Kent State University

Course Descriptions

Spring 2016 Undergraduate and Graduate Courses

Office of Curriculum Services
13 Nov 2015
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ACCT 23020 - INTRODUCTION TO FINANCIAL ACCOUNTING

(Equivalent to ACTT 11000) Introduction to principles of accounting as they relate to financial accounting and the preparation of financial statements. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Accounting Department

Course Attributes:
TAG - Business

ACCT 23021 - INTRODUCTION TO MANAGERIAL ACCOUNTING

(Equivalent to ACTT 11001) Introduction to principles of accounting as they relate to managerial accounting, including cost relationships. Prerequisite: ACCT 23020.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Accounting Department

Course Attributes:
TAG - Business

ACCT 33000 - FUNDAMENTAL TAX PROCEDURES

Nontechnical presentation of federal income tax laws and regulations as they relate to individuals. Prerequisite: Cumulative 2.500 GPA; and ACCT 23020 or ACTT 11000; and ACCT 23021 or ACTT 1101; not open to accounting (ACCT) majors.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Accounting Department
ACCT 33001 - CORPORATE ACCOUNTING I

The review of the accounting cycle; financial statement preparation, accounting for sales, receivables, inventory, fixed assets and intangible assets. Written communication and professional accounting research skills are emphasized. Prerequisite: Cumulative 2.500 GPA; and minimum B- (2.700) grade in ACCT 23021 or ACTT 11001 and ACCT 23020 or ACTT 11000; and minimum C (2.000) in ENG 21011, COMM 15000 and MATH 11010; and MATH 11012 or MATH 12002 and accounting (ACCT) major or minor.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Accounting Department

ACCT 33004 - INTRODUCTION TO ACCOUNTING SYSTEMS

Provides an overview of accounting information systems focusing on business processes, systems design and internal controls. Interpersonal skills and computer applications are emphasized. Prerequisite: cumulative 2.500 GPA; and MIS 24053; and MATH 11012 or MATH 12002; and a minimum B- (2.700) grade in ACCT 23021 or ACTT 11001 and ACCT 23020 or ACTT 11000; and minimum C (2.000) in ENG 21011, COMM 15000 and MATH 11010; and accounting (ACCT) major or minor.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Accounting Department

ACCT 33010 - COST ACCOUNTING

Cost accounting for manufacturing and service organizations including cost determination, cost analysis and reporting costs for decision making planning and control. Ethical decision making and computer applications are emphasized. Prerequisite: cumulative 2.500 GPA; and accounting (ACCT) major or minor; and ACCT 33001 and ACCT 33004 both with a minimum grade of C (2.000).

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Accounting Department

ACCT 33012 - CORPORATE ACCOUNTING II

Accounting for long-term liabilities, debt and equity investments leases pensions and other post retirement benefits income tax allocation and owners' equity statement of cash flows. Verbal communication and professional accounting research skills are emphasized. Prerequisite: cumulative 2.500 GPA; and accounting (ACCT) major and minor; and ACCT 33001 and ACCT 33004 both with a minimum grade of C (2.000).

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
ACCT 33061 - FINANCIAL REPORTING ISSUES AND ANALYSIS

Issues relative to the balance sheet, income statement and cash flow statement. Topics include assets, liabilities, owner's equity, revenue recognition, EPS, deferred taxes and pensions. Cannot be counted towards accounting major. Prerequisite: cumulative 2.500 GPA; and ACCT 23021 or ACTT 11001; not open to accounting (ACCT) majors.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

ACCT 33063 - COST CONTROL AND ANALYSIS FOR MANAGEMENT

Cost accounting concepts and procedures; analysis of revenue cost and income variances. Open only to nonaccounting majors; cannot count towards accounting major. Prerequisite: cumulative 2.500 GPA; and ACCT 23021 or ACTT 11001; not open to accounting (ACCT) majors.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

ACCT 43010 - PRINCIPLES OF AUDITING AND CONTROL

Integration of concepts and practical aspects of auditing. The importance of strong controls is stressed. Ethical decision making and written communication skills are emphasized. Prerequisite: cumulative 2.500 GPA; and senior standing; and accounting (ACCT) major; and ACCT 33010 and ACCT 33012 both with a minimum grade of C (2.000).

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Course Attributes:
Experiential Learning Requirem, Writing Intensive Course

ACCT 43013 - ADVANCED MANAGEMENT ACCOUNTING

(Cross-listed with ACCT 53013) Advanced techniques and issues in costing and accounting measurement for management planning, decision making and control. Professional accounting research, verbal communication and ethical decision-making skills are emphasized. Prerequisite: cumulative 2.500 GPA; and senior standing; and accounting (ACCT) major; and ACCT 33010 and ACCT 33012 both with a minimum grade of C (2.000).

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
**ACCT 43014 - ADVANCED ACCOUNTING SYSTEMS**

(Cross-listed ACCT 53014) Emphasizes the analysis, design and implementation of accounting information systems and internal controls. Written communication, ethical decision-making and computer application skills are emphasized. Prerequisite: cumulative 2.500 GPA; and senior standing; and accounting (ACCT) major; and ACCT 33001 and ACCT 33004 and ACCT 33010 and ACCT 33012 all with a minimum grade of C (2.000).

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**ACCT 43020 - CORPORATE ACCOUNTING III**

(Cross-listed with ACCT 53020) Business combinations, consolidated financial statements; specialized disclosures; impact of foreign currency translation on financial statements; intercorporate investments. Professional accounting research and interpersonal skills are emphasized. Prerequisite: cumulative 2.500 GPA; and senior standing; and Accounting (ACCT) major; and a minimum C (2.000) grade in ACCT 33001 and ACCT 33004 and ACCT 33010 and ACCT 33012 and ACCT 43031.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**ACCT 43031 - INCOME TAXATION**

Basic concepts of income recognition and deductions for individuals and corporations. Detailed coverage of the taxation of C corporations. Written communication skills are emphasized. Prerequisite: cumulative 2.500 GPA; and senior standing; and Accounting (ACCT) major; and ACCT 33001 and ACCT 33004 and ACCT 33010 and ACCT 33012 all with a minimum grade of C (2.000).

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**ACCT 43033 - INCOME TAXATION II**

(Cross-listed ACCT 53033) Advanced partnership and corporate tax problems; estate and gift taxation; tax administration and practice. Professional accounting research and written communication skills are emphasized. Prerequisite: cumulative 2.500 GPA; and senior standing; and Accounting (ACCT) major; and ACCT 43031.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
**ACCT 43034 - NONPROFIT ACCOUNTING AND AUDITING**

(Cross-listed with ACCT 53034) Unique nonprofit, financial reporting, managerial accounting and financial and operating audits for government and nonprofit entities. Professional accounting research written communication and ethical decision making skills are emphasized. Prerequisite: cumulative 2.500 GPA; and senior standing; and accounting (ACCT) major; and ACCT 33001 and ACCT 33004 and ACCT 33010 and ACCT 33012 all with a minimum grade of C (2.000).

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Accounting Department

**ACCT 43092 - ACCOUNTING INTERNSHIP**

Study of activities related to concurrent on-the-job experience with cooperating industrial and public accounting firms. Prerequisite: minimum C (2.000) grade in ACCT 33001 or ACCT 33004; and junior standing; and accounting (ACCT) major; and cumulative 3.000 GPA and special approval (students must have a cumulative 3.000 GPA in all attempts of ACCT courses).

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Accounting Department

Course Attributes:
Experiential Learning Requirem

**ACCT 43093 - VARIABLE TITLE WORKSHOP IN ACCOUNTING**

(Repeatable for credit) To be determined when a specific course is proposed for a particular term. Prerequisite: Senior standing and accounting (ACCT) major and special approval.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Workshop

Accounting Department

**ACCT 43095 - SPECIAL TOPICS: ACCOUNTING**

(Repeatable for credit) (Cross-listed with ACCT 53095) Special topics course that will be offered periodically with different topics and different faculty involved each time the course is offered. Prerequisite: Senior standing and accounting (ACCT) major and special approval.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
**Accounting Department**

**ACCT 43096 - INDIVIDUAL INVESTIGATION IN ACCOUNTING**
(Repeatable for credit) Open only to senior majors in accounting with permission of adviser. Prerequisite: Senior standing and accounting (ACCT) major and special approval.
1.000 TO 3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

**ACCT 53013 - ADVANCED MANAGEMENT ACCOUNTING**
(Cross-listed with ACCT 43013) Advanced techniques and issues in costing and accounting measurement for management planning, decision making and control. Professional accounting research verbal communication and ethical decision making skills are emphasized. Prerequisite: ACCT 33010 and 33012 or permission of instructor. Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**ACCT 53014 - ADVANCED ACCOUNTING SYSTEMS**
(Cross-listed with ACCT 43014) Emphasizes the analysis, design and implementation of accounting information systems and internal controls. Written communication, ethical decision making and computer application skills emphasized. Prerequisite: ACCT 33004 or permission of instructor. Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**Accounting Department**

**ACCT 53020 - CORPORATE ACCOUNTING III**
(Cross-listed with ACCT 43020) Business combinations, consolidated financial statements; specialized disclosures; impact of foreign currency on financial statements; intercorporate investments. Professional accounting research and interpersonal skills are emphasized. Prerequisite: minimum C (2.000) grade in ACCT 33012 and ACCT 43031; and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**Accounting Department**

**ACCT 53033 - INCOME TAXATION II**
Advanced partnership and corporate tax problems; estate and gift taxation; tax administration and practice. Professional accounting research and written communication skills are emphasized. Prerequisites: ACCT 43031 and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Accounting Department

ACCT 53034 - NONPROFIT ACCOUNTING AUDITING

Unique nonprofit, financial reporting, managerial accounting, and financial and operating audits for government and nonprofit entities. Professional accounting research written communication and ethical decision making emphasized. Prerequisites: ACCT 33012 and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Accounting Department

ACCT 53095 - SPECIAL TOPICS: ACCOUNTING

(Repeatable for credit) Special topics course that will be offered periodically with different topics and different faculty involved each time the course is offered. Prerequisite: Graduate standing and special approval.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Accounting Department

ACCT 63022 - PROFESSIONAL ISSUES AND ETHICS IN ACCOUNTING

A capstone course for the MSA program. Investigates issues confronting the accounting profession today by reviewing the past, examining the present and looking into the future. Topics covered include history and characteristics of the profession, regulation of the profession, ethical challenges facing accountants and auditors, fraud and the future of the profession. Professional accounting research verbal, and written communication emphasized. Prerequisite: Graduate standing and special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Accounting Department

ACCT 63024 - INFORMATION TECHNOLOGY AUDIT AND CONTROL

Examines the control and security of accounting information systems with an auditing perspective. Includes the role of IS audit function, IS auditing standards, system risks, application
controls and current issues facing is auditors. Research, writing and ethics will be emphasized. Prerequisite: graduate standing; and ACCT 43010 and ACCT 43014 or 53014.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Accounting Department

**ACCT 63025 - ANALYSIS AND VALUATION OF BUSINESS USING FINANCIAL STATEMENTS**

(Cross-listed with ACCT 73025) Uses financial statements to analyze business strategy, accounting issues, finances and future prospects. Uses case studies to apply business valuation framework to security analysis, credit, corporate financing policies, and management communications. Research and writing will be emphasized. Prerequisite: ACCT 33001 or ACCT 63037; and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Accounting Department

**ACCT 63030 - INTERNATIONAL ACCOUNTING**

(Cross-listed with ACCT 73030) Study of reporting in United States capital markets for domestic and foreign firms; evaluation of differences in accounting, auditing and financial reporting between nations; impact of international operations on accounting for decision making. Interpersonal skills emphasized. Prerequisite: ACCT 33012; and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Accounting Department

**ACCT 63031 - ADVANCED AUDITING THEORY AND PRACTICE**

(Cross-listed with ACCT 73031) Advanced conceptual and practical understanding of audit methodology and role of auditors. Focus on use of professional judgment in applying auditing standards on ethical considerations and on fraud. Review of current trends and developments in the public accounting profession. Written communication and ethical decision making emphasized. Prerequisite: ACCT 43010; and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Accounting Department

**ACCT 63032 - ACCOUNTING THEORY, HISTORY AND INSTITUTIONS**

(Cross-listed with ACCT 73032) Survey of history of accounting and development of principles, followed by intensive study of theoretical problems related to determination of income and presentation of financial position. International and current issues also discussed. Written communication and ethical decision making...
emphasized. Prerequisite: ACCT 33012 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Accounting Department

**ACCT 63037 - FINANCIAL ACCOUNTING FOR MANAGERIAL ACTION**

(Cross-listed with ACCT 73037) In-depth study of financial accounting concepts and basic financial statements. Examination of significant accounting issues affecting financial reporting and their impact on analysis and interpretation of financial information for decision making. Prerequisite: Open only to MBA and MA students; and graduate standing. Cannot be used toward MSA degree.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Accounting Department

**ACCT 63038 - ACCOUNTING FOR MANAGERIAL ACTION AND EVALUATION**

(Cross-listed with ACCT 73038) Review of cost accounting concepts and cost behavior. In-depth study of analyzing costs for pricing and product mix decisions; activity based cost systems; budgeting; planning and control issues; methods of remaining competitive in a global environment; compensation issues. Prerequisite: ACCT 63037 or 73037; and MBA and MA students only; and graduate standing. Cannot be used toward MSA degree.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Accounting Department

**ACCT 63042 - TAXATION OF CORPORATIONS AND SHAREHOLDERS**

An in-depth study of tax law that pertains to corporations and shareholders; corporate formation, distributions, liquidation and reorganization. Tax research and verbal and written communication emphasized. Prerequisite: ACCT 43031 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Accounting Department

**ACCT 63043 - TAXATION OF PARTNERSHIPS AND PARTNERS**

An in-depth study of formation, operation, termination and liquidation and other special problems of partnerships. Tax research and verbal and written communication emphasized. Prerequisite: ACCT 43033 or ACCT 53033; and graduate standing.
3.000 Credit hours
ACCT 63045 - TAX RESEARCH AND PLANNING

Tax planning; research methodology and problems. Tax research and verbal and written communications emphasized. Prerequisite: ACCT 43033 or ACCT 53033; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

ACCT 63092 - INTERNSHIP

(Repeatable for credit) Supervised practical experience with public accounting firm, corporation, governmental, or not-for-profit organization. Periodic reports required. Prerequisite: enrollment in the M.S. in Accounting program; and minimum grade of C (2.000) grade in ACCT 33010 and 33012; and cumulative 3.000 GPA; and graduate standing; and special approval (students must have a cumulative 3.000 GPA in ACCT courses).

3.000 Credit hours
3.000 Other hours

ACCT 63093 - VARIABLE TITLE WORKSHOP IN ACCOUNTING

(Repeatable for credit) To be determined when a specific course is proposed for a particular term. Prerequisite: graduate standing and special approval.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

ACCT 63098 - RESEARCH IN ACCOUNTING

(Repeatable for credit) (Cross-listed with ACCT 73098) Review of sources, techniques and methodology. Individually selected topic is investigated and reported in formal paper which may extend beyond the semester. Prerequisite: graduate standing; and major in accounting.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Lecture

Accounting Department
ACCT 73022 - PROFESSIONAL ISSUES AND ETHICS IN ACCOUNTING

(Cross-listed with ACCT 63022) A capstone course for the MSA program. Investigates issues confronting the accounting profession today by reviewing the past, examining the present, and looking into the future. Topics covered include history and characteristics of the profession regulation of the profession, ethical challenges facing accountants and auditors, fraud and the future of the profession. Professional accounting research, verbal and written communications emphasized. Prerequisite: special approval and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Accounting Department

ACCT 73024 - INFORMATION TECHNOLOGY AUDIT AND CONTROL

(Cross-listed with ACCT 63024) Examines the control and security of accounting information systems with an auditing perspective. Includes the role of is audit function, IS auditing standards, system risks, application controls, and current issues facing IS auditors. Research writing and ethics will be emphasized. Prerequisite: ACCT 43010; and ACCT 43014 or 53014; and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Accounting Department

ACCT 73025 - ANALYSIS AND VALUATION OF BUSINESS USING FINANCIAL STATEMENTS

(Cross-listed with ACCT 63025) Uses financial statements to analyze business strategy, accounting issues, finances, and future prospects. Uses case studies to apply business valuation framework to security analysis, credit, corporate financing policies and management communications. Research and writing will be emphasized. Prerequisite: ACCT 33001 or 63037; and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Accounting Department

ACCT 73030 - INTERNATIONAL ACCOUNTING

(Cross-listed with ACCT 63030) Study of reporting in United States capital markets for domestic and foreign firms; evaluation of differences in accounting, auditing and financial reporting between nations; impact of international operations on accounting for decision making. Interpersonal skills emphasized. Prerequisite: ACCT 33012; and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Accounting Department
ACCT 73031 - ADVANCED AUDITING THEORY AND PRACTICE

(Cross-listed with ACCT 63031) Advanced conceptual and practical understanding of audit methodology and role of auditors. Focus on use of professional judgment in applying auditing standards, on ethical considerations, and on fraud. Review of current trends and developments in the public accounting profession. Written communication and ethical decision making emphasized. Prerequisite: ACCT 43010; and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Accounting Department

ACCT 73032 - ACCOUNTING THEORY

(Cross-listed with ACCT 63032) Survey of history of accounting and development of principles, followed by intensive study of theoretical problems related to determination of income and presentation of financial position. International and current issues also discussed. Written communication and ethical decision making emphasized. Prerequisite: ACCT 33012 and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Accounting Department

ACCT 73037 - FINANCIAL ACCOUNTING FOR MANAGERIAL ACTION

(Cross-listed with ACCT 63037) In-depth study of financial accounting concepts and basic financial statements. Examination of significant accounting issues affecting financial reporting and their impact on analysis and interpretation of financial information for decision-making. Prerequisite: special approval and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Accounting Department

ACCT 73038 - ACCOUNTING FOR MANAGERIAL ACTION AND EVALUATION

(Cross-listed with ACCT 63038) Review of cost accounting concepts and cost behavior. In depth study of analyzing costs for pricing and product mix decisions activity based cost systems budgeting planning and control issues methods of remaining competitive in a global environment compensation issues. Prerequisite: special approval and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Accounting Department
**ACCT 73093 - VARIABLE TITLE WORKSHOP IN ACCOUNTING**

(Repeatable for credit) To be determined when a specific course is proposed for a particular term. Prerequisite: special approval and doctoral standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Accounting Department

**ACCT 73098 - RESEARCH IN ACCOUNTING**

(Repeatable for credit) (Cross-listed with ACCT 63098) Review of sources, techniques and methodology. Individually selected topic is investigated and reported in formal paper which may extend beyond the semester. Prerequisite: doctoral standing; and major in accounting.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Research

Accounting Department

**ACCT 83031 - AUDITING ISSUES**

A seminar designed to provide doctoral students with the opportunity to broaden their understanding of financial and operational auditing theory and research. Prerequisite: ACCT 43010 and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Accounting Department

**ACCT 83033 - MANAGERIAL ACCOUNTING ISSUES**

Library research and discussion will cover basic areas in cost/managerial accounting. Coverage will include a thorough understanding of the areas, the role of mathematical models, and emerging issues/problems. Emphasis will be placed on integrating the topical areas. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Accounting Department

**ACCT 83037 - FINANCIAL ACCOUNTING ISSUES**

Capstone theory course in which accounting conventions, principles and concepts of a currently controversial nature are explored and debated. Emerging issues in financial accounting reporting and research are examined. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture

Accounting Department

**ACCT 83038 - BASIC ACCOUNTING RESEARCH METHODOLOGY**

Examination of basic research methodology and how the methodology is applied in accounting research. Introduction to statistical packages and databases. Research paper required. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Accounting Department

**ACCT 83091 - SEMINAR-SELECTED ACCOUNTING TOPICS**

(Repeatable for credit) Topics vary with each offering, usually from the following: auditing, taxation, fund accounting, accounting systems and accounting education issues. Prerequisite: special approval and doctoral standing.

3.000 TO 6.000 Credit hours
3.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Accounting Department

**ACTT 11000 - ACCOUNTING I - FINANCIAL**

(Equivalent to ACCT 23020) Introduction to financial accounting, including principles generally accepted in preparation of accounting statements for users outside of the business organization. Prerequisite: None.

4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**ACTT 11001 - ACCOUNTING II-MANAGERIAL**

(Equivalent to ACCT 23021) Introduction to managerial accounting, including accounting for manufacturing firms, budgeting, standard cost systems, direct costing, segment reporting and cost-volume-profit-analysis. Prerequisite: ACTT 11000.

4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department
ACTT 11003 - PAYROLL ACCOUNTING
Introduction to the payroll function, including preparation of payroll and related federal, state and local tax forms required of all businesses. Both manual and computerized applications will be studied. Prerequisite: ACTT 11000.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

ACTT 20012 - ACCOUNTING SOFTWARE APPLICATIONS
An accounting software application course using accounting, spreadsheet and word processing software. Prerequisite: ACTT 11001.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

ACTT 21000 - ACCOUNTING III-FINANCIAL
An intensive and practical study of financial accounting principles pertaining to balance sheet and income statement accounts, and statement analyses. Prerequisite: ACTT 11001.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

ACTT 21001 - ACCOUNTING IV-FINANCIAL
Continuation of ACTT 21000. Also considers income statement accounts and financial statement analyses. Both manual and computerized applications will be studied. Prerequisite: ACTT 21000.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

ACTT 21003 - FUNDAMENTALS OF TAX PREPARATION
A non-technical presentation of federal income tax laws and regulations as they relate to individuals. Prerequisite: ACTT 11000.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
ACTT 21092 - INTERNSHIP IN ACCOUNTING TECHNOLOGY

(Repeatable for credit) Supervised field experience requires minimum of 14 hours per week for unpaid work experiences or 20 hours per week for employment with pay. Prerequisite: ACTT 21000 and permission.

2.000 TO 3.000 Credit hours
24.000 TO 36.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

ACTT 21095 - SPECIAL TOPICS: ACCOUNTING TECHNOLOGY

(Repeatable for credit) Special topics in accounting. Prerequisite: Permission.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

ACTT 21096 - INDIVIDUAL INVESTIGATION-ACCOUNTING TECHNOLOGY

(Repeatable for credit) Independent in-depth research of an accounting topic supervised and coordinated by an accounting technology faculty member. Prerequisite: 12 credit hours of ACTT courses and permission.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

ACTT 31063 - INTRODUCTION TO COST ACCOUNTING

Cost accounting concepts and systems; role of costs in decision making; budgeting concepts and procedures; analysis of revenue, cost and income variances. Prerequisite: ACTT 11001.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

ACTT 36110 - PRINCIPLES OF FRAUD EXAMINATION
Study of occupational fraud and abuse; its' detection and prevention within the realm of an enterprise. Prerequisite: ACTT 11000 and 11001.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

ACTT 36120 - ETHICAL ISSUES RELATING TO FRAUD EXAMINATION

Understanding ethical dilemmas, issues and professionalism relating to fraud examination. Prerequisite: ACTT 36110.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

ACTT 46170 - CASE STUDIES IN FRAUD EXAMINATION

Application of principles of fraud examination, detection and evaluation of recommended action plans to specific fraud cases. Prerequisite: ACTT 36110 and COMT 36318.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

ACTT 46191 - SEMINAR IN FRAUD EXAMINATION

(Repeatable for credit)Capstone course for students studying fraud examination and it's related areas. Students will be required to research, analyze and present current fraud issues. Prerequisite: ACTT 46170 and special approval.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

ADED 22275 - ISSUES AND TRENDS IN SOCIAL STUDIES EDUCATION

A course that introduces you to the field of social studies education. In this course you will explore the history and current issues and trends in the field of social studies education. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
**ADED 32142 - PRINCIPLES OF TEACHING ADOLESCENTS**

Orientation to adolescence and the teaching-learning process. This course includes 30 field-clinical hours in an urban setting. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school-agency before the first day of the semester in which student teaching internship will take place. Prerequisite: admission to advanced study.

3.000 Credit hours  
2.000 Lecture hours  
2.000 Other hours  

Levels: Undergraduate  
Schedule Types: Field Experience, Lecture  

Course Attributes:  
Writing Intensive Course  

**ADED 32268 - THE SECONDARY SCHOOL MATHEMATICS CURRICULUM**

The secondary school mathematics curriculum will be examined. Students textbooks and recommendations will be investigated. This course includes 30 field clinical hours. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school/agency before the first day of the semester in which student teaching/internship will take place. Prerequisite: ADED 32142 and MATH 22005.

3.000 Credit hours  
3.000 Lecture hours  

Levels: Undergraduate  
Schedule Types: Lecture  

**ADED 32275 - CURRICULUM AND PEDAGOGY IN SOCIAL STUDIES**

A beginning social studies teaching and learning course. In this course you will explore how to achieve the purposes of social studies education through curriculum, instructional and planning decisions. Prerequisite: ADED 22275, ADED 32142 and admission to advanced study.

3.000 Credit hours  
3.000 Lecture hours  

Levels: Undergraduate  
Schedule Types: Lecture  

**ADED 32277 - TEACHING SCIENCE IN SECONDARY SCHOOLS**

Goals, methodology and resources for effective teaching of science to adolescents and young adults. Prerequisite: ADED 32142.

3.000 Credit hours  
3.000 Lecture hours  

Levels: Undergraduate
ADED 42196 - INDIVIDUAL PROJECT IN ADOLESCENT EDUCATION

(Repeatable for credit) Independent study in Adolescent Education. Prerequisite: special approval.
2.000 TO 4.000 Credit hours
2.000 TO 4.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

ADED 42268 - TEACHING OF MATHEMATICS IN SECONDARY SCHOOLS

Methodology and materials for effective teaching of secondary school mathematics will be discussed and implemented in field experiences. Course includes 46 field/clinical hours. Mathematics courses through MATH 22005. Prerequisite: ADED 32268.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

ADED 42275 - TEACHING SOCIAL STUDIES IN GRADES 7 - 12

An advanced social studies education teaching and learning course. Addresses a range of topics that will help you engage your 7th–12th grade students with social studies. Prerequisite: ADED 32275 with a minimum C (2.000) grade and admission to advanced study. Corequisite: ADED 42292.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

ADED 42277 - TOPICS IN SECONDARY SCHOOL SCIENCE TEACHING

Analysis of trends in science teaching and materials and methods for introducing topics from the history of science and from health education. Prerequisite: ADED 32277 and admission to advanced study.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

ADED 42292 - FIELD WORK PRACTICUM

A minimum 96-hour field experience in a middle or high school. Observations, interviews, designing and
teaching of lessons and debriefing. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school-agency before the first day of the semester in which student teaching internship will take place. Prerequisites: Minimum grade of C (2.000) in ADED 32268 or ADED 32275 or ADED 32277; or ADED 43325 and ADED 43335; and advanced study. Corequisite: ADED 42268 or 42275 or 42277 or 43315.

3.000 Credit hours
9.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Teaching Learning and Curricul Department

Course Attributes:
Experiential Learning Requirem

**ADED 42357 - SECONDARY STUDENT TEACHING**

Provides a full-time student-teaching experience. Observations, interviews, designing and teaching of lessons and debriefing. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school-agency before the first day of the semester in which student teaching internship will take place. Official valid certification of Child Safety Training, approved Basic Life Support and A.L.I.C.E. Training must be presented to the campus office of clinical experience or designated faculty-staff at Regional campuses as prerequisite for student teaching. Prerequisite: Admission to advanced study; and Official valid certification of Child Safety Training, approved Basic Life Support and A.L.I.C.E. Training must be presented to the campus office of clinical experience or designated faculty/staff at Regional campuses as prerequisite for student teaching. Corequisite: ADED 49525.

9.000 Credit hours
35.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Teaching Learning and Curricul Department

Course Attributes:
Experiential Learning Requirem

**ADED 43315 - TEACHING LITERATURE IN THE SECONDARY SCHOOLS**

(Slashed with ADED 53315) Explores the pedagogy of canonical literature, literary theory and approaches to teaching texts in the secondary classroom. Prerequisite: ADED 43335; and advanced standing. Corequisite: ADED 42292.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**ADED 43325 - MULTI-MODAL LITERACIES IN THE SECONDARY CLASSROOM**

Explores the pedagogies of reading and composing with a variety of print and non-print texts. Focuses on the impact of media culture on adolescent learners. Utilizes new literacies to enhance learning in the content area. Prerequisite: advanced standing.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Teaching Learning and Curricul Department

**ADED 43335 - TEACHING LANGUAGE AND COMPOSITION**

Explores linguistic and rhetorical perspectives on the teaching of composition in secondary schools. Prerequisite: MCED 40007; and advanced standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**ADED 49525 - INQUIRY INTO PROFESSIONAL PRACTICE**

Reflection on teaching for the purpose of instructional improvement. Emphases are placed on preparing implementing and assessing a curricular unit collaborative problem solving conducting an action research project and creating a portfolio. Prerequisite: admission to advanced study. Corequisite: ADED 42357.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**ADED 52267 - IMPROVING MATHEMATICS INSTRUCTION FOR ADED**

Methodology and materials for effective teaching of secondary school mathematics. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**ADED 52277 - TEACHING SCIENCE IN THE SECONDARY SCHOOL**

Analysis of teaching materials, demonstrations and participation in science classes appropriate for graduate students seeking certification to teach science in the secondary school. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department
**ADED 53315 - TEACHING LITERATURE IN THE SECONDARY SCHOOLS**

(Slashed with ADED 43315) Explores the pedagogy of canonical literature, literary theory and approaches to teaching texts in the secondary classroom. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**ADED 62145 - PRINCIPLES OF SECONDARY TEACHING**

Principles of teaching in the secondary schools with emphasis on purposes, curriculum roles of the teacher instruction and the adolescent learner in secondary, middle, junior and senior high schools. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**ADED 62146 - INSTRUCTIONAL STRATEGIES AND CLASSROOM MANAGEMENT**

Enables students to demonstrate proficiency in the selection and application of general strategies for instruction, of appropriate instructional media and materials and in the accommodation of individual needs and cultural diversity within the secondary instructional setting. Prerequisite: graduate standing. Corequisite: ADED 62145.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**ADED 62191 - SEMINAR IN SECONDARY EDUCATION**

(Repeatable for credit) (Cross-listed with ADED 72191) Study and experience of various theoretical and methodological and practical approaches to special problems. Prerequisite: graduate standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Teaching Learning and Curricul Department

**ADED 62192 - ADVANCED PRACTICUM AND INTERNSHIP IN SECONDARY EDUCATION**

(Repeatable for credit) Provides a student-teaching or internship experience. Observations, interviews, designing and teaching of lessons and debriefing. Students are required to complete Bureau of Criminal Investigation and identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit
the results to authorized personnel at their assigned school-agency before the first day of the semester in which student teaching internship will take place. Official valid certification of Child Safety Training, approved Basic Life Support and A.L.I.C.E. Training must be presented to the campus office of clinical experience or designated facultystaff at Regional campuses as prerequisite for student teaching. Prerequisites: graduate standing; and Official valid certification of Child Safety Training, approved Basic Life Support and A.L.I.C.E. Training must be presented to the campus office of clinical experience or designated faculty/staff at Regional campuses as prerequisite for student teaching.

1.000 TO 10.000 Credit hours
3.000 TO 32.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Teaching Learning and Curricul Department

**ADED 62198 - RESEARCH IN SECONDARY EDUCATION**

(Repeatable for credit) Students pursue an individualized research project under direction of instructor. Prerequisite: graduate standing and special approval.

2.000 TO 15.000 Credit hours
2.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

Teaching Learning and Curricul Department

**ADED 67147 - TEACHING ADOLESCENTS IN THE SECONDARY SCHOOL CULTURE**

Providing for motivation, discipline and instruction of adolescents within the culture of the secondary school. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**ADED 67232 - SECONDARY SCHOOL SOCIAL STUDIES**

(Cross-listed with ADED 77232) General focus is on examining current instructional and curricular trends in teaching social studies. Emphasis is placed on strategies of teaching developing student's critical thinking skills role of the computer use of primary sources teaching controversial issues and stimulating active citizenship. Prerequisite: graduate standing and special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**ADED 72191 - SEMINAR IN SECONDARY EDUCATION**

(Repeatable for credit) (Cross-listed with ADED 62191) Study and experience of various theoretical and methodological and practical approaches to special problems. Prerequisite: doctoral standing.
AED 10001 - DESIGN THINKING I

Provides a broad, interdisciplinary introduction to design culture and the visualization of ideas and information through observations of the object in space. Prerequisite: architecture (ARCH), architectural studies (ARCS) or interior design (ID) major. Corequisite: AED 10101.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Architecture Department

AED 10002 - DESIGN THINKING II

Explores the role of design in society with a focus on purpose and meaning of form and space in relation to the human body. Prerequisites: AED 10001; and architecture (ARCH), interior design (ID), or architectural studies (ARCS) major. Corequisites: AED 10102.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Architecture Department

AED 10101 - DESIGN FOUNDATIONS STUDIO I

Introduction to the organizational principles and tools designers use to interpret and shape the built environment. Prerequisite: architecture (ARCH), architectural studies (ARCS) or interior design (ID) major. Corequisite: AED 10001.

3.000 Credit hours
6.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Architecture Department

AED 10102 - DESIGN FOUNDATIONS STUDIO II

A continued exploration of the organizational principles and tools designers use to interpret and shape the built environment. Prerequisites: AED 1010;1 and architecture (ARCH), interior design (ID) or architectural studies (ARCS) major.

3.000 Credit hours
6.000 Other hours

Levels: Undergraduate
Schedule Types: Studio
**AED 60922 - METHODS OF INQUIRY IN ARCHITECTURAL STUDIES**

(Cross-listed with ARCH 60922 + LARC 60922) Provides a comprehensive coverage of architectural inquiry techniques including qualitative and quantitative research methods and critical thinking skills to help students better conduct and understand research. Prerequisite: graduate standing. Corequisite: AED 60923.

- 2.000 Credit hours
- 2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**AED 60923 - EMPIRICAL RESEARCH IN ENVIRONMENTAL DESIGN**

(Cross-listed with LARC 60923) Introduces a student to faculty-directed research in a field with the environmental design domain. Typically, the course will include lectures by research faculty, readings from primary and review literature, and regular discussions among students, faculty and other research associates working under the direction of a principal investigator. Prerequisite: graduates standing and special approval. Corequisite: AED 60922.

- 1.000 Credit hours
- 1.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**AED 60930 - APPLIED RESEARCH METHODS IN ARCHITECTURE AND ENVIRONMENTAL DESIGN**

Addresses ontological and epistemological underpinnings of applied research methods in the environmental design fields. It is intended to extend students’ understanding of quantitative and qualitative research methods, data collection, analysis and interpretation. Prerequisites: AED 60922 and 60923 with a minimum B- grade; and graduate standing.

- 3.000 Credit hours
- 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**AED 63001 - EVIDENCE BASED DESIGN IN HEALTH CARE**

Prepares students to use credible data upon which to base design decisions rather than relying on anecdotal reports and findings. Studies evidence based design by exploring systems, research, and the design process. Prerequisite: graduate standing.

- 3.000 Credit hours
- 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
AED 66099 - THESIS PREPARATION SEMINAR

Designed for students writing a thesis in the Master of Science in Architecture and Environmental Design Program. Supports students development of research topics, review relevant research and scholarship, frame research questions and arguments, choose an appropriate methodology for analysis, and draft introductory and methodology sections of the thesis proposal document. Prerequisites: AED 60922 and 60923 and 60930; and ARCH 60301; and graduate standing; and special approval.

2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Architecture Department

AED 66199 - THESIS I

Thesis students must register for a total of 6 hours. Prerequisite: graduate standing and special approval.

6.000 Credit hours
6.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Architecture Department

AED 66299 - THESIS II

Following completion of 6 credit hours of Thesis I all graduate students must continuously register for Thesis II for all subsequent academic terms (including summer) until all degree requirements are met. Prerequisite: 6 credit hours of AED 66199; and graduate standing; and special approval.

2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Architecture Department

AERN 15000 - INTRODUCTION TO AERONAUTICS

Introduction to aeronautical and aerospace technology including historical development, underlying science and technical applications. The past, present and future social, economic, technical and political impact of aviation are also explored. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

AERN 15250 - FAA ORIENTATION

Introduction to the Federal Aviation Administration with particular emphasis on its role and impact on air traffic management and the National Airspace System (NAS). Course addresses the unique aspects and requirements
of federal employment, as well as federal regulations affecting flight operations and the FAA's associated supporting agencies. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

AERN 15300 - INTRODUCTION TO ENGINEERING ANALYSIS USING MATLAB®

Introduction to basic concepts in engineering analysis using the Matlab® computing language, the industry-standard “first language” for engineers. Introduction to problem solving, algorithm coding and development, debugging, analysis and interpretation. Pre/corequisite: MATH 12002.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

AERN 15500 - INTRODUCTION TO AEROSPACE ENGINEERING

fundamentals of fluid mechanics, applied aerodynamics, propulsion systems, airplane performance, stability, orbital motion, and launch vehicle performance. Prerequisite: MATH 12002.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

AERN 15740 - ELEMENTS OF FLIGHT THEORY

Basic instruction in all areas which gives the student aeronautical knowledge required for a private pilot certificate. Corequisite: AERN 15741.

5.000 Credit hours
5.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

AERN 15741 - PRIVATE PILOT FLIGHT

Flight course designed to fulfill FAA requirements for private pilot certificate. This course may only be repeatable twice. Student is required to spend 1.5 hours each day, five days a week, at the airport, until the FAA minimum requirement of 30 hours of ground instruction has been attained. When not flying, the student goes through personalized ground instruction with their flight instructor. Minimum FAA flight time requirements towards the Private Pilot Certificate is 48 hours. Actual flight training may exceed 48 hours. Prerequisite: 2.500 cumulative GPA. Corequisite: AERN 15740.

3.000 Credit hours
9.000 Other hours
AERN 15742 - PRIVATE PILOT HELICOPTER FLIGHT

Flight course designed to fulfill Federal Aviation Administration (FAA) requirements for the private pilot helicopter certificate. This course may only be repeatable twice. Student is required to spend 1.5 hours each day, five days a week, at the airport, until the FAA minimum requirements are attained. When not flying, the student goes through personalized ground instruction with an assigned flight instructor. Minimum FAA flight time requirements towards the Private Pilot Helicopter Flight Certificate is 40 hours. Actual flight training may exceed 40 hours. Prerequisites: 2.500 cumulative GPA and AERN 15740. Corequisite: AERN 35101.

3.000 Credit hours
5.500 Other hours

AERN 15743 - PRIVATE PILOT HELICOPTER FLIGHT ADD-ON

Flight course designed to fulfill Federal Aviation Administration (FAA) requirements for the private pilot helicopter certificate. This course may only be repeatable twice. Student is required to spend 1.5 hours each day, five days a week, at the airport, until the FAA minimum requirements are attained. When not flying, the student goes through personalized ground instruction with an assigned flight instructor. Minimum FAA flight time requirements towards the Private Pilot Helicopter Flight Certificate is 40 hours. Actual flight training may exceed 30 hours. Prerequisites: 2.500 cumulative GPA; and AERN 15740 and 15741. Corequisite: AERN 35101.

2.000 Credit hours
4.860 Other hours

AERN 15745 - NON-PILOT ELEMENTS OF FLIGHT THEORY

Basic instruction in areas to include: Federal Regulations, navigation, communication, airspace, weather, basic aerodynamics, and aero-medical factors which give the student a foundation in aeronautics. This course does not satisfy the Federal Aviation Regulation requirement for endorsement to take the Airman Knowledge Exam for a the private pilot nor does it satisfy the Aircraft Dispatch minor. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

AERN 20000 - PROFESSIONAL DEVELOPMENT IN AERONAUTICS I

The course will provide an overview of the current state of the aeronautics industry while preparing students for various internship and scholarship opportunities. Students will begin preparation for a career in the aeronautics industry by establishing a professional foundation in the areas of career planning and goal setting. Prerequisite:
Aeronautics (AERN) major and sophomore standing.
1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainability/Tech Department

**AERN 25200 - STATICS**

Forces and moments; equilibrium in two and three dimensions; multi-force members; equilibrium, centroids and friction. Prerequisites: MATH 12003 and PHY 23101.
2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainability/Tech Department

**AERN 25250 - ELEMENTS OF AVIATION WEATHER**

Aviation weather provides a comprehensive look at the Earth's atmosphere, general patterns and specific phenomena, and a focus on weather as related to flight. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainability/Tech Department

**AERN 25251 - WEATHER INFORMATION SYSTEMS**

Introduction to various weather sensing equipment and the systems that deliver weather information to various users. An in-depth look at the National Weather Service, NOAA, NASA, FAA and commercially available weather information systems. Prerequisite: AERN 25250 or GEOG 31062.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainability/Tech Department

**AERN 25252 - THUNDERSTORMS AND SEVERE WEATHER**

Analysis and forecast of thunderstorm and severe convective weather activity development and movement. Analysis of atmospheric information and clouds, radar, computer models, and charts. A study of mid-latitude cyclones and some focused study on tropical depressions, hurricanes, tornadoes, dust and sand storms. Study includes geographic effects and cyclone life cycles. Provides an in-depth look at the development of severe weather products for aviation such as AIRMET, SIGMET and Convective SIGMET. Prerequisite: AERN 25250 or GEOG 31062.
3.000 Credit hours
3.000 Lecture hours
AERN 25350 - FUNDAMENTALS OF AIR TRAFFIC CONTROL

Introduction to the National Airspace System (NAS) and the orders, manuals and procedures associated with the purposes and directives of the air traffic control environment to include purposes and responsibilities of the ATC system. Corequisite: AERN 25351.

2.000 Credit hours
2.000 Lecture hours

AERN 25351 - FUNDAMENTALS OF AIR TRAFFIC CONTROL LABORATORY

Introductory laboratory course on air traffic management and the National Airspace System, the orders, manuals and procedures associated with the purposes and directives of the air traffic control environment. To include purposes and responsibilities of the ATC system. Prerequisite: none. Corequisite: AERN 25350.

1.000 Credit hours
2.000 Lab hours

AERN 25400 - DYNAMICS

Kinematics and kinetics of rigid bodies in planar motion and an introduction to the kinematics and kinetics of rigid bodies in three-dimensional motion. Prerequisite: AERN 25200 and MATH 12003.

3.000 Credit hours
3.000 Lecture hours

AERN 25500 - AERODYNAMICS FOR ENGINEERS

Basic fluid dynamics concepts, conservation laws, potential, airfoil and wing analysis. Boundary layers on plates and airfoils. Pressure gradients. Introduction to turbulent and vortex-dominated flows. Prerequisites: AERN 15500 and MATH 22005.

3.000 Credit hours
3.000 Lecture hours
### AERN 25743 - COMMERCIAL PILOT FLIGHT I

Advanced flight course providing flight instruction for the commercial pilot. Primary emphasis is on cockpit resource management, advanced navigational practices and basic instrument instruction. This course may only be repeatable twice. Student is required to spend 2 hours daily, three days a week, at the airport until the FAA minimum requirement of 20 hours ground instruction has been attained. When not flying, the student goes through personalized ground instruction with his or her flight instructor. Prerequisites: AERN 15740 and 15741; and minimum 2.500 cumulative GPA. Corequisites: AERN 25250.

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<th>Credit hours</th>
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Levels: Undergraduate  
Schedule Types: Flight Training  
Applied Eng/Sustainabilit/Tech Department

### AERN 25800 - INTRODUCTION TO UNMANNED AIRCRAFT SYSTEMS

An overview of unmanned aircraft systems. Course topics include the history, development, and evolution of unmanned aircraft; current and forecast trends and issues; capabilities and performance of unmanned aircraft; UAS applications; regulations governing unmanned aircraft systems; unmanned aircraft flight operations; and opportunities and career paths in unmanned aircraft systems. Prerequisite: none.

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<tr>
<th>Credit hours</th>
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Levels: Undergraduate  
Schedule Types: Lecture  
Applied Eng/Sustainabilit/Tech Department

### AERN 30000 - PROFESSIONAL DEVELOPMENT IN AERONAUTICS II

The course will build upon the lessons learned in Professional Development in Aeronautics I by providing direct opportunities for interviewing and networking with professionals working in the aeronautics industry. Students will continue preparation for a career in the aeronautics industry by revising and implementing their career plan and goals. Prerequisites: AERN 20000; and junior standing.

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<tr>
<th>Credit hours</th>
<th>Lecture hours</th>
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Levels: Undergraduate  
Schedule Types: Seminar  
Applied Eng/Sustainabilit/Tech Department

### AERN 35001 - AIRCRAFT FABRICATION

The study and laboratory practice of government approved procedures used in the fabrication, repair and testing of certificated aircraft. Prerequisites: none.

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<th>Credit hours</th>
<th>Lecture hours</th>
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Levels: Undergraduate  
Schedule Types: Lecture  
Applied Eng/Sustainabilit/Tech Department

### AERN 35020 - AIRCRAFT PROPULSION SYSTEMS
A study of basic reciprocating and gas turbine engine theory. Course investigates powerplant construction, component function, including propeller and fuel systems, ancillary systems that support aircraft propulsive systems and performance characteristics. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

**AERN 35021 - RADAR SATELLITE WEATHER INFORMATION**

A study of satellite and radar imagery. A focus on both passive and active remote sensing systems. Student develops an understanding of the properties of meteorological radar sensing, signal propagation and estimating precipitation. Provides an in-depth look at radar and satellite products and their application to aircrew operations. Emphasis is placed on real-time identification of weather phenomena affecting a flight in progress. Prerequisite: AERN 25250 or GEOG 31062.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

**AERN 35022 - WEATHER STRATEGY FOR AIRCREWS**

Flying strategies for various weather conditions to include low ceilings and visibility, turbulence, cold weather, thunderstorms, and wind shear. An exploration of basic and advanced weather theory and how to get the best use of FAA and commercially available forecast products and briefing services. Course takes a condition-by-condition look at various hazardous weather phenomena. Prerequisites: AERN 25250 or GEOG 31062.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

**AERN 35030 - INTRODUCTION TO CORPORATE AVIATION**

Introduces students to the business and corporate sectors of commercial aviation. Examines business and corporate aviation from the joint perspectives of operations and maintenance management as well as flight operations. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

**AERN 35031 - AVIATION INDUSTRY REGULATIONS**

This course will exam the functions of the regulatory agencies in the aviation industry. The evolution of
Administrative Regulation, Federal Aviation Regulation and the rule making process. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

**AERN 35040 - AIRCRAFT SYSTEMS I**

In-depth study of various aircraft systems including electrical systems, environmental control systems, and fuel systems as applied to aircraft. Prerequisite: PHY 13012.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

**AERN 35095 - SPECIAL TOPICS IN AERONAUTICS**

(Repeatable for credit) Specialized offerings of interest in response to emerging or needed curricular needs in aeronautics. Topics will be announced in the schedule of classes. Prerequisite: Aeronautics (AERN) major and sophomore standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

**AERN 35101 - HELICOPTER FLIGHT THEORY**

Study of helicopter flight and operations that includes rotor system dynamics, control functions, major components, operation and performance. Prerequisites: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

**AERN 35150 - AIRCRAFT STRUCTURES**

Aircraft structural design investigations dealing with theory and applications in aviation. Prerequisites: PHY 13001.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Applied Eng/Sustainabilit/Tech Department
AERN 35200 - THERMAL FLUID ENGINEERING

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

AERN 35201 - THERMAL-FLUID ENGINEERING LABORATORY

Laboratory demonstrations and experiments for various heat transfer and fluid dynamics concepts. Prerequisite: none. Corequisite: AERN 35200.
1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

AERN 35300 - AEROSPACE VEHICLE PERFORMANCE

Performance analysis of fixed-wing aircraft, rotorcraft, and spacecraft. Equations of motion, evaluation of forces, and performance calculations. Steady and accelerated flight performance. Prerequisites: AERN 25500 and MATH 32044.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

AERN 35339 - FIXED BASE OPERATOR OPERATIONS

A study of general aviation operations and the role of Fixed Base Operators in the National Aviation System; management functions; marketing; profit; cash flow; financing; human resources; organization; administration; management information systems; operations; maintenance; safety; liability; physical facilities; and the future of general aviation. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

AERN 35340 - AIRPORT MANAGEMENT

Introduction to the many functions that are involved in the operation and management of an airport. Includes an analysis of the development of the airport-airway system, airport legislation, airport planning and airport
AERN 35341 - AIR TRANSPORTATION SYSTEMS

Descriptive course in airline operations as seen from the air carrier's business perspective. Emphasis is on business practices and techniques unique to aviation. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

AERN 35342 - TERMINAL OPERATIONS I

Intermediate level terminal operations course. Emphasis on tower operations at the clearance delivery, ground control, and local control positions. Topics covered will include, but not be limited to phraseology, procedures, LOAs, and weather. Prerequisites: AERN 15250, AERN 25350 and AERN 25351; and AERN 15740 or AERN 15745.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

AERN 35343 - EN ROUTE I

Introduction to en route operations of air traffic control. Focus on the non-RADAR foundations of en route operations. Topics covered include, but are not limited to phraseology, maps, LOAs, rules and procedures in a non-RADAR environment. Prerequisite: AERN 25250 and 35342.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

AERN 35345 - TERMINAL OPERATIONS I LABORATORY

Application of terminal air traffic control operating principles explored in AERN 35342 Terminal Operations I. Prerequisite: none. Corequisite: AERN 35342.

1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory
AERN 35400 - SYSTEM DYNAMICS AND CONTROL

Dynamic modeling and response of systems with mechanical, hydraulic, electrical, and/or thermal elements. Classical methods of feedback control system design and analysis. Prerequisites: AERN 25500 and MATH 32044.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

AERN 35500 - SIGNALS AND CIRCUITS

An introduction to electric circuit elements and electronic devices and a study of circuits containing such devices. Both analog and digital systems are considered. Prerequisite: AERN 35400 and PHY 23102. Corequisite: AERN 35501.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

AERN 35501 - SIGNALS AND CIRCUITS LABORATORY

Laboratory demonstrations and experiments for electrical circuits, data acquisition, and signal measurements. Corequisite: AERN 35500.

1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

AERN 35600 - HIGH-SPEED AERODYNAMICS

Compressibility effects on airfoil and wing aerodynamics; supersonic potential flow; method of characteristics; boundary layer effects on aircraft performance. Prerequisites: AERN 25500, AERN 35200 and MATH 32044.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

AERN 35644 - INSTRUMENT FLIGHT THEORY

Course instruction on Instrument Flight to include, navigation facilities (both ground and aircraft), weather
theory and weather specific to instrument meteorological conditions, weather charts and sources, cross-country flight planing for IFR, FAA regulations specific to IFR flight, Charts for Instrument Flight, Aircraft Performance, Decision Making, Aircraft Systems and Instruments related to IFR Flight, and Instrument Flight techniques and procedures. This course meets the requirements for endorsement to take the FAA Airman Knowledge Exam for an Instrument Rating and satisfies the requirements of the Training Course Outline approved by the FAA. Prerequisites: AERN 15740 and AERN 25250. Corequisite: AERN 35645.

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
<th>Level</th>
<th>Schedule Type</th>
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<tr>
<td>AERN 35645</td>
<td>INSTRUMENT PILOT FLIGHT</td>
<td>3.00</td>
<td>Undergraduate</td>
<td>Flight Training</td>
<td>Applied Eng/Sustainability/Tech Department</td>
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<tr>
<td>AERN 35646</td>
<td>INSTRUMENT HELICOPTER FLIGHT</td>
<td>2.00</td>
<td>Undergraduate</td>
<td>Flight Training</td>
<td>Applied Eng/Sustainability/Tech Department</td>
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<tr>
<td>AERN 35647</td>
<td>COMMERCIAL PILOT FLIGHT II</td>
<td>2.00</td>
<td>Undergraduate</td>
<td>Flight Training</td>
<td>Applied Eng/Sustainability/Tech Department</td>
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<tr>
<td>AERN 35648</td>
<td>INSTRUMENT HELICOPTER FLIGHT ADD-ON</td>
<td>4.86</td>
<td>Undergraduate</td>
<td>Flight Training</td>
<td>Applied Eng/Sustainability/Tech Department</td>
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</table>
Flight course designed to fulfill FAA requirements for the Instrument Helicopter Rating. This course may only be repeatable twice. Student is required to spend 1.5 hours each day, five days a week, at the airport, until the FAA minimum requirements are attained. When not flying, the student goes through personalized ground instruction with an assigned flight instructor. Minimum FAA flight time requirements towards the Instrument Helicopter Flight Rating is 15 hours of actual or simulated instrument time. Actual flight training may exceed 15 hours. Prerequisite: AERN 35645; and cumulative 2.500 GPA. Corequisite: AERN 35101.

1.000 Credit hours
2.430 Other hours

Levels: Undergraduate
Schedule Types: Flight Training

**AERN 35650 - NON-PILOT INSTRUMENT FLIGHT THEORY**

Course instruction for instrument flight to include: navigation facilities and equipment (both ground and aircraft), general weather theory and weather related to instrument meteorological conditions, weather charts and sources, FAA regulations pertinent to the conduct of instrument flight, aeronautical charts for instrument flight and techniques and procedures unique to the conduct of instrument flight. This course does not satisfy the Federal Aviation Regulation requirement for endorsement to take the Airman Knowledge Exam for an Instrument Rating nor does it satisfy the Aircraft Dispatch minor. Prerequisites: AERN 15740 or AERN 15745; and AERN 25250.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

**AERN 35746 - COMMERCIAL PILOT THEORY**

Comprehensive instruction covering all areas necessary to exercise the privileges of a commercial pilot. Prerequisites: AERN 35644.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Flight Training

Applied Eng/Sustainabilit/Tech Department

**AERN 35747 - COMMERCIAL PILOT FLIGHT III**

Comprehensive flight course for the professional pilot candidate to meet the requirements of the FAA commercial pilot certificate. This course may only be repeatable twice. Student is required to spend 2 hours daily, three days a week, at the airport until the FAA minimum requirement of 25 hours ground instruction has been attained. When not flying, the student goes through personalized ground instruction with his or her flight instructor. Prerequisites: AERN 35644 and 35645; and cumulative 2.500 GPA. Pre/corequisite: AERN 35647. Corequisite: AERN 35746.

2.000 Credit hours
2.000 Other hours

Levels: Undergraduate
Schedule Types: Flight Training

Applied Eng/Sustainabilit/Tech Department
AERN 35748 - COMMERCIAL PILOT HELICOPTER FLIGHT ADD-ON

Flight course designed to fulfill Federal Aviation Administration (FAA) requirements for the commercial pilot helicopter certificate. This course may only be repeatable twice. Student is required to spend 1.5 hours each day, five days a week, at the airport, until the FAA minimum requirements are attained. When not flying, the student goes through personalized ground instruction with an assigned flight instructor. Minimum FAA flight time requirements towards the Commercial Pilot Helicopter Add-On Flight Certificate is 35 hours. Actual flight training may exceed 35 hours. Prerequisites: AERN 35747; and AERN 15742 or 15743; and cumulative 2.500 GPA. Corequisite: AERN 35101.

2.000 Credit hours
4.860 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Applied Eng/Sustainabilit/Tech Department

AERN 35749 - COMMERCIAL PILOT HELICOPTER FLIGHT

Flight course designed to fulfill FAA requirements for the Commercial Pilot Helicopter certificate. This course may only be repeatable twice. Student is required to spend 1.5 hours each day, five days a week, at the airport, until the FAA minimum requirements are attained. When not flying, the student goes through personalized ground instruction with an assigned flight instructor. Minimum FAA flight time requirements towards the Commercial Pilot Helicopter Flight Certificate is 150 hours. Actual flight training may exceed 150 hours. Prerequisite: AERN 15742 or 15743; and minimum cumulative 2.500 GPA. Corequisite: AERN 35746.

3.000 Credit hours
5.500 Other hours

Levels: Undergraduate
Schedule Types: Flight Training

Applied Eng/Sustainabilit/Tech Department

AERN 35810 - UNMANNED AIRCRAFT SYSTEMS

Provides an understanding of the theory of operation, architecture, and performance characteristics of various airborne-onboard systems and subsystems utilized in unmanned aerial vehicles. Also includes examination of aircraft materials, structural components, and configuration. Prerequisite: AERN 25800.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

AERN 35830 - UNMANNED AIRCRAFT SYSTEMS SENSING AND SENSOR SYSTEMS

An in-depth study of sensors and remote sensing systems used to support Unmanned Aircraft operations. Course emphasizes the theory, technical characteristics, capabilities, and operational use of various sensors and sensing systems. Course also investigates sensor data generation and sensing system image interpretation and analysis. Prerequisite: AERN 25800.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
AERN 35840 - UNMANNED AIRCRAFT SYSTEMS COMMAND, CONTROL AND COMMUNICATIONS

Explores the technological and operational aspects of ground-based and airborne command, control, and communications systems used in unmanned aircraft systems. Topics include UAV sense-and-avoid systems, data link systems, voice communications systems, telemetry systems, navigation systems, and manual and automatic flight control systems. Prerequisites: AERN 35644 or AERN 35650; and AERN 35810.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

AERN 45010 - AIRCRAFT DISPATCH I

This is the first of two courses designated for the practical application of knowledge necessary to perform aircraft dispatcher functions. Topics include decision making, human error and teamwork. This course is required for endorsement to take the FAA aircraft dispatcher knowledge exam. Prerequisite: AERN 35644 or AERN 35650.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

AERN 45020 - AIRCRAFT DISPATCH II

This is the second of two courses designated for the practical application of previously acquired knowledge necessary to perform aircraft dispatcher functions. Topics as applied to dispatch functions include: briefing techniques, preflight, weather analysis and flight planning. Required for an endorsement to take the FAA aircraft dispatcher practical test. Prerequisite: AERN 45010.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

AERN 45025 - DISPATCH LABORATORY

Practical Aircraft Dispatch application and preparation for the ADX written, oral and practical exam Prerequisite: AERN 45010. Corequisite: AERN 45020.

1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Applied Eng/Sustainabilit/Tech Department
### AERN 45030 - AIRCRAFT SYSTEMS II

Continuation of AERN 35040. An in-depth study of various aircraft systems including auxiliary systems, undercarriage, hydraulics, flight controls, instruments, and integrated systems as applied to aircraft.  
Prerequisite: AERN 35040.  
3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture  
Applied Eng/Sustainabilit/Tech Department

### AERN 45040 - LABOR RELATIONS IN THE AVIATION INDUSTRY

Legislation governing labor relations in the private sector of the United States Economy consist of two separate and distinct pieces of legislation: the Railway Labor Act and the National Labor Relations Act. This course focuses on the examination of air transport labor relations in the context of these key laws. As the student of aviation management comes in contact with both Acts though this course, the student will learn similarities and differences of each and their resultant impact. The student will actively apply this knowledge in a mock labor relations negotiation. Prerequisites: none.  
3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture  
Applied Eng/Sustainabilit/Tech Department

### AERN 45092 - AERONAUTICAL INTERNSHIP/COOPERATIVE EDUCATION

(Repeatable for a total of 6 hours) Work experience in aerospace/aviation industry or related activity, laboratory or student professional organization. Prerequisite: special approval.  
1.000 TO 3.000 Credit hours  
1.000 TO 3.000 Other hours

Levels: Undergraduate  
Schedule Types: Practicum or Internship  
Applied Eng/Sustainabilit/Tech Department  
Course Attributes:  
Experiential Learning Requirem

### AERN 45096 - INDIVIDUAL INVESTIGATION IN AERONAUTICS

(Repeatable for a maximum of 6 credit hours) Work study of an individual nature on a topic relating to professional aviation. Prerequisite: Sophomore standing and special approval.  
1.000 TO 3.000 Credit hours  
1.000 TO 3.000 Other hours

Levels: Undergraduate  
Schedule Types: Individual Investigation  
Applied Eng/Sustainabilit/Tech Department
AERN 45099 - AERONAUTICAL STUDIES CAPSTONE

(Repeatable for credit) An in-depth study of the student's area of focus within aeronautical studies, culminating to a senior level project. At the discretion of the aeronautics faculty, students may substitute another capstone course for this course. Students must pass this capstone with a grade of C (2.000) or better in order to graduate. Prerequisite: senior standing.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Senior Project/Honors Thesis

Applied Eng/Sustainabililt/Tech Department

Course Attributes:
Experiential Learning Requirem

AERN 45100 - OPERATIONAL PLANNING IN AVIATION

Focus on both airport and airline operations through planning, design and management. Students function as project managers and work with simulation to run their own airport design and airline operations with respect to financial and economic variables. Prerequisites: AERN 35340 and AERN 35341.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture, Research

Applied Eng/Sustainabililt/Tech Department

AERN 45121 - ADVANCED AEROSPACE PROPULSION

A thorough study of propulsion systems used in the aeronautics industry beginning with an introduction to the reciprocating engine and ending with the study of modern rocketry. Emphasis is given to advanced systems such as gas turbine engines and hypersonic propulsion systems. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabililt/Tech Department

AERN 45130 - PHYSIOLOGY AND HUMAN FACTORS OF FLIGHT

A study of the interaction of the human body with flight and those human factors that affect flight operations. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabililt/Tech Department

AERN 45135 - AVIATION SAFETY THEORY
(Cross-listed with AERN 55135) Provides an in-depth study into aviation human safety theories and the basics of risk and safety management. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainability/Tech Department

**AERN 45150 - APPLIED FLIGHT DYNAMICS I**

Cross-listed with AERN 55150) An applied aircraft flight dynamics course that demonstrates aircraft, engine and propeller performance with the overall flight performance and stability of the typical subsonic airplane. Emphasis is placed on the aerodynamics of flight. Prerequisites: PHY 13011.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainability/Tech Department

**AERN 45151 - APPLIED FLIGHT DYNAMICS II**

Aerodynamics, flight dynamics, and flight performance of high performance aircraft. Course includes supersonic aerodynamics, flight stability and handling, and an in-depth investigation and analysis of flight performance parameters including lift, drag, load factor, climb performance, and turn performance. Prerequisite: AERN 45150.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainability/Tech Department

**AERN 45200 - STRATEGIC AVIATION MANAGEMENT**

Serves as the capstone course for the aviation management area of concentration in aeronautics. As such, it is designed to address evolving issues and challenges in aviation management with a particular emphasis on airlines and airports through an application of previously mastered aviation management courses. Students must pass the course with a minimum grade of "C" (2.000). Prerequisite: AERN 45100; and senior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture, Research

Applied Eng/Sustainability/Tech Department

Course Attributes: Experiential Learning Requirem

**AERN 45250 - AVIATION LAW**

Involves a study of the origins of Western jurisprudence, common law and aviation law as an integral part of
law in the U.S. Also introduces international aviation law by lateral agreement as well as U.S. Constitutional law and its amendments as they relate to the structure and process of aviation law. Criminal and civil law as they relate to civil aviation are also addressed. Case studies are included. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

**AERN 45291 - AEROSPACE SENIOR SEMINAR**

(Repeatable for credit) Seminar on selected topics relating to problems, issues and conditions of employment within aviation. Prerequisite: Aeronautics (AERN) major and senior standing.

1.000 Credit hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

Applied Eng/Sustainabilit/Tech Department

**AERN 45300 - AIR TRAFFIC CONTROL CAPSTONE**

Designed to prepare the student for the AT-Basics, AT-SAT, and to act as the culminating experience for the air traffic control program of study. Includes a combination of practical terminal and enroute operations. A grade of "B" or higher must be achieved in order to graduate and receive a CTI endorsement. Prerequisites: AERN 45343 and AERN 45344.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Applied Eng/Sustainabilit/Tech Department

Course Attributes:
Experiential Learning Requirem

**AERN 45320 - TERMINAL OPERATIONS II**

Advanced terminal course that focuses on the TRACON environment. Emphasis in vectoring and sequencing for approach at the primary airport. Topics covered will include, but not be limited to phraseology, maps, LOAs, and airspace. Prerequisite: AERN 35342. Corequisite: AERN 45321.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

**AERN 45321 - TERMINAL OPERATIONS II LABORATORY**

Application of terminal air traffic control operating principles explored in AERN 45320 Terminal Operations II.
Prerequisite: AERN 35342. Corequisite: AERN 45320.
1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Applied Eng/Sustainabilit/Tech Department

**AERN 45340 - AIRCRAFT MAINTENANCE**

Fundamentals of aircraft maintenance and resolving maintenance problems on the flight line. Prerequisite: Aeronautics (AERN) major and senior standing and special approval.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Applied Eng/Sustainabilit/Tech Department

**AERN 45343 - EN ROUTE II**

Advanced en route course that focuses on low altitude, en route operations. Some time is spent on high altitude and special operations as well. Topics covered include, but not limited to phraseology, procedures, LOAs and maps. Prerequisite: AERN 45320. Corequisite: AERN 45344.
2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

**AERN 45344 - EN ROUTE II LABORATORY**

Application of en route air traffic control operating principles explored in AERN 45343 En Route II. Prerequisite: none. Corequisite: AERN 45343.
1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Applied Eng/Sustainabilit/Tech Department

**AERN 45349 - SYSTEMS MAINTENANCE AND RELIABILITY**

Combines theories of systems and operations with practical experience to meet FAA standards for an airframe and powerplant license (300 hours shop experience). Prerequisite: AERN 45340.
5.000 Credit hours
5.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department
AERN 45350 - AVIONICS

(Cross-listed with AERN 55350) A study of aviation electronic systems in flight vehicles that pertain to communication, navigation and air traffic control systems. Prerequisites: PHY 13001 and PHY 13002.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

AERN 45600 - AIRCRAFT STABILITY AND CONTROL

Three-dimensional rigid body dynamics, aircraft equations of motion, principles of static stability and control, dynamic stability of uncontrolled motion, gyroscopic instruments. Prerequisites: AERN 25500 and AERN 35400. Corequisite: AERN 45601.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

AERN 45601 - AIRCRAFT STABILITY AND CONTROL LABORATORY

Laboratory demonstrations and experiments for various aspects of aircraft stability and control. Prerequisite: none. Corequisite: AERN 45600.
1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Applied Eng/Sustainabilit/Tech Department

AERN 45648 - THEORY OF FLIGHT INSTRUCTION

Detailed fundamentals of teaching flight and ground instruction and the analysis of flight techniques, in order to meet requirements of FAR's part 61.185(a). Prerequisites: AERN 35040, 35746, 35747 and 45150. Corequisite: AERN 45649.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Flight Training

Applied Eng/Sustainabilit/Tech Department

Course Attributes:
Experiential Learning Requirem

AERN 45649 - FLIGHT INSTRUCTOR/AIRPLANES
Flight course with emphasis on instructing techniques in aircraft from right seat. Includes student evaluation techniques to meet FAR requirements for CFI. This course may only be repeatable twice. Student is required to spend 2 hours daily, three days a week, at the airport until the FAA minimum requirement of 30 hours ground instruction has been attained. When not flying, the student goes through personalized ground instruction with his or her flight instructor. Prerequisites: AERN 35746 and 35747. Corequisite: AERN 45648.

2.000 Credit hours
9.000 Other hours

Levels: Undergraduate
Schedule Types: Flight Training

Applied Eng/Sustainabilit/Tech Department

**AERN 45650 - CERTIFIED FLIGHT INSTRUCTOR HELICOPTER FLIGHT**

Flight course designed to fulfill FAA requirements for the Flight Instructor Helicopter certificate. Prerequisites: AERN 35746 and 35749; and 2.500 cumulative GPA. Corequisite: AERN 45648.

2.000 Credit hours
2.220 Other hours

Levels: Undergraduate
Schedule Types: Flight Training

Applied Eng/Sustainabilit/Tech Department

**AERN 45651 - FLIGHT INSTRUCTOR-INSTRUMENTS**

Flight course with emphasis on flight instructing techniques involved with instrument flight and ATC procedures. This course may only be repeated twice. Prerequisites: AERN 45648 and 45649; and cumulative 2.500 GPA.

2.000 Credit hours
2.000 Lecture hours
9.000 Other hours

Levels: Undergraduate
Schedule Types: Flight Training

Applied Eng/Sustainabilit/Tech Department

**AERN 45652 - CERTIFIED FLIGHT INSTRUCTOR INSTRUMENT HELICOPTER FLIGHT**

Flight course designed to fulfill FAA requirements for the Flight Instructor Instrument Helicopter certificate. This course may only be repeated twice. Student is required to spend 1.5 hours each day, five days a week, at the airport, until the course requirements are attained. When not flying, the student goes through personalized ground instruction with an assigned flight instructor. Certified Flight Instructor Helicopter Certificate is 15 hours. Actual flight training may exceed 15 hours. Prerequisites: AERN 35646 or 35648; and AERN 45650 or 45659; and 2.500 cumulative GPA.

1.000 Credit hours
1.100 Other hours

Levels: Undergraduate
Schedule Types: Flight Training

Applied Eng/Sustainabilit/Tech Department

**AERN 45653 - MULTI-ENGINE PILOT FLIGHT**

The course provides the required ground and flight instruction necessary to qualify students for the multi-
engine rating from the FAA. This course may only be repeatable twice. Student is required to spend 2 hours daily, three days a week, at the airport until the FAA minimum requirement of 20 hours ground instruction has been attained. When not flying, the student goes through personalized ground instruction with his or her flight instructor. Prerequisite: AERN 35747; and cumulative 2.500 GPA.

1.000 Credit hours
1.000 Lecture hours
9.000 Other hours

Levels: Undergraduate
Schedule Types: Flight Training

Applied Eng/Sustainabilit/Tech Department

**AERN 45654 - CERTIFIED FLIGHT INSTRUCTOR HELICOPTER FLIGHT ADD-ON**

Flight course designed to fulfill FAA requirements for the Flight Instructor Helicopter Add-on certificate. Prerequisites: AERN 45649; and 2.500 cumulative GPA.

1.000 Credit hours
1.100 Other hours

Levels: Undergraduate
Schedule Types: Flight Training

Applied Eng/Sustainabilit/Tech Department

**AERN 45655 - ADVANCED MULTI-ENGINE PILOT FLIGHT**

Ground flight instruction for proficiency and required hours in preparation for multi-engine instruction. Prerequisite: AERN 45653; and minimum cumulative 2.500 GPA.

1.000 Credit hours
9.000 Other hours

Levels: Undergraduate
Schedule Types: Flight Training

Applied Eng/Sustainabilit/Tech Department

**AERN 45656 - CERTIFIED FLIGHT INSTRUCTOR INSTRUMENT HELICOPTER FLIGHT ADD ON**

Flight course designed to fulfill FAA requirements for the Flight Instructor Instrument Helicopter Add-on certificate. Prerequisites: AERN 45651; and cumulative 2.500 GPA.

1.000 Credit hours
1.100 Other hours

Levels: Undergraduate
Schedule Types: Flight Training

Applied Eng/Sustainabilit/Tech Department

**AERN 45657 - MULTI-ENGINE FLIGHT INSTRUCTOR**

This course provides the necessary ground and flight instruction to professionally qualify students for the multi-engine instructor rating by the FAA. This course may only be repeatable twice. Student is required to spend 2 hours daily, three days a week, at the airport. When not flying, the student goes through personalized ground instruction with his or her flight instructor. Prerequisite: AERN 45649 and AERN 45655; and minimum 2.500 cumulative GPA.

1.000 Credit hours
AERN 45659 - UPSET RECOVERY TRAINING

Consisting of both ground school and hands-on flight components, this upset training course prepares pilots for emergency situations they may encounter that cannot properly be replicated in a typical GA aircraft. Extensive piston driven and swept wing jet aerodynamic characteristics, accident analysis and recovery profile. Special course fees apply. Prerequisites: 2.500 GPA; and AERN 15741.

1.000 Credit hours
9.000 Other hours

AERN 45700 - AIRCRAFT DESIGN

(Cross-listed with AERN 55700) Preliminary design of a fixed-wing aircraft for a specific mission: weight estimates; wing planform, airfoil and propulsion; selection airframe configuration and layout design; performance analysis; and overall systems integration. Prerequisites: AERN 15000; and TECH 21021; and PHY 13011 and 13012. Pre/corequisites: AERN 45030 and 45150 and 45350.

4.000 Credit hours
4.000 Lecture hours

AERN 45710 - TURBINE ENGINE THEORY AND OPERATION

An in-depth study of the theory, operation and performance of turbine turboprop engines and associated systems. Prerequisite: AERN 35020.

2.000 Credit hours
2.000 Lecture hours

AERN 45711 - TURBINE ENGINE THEORY AND OPERATION LABORATORY

Laboratory using a turboprop flight simulator to provide instruction and demonstration of the operating characteristics and procedures associated with turbine/turboprop engines. Prerequisite: AERN 35020. Pre/corequisite: AERN 45710.

1.000 Credit hours
1.000 Other hours
AERN 45720 - CREW RESOURCE MANAGEMENT

An in-depth study of the common principles of aviation crew resource management (CRM) and human factors as utilized by air transport flight crews. Prerequisite: AERN 45130.
2.000 Credit hours
2.000 Lecture hours

AERN 45721 - CREW RESOURCE MANAGEMENT LABORATORY

Flight simulator-based laboratory that includes flight simulator experiences that integrate CRM and LOFT in a multicrew environment. Prerequisite: AERN 45130. Pre/corequisite: AERN 45720.
1.000 Credit hours
1.000 Other hours

AERN 45730 - APPLIED TRANSPORT CATEGORY AIRCRAFT SYSTEMS

Course examines various systems in use on air transport aircraft. The course emphasis is on the principles, operation and limitations of complex, integrated systems found in modern aircraft. Prerequisite: AERN 35020 and AERN 45030.
3.000 Credit hours
3.000 Lecture hours

AERN 45740 - FLIGHT MANAGEMENT SYSTEMS

Course examines various advanced avionics systems used on air transport type aircraft. The course emphasis is on the principles, operation and limitations of integrated avionics related to the "glass cockpit" found on modern aircraft. Prerequisite: AERN 45030 and 45350.
3.000 Credit hours
3.000 Other hours
**AERN 45791 - AVIATION SECURITY AND POLICY SEMINAR**

(Cross-listed with AERN 55791) Examines policies, practices, procedures and regulatory provisions developed to create and enhance security in civil aviation with a special emphasis on airlines, airports, airspace and agencies responsible for civil aviation security. Prerequisite: AERN 45250.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate  
Schedule Types: Seminar  
Applied Eng/Sustainabilit/Tech Department  
Course Attributes:  
Writing Intensive Course

**AERN 45800 - UNMANNED AIRCRAFT SYSTEMS FLIGHT OPERATIONS THEORY**

Classroom instruction to provide the general information and knowledge necessary to prepare students to pilot and operate unmanned aircraft. Emphasis is placed on the acquisition of knowledge required to engage in UAS flight operations, specifically focused on piloting UAVs and managing UAV sensors. This course provides students with the background knowledge required to begin flight training and to perform real-time mission management operations for high performance unmanned aircraft systems. Prerequisites: AERN 25350; and AERN 25351; and AERN 35644 or AERN 35650; and AERN 35830; and AERN 35840; and AERN 45150.

4.000 Credit hours  
4.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture  
Applied Eng/Sustainabilit/Tech Department

**AERN 45850 - AIRCRAFT DESIGN II**

Second of a two-course series of aerospace design. Preliminary design or case study of an aerospace vehicle, including but not limited to aircraft, rotorcraft, and spacecraft. Primary focus on sub-system design (i.e., propulsion, structure, controls, etc.), and overall vehicle integration of these subsystems. Cost analysis and safety analysis. Final technical report and/or model prototype. Prerequisites: AERN 45600 and AERN 45700. Corequisite: AERN 45900.

3.000 Credit hours  
1.000 Lecture hours  
4.000 Lab hours

Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab  
Applied Eng/Sustainabilit/Tech Department

**AERN 45900 - AEROELASTICITY**

Review of beam analysis. Structural dynamics of one-dimensional systems. Analysis of static aeroelastic phenomena, unsteady aerodynamics and flutter. Equations of motion for complete aeroelastic systems; solution techniques. Prerequisite: AERN 35150 and TECH 33111.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture
AERN 55135 - AVIATION SAFETY THEORY

An in-depth study of aviation human safety theories and the basics of risk and safety management.
Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

AERN 55150 - APPLIED FLIGHT DYNAMICS I

(Cross-listed with AERN 45150) A course relating aircraft, engine and propeller performance to the overall flight performance of the typical light airplane. Includes flight test project participation. Special course fee $10 cr./Hr. Subject to change. Prerequisite: MATH 11012 or MATH 12002, PHY 13001 and 13002 or PHY 23101 and 23102, and AERN 15000; and graduate standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

AERN 55235 - HUMAN ERROR ANALYSIS IN AVIATION

Provides an in-depth look at human error and its implications in the realm of safety using examples from the aviation industry. Includes a basic overview of human error, discussion on the models available to examine error, provides knowledge on how to classify and provide recommendations of intervention strategies. A focus will be on the SHELL Model, the Human Factors Analysis and Classification System, and the 5M model. This course will use real examples of accidents and incidents for students to apply these strategies. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

AERN 55350 - AVIONICS

(Cross-listed with AERN 45350) A descriptive course that covers electronic systems in aviation, particularly from the standpoint of aircraft equipment its operational theory and practical use by the pilot. Prerequisite: PHY 13001 and 13002 or PHY 23101 and 23102; AERN 15000; and TECH 21021; and graduate standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab
AERN 55700 - AIRCRAFT DESIGN

(Cross-listed with AERN 45700) Preliminary design of a fixed-wing aircraft for a specific mission; weight estimates, wing platform, airfoil and propulsion selection. Airframe configuration and layout design performance analysis, and overall systems integration. Prerequisite: PHY 13001 and 13002 or PHY 23101 and 23102; AERN 15000; and TECH 21021. Pre/corequisites: AERN 45030, and 45350 and 45150; and graduate standing.

4.000 Credit hours
4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

AERN 55791 - AVIATION SECURITY AND POLICY SEMINAR

(Repeatable for credit) (Cross-listed with AERN 45791) Analytical review of policies, practices procedures and regulatory provisions designed to create and enhance security in civil aviation with a special emphasis on the impact of emerging technologies on aviation security. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Applied Eng/Sustainabilit/Tech Department

AERN 61091 - AEROSPACE SEMINAR

(Repeatable for a maximum of three semesters) Discussions of selected technical topics related to aerospace technology. Prerequisite: Graduate standing.

1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Applied Eng/Sustainabilit/Tech Department

AERN 65095 - SPECIAL TOPICS IN AERONAUTICS

(Repeatable for a maximum of 15 credit hours) Study of special topics that focus on subjects and issues in aeronautics. Prerequisite: graduate standing.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

AERN 65240 - AVIATION SAFETY MANAGEMENT SYSTEMS

An in-depth study of the concepts and principles of aviation safety management and aviation Safety Management Systems (SMS). Provides a fundamental knowledge of SMS safety policy, safety risk management, safety assurance, and safety promotion. Also includes a thorough analysis of the design, implementation, and
AERN 65300 - AIRLINE TRANSPORTATION OPERATIONS

The study of scheduled and charter airline transport operations under Federal Air Regulations (FAR) Part 135. Prerequisite: Special approval and graduate standing.

Levels: Graduate
Schedule Types: Lecture

AERN 65496 - INDIVIDUAL INVESTIGATION IN AERONAUTICS

(Repeatable for a maximum of 9 credit hours) Individual investigation of various aeronautics-related topics. Prerequisite: Special approval and graduate standing.

Levels: Graduate
Schedule Types: Individual Investigation

AGRI 20000 - ECONOMIC PERSPECTIVES ON FOOD AND AGRICULTURE

Introduction of the role of economics in agriculture at the firm, national, and international level. An overview of the structure and scope of the U.S. Food and Fiber Sector and its current trends and implications for the national economy. Students learn to apply various economic principles and concepts relating to production agriculture, business management, consumer behavior, market price analysis and equilibrium, international trade and public policy formation. Prerequisite: none.

Levels: Undergraduate
Schedule Types: Lecture

AGRI 30000 - FARM BUSINESS MANAGEMENT

Develops an understanding of the various business management decisions involved in the organization and operation of a farm business operation for continuous profit and production cost efficiency. Students acquire knowledge and proficiency in applying the various economic principles and farm business management analysis concepts which aid a farm operator or owner in the decision making process for a farm business operation. Prerequisites: ACTT 11000 and BMRT 11009 and ECON 22060.

Levels: Graduate
Schedule Types: Lecture
AGRI 31000 - AGRIBUSINESS MANAGEMENT

Intended for students interested in careers eventually leading to managerial positions in commodity production and marketing, input supply, banking, cooperatives and related agricultural industries. Focus is on the use of financial statements, operating and managerial functions, communication, and the inter-personal work environment within an organization. Presentation is by lecture integrated with experiential learning through use of student-team decision making applied to an agribusiness management simulation. Prerequisites: ACTT 11000 and ACTT 11001 and BMRT 11009 and ECON 22060.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

AGRI 32000 - FARM RECORDS ANALYSIS AND INCOME TAX MANAGEMENT

Develop an understanding of the procedures involved with farm recordkeeping and illustrates the ways in which farm records can be used to evaluate and to improve the economic performance and profitability of a farm business. Students have the opportunity to gain an understanding of the current tax system. Students learn to apply the various tax management methods and strategies that can be used to maximize the after tax income to a farm business operation. Prerequisite: AGRI 30000.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

AGRI 33000 - AGRICULTURAL COMMODITY MARKETING

Covers the economic factors, socioeconomic trends, farm demographic changes, global competitiveness, and consumer attitudes that shape the current structure and operation of the U.S. agricultural marketing system. Includes how decisions at one level in the value chain impact all other levels and explores how and when the system changes as a result of individual decisions. Also focuses on quality-based marketing, contracting and provides a global perspective. Prerequisites: AGRI 20000 and BMRT 11009 and BMRT 21050 and ECON 22060.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

AGRI 34000 - LIVESTOCK PRODUCTION MANAGEMENT

An introduction to the livestock industry and its role in society and our economy. Principles of livestock production management are introduced for beef, swine, dairy cattle, horses, sheep, goats and poultry.
Prerequisites: AGRI 31000; and BSCI 10001 and 10003, or BSCI 10100.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**AGRI 35000 - CROP AND FORAGE PRODUCTION MANAGEMENT**

Deals with crop plants in relation to the environment, crop improvement, seeds, and seeding. The practice of tillage, fertilizer, rotation, cropping, and weed control is covered. Pastureland and farmland, the harvest of field crops, and the handling and marking of grain seeds and hay are also included, as well as crops of the grass family, perennial forage grasses, the legume family and miscellaneous crops. Prerequisites: BSCI 10001 and 10003, or BSCI 10100; and AGRI 30000.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**AGRI 40000 - ADVANCED FARM BUSINESS MANAGEMENT**

Application of economics and business principles to the management of a Farm Business. Use of analytical tools such as enterprise budgeting, linear programming, pro-forma cash flow budgeting, capital budgeting, and risk management analysis to aid the decision-making process. Understanding of farm transfer and succession planning and its importance in the intergenerational viability of a farm business. Prerequisite: AGRI 30000.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**AGRI 40092 - AGRIBUSINESS INTERNSHIP**

Provide students an internship work experience in the agribusiness industry. This internship may be completed in any one of the following areas of agribusiness: sales management, agriculture lending, insurance, cooperative management, commodity merchandising, farm business management, public relations, farm marketing, agricultural policy, dairy production or farm business operations. Prerequisites: junior or senior standing; and agribusiness (AGRI) major; and special approvla.
3.000 Credit hours
9.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Regional College Department

Course Attributes:
Experiential Learning Requirem

**AGRI 41000 - AGRICULTURAL PRICE ANALYSIS**
The economics of supply and demand provide a foundation for understanding the behavior of agricultural markets, the formation of prices, and the role of prices in the allocation of goods and services. Traditional topics include: price determination, seasonality, market adjustments, marketing margins, short-run and long-run demand, derived demand, hedging with futures markets, marketing strategies, and trade. Graphical and empirical methods, including regression, are used to do price analysis. Prerequisites: AGRI 20000 and BMRT 21050 and ECON 22061.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

AGRI 42000 - AGRICULTURAL FINANCE
To develop an understanding and proficiency in applying the various economic principles and concepts of financial management for analyzing alternative investment decisions and solving financial problems in a farm business operation. Various strategies for acquiring and financing capital resources in the farm business operation are explored. Characteristics of the financial institutions providing credit to farmers and their particular lending programs are studied. Prerequisites: AGRI 30000 and ECON 22060 and MATH 11010.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

AGRI 43000 - AGRICULTURAL ENVIRONMENTAL LAW
To acquaint students with the fundamentals of state and federal pollution control law. Major topics include: air pollution control, water pollution control, toxic substance control, solid waste management and disposal, Superfund, wetlands, endangered species, land use regulation, environmental assessment, environmental law administration and enforcement and global environmental law. Prerequisites: AGRI 30000 and BMRT 21000 and ECON 22061.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

AGRI 44000 - AGRICULTURAL AND INTERNATIONAL TRADE POLICY
History, development, programs, and analysis of public policy issues in agriculture and natural resources. Analysis of science, economic, and political factors involved in policy development. Emphasis on farm policy and farm structure; food and nutrition; trade and development; and natural resources, the environment, and bioenergy, with special attention to issues and policies impacting Ohio and the United States. Prerequisites: AGRI 20000 and ECON 22061.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
AGRI 45000 - SENIOR SEMINAR

Capstone course designed to expose Agribusiness majors to current events and the interpretation of those events in an economics framework for use in management decision making. Students are introduced to the scientific method and complete a senior research project. Prerequisites: senior standing; and agribusiness (AGRI) major.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

ANTH 18210 - INTRODUCTION TO CULTURAL ANTHROPOLOGY

Exploration of human diversity through the analysis of world cultures. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Anthropology Department

Course Attributes:
Diversity Course-Global, Kent Core-Social Sciences, LER-Social Sciences, TAG - Social/Behavior Sciences, Trnfr Module-Social Sciences

ANTH 18420 - INTRODUCTION TO ARCHAEOLOGY

Archaeology is the study of the human past using material remains. The themes of time change and human diversity will be emphasized as students learn about ancient societies and how they teach us about ourselves. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Anthropology Department

Course Attributes:
Diversity Course-Global, Kent Core-Social Sciences, LER-Social Sciences, TAG - Social/Behavior Sciences, Trnfr Module-Social Sciences

ANTH 18630 - HUMAN EVOLUTION

Introduction to basic evolutionary theory with a focus on the emergence and progressive development of the human species during the last five million years. Includes related topics such as primate behavior and human variation. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
ANTH 18631 - ISSUES IN HUMAN EVOLUTION

Laboratory study of primate and human anatomy; human paleontology; Mendelian, molecular and human genetics; and primate behavior, ecology and conservation. Pre/corequisite: ANTH 18630.
1.000 Credit hours
1.000 Lab hours

Levels: Undergraduate
Schedule Types: Lecture

ANTH 38096 - INDIVIDUAL INVESTIGATION IN ANTHROPOLOGY

(Repeatable for credit) Readings and/or research supervised by a member of the anthropology staff. Prerequisite: Permission.
1.000 TO 3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

ANTH 38240 - CULTURE AND PERSONALITY

Comparative cross-cultural socialization and personality development; group and national character; relationship of personality to politics, social and occupational roles. Prerequisite: ANTH 18210 or SOC 12050.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

ANTH 38250 - RELIGION: A SEARCH FOR MEANING

How human beings search for meanings in religious experience; the universality and cultural conditioning of this phenomenon. Prerequisite: ANTH 18210.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
ANTH 38292 - FIELD WORK IN CULTURAL ANTHROPOLOGY

(Repeatable for credit) Practical experience carrying out field research in cultural anthropology under the supervision of members of the anthropology faculty. Prerequisite: ANTH 18210 or SOC 12050.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Field Experience

ANTH 38480 - ARCHAEOLOGICAL ANALYSIS

Methods necessary for the description and laboratory analysis of prehistoric remains. Course will include laboratory exercises as well as class lectures. Prerequisite: ANTH 18420.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

ANTH 38490 - QUANTITATIVE ANTHROPOLOGY

Introduces the quantitative description of numerical data, provides an understanding of the basis of probability theory and statistical inference and acquaints the student with the role of computers in anthropology. Prerequisite: ANTH 18420 or 18630 or 38630.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

ANTH 38680 - PRIMATE SOCIETIES

This course will be a survey of the behavior of living primates. Topics covered include reproductive and foraging strategies, social structure and primate conservation. Antecedent human behavior will also be considered. Prerequisite: ANTH 18630 or 38630.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
ANTH 48093 - VARIABLE TITLE WORKSHOP IN ANTHROPOLOGY

(Repeatable for credit) (Cross-listed with ANTH 58093) Classroom discussions and field study activity focused on professional and disciplinary concerns. Specific content varies with workshop group. Prerequisite: Special approval.
1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Undergraduate
Schedule Types: Workshop

ANTH 48095 - SPECIAL TOPICS IN ANTHROPOLOGY

(Repeatable for credit) (Cross-listed with ANTH 58095) Offered irregularly when unusual resources and/or opportunities permit. Topic announced when scheduled. Prerequisite: ANTH 18210 or 18420.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

ANTH 48212 - KINSHIP AND SOCIAL ORGANIZATION

(Cross-listed with ANTH 58212) This course employs cross-cultural approaches to the understanding of marriage, family organization, descent and kinship systems. Prerequisite: ANTH 18210.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

ANTH 48214 - POLITICS OF CULTURE

Cross-listed with ANTH 58214 and PAS 43320) Addresses the way in which culture has been politicized, and looks at such issues as cultural relativism and objectivity in anthropological studies with reference to specific peoples and geographic areas. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Course Attributes:
Diversity Course-Global
**ANTH 48220 - CULTURAL ECOLOGY**

(Cross-listed with ANTH 58220) Analysis of the relationship between socio-cultural systems and the physical-biological environment. Prerequisite: ANTH 18210.

3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

Anthropology Department

**ANTH 48225 - ARCHAEOLOGY OF DEATH**

(Cross-listed with ANTH 58225) From excavations of prehistoric burial mounds to studies of colonial gravestones, the archaeology of death has always occupied a prominent place in anthropological research. The course explores approaches to diverse meanings of life and death. Prerequisite: ANTH 18420.

3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

Anthropology Department

**ANTH 48230 - SOCIO-CULTURAL CHANGE**

(Cross-listed with ANTH 58230) Analysis of institutional change where peoples of different cultures are in sustained contact. Prerequisite: ANTH 18210.

3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

Anthropology Department

**ANTH 48250 - CULTURE AND CURING**

(Cross-listed with ANTH 58250) Examination of the relationship between cultural beliefs about the nature of reality and the essence of humanity, and the causation and alleviation of disease. Prerequisite: ANTH 18210.

3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

Anthropology Department

Course Attributes:  
Diversity Course-Global

**ANTH 48425 - ANCIENT MESOAMERICA**
ANTH 48440 - ARCHAEOLOGY OF ANCIENT OHIO

(Cross-listed with ANTH 58440) Cultural evolution and human-environmental relationships in the ancient Ohio region documenting an 11,000 year period from initial occupation to the beginning of European written history. Prerequisite: ANTH 18420.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Anthropology Department

ANTH 48450 - STATES AND EMPIRES

(Cross-listed with ANTH 58450) This course presents a comparative analysis of both old and new world case histories to explore definitions, causal explanations and organizational parameters associated with prehistoric state and empire level societies. Prerequisite: ANTH 18420.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Anthropology Department

ANTH 48492 - ARCHAEOLOGICAL FIELD METHODS

(Repeatable for a maximum of 18 credit hours) (Cross-listed with ANTH 58492) Field and laboratory techniques in archaeological research. Prerequisite: special approval.
3.000 Credit hours
1.660 Lecture hours
4.000 Other hours

Levels: Undergraduate
Schedule Types: Field Experience, Lecture

Anthropology Department

Course Attributes:
Experiential Learning Requirem

ANTH 48623 - HUMAN VARIATION

(Cross-listed with ANTH 58623) A detailed anthropological examination of the causes and extent of modern human variability. Prerequisite: none.
ANTH 48630 - PACIFIC ISLAND CULTURES
Peoples and characteristics of culture areas of Pacific Islands, including Polynesia, Melanesia and Micronesia with analysis of several representative cultures from these areas. Prerequisite: ANTH 18210.

ANTH 48692 - FIELD WORK IN BIOLOGICAL ANTHROPOLOGY
(Repeatable for credit) (Cross-listed with ANTH 58692) Can be applied to any bioanth field of study and off-campus activity, ranging from museum work to U.S. and international research projects. Prerequisite: Special approval.

ANTH 48810 - HUMAN PALEONTOLOGY
(Cross-listed with ANTH 58810) Study of primate fossils of the Miocene and Pliocene to include the origins of humans and their earliest ancestors. Prerequisite: ANTH 38630.

ANTH 48820 - HUMAN MUSCULO-SKELETAL SYSTEM
(Cross-listed with ANTH 58820) A largely hands-on course introducing the study of human anatomy for students interested in biological anthropology and archaeology. Topics include skeletal and functional anatomy biomechanics and estimation of age and sex from isolated bones. Prerequisite: junior standing or above.
ANTH 48830 - HUMAN BEHAVIORAL ECOLOGY AND EVOLUTION

(Cross-listed with ANTH 58830) How "unique" is human behavior? Using an evolutionary perspective, we will explore the evolution of human mating systems and parental investment. Prerequisite: ANTH 18630 or 38630 or BSCI 30156.
3.000 Credit hours
3.000 Lecture hours

ANTH 48835 - PRIMATE ECOLOGY AND CONSERVATION

(Cross-listed with ANTH 58835) Study of the geographic distribution and evolutionary ecology of prosimians, monkeys and apes and human and climatic effects on their long-term survival. Prerequisite: ANTH 18630 or 38630 or 38680 or BSCI 10120.
3.000 Credit hours
3.000 Lecture hours

ANTH 48840 - NATURAL SELECTION IN PERSPECTIVE

(Cross-listed with ANTH 58840) The course provides an in-depth introduction into the theory of natural selection by reading both Darwin's original work and recent interpretations. Prerequisite: ANTH 18630 or 38630 or BSCI 10120.
3.000 Credit hours
3.000 Lecture hours

ANTH 58093 - VARIABLE TITLE WORKSHOP IN ANTHROPOLOGY

(Repeatable for credit) (Cross-listed with ANTH 48093) Classroom discussions and field study activity focused on professional and disciplinary concerns. Specific content varies with workshop group. Prerequisite: Graduate standing.
1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours
ANTH 58095 - SPECIAL TOPICS IN ANTHROPOLOGY

(Repeatable for credit) (Cross-listed with ANTH 48095) Offered irregularly when unusual resources and/or opportunities permit. Prerequisite: 6 graduate hours toward M.A. in Anthropology. Graduate standing. 3.000 Credit hours 3.000 Lecture hours

ANTH 58212 - KINSHIP AND SOCIAL ORGANIZATION

(Cross-listed with ANTH 48212) This course employs cross-cultural approaches to the understanding of marriage, family organization, descent and kinship system. Prerequisite: Graduate standing. 3.000 Credit hours 3.000 Lecture hours

ANTH 58214 - POLITICS OF CULTURE

(Cross-listed with ANTH 48214 and PAS 43320) This course will address the way in which culture has been politicized. It will look at issues such as cultural relativism and objectivity in anthropological studies with reference to specific peoples and geographic areas. Prerequisite: Graduate standing. 3.000 Credit hours 3.000 Lecture hours

ANTH 58220 - CULTURAL ECOLOGY

Cross-listed with ANTH 48220) Analysis of relationships between socio-cultural systems and physical-biological environment. Prerequisite: Graduate standing. 3.000 Credit hours 3.000 Lecture hours

ANTH 58225 - ARCHAEOLOGY OF DEATH
(Cross-listed with ANTH 48225) From excavations of prehistoric burial mounds to studies of colonial gravestones, the archaeology of death has always occupied a prominent place in anthropological research. The course explores approaches to diverse meanings of life and death. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Anthropology Department

ANTH 58230 - SOCIO-CULTURAL CHANGE

(Cross-listed with ANTH 48230) Analysis of institutional changes where peoples of different cultures are in sustained contact. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Anthropology Department

ANTH 58250 - CULTURE AND CURING

(Cross-listed with ANTH 48250) Examination of the relationship between cultural beliefs about the nature of reality and the essence of humanity, and causation and alleviation of disease. Prerequisite: Special approval and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Anthropology Department

ANTH 58425 - ANCIENT MESOAMERICA

(Cross-listed with ANTH 48425) Comparative analysis of Mesoamerican societies from the arrival of the first Americans over 10,000 years ago to European colonization in the 16th century A.D., including major pre-Columbian civilizations. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Anthropology Department

ANTH 58440 - ARCHAEOLOGY OF ANCIENT OHIO

(Cross-listed with ANTH 48440) Cultural evolution and human-environmental relationships in the ancient Ohio region documenting an 11,000 year period from initial occupation to the beginning of European written history. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisite</th>
<th>Credit Hours</th>
<th>Lecture Hours</th>
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</thead>
<tbody>
<tr>
<td>ANTH 58450</td>
<td>STATES AND EMPIRES</td>
<td>(Cross-listed with ANTH 48450) This course presents a comparative analysis of both Old and New World case histories to explore definitions, causal explanations and organizational parameters associated with prehistoric state and empire level societies. Prerequisite: Graduate standing.</td>
<td>3.000 Credit hours 3.000 Lecture hours</td>
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<tr>
<td>ANTH 58492</td>
<td>ARCHAEOLOGICAL FIELD METHODS</td>
<td>(Repeatable 6 times for credit) (Cross-listed with ANTH 48492) Field and laboratory techniques in archaeological research. Prerequisite: graduate standing.</td>
<td>3.000 Credit hours 1.660 Lecture hours 4.000 Other hours</td>
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<td>ANTH 58623</td>
<td>HUMAN VARIATION</td>
<td>(Cross-listed with ANTH 48623) A detailed anthropological examination of the causes and extent of modern human variability. Prerequisite: Special approval and graduate standing.</td>
<td>3.000 Credit hours 3.000 Lecture hours</td>
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<tr>
<td>ANTH 58692</td>
<td>FIELD WORK IN BIOLOGICAL ANTHROPOLOGY</td>
<td>(Repeatable for credit) (Cross-listed with ANTH 48692) Can be applied to any bioanth field of study and off-campus activity, ranging from museum work to U.S. and international research projects. Prerequisite: Approval of project and faculty sponsor graduate standing.</td>
<td>3.000 Credit hours 3.000 Other hours</td>
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</tbody>
</table>
ANTH 58810 - HUMAN PALEONTOLOGY

(Cross-listed with ANTH 48810) Study of primate fossils of the Miocene and Pliocene to include the origins of humans and their earliest ancestors. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Anthropology Department

ANTH 58820 - HUMAN MUSCULO-SKELETAL SYSTEM

(Cross-listed with ANTH 48820) A largely hands-on course introducing the study of human anatomy for students interested in biological anthropology and archaeology. Topics include skeletal and functional anatomy, biomechanics, and estimation of age and sex from isolated bones. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Anthropology Department

ANTH 58830 - HUMAN BEHAVIORAL ECOLOGY AND EVOLUTION

(Cross-listed with ANTH 48830) How "unique" is human behavior? Using an evolutionary perspective we will explore the evolution of human mating systems and parental investment. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Anthropology Department

ANTH 58835 - PRIMATE ECOLOGY AND CONSERVATION

(Cross-listed with ANTH 48835) Study of the geographic distribution and evolutionary ecology of prosimians, monkeys and apes and human and climatic effects on their long-term survival. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Anthropology Department

ANTH 58840 - NATURAL SELECTION IN PERSPECTIVE

(Cross-listed with ANTH 48840) The course provides an in-depth introduction into the theory of natural selection by reading both Darwin's original work and recent interpretations. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours
ANTH 68091 - RESEARCH SEMINAR IN ANTHROPOLOGICAL THEORY

(Repeatable for credit) An opportunity for advanced students to follow up personal theoretical interests based upon a previously established foundation in theory. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Other hours

ANTH 68093 - VARIABLE TITLE WORKSHOP IN ANTHROPOLOGY

(Repeatable for credit) Classroom presentations and field study focused on professional and disciplinary concerns. Specific content varies with workshop group. Prerequisite: Special approval and graduate standing.

1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

ANTH 68095 - SPECIAL TOPICS IN ANTHROPOLOGY

(Repeatable for credit) Offered irregularly when unusual resources and/or opportunities permit. Prerequisite: 6 graduate hours toward M.A. in Anthropology. Graduate standing.

3.000 Credit hours
3.000 Lecture hours

ANTH 68096 - INDIVIDUAL INVESTIGATION

(Repeatable for credit) Readings and/or research supervised by member of graduate faculty. Petition form available in the anthropology department office. Prerequisite: Special approval and graduate standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

ANTH 68098 - RESEARCH

(Repeatable for credit) Research or individual investigation. Repeated registration permitted. Petition form
available in the anthropology department office. Prerequisite: Special approval and graduate standing.
1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research
Anthropology Department

**ANTH 68199 - THESIS I**

Thesis student must register for total of 6 hours, 2 to 6 hours in a single semester, or distributed over several semesters if desired. Prerequisite: Special approval and graduate standing.
2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis
Anthropology Department

**ANTH 68230 - PROBLEMS IN CULTURAL ANTHROPOLOGY**

Basic graduate course in cultural anthropology required of all M.A. candidates. Course deals with major topics within this subdiscipline of anthropology. Prerequisite: Special approval and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
Anthropology Department

**ANTH 68241 - ETHNIC GROUP ANALYSIS: PACIFIC ISLANDS**

Peoples and characteristics of culture areas of the Pacific Islands, including Polynesia, Melanesia and Micronesia with analysis of several representative cultures from these areas. Prerequisite: Special approval and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
Anthropology Department

**ANTH 68299 - THESIS II**

Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: ANTH 68199 and graduate standing.
2.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis
Anthropology Department
<table>
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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>ANTH 68430</td>
<td>PROBLEMS IN WORLD PREHISTORY</td>
<td>Basic graduate course in prehistoric archaeology required of all M.A. candidates. Prerequisite: Graduate standing.</td>
<td>3.000 Credit hours</td>
<td>3.000</td>
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<tr>
<td>ANTH 68630</td>
<td>PRINCIPLES OF BIOLOGICAL ANTHROPOLOGY</td>
<td>A graduate-level introduction to the field of biological anthropology. Topics include genetics, human variation, fossil and modern primates, early man. Prerequisite: Graduate standing.</td>
<td>3.000 Credit hours</td>
<td>3.000</td>
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<tr>
<td>ANTH 68637</td>
<td>BIOANTHROPOLOGICAL DATA ANALYSIS I</td>
<td>(Cross-listed with BMS 78637) Examination of methods of univariate and bivariate experimental design. This survey emphasizes tests of hypothesis and estimation techniques with both classical and nonparametric procedures.</td>
<td>5.000 Credit hours</td>
<td>5.000</td>
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<tr>
<td>ANTH 68638</td>
<td>BIOANTHROPOLOGICAL DATA ANALYSIS II</td>
<td>(Cross-listed with BMS 78638) This survey of multivariate analysis in anthropology includes one-sample data exploration, multiple sample problems and regression methods. It also includes computer application.</td>
<td>3.000 Credit hours</td>
<td>3.000</td>
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<tr>
<td>ANTH 90001</td>
<td>Anthropology Test Course</td>
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</table>
Levels: Graduate  
Schedule Types: Lecture

**ARAB 11101 - ELEMENTARY ARABIC I**

Introduction to Modern Standard Arabic and colloquial Arabic in the context of the cultures of Arabic speakers.  
Prerequisite: None.  
5.000 Credit hours  
5.000 Lecture hours  

Levels: Undergraduate  
Schedule Types: Lecture  

Modern-Classical Lang Studies Department

**ARAB 11102 - ELEMENTARY ARABIC II**

Continuation of the introduction to Modern Standard Arabic and colloquial Arabic in the context of the cultures of Arabic speakers. Prerequisite: ARAB 11101.  
5.000 Credit hours  
5.000 Lecture hours  

Levels: Undergraduate  
Schedule Types: Lecture  

Modern-Classical Lang Studies Department

**ARAB 21201 - INTERMEDIATE ARABIC I**

Continued development of speaking, listening, reading and writing skills in Arabic, using a variety of cultural materials. Prerequisite: ARAB 11102.  
5.000 Credit hours  
5.000 Lecture hours  

Levels: Undergraduate  
Schedule Types: Lecture  

Modern-Classical Lang Studies Department

**ARAB 21202 - INTERMEDIATE ARABIC II**

Continuation of ARAB 21201. Prerequisite: ARAB 21201.  
5.000 Credit hours  
5.000 Lecture hours  

Levels: Undergraduate  
Schedule Types: Lecture  

Modern-Classical Lang Studies Department

**ARAB 30095 - SPECIAL TOPICS IN ARABIC CULTURE AND LANGUAGE**

(Repeatable for a maximum of 9 credit hours) Special topics in Arabic civilization, culture or language. Prerequisite: none.  
3.000 Credit hours  
3.000 Lecture hours
ARAB 31301 - ADVANCED INTERMEDIATE ARABIC I

Continuation of the study of Modern Standard Arabic and colloquial Arabic in the context of Arab cultures. Further development of listening, speaking, reading and writing skills, using a variety of cultural materials. Prerequisite: ARAB 21202.
4.000 Credit hours
4.000 Lecture hours

ARAB 31302 - ADVANCED INTERMEDIATE ARABIC II

Continuation of ARAB 31301. Prerequisite: ARAB 31301.
4.000 Credit hours
4.000 Lecture hours

ARAB 41096 - INDIVIDUAL INVESTIGATION

(Repeatable for a total of 6 credit hours) Individual study supervised by a faculty member on an approved topic dealing with Arabic language and-or culture. Prerequisite: ARAB 21201.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

ARAB 41201 - ADVANCED ARABIC I

Continuation of ARAB 31302. Emphasis is on building active vocabulary for comprehension, reading authentic texts, writing of connected discourse and the development of higher levels of conversational proficiency. Prerequisite: ARAB 31302 and special approval.
4.000 Credit hours
4.000 Lecture hours

ARAB 41202 - ADVANCED ARABIC II
Continuation of ARAB 41201. Prerequisites: ARAB 41201 and special approval.
4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**ARAB 41301 - ARABIC CULTURE**

Survey of the Arab world covering its geographical, ethnic, religious, and linguistic diversity and the roots of its current socio-cultural context. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**ARAB 41302 - BUSINESS ARABIC**

Study of the business protocol, language functions, texts and vocabulary associate with travel and business in the Arabic-speaking world. Prerequisite: ARAB 31302.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**ARAB 67010 - PRACTICE OF ARABIC TRANSLATION**

Introductory course in which students translate a variety of non-specialized, non-fiction short texts in different domains, identify the most common semantic, syntactic, stylistic, cultural, and discourse-level problems encountered in translation, and apply appropriate cognitive strategies. Prerequisite: graduate standing.
Corequisite: TRST 60010.
2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**ARAB 67240 - LITERARY AND CULTURAL TRANSLATION**

Translation of documents from a variety of literary and cultural sources, including literature, expository and journalistic prose, speeches and essays in and from Arabic. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
### ARAB 67250 - COMMERCIAL, LEGAL AND DIPLOMATIC TRANSLATION
An introduction to methods and resources for the translation of commercial, economic, financial, legal, diplomatic and governmental documents. Prerequisite: TRST 60010 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

### ARAB 67251 - SCIENTIFIC, TECHNICAL AND MEDICAL TRANSLATION
An introduction to methods and resources for the translation of scientific, technical, industrial and medical documents. Prerequisite: TRST 60010 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

### ARAB 67979 - TRANSLATION CASE STUDY
Students are responsible for a major translation and a terminology glossary as well as a critical analysis of the source text, the problems encountered during the translation process and the strategies used to solve them. Prerequisite: graduate standing and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

### ARCH 10001 - UNDERSTANDING ARCHITECTURE
The nature of the built environment, its forms and functions are explored within the cultural contexts of ecology, technology, human behavior, symbolism, art and history. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Architecture Department

Course Attributes:
Kent Core-Fine Arts, LER-Fine Arts, Trnfr Module-Fine Arts

### ARCH 10011 - GLOBAL ARCHITECTURAL HISTORY I
Global history of architecture from Neolithic times through the 16th Century. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Architecture Department

Course Attributes:
Kent Core-Fine Arts, LER-Fine Arts, Trnfr Module-Fine Arts

ARCH 10012 - GLOBAL ARCHITECTURAL HISTORY II

Global history of architecture from the 17th Century to 2000. Prerequisite: ARCH 10011 or ARTH 22007.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Architecture Department

Course Attributes:
Kent Core-Fine Arts, LER-Fine Arts, Trnfr Module-Fine Arts

ARCH 10093 - WORKSHOP: VARIABLE TITLE

(repeated registration permitted.) Variable topics. Prerequisite: Permission.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Workshop

Architecture Department

ARCH 10101 - FIRST YEAR DESIGN STUDIO I

Introduction to the fundamental principles of visual organization, structural organization, graphic communications, historical precedence and current directions in architecture. Graphic techniques include free hand drawing, and technical orthographics, axonometrics and perspectives. Prerequisite: architecture (ARCH) or interior design (ID) majors.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Architecture Department

ARCH 10102 - FIRST YEAR DESIGN STUDIO II

Investigations into strategies of form making through the introduction of client, type, context, site and form/space theories 2D, and 3D representation techniques and analysis of related reference architects. Prerequisite: ARCH 10101.
3.000 Credit hours
ARCH 10111 - HISTORY OF ARCHITECTURE I

History of architecture from pre-history through the Gothic period. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

ARCH 20101 - SECOND YEAR DESIGN STUDIO I

The introduction of a building design process that emphasizes the integration of program requirements with specific form topologies using line and plane as the primary elements to provide shape and space. Prerequisite: ARCH 10102.
3.000 Credit hours
3.000 Other hours

ARCH 20102 - SECOND YEAR DESIGN STUDIO II

The introduction of a building design process that emphasizes the integration of program requirements with form typologies that are both influenced and informed by specific site context. Line and plane and primary configural shapes are again incorporated to develop building form solutions. Prerequisite: ARCH 20101.
3.000 Credit hours
3.000 Other hours

ARCH 20112 - HISTORY OF ARCHITECTURE II

History of architecture from the Medieval era through the 19th century. Prerequisite: architecture (ARCH) or architectural studies (ARCS) major or architectural studies (ARCS) minor.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Architecture Department
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<tr>
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<th>Levels: Undergraduate</th>
<th>Schedule Types: Lecture</th>
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<tr>
<td>ARCH 20113</td>
<td>HISTORY OF ARCHITECTURE III</td>
<td>A history of 20th century architecture. Prerequisites: ARCH 20112 and architecture (ARCH) or architectural studies (ARCS) major or architectural studies (ARCS) minor.</td>
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<td>3.000</td>
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<tr>
<td>ARCH 20201</td>
<td>BEYOND WESTERN ARCHITECTURE</td>
<td>Course introduces students to the broad realm of contributions to world architecture made by cultures and civilizations that were not in the traditional sphere of Western/European influence. Prerequisites: ARCH 10111 and 20112; and architecture (ARCH) or architectural studies (ARCS) major.</td>
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<tr>
<td>ARCH 20301</td>
<td>INTRODUCTION TO BUILDING STRUCTURES</td>
<td>An introduction to building structures, statics, strength of materials, analysis for shear-moment-displacement, loads including dead-live-wind-earthquake and building code requirements for structural safety. Prerequisite: Architecture majors only and MATH 12011 and 12012, or MATH 12002; PHY 13001 or 13011.</td>
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<tr>
<td>ARCH 20601</td>
<td>COMPUTER APPLICATIONS IN ARCHITECTURE I</td>
<td>Course provides a basic understanding of two-dimensional CAD operations, parametric building design and building information modeling (BIM). Prerequisite: architecture (ARCH) or architectural studies (ARCS) or interior design (ID) major.</td>
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<td>1.000 TO 3.000</td>
<td>15.000 TO 45.000</td>
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<td>Studio</td>
</tr>
<tr>
<td>ARCH 20602</td>
<td>COMPUTER APPLICATIONS IN ARCHITECTURE II</td>
<td>Principles and practices of 3D digital modeling and rendering, including: production of geometric surfaces and forms using polygon construction, texturing, lighting and rendering. Prerequisite: ARCH 20601 and architecture (ARCH) or architectural studies (ARCS) or interior design (ID) major.</td>
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<td>1.000 TO 3.000</td>
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ARCH 20693 - WORKSHOP: COMPUTER APPLICATIONS

(Repeatable for credit) Computer workshops are intended to provide an exposure to various fundamental computer topics and their application to architectural studies. Topics include file management, network applications, spreadsheets, raster image manipulations, two- and three-dimensional CAD and computer aided visualization. Prerequisite: Architecture and interior design majors only.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

ARCH 30001 - SITE DESIGN

Research component addressing technical, cultural and contextual concerns, influences and directions in site design. Prerequisite: architecture (ARCH) major and approved admission to advanced study (third year). Corequisite ARCH 30101.
1.000 Credit hours
1.000 Lecture hours

ARCH 30002 - URBAN DESIGN

(This course is equivalent to ARCH 30012) Lecture/seminar/research component conducted concurrently with ARCH 30102 addressing design of form and space in cities through study of precedents, traditions and current directions in urban form making. Prerequisites: ARCH 30101, ARCH 30001. Corequisite: ARCH 30102.
1.000 Credit hours
1.000 Lecture hours

ARCH 30012 - URBAN DESIGN, FLORENCE, ITALY

(This course is equivalent to ARCH 30002) Lecture/seminar/research component addressing design of form and space in cities through study of precedents, traditions and current directions in urban form making. Prerequisite: ARCH 30101. Corequisite: ARCH 30112.
1.000 Credit hours
1.000 Lecture hours
ARCH 30101 - THIRD YEAR DESIGN STUDIO I

Studio investigation of the simultaneous concerns of program, site, context and materials of construction. Specific emphasis on the understanding of the goals, objectives, intentions and parameters of site/context in design, including cultural influences. Prerequisite: Architecture (ARCH) majors with approved admission to advanced study (third year). Corequisite: ARCH 30001.
5.000 Credit hours
5.000 Other hours

ARCH 30102 - THIRD YEAR DESIGN STUDIO II

(This course is equivalent to ARCH 30112) Studio investigation with specific emphasis on the understanding of the goals, objectives, intentions and parameters of urban design. Prerequisite: ARCH 30101. Corequisite: ARCH 30002.
5.000 Credit hours
5.000 Other hours

ARCH 30112 - THIRD YEAR DESIGN STUDIO II-FLORENCE, ITALY

(This course is equivalent to ARCH 30102) Studio investigation with specific emphasis on understanding of the goals, objectives, intentions and parameters of urban design. Prerequisite: special approval. Corequisite ARCH 30012.
5.000 Credit hours
5.000 Other hours

ARCH 30301 - STRUCTURAL SYSTEMS I

A continuation of building structures, statics, strength of materials and systems analysis. Emphasis is on elastic materials allowable stresses and design for wood and steel structural members and systems. Prerequisite: ARCH 20301 and architecture (ARCH) major with approved admission to advanced study (third year).
ARCH 30401 - METHODS AND MATERIALS I

Introduction to the origins, extraction, properties and processing of the basic materials of construction. Primary focus on wood and masonry-appropriate use and scale including code requirements, methods of construction and design consequences. Prerequisite: architecture (ARCH) majors with approved admission to advanced study (third year).

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Architecture Department

ARCH 30501 - ENVIRONMENTAL TECHNOLOGY I

Basic principles of ecological design and architecture environmental systems including lighting, sonic and thermal systems. Interior design (ID) majors by special approval. Prerequisite: PHY 13012 and architecture (ARCH) major with approved admission to advanced study (third year).

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Architecture Department

ARCH 40001 - SUSTAINABLE DESIGN

(Cross-listed with ARCH 50001) Research component addressing precedents, traditions, current directions in conservation of natural environment. Principles and methods of ecological design in architecture and urban design. Prerequisites: ARCH 30102 or ARCH 30112. Corequisite: ARCH 40101.

1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Architecture Department

Course Attributes:
Writing Intensive Course

ARCH 40002 - SYSTEMS DESIGN

(Cross-listed with ARCH 50002) Lecture and research component addressing comprehensive integration of mechanical, electrical communications structural life safety systems and sustainable design concerns. Prerequisite: ARCH 40101. Corequisite: ARCH 40102.

1.000 Credit hours
ARCH 40101 - FOURTH YEAR DESIGN STUDIO I

(Cross-listed with ARCH 50101) Studio investigation of complex formal and spatial constructs addressing the comprehensive concerns of architecture. Special emphasis on understanding the conservation of the natural environment. CAD is required. Prerequisite: ARCH 30102 or ARCH 30112. Corequisite: ARCH 40001.

5.000 Credit hours
5.000 Other hours

Levels: Undergraduate
Schedule Types: Lecture

Architecture Department

ARCH 40102 - FOURTH YEAR DESIGN STUDIO II

(Cross-listed with ARCH 50102) Studio investigation of the comprehensive concerns and understanding of building systems integration. CAD is required. Prerequisite: ARCH 40101. Corequisite: ARCH 40002.

5.000 Credit hours
5.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Architecture Department

ARCH 40302 - STRUCTURAL SYSTEMS II

(Cross-listed with ARCH 50302) A continuation of building structures, statics, strength of materials and systems analysis. Emphasis is on inelastic materials, allowable stress and design for masonry and concrete structural members and systems. Prerequisite: ARCH 30301.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Architecture Department

ARCH 40402 - METHODS AND MATERIALS II

(Cross-listed with ARCH 50402) Continued investigation of the origins, extraction, properties and processing of the basic materials of construction. Primary focus on concrete and steel-appropriate use and scale, including allied systems and building materials, including glazing and interiors. Introduction to construction contract documents. Prerequisite: ARCH 30401.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Architecture Department
ARCH 40502 - ENVIRONMENTAL TECHNOLOGY II

(Cross-listed with ARCH 50502) Ecological design of large buildings. The investigation and analysis of lighting, thermal, water, electrical and waste systems in urban settings. Prerequisite: ARCH 30501.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

ARCH 44611 - PORTFOLIO

Architectural drawings and other allied work of the student reproduced and assembled in a professional portfolio suitable for job and graduate application. Prerequisite: ARCH 40101.

1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

ARCH 45210 - RENAISSANCE ARCHITECTURE

(Cross-listed with ARCH 55210) History and theory of renaissance architecture from 1400 until 1600. Prerequisite: ARCH 10011 and 10012; or ARCH 10111 and 20112; or ARTH 22006 and 22007.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

ARCH 45211 - BAROQUE ARCHITECTURE

(Cross-listed with ARCH 55211) History and theory of architecture in Europe from 1600 through 1750. Prerequisite: ARCH 10011 and 10012; or ARCH 10111 and 20112; or ART 22006 and 22007.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

ARCH 45220 - AMERICAN ARCHITECTURE: COLONIAL TO 1900

(Cross-listed with ARCH 55220) History of American architecture for Spanish, French, Dutch and English colonization through the 19th century. Prerequisite: ARCH 10011 and 10012; or ARCH 10111 and 20112; or ARTH 22006 and 22007.

3.000 Credit hours
ARCH 45240 - THE SKYSCRAPER
(Cross-listed with ARCH 55240) A study of skyscrapers from the standpoint of architectural, financial, structural, psychological, and technological considerations. Emphasis is placed on: early developments in Chicago and New York, the influence of the International Style, and current trends in ultra-high skyscrapers being built outside the US. Prerequisites: minimum C (2.000) grade in both ARCH 10111 and ARCH 20112. 
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Architecture Department

ARCH 45291 - SEMINAR: VARIABLE TOPICS IN ARCHITECTURAL HISTORY
(repeatable for a total of 3 credit hours) (Cross-listed with ARCH 55291) Content varies. Prerequisite: special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

Architecture Department

ARCH 45391 - SEMINAR: STRUCTURES III
(Repeatable for credit) (Cross-listed with ARCH 55391) A continuation of building structures, statics, strength of materials and systems analysis. Emphasis is on complex systems, including horizontal long span and high rise structures. Computer analysis is required. Prerequisite: ARCH 40302.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

Architecture Department

ARCH 45491 - SEMINAR: METHODS AND MATERIALS III
(Repeatable for credit) (Cross-listed with ARCH 55491) Advanced topics in methods and complex materials systems. Computer modeling and field experiences are required. Prerequisite: ARCH 40402.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

Architecture Department
ARCH 45591 - SEMINAR: ENVIRONMENTAL TECHNOLOGY III

(Repeatable for credit) (Cross-listed with ARCH 55591) Variable topics in environmental technology—environmental design and energy conservation, advanced lighting techniques etc. Prerequisite: ARCH 40502.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

Architecture Department

ARCH 45601 - ADVANCED COMPUTER APPLICATIONS

(Repeatable for a total of 3 credit hours) (Cross-listed with ARCH 55601) This course discusses advanced visualization techniques such as raytracing, radiosity and animation, and presents a variety of presentation issues and options. Prerequisite: Special approval; admission to third year.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Architecture Department

ARCH 45620 - INTRODUCTION TO PRESERVATION

(Repeatable for a maximum of 3 credit hours) (Cross-listed with ARCH 55620) An overview of preservation including building analysis, conservation adaptive reuse, economic benefits of preservation planning as a revitalizing strategy. Prerequisite: Permission.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Architecture Department

ARCH 45621 - CURRENT ISSUES IN HISTORIC PRESERVATION

(Repeatable for a maximum of 3 credit hours) (Cross-listed with ARCH 55621) course in which practicing professionals including architects, planners, developers and government officials present preservation related work. Prerequisite: Permission.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Architecture Department

ARCH 45625 - EXPLORING HISTORIC STRUCTURES

(Cross-listed with ARCH 55625) Provides students with the skills and opportunity to document an historic structure using methods prescribed by the Historic American Buildings Survey (HABS). Course work will cover
recording, documentation and assessment of the historic structure implementing the guidelines established by the Getty Conservation Institute, including history, purpose, means, methods and field work. Architecture majors must have approved admission to the third year of study. Prerequisite: junior standing.
3.000 Credit hours
1.200 Lecture hours
3.600 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Architecture Department

ARCH 45627 - PRESERVATION TECHNOLOGY

(Cross-listed with ARCH 55627) A study of historic building materials with an emphasis on causes of degradation, strategies for conservation and standards for preservation. Prerequisites: junior or senior standing in Architecture.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Architecture Department

ARCH 45630 - INTRODUCTION TO LANDSCAPE ARCHITECTURE

(Repeatable for a maximum of 3 credit hours) (Cross-listed with ARCH 55630) Introduction to landscape design with emphasis upon the relationship between landscape and buildings. Prerequisite: None.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Architecture Department

ARCH 45631 - SITE ANALYSIS AND DESIGN

(Repeatable for a maximum of 3 credit hours) (Cross-listed with ARCH 55631) Analysis of environmental factors as a basis for site selection and site planning. Prerequisite: None.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Architecture Department

ARCH 45640 - DEVELOPING ENVIRONMENTS FOR OLDER ADULTS

(Repeatable for a maximum of 3 credit hours) (Cross-listed with ARCH 55640) Research of existing built environments and an investigation of the planning design process for the elderly. Repeatable for a total of 3 credit hours. Prerequisite: None.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours
ARCH 45701 - URBAN DESIGN STUDIO I

(Repeatable for a maximum of 6 credit hours) (Cross-listed with ARCH 55701) Introduction to urban design and its relationship to other design disciplines through analysis of neighborhoods and definition of comprehensive area improvement programs. Prerequisite: special approval.
3.000 TO 6.000 Credit hours
3.000 TO 6.000 Other hours

ARCH 45703 - THEORIES AND PRINCIPLES OF URBAN DESIGN

(Repeatable for a maximum of 3 credit hours) Course on the nature and utility of theory in urban design, examining the relationship between design ideologies and the theories of the environment on which they are based. Prerequisite: None.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

ARCH 45704 - THEORIES AND PRINCIPLES OF URBAN DESIGN II

(Repeatable for a maximum of 3 credit hours) course on the relationship between design ideologies/theories and the realities of existing spatial relationships/precedents. Prerequisite: special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

ARCH 45793 - WORKSHOP: URBAN DESIGN AND PLANNING

(Repeatable for a maximum of 3 credit hours) This course provides an introduction to the scope of planning and design in the making of quality urban neighborhoods, with a particular emphasis on the role of urban design, architecture and landscape design. Prerequisite: None.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours
ARCH 46991 - SEMINAR: VARIABLE TOPIC

(Repeatable for credit) Variable topic seminar. Prerequisite: Approved admission to third year.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

Architecture Department

ARCH 46992 - FIELD STUDY

(Repeatable for credit) (Cross-listed with ARCH 56992) Variable topic field experience. Prerequisite: Approved admission to third year.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Field Experience

Architecture Department

Course Attributes:
Experiential Learning Requirem

ARCH 46993 - WORKSHOP: VARIABLE TOPIC

(Repeatable for credit) (Cross-listed with ARCH 56993) Variable topic workshop. Prerequisite: Approved admission to third year.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Workshop

Architecture Department

ARCH 46995 - SPECIAL TOPICS IN ARCHITECTURE

(Repeatable for credit) (Cross-listed with ARCH 56995) Special topics in architecture. Prerequisite: Approved admission to third year.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Architecture Department

ARCH 46996 - INDIVIDUAL INVESTIGATION

(Repeatable for credit) Individual investigation. Prerequisite: Permission prior written agreement with faculty is required.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours
ARCH 50001 - SUSTAINABLE DESIGN

(Cross-listed with ARCH 40001) Writing intensive and research component addressing precedents, traditions, current directions in conservation of natural environment. Principles and methods of ecological design in architecture and urban design. Prerequisite: Graduate standing.
1.000 Credit hours
1.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

ARCH 50002 - SYSTEMS DESIGN

(Cross-listed with ARCH 40002) Lecture and research component addressing comprehensive integration of mechanical, electrical, communication, structural- and life-safety systems and sustainable design concerns. Prerequisite: Graduate standing.
1.000 Credit hours
1.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

ARCH 50093 - VARIABLE TITLE WORKSHOP-ARCHITECTURE

(Repeatable for credit)Prerequisite: Graduate standing.
1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Workshop

ARCH 50101 - FOURTH YEAR DESIGN STUDIO I

(Cross-listed with ARCH 40101) Studio investigation of complex formal and spatial constructs addressing comprehensive concerns of architecture. Special emphasis on understanding conservation of the natural environment. CAD is required. Prerequisite: ARCH 30102 or ARCH 30112; Graduate standing. Corequisite: ARCH 50001.
5.000 Credit hours
5.000 Other hours

Levels: Graduate
Schedule Types: Studio

Architecture Department
ARCH 50102 - FOURTH YEAR DESIGN STUDIO II
(Cross-listed with ARCH 40102) Studio investigation of the comprehensive concerns and understanding of building systems integration. CAD is required. Prerequisite: Graduate standing. Corequisite ARCH 50002.
5.000 Credit hours
5.000 Other hours

Levels: Graduate
Schedule Types: Studio

Architecture Department

ARCH 50302 - STRUCTURAL SYSTEMS II
(Cross-listed with ARCH 40302) A continuation of building structures, statics, strength of materials and systems analysis. Emphasis is on inelastic materials, allowable stress, and design for masonry and concrete structural members and systems. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Architecture Department

ARCH 50402 - METHODS AND MATERIALS II
(Cross-listed with ARCH 40402) Continued investigation of the origins, extraction, properties and processing of the basic materials of construction. Primary focus on concrete and steel-appropriate use and scale including allied systems and building materials, including glazing and interiors. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Architecture Department

ARCH 50502 - ENVIRONMENTAL TECHNOLOGY II
(Cross-listed with ARCH 40502) Ecological design of large buildings. The investigation and analysis of lighting, thermal, water, electrical and waste systems in urban settings. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Architecture Department

ARCH 55101 - FIFTH-YEAR DESIGN STUDIO I
(Cross-listed with ARCH 45101) This studio intends to investigate a new scale of environmental issues which integrate both architectural and urban planning. Included are site visits data collection design of a master plan and an architectural form response to a segment of the total conceptual plan. Prerequisite: Graduate standing.
6.000 Credit hours
6.000 Other hours
ARCH 55102 - FIFTH-YEAR DESIGN STUDIO II

(Repeatable for a total of 6 credit hours) (Cross-listed with ARCH 45102) Advanced design studio emphasizing comprehensive and independent investigation-exploring and manifesting ideas through architecture using competition and hypothetical or real projects as vehicles of expression. Prerequisite: Graduate standing.
3.000 TO 6.000 Credit hours
3.000 TO 6.000 Other hours

ARCH 55210 - RENAISSANCE ARCHITECTURE

(Cross-listed with ARCH 45210) History and theory of Renaissance architecture from 1400 until 1600. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

ARCH 55211 - BAROQUE ARCHITECTURE

(Cross-listed with ARCH 45211) History and theory of architecture in Europe from 1600 through 1750. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

ARCH 55220 - AMERICAN ARCHITECTURE: COLONIAL TO 1900

(Cross-listed with ARCH 45220) History of American architecture from Spanish, French, Dutch and English colonization through the 19th century. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

ARCH 55240 - THE SKYSCRAPER
A study of skyscrapers from the standpoint of architectural, financial, structural, psychological, and technological considerations. Emphasis is placed on: early developments in Chicago and New York, the influence of the International Style, and current trends in ultra-high skyscrapers being built outside the US. Prerequisites: graduate standing; minimum C (2.000) grade in both ARCH 10111 and ARCH 20112.

Levels: Graduate
Schedule Types: Lecture

ARCH 55291 - SEMINAR: VARIABLE TOPICS IN ARCHITECTURAL HISTORY

(Repeatable for a maximum of 3 credit hours) (Cross-listed with ARCH 45291) Content varies. Prerequisite: special approval and graduate standing.

Levels: Graduate
Schedule Types: Seminar

ARCH 55391 - SEMINAR: STRUCTURES III

(Repeatable for credit) (Cross-listed with ARCH 45391) A continuation of building structures, statics strength of materials and systems analysis. Emphasis is on complex systems including horizontal long span and high rise structures. Computer analysis is required. Prerequisite: Graduate standing.

Levels: Graduate
Schedule Types: Seminar

ARCH 55491 - SEMINAR: METHODS AND MATERIALS III

(Repeatable for credit) (Cross-listed with ARCH 45491) Advanced topics in methods and complex materials systems. Computer modeling and field experience is required. Prerequisite: Graduate standing.

Levels: Graduate
Schedule Types: Seminar

ARCH 55591 - SEMINAR: ENVIRONMENTAL TECHNOLOGY III

(Repeatable for a maximum of 3 credit hours) (Cross-listed with ARCH 45591) Variable topics in environmental technology, environmental design and energy conservation, advanced lighting techniques, etc. Prerequisite: Graduate standing.

Levels: Graduate
Schedule Types: Seminar
ARCH 55601 - ADVANCED COMPUTER APPLICATIONS
(Repeatable for a maximum of 3 credit hours) (Cross-listed with ARCH 45601) This course discusses advanced visualization techniques such as raytracing, radiosity and animation and presents a variety of presentation issues and options. Prerequisite: Graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

ARCH 55620 - INTRODUCTION TO PRESERVATION
(Repeatable for a maximum of 3 credit hours) (Cross-listed with ARCH 45620) An overview of preservation including building analysis conservation, adaptive reuse, economic benefits of preservation planning as a revitalizing strategy. Prerequisite: Admission to the preservation program or permission of the instructor. Graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

ARCH 55621 - CURRENT ISSUES IN HISTORIC PRESERVATION
(Repeatable for a maximum of 3 credit hours) (Cross-listed with ARCH 45621) Course in which practicing professionals including architects, planners, developers and government officials present preservation related work. Prerequisite: Special approval and graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

ARCH 55625 - EXPLORING HISTORIC STRUCTURES
(Cross-listed with ARCH 45625) This course provides students with the skills and opportunity to lead teams documenting an historic structure using methods prescribed by the Historic American Buildings Survey (HABS). Lectures will cover recording, documentation and assessment of the historic structure implementing the guidelines established by the Getty Conservation Institute, including history, purpose, means, methods, and field work. Prerequisite: graduate standing in the College of Architecture and Environmental Design.
3.000 Credit hours
1.200 Lecture hours
3.600 Lab hours
ARCH 55627 - PRESERVATION TECHNOLOGY

(Cross-listed with ARCH 45627) A study of historic building materials with an emphasis on causes of degradation, strategies for conservation, and standards for restoration. Prerequisite: graduate standing; and minimum C (2.000) grade in both ARCH 30401 and ARCH 40402.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Architecture Department

ARCH 55630 - INTRODUCTION TO LANDSCAPE ARCHITECTURE

(Repeatable for a maximum of 3 credit hours) (Cross-listed with ARCH 45630) Introduction to landscape design with emphasis upon the relationship between landscape and buildings. Prerequisite: Graduate standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Architecture Department

ARCH 55631 - SITE ANALYSIS AND DESIGN

(Repeatable for a maximum of 3 credit hours) (Cross-listed with ARCH 45631) Analysis of environmental factors as a basis for site selection and site planning. Prerequisite: Graduate standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Architecture Department

ARCH 55640 - DEVELOPING ENVIRONMENTS FOR OLDER ADULTS

(Repeatable for a maximum of 3 credit hours) (Cross-listed with ARCH 45640) Research of existing built environments and an investigation of the planning design process for the elderly. Prerequisite: Graduate standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Architecture Department

ARCH 55707 - REPRESENTATION IN DESIGN
Course on the nature of communication in design and the representational tools the designer uses to give form to abstract ideas and converse with clients and colleagues. Prerequisite: Graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Architecture Department

ARCH 55793 - WORKSHOP IN URBAN DESIGN AND PLANNING

This course provides an introduction to the scope of planning and design in the making of quality urban neighborhoods with particular emphasis on the role of urban design, architecture and landscape design. Prerequisite: Graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Architecture Department

ARCH 56991 - SEMINAR: VARIABLE TOPIC

Variable topic seminar. Prerequisite: Special approval and graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Architecture Department

ARCH 56992 - FIELD STUDY

Field experience. Prerequisite: Special approval and graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Field Experience

Architecture Department

ARCH 56993 - WORKSHOP: VARIABLE TOPIC

Field experience. Prerequisite: Graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Workshop
ARCH 56995 - SPECIAL TOPICS IN ARCHITECTURE

(Repeatable for credit) (Cross-listed with ARCH 46995) Special topics in architecture. Prerequisite: Special approval and graduate standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

ARCH 60101 - GRADUATE DESIGN STUDIO I

Architectural studies related to buildings. Emphasis on spatial, aesthetic, environmental and functional factors in design. Prerequisite: Graduate standing.

3.000 TO 6.000 Credit hours
3.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Studio

ARCH 60102 - GRADUATE DESIGN STUDIO II

Independent design project, completed under the direction of an individual adviser selected from the graduate faculty. Prerequisite: ARCH 60101 and 60301 and graduate standing. Corequisite: ARCH 60922.

3.000 TO 6.000 Credit hours
3.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Studio

ARCH 60103 - GRADUATE DESIGN STUDIO III

Capstone-studio (or "Master Project") aimed at further investigating building design issues both at a greater depth of complexity and by focusing on particular design aspects or areas of concentration. Prerequisite: ARCH 60101 and 60150 and 60922 and graduate standing.

6.000 TO 9.000 Credit hours
6.000 TO 9.000 Other hours

Levels: Graduate
Schedule Types: Studio

ARCH 60141 - HEALTH CARE DESIGN I

Oriented to the individual student, focusing on research surrounding a specific aspect health care facility design. The student then defines the capstone issue and establishes the parameters around which their capstone design project is executed. Prerequisites: AED 63001 and ARCH 63002 and 63003; and graduate standing.
ARCH 60142 - HEALTH CARE DESIGN II

Focused on an individual student’s defined capstone issue and overseen by a capstone advisor. Concludes in the design of the specific issue detailed by the student in Health Care Design I. This is the culminating course for the Master Degree in Health Care Design. Prerequisites: ARCH 60141 and doctoral standing.

Levels: Graduate
Schedule Types: Studio

Architecture Department

ARCH 60150 - PROJECT PROGRAMMING

Study and discussion of the notion of program in architecture and the principles of project programming. Case study analysis and preparation of a comprehensive program for an architectural project. Prerequisite: Graduate standing; ARCH 60101 and 60301.

Levels: Graduate
Schedule Types: Lecture

Architecture Department

ARCH 60301 - THEORIES OF ARCHITECTURE

(Repeatable for a maximum of 3 credit hours) In-depth analysis and discussion of contemporary architectural theories. Critical evaluation of major authors and architectural projects. Prerequisite: Graduate standing.

Levels: Graduate
Schedule Types: Lecture

Architecture Department

ARCH 60922 - METHODS OF INQUIRY IN ARCHITECTURAL STUDIES

(Cross-listed with AED 60922 and LARC 60922) Provides a comprehensive coverage of architectural inquiry techniques including qualitative and quantitative research methods and critical thinking skills to help students better conduct and understand research. Prerequisite: ARCH 60101 and 60301 and graduate standing and special approval.

Levels: Graduate
Schedule Types: Lecture
ARCH 63002 - HEALTH CARE FACILITIES I
An investigation of the history and types of health care facilities, and basic planning and programming requirements for their planning and design. Prerequisite: graduate standing and special approval.
3.000 Credit hours
3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture

ARCH 63003 - HEALTH CARE FACILITIES II
An investigation of architectural finishes, furnishings, mechanical systems, regulatory systems, and design team dynamics in health care design. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture

ARCH 65001 - PROFESSIONAL PRACTICE: REAL ESTATE AND DEVELOPMENT
Introduction to the economic, social, ethical and legal impact on/of development projects in both the public and the private sectors. Computer applications and case-studies analysis are required. Prerequisite: Graduate standing.
2.000 TO 4.000 Credit hours
2.000 TO 4.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture

ARCH 65002 - PROFESSIONAL PRACTICE: CONTRACT AND PLANNING LAW
The course surveys laws relating to the practice of architecture and to dispute resolution with emphasis on contract laws contrasted with laws of negligence and the standard of care in the profession. The planning law component surveys land use control mechanisms as seen through zoning, variances and practical applications. Prerequisite: architecture (ARCH) major and graduate standing.
2.000 Credit hours
2.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture

ARCH 65003 - PROFESSIONAL PRACTICE: LEADERSHIP, ETHICS AND OFFICE MANAGEMENT
Course discusses issues of professional leadership and examines architectural office structures. Management approaches, professional registration and practice, use of consulting engineers and financial management of an office in the context of the profession as business. Prerequisite: ARCH 65002 and architecture (ARCH) major and graduate standing.
2.000 TO 3.000 Credit hours
2.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Architecture Department

**ARCH 66199 - THESIS I**

Thesis students must register for a total of 6 hours. Prerequisite: Graduate standing.
2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Architecture Department

**ARCH 66299 - THESIS II**

(Repeatable for credit)Following completion of 6 credit hours of Thesis I all graduate students must continuously register for Thesis II for all subsequent academic terms (including summer) until all degree requirements are met. Prerequisite: 6 credit hours of ARCH 66199. Graduate standing.
2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Architecture Department

**ARCH 66892 - PRACTICUM**

(Repeatable for credit)Variable topic practicum. Prerequisite: Permission.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Architecture Department

**ARCH 66991 - SEMINAR: VARIABLE TOPIC**

(Repeatable for credit)Seminar on a variable topic. Prerequisite: Graduate standing.
1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Architecture Department
ARCH 66992 - FIELD STUDY

(Repeatable for credit) Field study in architecture. Prerequisite: Graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Field Experience

Architecture Department

ARCH 66993 - WORKSHOP: VARIABLE TOPIC

(Repeatable for credit) Variable topic workshop. Prerequisite: Graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Architecture Department

ARCH 66995 - SPECIAL TOPICS IN ARCHITECTURE

(Repeatable for credit) Special topics in architecture. Prerequisite: Graduate standing.
1.000 TO 4.000 Credit hours
1.000 TO 4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Architecture Department

ARCH 66996 - INDIVIDUAL INVESTIGATION

(Repeatable for credit) Individual investigation in architecture. Prerequisite: Graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Architecture Department

ARCH 66998 - RESEARCH

(Repeatable for credit) Research in architecture. Prerequisite: Graduate standing.
2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Research

Architecture Department
### ARCH 67510 - SUSTAINABLE BUILDING CONSTRUCTION I

First course of a two-course sequence. Provides an in-depth survey of design, pre- and post-construction activities pertinent to Green Building and Sustainable Design of the Built environment. Reviews fundamental concepts and principles of sustainable building design and construction with special emphasis on construction site issues. Provides a comprehensive review of impact of site on construction and building design on the site and its resources. Focus is on understanding the role building design and construction play on resources efficiency and minimizing the impact of construction activities on the environment. Prerequisite: TECH 57000 and graduate standing.

- **Credit hours**: 3.000
- **Lecture hours**: 3.000

**Levels**: Graduate  
**Schedule Types**: Lecture

Architecture Department

### ARCH 67511 - SUSTAINABLE BUILDING CONSTRUCTION II

Second course of a two-course sequence. Provides an in-depth survey of design, pre- and post-construction activities pertinent to Green Building and Sustainable Design of the Built environment. Reviews fundamental concepts and principles of sustainable building design and construction with special emphasis on building systems. Provides a comprehensive review of impact of building component, materials, and systems on design and construction of High-performance buildings. Focus is on understanding the role building design and construction play on resources efficiency and minimizing the impact of construction activities on the environment. Prerequisite: ARCH 67510 and graduate standing.

- **Credit hours**: 3.000
- **Lecture hours**: 3.000

**Levels**: Graduate  
**Schedule Types**: Lecture

Architecture Department

### ARCS 10121 - REPRESENTATION OF DESIGN I

A survey of the techniques and assumptions of basic architectural design concepts and representation of the built environment through analytical and synthetic exercises that introduce fundamental design skills. In order to integrate students into the college and the field, the exercises are supplemented by readings in contemporary visual culture. Prerequisite: none.

- **Credit hours**: 3.000
- **Lecture hours**: 3.000

**Levels**: Undergraduate  
**Schedule Types**: Lecture

Architecture Department

### ARCS 10122 - REPRESENTATION OF DESIGN II

Continuation of ARCS 10121 with an emphasis on 3-D thinking and representation, critical skills and the role of images in architectural culture and society. The course also introduces the wider application of design principles in graphic design, digital media and the visualization of information. Prerequisite: ARCS 10121 or ARCH 10101.

- **Credit hours**: 3.000
- **Lecture hours**: 3.000

**Levels**: Undergraduate  
**Schedule Types**: Lecture
ARCS 20121 - STUDIO FOR ARCHITECTURAL STUDIES

An introduction to basic issues in architectural design and composition. Through sketch projects and design exercises in a variety of media, students gain a familiarity with basic architectural problems and the kinds of thinking architects use to address those problems. Prerequisite: ARCS 10122 or AED 10102; and Architectural Studies (ARCS) major.
4.000 Credit hours
4.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

ARCS 20122 - STUDIO FOR ARCHITECTURAL STUDIES II

Studio allows students to further develop their design skills in relation to a theme or shared research topic that crosses the disciplinary boundaries of architecture and challenges conventional ideas of the role design can play in developing knowledge. Prerequisite: ARCS 20121 or ARCH 20101.
4.000 Credit hours
4.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

ARCS 30022 - URBAN DESIGN DISCOURSE

Starting in the 1960s, a series of theorist attempted to understand the city as a form of writing, producing some of the most influential design books of the last generation. Course investigates this literature, using a range of writing exercises in which students interpret both urban space and the writing it inspires. Prerequisite: ARCH 20113 or AED 10102; and Architectural Studies (ARCS) major or minor.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Course Attributes:
Experiential Learning Requirem, Writing Intensive Course

ARCS 30123 - MATERIALS AND PROCESS OF MAKING

Seeks to introduce and foster an ease of mobility through various digital design environments utilizing familiar techniques of design production (i.e. drawing, modeling, rendering, etc.). Students engage in digital modes of production that will enable the testing of material, spatial, and tectonic performance through scalar prototyping. Prerequisites: AED 10002; and architectural studies (ARCS) major or minor.
3.000 Credit hours
1.000 Lecture hours
4.000 Other hours
ARCS 30124 - METHODS AND THEORIES OF REPRESENTATION

Seeks to examine traditional and contemporary methods of architectural representation as generative tools that mediate between individual idea and constructed environment. Prerequisites: AED 10002; and architectural studies (ARCS) major or minor.

3.000 Credit hours
1.000 Lecture hours
4.000 Other hours

Levels: Undergraduate
Schedule Types: Lecture, Studio

ARCS 30321 - STRUCTURAL TYPOLOGY

Course provides a non-computational introduction to structural principles, materials and building technologies. Historical and contemporary examples are used as case studies. The goal of the course is to give students an understanding of the role structural engineering and materials science play in design thinking and how they can drive design innovation. Prerequisite: AED 10002; and architectural studies (ARCS) major or minor.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

ARCS 30421 - THE ENVIRONMENTAL IMPERATIVE

Course begins with a historical introduction to the transformative role played by environmental technologies in modern architecture. This discussion is then brought into the present through an introduction to a wide range of contemporary thinking about sustainability in architecture and urbanism. Prerequisite: AED 10002; or special permission by both the instructor and program coordinator.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

ARCS 40114 - THEORY AND CRITICISM IN ARCHITECTURAL MEDIA

Aimed at investigating the increasingly intertwined issues that link contemporary architectural theory and criticism with the world of media. Prerequisites: AED 10002; and architectural studies (ARCS) major; and junior or senior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
Architecture Department

Course Attributes:
Writing Intensive Course

**ART 10022 - 2D COMPOSITION**

Basic introduction in flat pictorial composition for the studio or craft artist. Work produced in this class must be retained for later portfolio presentation in ARTF 24005. Prerequisite: None.

3.000 Credit hours
5.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Art Department

Course Attributes:
TAG - Arts/Humanities

**ART 10023 - 3D COMPOSITION**

Course serves as the introductory three-dimensional experience, focusing on fundamental principles, elements and strategies of visual organization. Focus is on creative problem-solving using a variety of approaches and materials, and favors non-equipment intensive assignments. Students develop critical thinking and practical skills relating to three-dimensional form and space. This foundation-level course prepares students for subsequent study within all the visual arts. Prerequisite: none.

3.000 Credit hours
5.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Art Department

Course Attributes:
TAG - Arts/Humanities

**ART 20024 - DIGITAL MEDIA**

Introduces concepts, tools, software and guided experiences necessary for creative integration of digital skills and concepts into art practices and art research. Prerequisite: art education (ARTE) or art history (ARTH) or fine arts (ARTS) or crafts (CRFT) or crafts/fine arts (CFA) major and freshmen or sophomore standing.

3.000 Credit hours
5.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Art Department

**ART 30692 - EXPERIENTIAL LEARNING IN THE VISUAL ARTS**

(Repeatable for A maximum of 6 credit hours) An undergraduate, experience-based learning activity carried out in a visual arts setting. Emphasis is on the goals of connecting ideas, concepts and skills developed in
coursework to applications in new or different contexts, demonstrating how this experience has broadened students' understanding of their discipline, and reflection on significance of the experience. Learning contract required. Prerequisite: Junior standing or above with a major in the School of Art and special approval of faculty sponsor.

1.000 TO 3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Field Experience

Art Department

Course Attributes:
Experiential Learning Requirem

**ART 40007 - ARTS ENGAGEMENT: INTERPRETING FOR A COMMUNITY**

Development of a reflective and mindful approach to understanding and supporting the arts through articulating and communicating the experiences we have and meanings we construct from engaging with the arts.

Prerequisites: a major in the College of the Arts and senior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Seminar

Art Department

Course Attributes:
Writing Intensive Course

**ART 40008 - PROFESSIONAL PRACTICES IN VISUAL ARTS**

Introduction to the concerns and practices of the professional artist/craftsperson. Prerequisites: crafts (CRFT) or fine arts (ARTS) major and senior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Art Department

Course Attributes:
Writing Intensive Course

**ART 40092 - FIELD EXPERIENCE TRAVEL STUDY IN ART**

(Repeatable for a maximum of 6 credit hours) Travel-based field experience in the visual arts at site(s) away from the university. Involves two or more visual arts disciplines and direct observation of works and experience of culture in context. May involve research, creative activity, presentation and-or written reflection as appropriate to site and goals of course. Prerequisite: none.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Field Experience
Art Department

Course Attributes:
Experiential Learning Requirem

**ART 41093 - VARIABLE TITLE WORKSHOP IN ART**

(Repeatable for a total of 18 hours) (Cross-listed with ART 51093) Prerequisite: special approval.
1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Undergraduate
Schedule Types: Workshop

Art Department

**ART 50092 - FIELD EXPERIENCE TRAVEL STUDY IN ART**

(Repeatable for a maximum of 6 credit hours) (Cross-listed with ART 40092) Travel-based field experience in the visual arts at site(s) away from the university. Involves two or more visual arts disciplines and direct observation of works and experience of culture in context. May involve research, creative activity, presentation, and-or written reflection as appropriate to site and goals of course. Prerequisites: ARTE, ARTH, ARTS and CRFT majors; and graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Field Experience

Art Department

**ART 51093 - VARIABLE TITLE WORKSHOP IN ART**

(Repeatable for credit) (Cross-listed with ART 41093) Prerequisite: Graduate standing.
1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Art Department

**ART 67199 - M.A. THESIS I**

Thesis students must register for a minimum of 6 hours, 2 to 6 hours in a single semester distributed over several semesters if desired. Prerequisite: Graduate standing.
2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Art Department

**ART 67299 - M.A. THESIS II**
Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: ART 67199 and graduate standing.

2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Art Department

**ART 69199 - M.F.A. THESIS I**

Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester distributed over several semesters if desired. Prerequisite: Graduate standing.

2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Art Department

**ART 69299 - M.F.A. THESIS II**

Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: ART 69199 and graduate standing.

2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Art Department

**ARTC 25300 - TEXTILE ARTS: PATTERN**

An introduction to the concepts and processes of constructed pattern including plaiting, netting and weaving. Off-loom and floor loom explorations will emphasize the relationship of form and structure in textile art. An emphasis is placed on the use of non-traditional or experimental materials. Required for craft majors. Prerequisite: ARTF 14000 and ART 10022.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Art Department

**ARTC 25400 - CERAMICS I**

This course is an introduction to ceramics as an artistic medium with focus on the handbuilding of clay objects using the pinch, coil and slab methods of construction. Prerequisite: ARTF 14000 and ART 10022.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio
ARTC 25600 - INTRODUCTION TO GLASS WORKING

Introduction to studio glass through technique and brief history. Both basic glass blowing and glass casting techniques and problems will be covered. Prerequisite: ARTF 14000 and ART 10022.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

ARTC 25700 - INTRODUCTION TO JEWELRY METALS I

Introduction to basic jewelry and metalsmithing techniques including fabrication, forming and finishing. Emphasis on advancing design skills and critical analysis. Exposure to historical and contemporary works. Prerequisites: ARTF 14000 and ART 10022.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

ARTC 25701 - INTRODUCTION TO JEWELRY/METALS FOR NON-ART MAJORS

Introduction to basic jewelry and metalsmithing techniques including fabrication, forming and finishing. Emphasis on advancing design skills and critical analysis. Exposure to historical and contemporary works. Prerequisite: Non-Art majors.
3.000 Credit hours
5.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

ARTC 35095 - CRAFTS: SELECTED TOPICS

(Repeatable for credit) (Cross-listed with ARTC 45095 and ARTC 55095) Specialized courses in crafts that focus on specific techniques and media. Prerequisite: ARTC 25300, 25400 or 25500 or 25600 or 25700.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Art Department
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Description</th>
<th>Prerequisites</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>ARTC 35300</td>
<td>TEXTILE ARTS: DIMENSIONAL</td>
<td>An introduction to the development of unique sculptural objects in textile media. Students will explore three-dimensional textile processes using the floor loom and the construction method of wrapping and coiling.</td>
<td>ART 10022, ARTF 14000, ART 10023, ART 20024.</td>
<td>3.000</td>
<td>3.000</td>
<td>Undergraduate</td>
<td>Studio</td>
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<tr>
<td>ARTC 35301</td>
<td>TEXTILE ART: PRINT PATTERN</td>
<td>Focus is on the unique aspects of printing repeat designs on cloth. Screenprinted pattern, developed through manual techniques and digital design is considered in relation to the surface and the flexible plane of cloth. The development of design, craft skills, and critical evaluation are emphasized in relation to art and industry applications. Prerequisites: ART 10022, ARTF 14000, ART 10023, ART 20024.</td>
<td>ART 10022, ARTF 14000, ART 10023, ART 20024.</td>
<td>3.000</td>
<td>3.000</td>
<td>Undergraduate</td>
<td>Studio</td>
<td>Art Department</td>
</tr>
<tr>
<td>ARTC 35302</td>
<td>TEXTILE ARTS: FELTMaking</td>
<td>An opportunity for the in-depth exploration of technical and aesthetic possibilities of this unique process. Layers and textures in two dimensions and processes for three-dimensional feltmaking are introduced and considered as an expressive vocabulary. Dyeing of wool fleece plays a major role in the course. Prerequisite: ART 10022, ARTF 14000, ART 10023, ART 20024</td>
<td>ART 10022, ARTF 14000, ART 10023, ART 20024.</td>
<td>3.000</td>
<td>3.000</td>
<td>Undergraduate</td>
<td>Studio</td>
<td>Art Department</td>
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<tr>
<td>ARTC 35303</td>
<td>TEXTILE ARTS: TAPESTRY</td>
<td>An introduction to a variety of traditional pictorial tapestry weft face techniques to be executed on the frame loom and/or floor loom. Both tapestry and carpet history are presented to reveal traditional processes, patterns, and images for inspiration in the creation of individual works. Dyeing will play a major role in the exploration. Prerequisite: ART 10022, ARTF 14000, ART 10023, ART 20024</td>
<td>ART 10022, ARTF 14000, ART 10023, ART 20024.</td>
<td>3.000</td>
<td>3.000</td>
<td>Undergraduate</td>
<td>Studio</td>
<td>Art Department</td>
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<tr>
<td>ARTC 35305</td>
<td>TEXTILE ACCESSORIES: DESIGN AND PRODUCTION</td>
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<td>Undergraduate</td>
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</tbody>
</table>
Focus is on the design and production of textile accessories using the structural process of weaving. Texture, material, and color are critically and creatively considered in relation to the development of unique functional objects. Professional design objectives are presented. Prerequisites: ART 10022, ART 10023, ARTF 14000, ART 20024
3.000 Credit hours
5.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Art Department

**ARTC 35306 - TEXTILE ART: SURFACE COLOR AND DESIGN**

Introduction to coloring and patterning cloth through dyeing and resist techniques. Formal and conceptual aspects of surface design in relation to the flexible cloth plane will be explored. Study of traditional historic and contemporary textile references will provide a foundation for creative development. Prerequisite: ARTF 14000, ART 10022, ART 10023 and ART 20024
3.000 Credit hours
5.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Art Department

**ARTC 35350 - TEXTILE ARTS: DESIGN AND PRODUCTION**

A basic introduction to the mechanics of designing and constructing patterned and dyed cloth on the floor loom. Learning to use the computer for the designing of woven pattern is an expectation of the course. (This is an excellent course for designers of fashion and interiors, as well as anyone interested in the design and craft of weaving.) Prerequisite: ART 10022, ARTF 14000, ART 10023 and ART 20024
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Art Department

**ARTC 35400 - CERAMICS II**

Continuation of ARTC 25400 emphasizing design, use of potter’s wheel and chemistry of glazes. Prerequisite: ARTC 25400, ART 10023 and ART 20024
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Art Department

**ARTC 35600 - GLASS BLOWING**

Further exploration of glass blowing techniques. Design, form, color and execution will be emphasized. Prerequisite: ARTC 25600, ART 10023 and ART 20024
3.000 Credit hours
ARTC 35601 - SCULPTURAL AND KILN-FORMED GLASS

An overview and exploration of sculptural and kiln-formed glass techniques. Casting, jusing, slumping and cold construction will be covered. Design, form, content and technical execution and understanding operations of equipment will be emphasized. Prerequisite: ARTC 25600, ART 10023 and ART 20024

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Art Department

ARTC 35700 - JEWELRY CONCEPTS AND TECHNIQUES

An in-depth exploration of jewelry making techniques such as casting, stone setting, mechanisms and fabrication. Conceptual development and design skills are emphasized. To gain a deeper understanding of the subject, historical and contemporary works will be viewed and discussed. Prerequisite: ARTC 25700, ART 10023 and ART 20024

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Art Department

ARTC 35701 - METALSMITHING CONCEPTS AND TECHNIQUES

Course offers an in-depth exploration of hammerworking techniques such as raising, forging and shell forming. Conceptual development and design skills are emphasized. To gain a deeper understanding of the subject, historical and contemporary works will be viewed and discussed. Prerequisite: ARTC 25700, ART 10023 and ART 20024

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Art Department

ARTC 35702 - ENAMELING CONCEPTS AND TECHNIQUES

An in-depth exploration of vitreous enameling techniques on two dimensional surfaces. Porcelain enamel on steel will be introduced. Conceptual development and design skills are emphasized. To gain a deeper understanding of the subject, historical and contemporary works will be viewed and discussed. Prerequisite: ARTC 25700 and 35700.

3.000 Credit hours
3.000 Other hours
ARTC 35703 - TEXTILE TECHNIQUES IN METAL

Course applies textile techniques such as weaving, crocheting, knitting and basketry to create jewelry and objects in metal. Emphasis is on innovative approach to traditional processes. Prerequisite: ARTC 25700.

3.000 Credit hours
3.000 Other hours

ARTC 45092 - FIELD EXPERIENCE: TRAVEL STUDIES IN CRAFTS

(Repeatable for credit) (Cross-listed with ARTC 55092) Travel-based study/field experience in crafts disciplines to and at a site or sites away from Kent State University. Prerequisite: Major in crafts (ARTC).

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

ARTC 45095 - CRAFTS: SELECTED TOPICS

(Repeatable for credit) (Cross-listed with ARTC 35095 and ARTC 55095) Specialized courses in crafts that focus on specific techniques and media. Prerequisite: Junior standing.

1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

ARTC 45096 - INDIVIDUAL STUDY: CRAFTS

(Repeatable for a total of 12 hours) Additional study and/or special topics in ceramics, enameling glass jewelry, metals or fiber arts. Prerequisite: special approval.

1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours
ARTC 45098 - SENIOR THESIS RESEARCH AND PROPOSAL

(Repeatable for credit) Preparatory course upon its successful completion a student may continue with Senior Thesis Exhibition. Acts as an exploratory period for the student to develop his or her ideas, conceptually, thematically and materially through research, writing, and through physical material studies. Prerequisites: Senior standing in Crafts [CRFT] and special approval.
1.000 Credit hours
1.600 Other hours

Levels: Undergraduate
Schedule Types: Research

Art Department

ARTC 45099 - SENIOR THESIS EXHIBITION

Required of all B.F.A. students in Crafts preparing them for the challenges of a creative professional practice in their chosen discipline. It is the culmination of undergraduate studies and serves as a cap-stone experience in one of the sub-major areas of concentration - Ceramics, Glass, Jewelry, Metals, Enamels and Textile Art. Provides students an opportunity to independently develop and create a body of work for exhibition and faculty review and requires the completion of undergraduate thesis, and professional caliber photo documentation of the exhibition. Prerequisite: ARTC 45098.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Senior Project/Honors Thesis

Art Department

Course Attributes:
Experiential Learning Requirem

ARTC 45300 - TEXTILE ART: JACQUARD WEAVING

(Repeatable for a maximum of 6 credit hours) (Cross-listed with ARTC 55300) Introduction to digital design and production of jacquard woven cloth on our state-of-the-art TC1 hand looms. The use of Pointcarré®, a specialized weave software and Photoshop® provides a foundation of professional design knowledge for application in a studio or industry context. Historic and contemporary examples are studied as a foundation to enhance individual exploration of this distinctive woven language for art and design. Prerequisite: ARTC 35350.
3.000 Credit hours
5.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Art Department

ARTC 45301 - TEXTILE ARTS: ADVANCED STUDIO

Structured time for individual investigations in textiles. Emphasis on self designed study. Bi-weekly presentations of contemporary work in textiles and weekly discussions or critiques with open studio. Prerequisite: Senior standing in crafts; and ARTF 14000, ART 10022, ART 10023 and ART 20024
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio
Art Department

**ARTC 45304 - TEXTILE ARTS: PICTORIAL WEAVING**

(Cross-listed with ARTC 55304) Introduction to a range of weaving processes traditionally associated with the creation of figured or pictorial cloth. Techniques such as warp painting, supplementary weft and warp, pick-up doubleweave and tapestry are explored as a means of creating a well-composed art cloth. Textile history is presented as an important resource for the development of woven studies and individually conceived projects. Prerequisites: ART 10022, ART 10023, ART 20024 and ARTF 14000

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Art Department

**ARTC 45400 - ADVANCED CERAMICS**

(Repeatable for credit) Individual problems in ceramics. Prerequisite: ARTC 35400.

2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Art Department

**ARTC 45600 - ADVANCED GLASS WORKING**

(Repeatable for a maximum of 40 credit hours) Individual exploration of sculptural and hot glass techniques. Design, form, content and execution strongly emphasized. Introduction to studio facility design, construction and maintenance. Prerequisite: ARTC 35600 and ARTC 35601.

3.000 Credit hours
5.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Art Department

**ARTC 45700 - DESIGN AND PRODUCTION**

Course prepares students to enter the marketplace by examining production processes for creating multiples, industrial applications and marketing. Traditional rendering techniques are taught as a method for communicating with clientele in the custom design market. Design skills are emphasized. Prerequisite: ARTC 35700 and 35701.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Art Department
ARTC 45701 - TABLEWARE
Course explores forms made for the table such as flatware, serving sets and containers. Traditional and experimental approaches will be examined. Prerequisite: ARTC 35700 and 35701.
3.000 Credit hours
3.000 Other hours
Levels: Undergraduate
Schedule Types: Studio
Art Department

ARTC 45702 - ADVANCED ENAMELING
Course offers advanced vitreous enameling techniques on two-and three-dimensional surfaces. Conceptual development and design skills are emphasized. To gain a deeper understanding of the subject, historical and contemporary works will be viewed and discussed. Prerequisite: ARTC 35702.
3.000 Credit hours
3.000 Other hours
Levels: Undergraduate
Schedule Types: Studio
Art Department

ARTC 45704 - ADVANCED STUDIO JEWELRY METALS ENAMELING
(Repeatable for a maximum of 9 credit hours) Course offers structured time for individual investigations in jewelry, metalsmithing and enameling. Emphasis on self-directed study with frequent critiques and technical demos as needed. Regular viewing and discussion of historical and contemporary works. Prerequisite: ARTC 35700 and 35701 and senior standing.
3.000 Credit hours
3.000 Other hours
Levels: Undergraduate
Schedule Types: Studio
Art Department

ARTC 55092 - FIELD EXPERIENCE: TRAVEL STUDIES IN CRAFTS
(Repeatable for credit) (Cross-listed with ARTC 45092) Travel-based study/field experience in crafts disciplines to and at a site or sites away from Kent State University. Prerequisite: Graduate standing in crafts or special approval of instructor.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours
Levels: Graduate
Schedule Types: Field Experience
Art Department

ARTC 55095 - CRAFTS: SELECTED TOPICS
(Repeatable for credit) (Cross-listed with ARTC 35095 and ARTC 45095) Specialized courses in crafts that focus on specific techniques and media. Prerequisite: Special approval and graduate standing.
1.000 TO 6.000 Credit hours
ARTC 55300 - TEXTILE ART: JACQUARD WEAVING
(Repeatable for a maximum of 6 credit hours) (Cross-listed with ARTC 45300) Introduction to digital design and production of jacquard woven cloth on our state-of-the-art TC1 hand looms. The use of Pointcarré®, a specialized weave software and Photoshop® provides a foundation of professional design knowledge for application in a studio or industry context. Historic and contemporary examples are studied as a foundation to enhance individual exploration of this distinctive woven language for art and design. Prerequisite: graduate standing.
3.000 Credit hours
5.000 Other hours

ARTC 55304 - TEXTILE ART: PICTORIAL WEAVING
(Cross-listed with ARTC 45304) Introduction to a range of weaving processes traditionally associated with the creation of figured or pictorial cloth. Techniques such as warp painting, supplementary weft and warp, pick-up doubleweave and tapestry will be explored as a means of creating a well composed art cloth. Textile history is presented as an important resource for the development of woven studies and individually conceived projects. Prerequisites: graduate standing.
3.000 Credit hours
5.000 Other hours

ARTC 65095 - CRAFTS: SELECTED TOPICS
(Repeatable for credit) Specialized courses in crafts that focus on specific techniques and media. Prerequisite: Special approval and graduate standing.
1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

ARTC 65991 - SEMINAR IN CRAFTS
(Repeatable for credit) Contemporary issues and professional concerns in the crafts explored through presentations, lectures and discussion. Graduate faculty and guest speakers. Prerequisite: Graduate standing.
2.000 Credit hours
2.000 Other hours
**ARTC 65996 - INDIVIDUAL STUDY:CRAFTS**

(Repeatable for credit) Independent study in ceramics, glass, enamels, jewelry metals or fiber arts. Prerequisite: Graduate standing.

1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

**ARTE 31001 - ART EDUCATION: FOUNDATIONS AND CONCEPTS ELEMENTARY**

An introduction to art education concepts. Emphasis on child development and on teaching the expressive and responsive dimensions of art in the early grades. Eleven field clinical hours are associated with this course. Prerequisite: 2.750 GPA and sophomore standing in art education.

3.000 Credit hours
3.000 Lecture hours

**ARTE 31004 - ART EDUCATION: TEACHING PRACTICUM**

A teaching experience for applying art education concepts. Analysis of instructional problems emphasized. Fifty-four field and/or clinical hours are associated with this course. Prerequisite: 2.750 GPA and ARTE 31001.

3.000 Credit hours
3.000 Other hours

**ARTE 31005 - ART EDUCATION-SPECIAL TOPICS**

(Repeatable for credit) Special topics (experimental course). Prerequisite: Permission of instructor.

2.000 TO 4.000 Credit hours
2.000 TO 4.000 Lecture hours
ARTE 31096 - INDIVIDUAL STUDY-ART EDUCATION

(Repeatable for credit) Additional study in areas of a student’s choice in consultation with adviser. Prerequisite: special approval.
2.000 TO 10.000 Credit hours
2.000 TO 10.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Art Department

ARTE 41002 - ART EDUCATION: FOUNDATIONS AND CONCEPTS - SECONDARY

An examination of relationships between content, materials and strategies for teaching art to students in grades 7 - 12 and students with special needs. Nine field and/or clinical hours are associated with this course.
Prerequisites: 2.750 GPA and ARTE 31004.
3.000 Credit hours
3.000 Lecture hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Field Experience, Lecture, Studio

Art Department

Course Attributes:
Experiential Learning Requirem

ARTE 41003 - ART EDUCATION:FIELD EXPERIENCES

A planning and teaching experience for teaching art in various settings; analysis of classroom situations emphasized. Fifty-four field and/or clinical hours are associated with this course. ARTE 41002 may be taken with this course if given special approval. Prerequisite: 2.75 GPA and ARTE 41002.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Field Experience, Lecture

Art Department

Course Attributes:
Writing Intensive Course

ARTE 41004 - PRE-KINDERGARTEN-12 DESIGN EDUCATION

(Slashed with ARTE 51004) Develop lessons that address environment design, communication design, product design and interactive design, as well as research methods and the use of materials that are appropriate for students in elementary and secondary schools. The design process and design thinking, adapted specifically for the context of PreK-12 education, will be taught. The assignments are created around design issues that integrate with other subject areas, have relevance to young students’ lives and connect to the National and Ohio Content Standards. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
### ARTE 41009 - ART EDUCATION MAJOR REVIEW

Examination of student's knowledge, proficiency and ability to apply concepts in art and art education. Prerequisite: 2.750 GPA; and pre- or corequisite ARTE 41002 and 41003.

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Levels: Undergraduate  
Schedule Types: Studio

### ARTE 41092 - FIELD EXPERIENCE: TRAVEL STUDY IN ART EDUCATION

(Repeatable for credit) (Cross-listed with ARTE 51092) Travel-based study/field experience in art education to and at a site or sites away from Kent State University. Prerequisite: Major in art education or special approval of instructor.

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Levels: Undergraduate  
Schedule Types: Field Experience

### ARTE 41096 - INDIVIDUAL STUDY-ART EDUCATION

(Repeatable for credit) Additional study in areas of students' choice in consultation with adviser. Prerequisite: special approval.

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Levels: Undergraduate  
Schedule Types: Individual Investigation

### ARTE 41525 - ART EDUCATION: INQUIRY INTO PROFESSIONAL PRACTICE

(Cross-listed with ARTE 51525) Concepts and practices related to teaching art. Inquiry into art teaching as a professional practice. Emphasis is on teacher as critical disciplined investigator. Twenty-six field and/or clinical hours are associated with this course. Prerequisite: 2.750 GPA and ARTE 41009 and special approval. Corequisite: ARTE 41557.

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Levels: Undergraduate  
Schedule Types: Lecture

Art Department
ARTE 41557 - ART EDUCATION: STUDENT TEACHING AND SEMINAR

Provides a 10-week student teaching experience and associated seminar. See student teaching section in catalog. Prerequisite: 2.750 overall and major GPA and ARTE 41009. Corequisite: ARTE 41525; and special approval; and Official valid certification of Child Safety Training, approved Basic Life Support and A.L.I.C.E. Training must be presented to the campus office of clinical experience or designated faculty/staff at Regional campuses as prerequisite for student teaching.
9.000 Credit hours
9.000 Other hours

Levels: Undergraduate
Schedule Types: Field Experience, Seminar

Art Department

Course Attributes:
Experiential Learning Requirem

ARTE 51002 - ART EDUCATION: FOUNDATIONS AND CONCEPTS SECONDARY

An examination of relationships among content, materials and strategies for teaching art to students in grades 7 - 12 and students with special needs. Nine field and or clinical hours are associated with this course. Prerequisite: Graduate standing, 2.750 GPA and ARTE 31004.
3.000 Credit hours
3.000 Lecture hours
1.000 Other hours

Levels: Graduate
Schedule Types: Field Experience, Lecture, Studio

Art Department

ARTE 51004 - PRE-KINDERGARTEN-12 DESIGN EDUCATION

(Slashed with ARTE 41004) The focus of this course is to develop lessons that address environment design, communication design, product design, and interactive design, as well as research methods and the use of materials that are appropriate for students in elementary and secondary schools. The design process and design thinking, adapted specifically for the context of PreK-12 education, will be taught. The assignments are created around design issues that integrate with other subject areas, have relevance to young students’ lives, and connect to the National and Ohio Content Standards. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Art Department

ARTE 51092 - FIELD EXPERIENCE: TRAVEL STUDY IN ART EDUCATION

(Repeatable for credit) (Cross-listed with ARTE 41092) Travel-based study/field experience in art education to and at a site or sites away from Kent State University. Prerequisite: Graduate standing in art education or special approval by instructor.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
ARTE 51525 - ART EDUCATION: INQUIRY INTO PROFESSIONAL PRACTICE

Concepts and practices related to teaching art. Inquiry into art teaching as a professional practice. Emphasis is on teacher as critical disciplined investigator. Twenty six field and/or clinical hours are associated with this course. Prerequisite: Graduate standing and special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Art Department

ARTE 61095 - SPECIAL TOPICS: ART EDUCATION

(Repeatable for credit) A course whose topic changes to reflect the interests and specializations of faculty. Prerequisite: ARTE 61198 and instructor's special approval; graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Art Department

ARTE 61096 - INDIVIDUAL STUDY- ART EDUCATION

(Repeatable for credit) Specialized study leading to the thesis in art education. Prerequisite: ART 61001, 61003, 61198 and special approval. Graduate standing.

1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Art Department

ARTE 61101 - RESEARCH SEMINAR IN ART EDUCATION

Specialized research seminar exploring methods and methodologies pertinent to research in art education. Prerequisites: graduate standing and special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Seminar

Art Department

ARTE 61191 - SEMINAR IN ART EDUCATION I

(Repeatable for credit) Emphasizes the study of some prevailing themes in Pre K-12 Art and Design education.
The curriculum focuses on the ideas of leading scholars and practicing teachers who have shaped practice in the field of art education within the context of the social, political, and educational values and beliefs of the time. Seminar II is a continuation of the topics addressed in Seminar I. Prerequisite: Art Education (ARTE) majors; and graduate standing.

3.000 Credit hours
3.000 Other hours

ARTE 61209 - CANDIDACY REVIEW EXAMINATION: ART EDUCATION

This comprehensive review is a formal assessment of students' knowledge and understanding of concepts in art, education and art education. Prerequisite: ARTE 61198 and instructor's special permission; graduate standing.

1.000 Credit hours
1.000 Lecture hours

ARTE 61291 - SEMINAR IN ART EDUCATION II

(Repeatable for credit) Following ARTE 61191, this course continues the study of some prevailing themes in Pre-K-12 art and design education. The curriculum will focus on the ideas of leading scholars and practicing teachers who have shaped practice in the field of art education within the context of the social, political, and educational values and beliefs of the time. Prerequisite: ARTE 61191; and graduate standing.

3.000 Credit hours
3.000 Other hours

ARTE 61380 - MASTER'S RESEARCH SEMINAR

(Repeatable twice for credit) A course for guiding the design of the proposal of the terminal project in the non-thesis track of the MA in Art Education. Prerequisite: graduate standing and special approval.

2.000 Credit hours
2.000 Lecture hours

ARTE 61398 - MASTER'S PROJECT RESEARCH

(Repeatable for credit) Non-thesis option students undertake their Project research and defend it before a committee. Prerequisite: ARTE 61191 and ARTE 61291; and special approval.

1.000 Credit hours
1.000 Other hours
ARTF 14000 - DRAWING I

Fundamental drawing and studio experiences; exploration of basic drawing ideas and media. Work produced in class must be retained for later portfolio presentation in ARTF 24005. Prerequisite: None.
3.000 Credit hours
3.000 Other hours

ARTF 14001 - DRAWING II

Continued practice in drawing with particular emphasis upon dimensional representation and pictorial structure. Work produced in this class must be retained for later portfolio presentation in ARTF 24005. Prerequisite: ARTF 14000, ART 10022 and ART 10023.
3.000 Credit hours
6.000 Other hours

ARTF 14055 - SCULPTURE I

An introduction to the basic concepts of three-dimensional form. Work produced in this course must be retained for later portfolio presentation in ARTF 24005. Prerequisite: ARTF 14000 and ART 10023.
3.000 Credit hours
3.000 Other hours

ARTF 14060 - PAINTING I

Opaque, water-based media used to introduce fundamental form language and vocabulary of painting. Emphasis upon structured study and effective use of colors. Work produced in class must be retained for later portfolio presentation in ARTF 24005. Prerequisite: ARTF 14000 and ART 10022.
3.000 Credit hours
3.000 Other hours
ARTF 24001 - DRAWING III

Emphasis on continued development of drawing with focus on nonfigurative representations of pictorial space. Work produced in this course must be retained for later portfolio presentation in ARTF 24005. Prerequisite: ARTF 14001.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Art Department

ARTF 24005 - SOPHOMORE REVIEW: FINE ARTS

Diagnostic review by fine arts faculty of portfolio of work selected from "foundation" courses. Student's knowledge of art history is also examined. Student must receive a passing score (above average of C) to continue in degree program. Action by faculty committee may include the assignment of additional studio work over the normal graduation requirements in areas of apparent deficiencies. Prerequisite: ART 10022, ART 10023, ARTF 14000, ARTF 14001, ARTF 14055, ARTF 14060, ARTH 22006, ARTH 22007, ARTF 24010 AND ARTF 24040.
1.000 Credit hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Art Department

ARTF 24010 - INTRODUCTION TO FINE ART PHOTOGRAPHY

Introductory studio/lecture course which introduces fine art photography with an aesthetic, contemporary approach. Students learn traditional and digital photographic image-making applications and the historical underpinnings of the photograph in modern art. Research paper and portfolio required. Work produced in this class must be retained for later portfolio presentation in ARTF 24005. Prerequisite: ARTF14000 and ART 10022.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Art Department

ARTF 24040 - PRINTMAKING I

Basic traditional and contemporary techniques of relief (woodcut, lino-cut, etc.) and intaglio printing (etching, collography, etc.). Work produced in this class must be retained for later portfolio presentation in ARTF 24005. Prerequisite: ARTF 14000 and ART 10022.
3.000 Credit hours
3.000 Other hours
ARTF 24055 - SCULPTURE II

Continuation of sculpture I with greater emphasis on materials and processes. Prerequisite: ARTF 14055, ART 10022 and ART 20024.
3.000 Credit hours
3.000 Other hours

ARTF 24060 - PAINTING II

Continuation of work begun in Painting I. Introduction to oil painting with emphasis upon direct painting from observed sources and study of expressive capabilities of painting. Prerequisite: ARTF 14060, ART 10023 and ART 20024.
3.000 Credit hours
3.000 Other hours

ARTF 34001 - DRAWING IV

Further study and understanding of concepts and ideas which enable the student to understand and professionally realize their drawings. Prerequisite: ARTF 24001 and a grade of S in ARTF 24005.
3.000 Credit hours
3.000 Other hours

ARTF 34002 - INTRODUCTION TO FIGURE DRAWING

(Repeatable for a total of 9 credit hours) Extensive studio practice of traditional and contemporary approaches to the human figure. Critical analysis of the figure from the Renaissance through postmodernism. Students work from a nude model. Prerequisite: ARTF14000, ARTF14001and ARTF 24001; and a grade of S in ARTF 24005.
3.000 Credit hours
3.000 Other hours
ARTF 34040 - PRINTMAKING: INTERMEDIATE INTAGLIO

Continuation of ARTF 24040 emphasizing individually assigned problems in intaglio with introduction to color intaglio techniques. Prerequisite: ARTF 24040, ART 10023 and ART 20024; and a grade of S in ARTF 24005.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Art Department

ARTF 34041 - SERIGRAPHY I

The initial presentation of fundamental concepts and processes pertaining to serigraphy. This course will include printing techniques and aesthetic considerations in the making of art. Prerequisite: ARTF 24040, ART 10023 and ART 20024; and a grade of S in ARTF 24005.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Art Department

ARTF 34042 - LITHOGRAPHY I

Introduction to stone lithography. Techniques of drawing and printing crayon, tusche, transfer and color images and their relation to problems of drawing and composition. Prerequisite: ARTF 24040, ART 10023 and ART 20024; and a grade of S in ARTF 24005.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Art Department

ARTF 34050 - SCULPTURE: LIFE MODELING

(Repeatable for a maximum of 6 credit hours) Continuation of the study of the human figure in sculpture. Prerequisite: ARTF 24055 and a grade of S in ARTF 24005.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Art Department

ARTF 34055 - SCULPTURE III

A sculpture course with an emphasis on other conceptual approaches beyond the more formal and aesthetic considerations explored in Sculpture II. Prerequisite: ARTF 24055 and ARTF 24005 with a grade of S.
3.000 Credit hours
3.000 Other hours
ARTF 34060 - PAINTING III
Continuation of the painting experience in various media, using formal means of painting expressively. Prerequisite: ARTF 24060 and a grade of S in ARTF 24005.
3.000 Credit hours
3.000 Other hours

ARTF 44003 - DRAWING V
(Repeatable for a total of 9 credit hours) Continuation of ARTF 34001. Prerequisite: ARTF 34001 and a grade of S in ARTF 24005.
3.000 Credit hours
3.000 Other hours

ARTF 44010 - ADVANCED FINE ART PHOTOGRAPHY
Combined studio/lecture course offering more advanced, conceptual approaches to the contemporary applications of photographic imaging for artists. Students work with larger scale printing formats, more involved research and greater depth of involvement with the photographic medium. Prerequisite: ARTF 24010 and ARTF 24005 with a grade of S.
3.000 Credit hours
3.000 Other hours

ARTF 44011 - DIGITAL FINE ART PHOTOGRAPHY
(Slashed with ARTF 55011) Students develop their technical and conceptual skills in fine art digital photography, and develop a contemporary approach to working with the medium. Students will explore various photographic and digital techniques, and will form an awareness of such techniques in contemporary photography. Prerequisite: ART 10022 with a minimum C (2.000) grade.
3.000 Credit hours
3.000 Other hours

ARTF 44040 - PRINTMAKING: ADVANCED INTAGLIO

Continuation of ARTF 34040 with special emphasis on color and photographic techniques intaglio. Prerequisite: ARTF 34040 and a grade of S in ARTF 24005.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Art Department

ARTF 44041 - SERIGRAPHY II

Continuation of ARTF 34041 emphasizing individually assigned projects. Prerequisite: ARTF 34041 and a grade of S in ARTF 24005 and special approval.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Art Department

ARTF 44043 - ADVANCED PRINTMAKING

(Repeatable for a maximum of 9 credit hours) Advanced printmaking course with emphasis on students producing new, individually conceived visual works in printmaking in close consultation with faculty. Written proposal by students required at registration. Prerequisites: Choose two (2) from the following: ARTF 34040 or 34041 or 34042 or 44040 or 44041 or 44042.

3.000 Credit hours
5.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Art Department

ARTF 44045 - ART OF THE BOOK

(Slashed with ARTF 44045) A distance learning course that combines video demonstrations and readings on creating artists books for fine art studio artists and photographers. Some basic digital image manipulation and studio skills with paper are needed for successful results. Students are required to digitally document their projects and upload them for review before project deadlines. Specific materials and basic studio tools are required to complete the projects. Prerequisite: ART 10022 with a minimum C (2.000) grade.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Art Department

ARTF 44055 - SCULPTURE IV

Advanced sculpture course with emphasis on students pursuing individually conceived problems in close
consultation with faculty. Written proposal by students required at registration. Prerequisite: ARTF 34055 and a grade of S in ARTF 24005.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Art Department

**ARTF 44060 - PAINTING IV**

(Repeatable for a maximum of 9 credit hours) Advanced painting course with emphasis on students pursuing individually conceived problems in close consultation with faculty. Written proposal by students required at registration. Prerequisite: ARTF 34060 and a grade of S in ARTF 24005.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Art Department

**ARTF 44092 - FIELD EXPERIENCE:TRAVEL STUDY IN FINE ART**

(Repeatable for credit) (Cross-listed with ARTF 54092) Travel-based study/field experience in fine arts disciplines to and at a site or sites away from Kent State University. Prerequisite: Major in Fine Art or special approval of instructor.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Field Experience

Art Department

Course Attributes:
Experiential Learning Requirem

**ARTF 44095 - SELECTED TOPICS IN FINE ARTS**

(Repeatable for credit) Special problems in studio art. Discussion, lecture and studio research in various selected media and concepts. Content varies each semester offered. Prerequisite: A grade of S in ARTF 24005.

1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Art Department

**ARTF 44096 - INDIVIDUAL STUDY FINE ART**

(Repeatable for credit)Additional study in area of student's choice in consultation with advisor. Prerequisite: Major in Fine Art and special approval.

1.000 Credit hours
1.000 Other hours
ARTF 44099 - SENIOR PROJECT: FINE ARTS

Independently conceived project by senior fine art major, including written artist statements culminating in an exhibition and oral review. Prerequisite: Senior standing a grade of S in ARTF 24005 and special approval.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Course Attributes:
Experiential Learning Requirem

ARTF 54011 - DIGITAL FINE ART PHOTOGRAPHY

(Slashed with ARTF 44011) Students develop their technical and conceptual skills in fine art digital photography, and develop a contemporary approach to working with the medium. Students explore various photographic and digital techniques and form an awareness of such techniques in contemporary photography. Prerequisite: graduate standing.

3.000 Credit hours

Levels: Graduate
Schedule Types: Studio

ARTF 54045 - ART OF THE BOOK

(Slashed with ARTF 44045) Distance learning course on creating artist books for professional artists and photographers. Basic material skills with paper and printing, drawing, design and or photography needed. Digital photo documentation of works and uploading of files necessary for completion of course. Prerequisite: Master of Arts or Master of Fine Arts within the School of Art.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Studio

ARTF 54091 - SEMINAR: STUDIO

(Repeatable for a maximum of 9 credit hours) Contemporary issues related to visual arts explored through presentation, lecture and discussion. Guest speakers augment staff. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar
ARTF 54092 - FIELD EXPERIENCE: TRAVEL STUDY IN FINE ART

(Repeatable for credit) (Cross-listed with ARTF 44092) Travel-based study/field experience in fine arts disciplines to and at a site or sites away from Kent State University. Prerequisite: Graduate standing in Fine Art or special approval by instructor.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Field Experience

ARTF 64040 - PRINTMAKING: INDIVIDUAL STUDY

Continued development on a personal direction in printmaking. Prerequisite: Special approval and graduate standing.
2.000 TO 10.000 Credit hours
2.000 TO 10.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

ARTF 64050 - SCULPTURE: INDIVIDUAL STUDY

Continued development of a personal direction in sculpture. Prerequisite: Graduate standing.
2.000 TO 10.000 Credit hours
10.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

ARTF 64060 - PAINTING: INDIVIDUAL STUDY

Individual study, painting. Prerequisite: Special approval and graduate standing.
2.000 TO 10.000 Credit hours
10.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

ARTF 64096 - INDIVIDUAL INVESTIGATION: FINE ART

(Repeatable for credit) Independent study in drawing, painting, printmaking or sculpture. IP Permissible. Prerequisites: graduate standing in MA or MFA program in fine art.
2.000 TO 10.000 Credit hours
3.300 TO 16.500 Other hours
### ARTF 64098 - RESEARCH

(Repeatable for credit) Studio research in the visual arts. Prerequisite: Graduate standing.

- **Credit hours:** 1.000 TO 15.000
- **Other hours:** 1.000 TO 15.000

#### Course Details:
- **Levels:** Graduate
- **Schedule Types:** Individual Investigation, Studio

### ARTH 12001 - ART AS A WORLD PHENOMENON

An introduction to the history of art emphasizing analysis and interpretation of visual art forms. The course will also focus on the functions and meaning of Western and non-Western art traditions. Not counted toward requirements for art majors. Prerequisite: None.

- **Credit hours:** 3.000
- **Lecture hours:** 3.000

#### Course Details:
- **Levels:** Undergraduate
- **Schedule Types:** Lecture

### ARTH 22006 - ART HISTORY: ANCIENT AND MEDIEVAL ART

Examination and interpretation of the major monuments of Western art and architecture from Paleolithic art to late Gothic art. The impact of non-Western traditions will be included as appropriate. Prerequisite: None.

- **Credit hours:** 3.000
- **Lecture hours:** 3.000

#### Course Details:
- **Levels:** Undergraduate
- **Schedule Types:** Lecture

### ARTH 22007 - ART HISTORY: RENAISSANCE TO MODERN ART

Major movements and artists in painting, sculpture and allied arts of Europe and America from early Renaissance in Italy until the present day. The impact of non-Western traditions will be included as appropriate. Prerequisite: None.

- **Credit hours:** 3.000
- **Lecture hours:** 3.000

#### Course Details:
- **Levels:** Undergraduate
- **Schedule Types:** Lecture
Art Department

Course Attributes:
Kent Core-Fine Arts, LER-Fine Arts, TAG - Arts/Humanities, Trnfr Module-Fine Arts

**ARTH 22020 - ART OF AFRICA, OCEANIA AND THE AMERICAS**

Stylistic and historical investigation of the art and architecture of the traditional societies of Africa, Oceania and the Americas within an art historical and cross-cultural perspective. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Art Department

Course Attributes:
Diversity Course-Global, Kent Core-Fine Arts, LER-Fine Arts, Trnfr Module-Fine Arts

**ARTH 32066 - LATE MODERN ART**

Painting, sculpture and allied arts in the United States and Europe from 1940 to the present. Prerequisite: ARTH 22007.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Art Department

**ARTH 42000 - RESEARCH AND WRITING IN ART HISTORY**

Introduction to the basic techniques and resources for art history research. Provides assistance in the preparation of research papers and critical essays required by upper-division art history courses. Prerequisite: Junior standing or above. Corequisite: Upper-division art history course.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Art Department

Course Attributes:
Writing Intensive Course

**ARTH 42023 - THE ARTS OF JAPAN**

Examination of sources and styles of Japanese art, from prehistoric to recent times. Prerequisite: junior or senior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
**ARTH 42025 - ART OF WEST AFRICA**

(Cross-listed with ARTH 52025) Arts, crafts and architecture of the western Sudanic and Guinea Coast areas of West Africa from prehistoric times to the present. Prerequisite: Junior or senior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Art Department

Course Attributes:
Diversity Course-Global

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**ARTH 42026 - ART OF NIGERIA**

(Cross-listed with ARTH 52026) Study of the arts, crafts and architecture of Nigeria from prehistoric times to the present. Prerequisite: Junior or senior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Art Department

Course Attributes:
Diversity Course-Global

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**ARTH 42027 - ART OF CENTRAL AFRICA**

(Cross-listed with ARTH 52027) Comparative study of the arts, crafts and architecture of Central Africa from prehistoric times to the present. Prerequisite: Junior or senior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Art Department

Course Attributes:
Diversity Course-Global

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**ARTH 42031 - GREEK ARCHAEOLOGY AND ART**

(Slashed with ARTH 52031) (Cross-listed with CLAS 41401 and CLAS 51401) Introduction to archaeology of the Greek world with emphasis on recent discoveries and their impact on the study of Greek art, architecture and sculpture through the Hellenistic period. Prerequisite: Junior or senior standing.
3.000 Credit hours
3.000 Lecture hours
ARTH 42032 - ROMAN ARCHAEOLOGY AND ART
(Slashed with ARTH 52032) (Cross-listed with CLAS 41402 and CLAS 51402) Introduction to archaeology of the Roman world with emphasis on recent discoveries and their impact on the study of Etruscan and Roman art, architecture and sculpture through the Imperial period. Prerequisites: Junior or senior standing.
3.000 Credit hours
3.000 Lecture hours

ARTH 42036 - MEDIEVAL ART
(Cross-listed with ARTH 52036) Emphasis on major period of Medieval art (Byzantine, Carolingian, Ottonian, Romanesque and Gothic) treating iconographic themes and styles in a variety of media. Prerequisite: Junior or senior standing.
3.000 Credit hours
3.000 Lecture hours

ARTH 42039 - GOTHIC ART, 12TH TO 15TH CENTURIES
(Cross-listed with ARTH) An examination of the development of European Gothic art from the 12th century to the 15th century. Emphasis on the ties to contemporary philosophical and literary developments. Prerequisite: Art History (ARTH 22006 and 22007).
3.000 Credit hours
3.000 Lecture hours

ARTH 42041 - ITALIAN RENAISSANCE ART
(Cross-listed with ARTH 52041) Study of development of major themes in Italian art from 1400 until c. 1550 emphasizing achievements of the masters and analyzing major ideas and theories of the period. Prerequisite: Junior or senior standing.
3.000 Credit hours
3.000 Lecture hours
ARTH 42042 - NORTHERN RENAISSANCE ART

(Cross-listed with ARTH 52042) Study of stylistic and iconographic questions and technique in Northern panel painting, as well as other arts in Northern Europe. Prerequisite: Junior or senior standing. 3.000 Credit hours 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Art Department

ARTH 42043 - THE HIGH RENAISSANCE AND MANNERISM IN ITALY

(Cross-listed with ARTH 52043) Covers late 15th century and 16th century painting, sculpture and architecture in Italy. Following discussion of the High Renaissance masters, students examine the works collectively known as the Mannerists. Course gives students a firm grounding in the manifold artistic activity of the 16th century. Prerequisite: Junior or senior standing. 3.000 Credit hours 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Art Department

ARTH 42044 - VENETIAN RENAISSANCE ART

(Cross-listed with ARTH 52044) Course provides a survey of Venetian painting, sculpture and architecture from the late 1300's to the late 1500's. Upon completion students have a comprehension of the interrelationship of Venetian art with its unique environment and society. Prerequisite: Junior or senior standing. 3.000 Credit hours 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Art Department

ARTH 42046 - BAROQUE ART OF THE 17TH CENTURY

(Cross-listed with ARTH 52046) Study of the origins of Baroque art in Italy and its spread throughout Flanders, the Netherlands, France and Spain. Prerequisite: Junior or senior standing. 3.000 Credit hours 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Art Department

ARTH 42051 - EUROPEAN ART AND IDEAS:1750-1900

(Cross-listed with ARTH 52051) Selected studies in late 18th-century and 19th-century British, French, German and Spanish art and architecture within the broader context of Western culture and ideas. Prerequisite: Junior or senior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Art Department

**ARTH 42061 - EARLY 20TH-CENTURY ART**

(Cross-listed with ARTH 52061) Study of painting, sculpture, architecture and allied arts in Europe from 1880 to 1940. Prerequisite: ARTH 22007.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Art Department

**ARTH 42062 - PICASSO**

Course provides a survey of the art of Picasso, starting with his childhood works. Students gain a better understanding of Picasso's pivotal importance to 20th century art and various influences that cultivated his incredible creativity. Prerequisite: Junior or senior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Art Department

**ARTH 42063 - AMERICAN ART:EUROPEAN ROOTS**

(Cross-listed with ARTH 52063) Examines the role of European roots in the formation of American art. The complex issues and identities artists faced as a result of the expatriate experience are addressed. Prerequisite: Junior or senior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Art Department

**ARTH 42067 - ART OF THE 1960S**

(Cross-listed with ARTH 52067) A survey of the major movement of the sixties decade, with primary emphasis on the United States. Prerequisite: Junior or senior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Art Department
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Credit Hours</th>
<th>Lecture Hours</th>
<th>Levels</th>
<th>Schedule Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 42071</td>
<td>HISTORY OF PRINTS</td>
<td>Chronological survey of printmaking (engraving, etching, lithography, etc.) From 1400 to the present emphasizing its technical and stylistic evolution. Prerequisite: Junior or senior standing.</td>
<td>3.000</td>
<td>3.000</td>
<td>Undergraduate</td>
<td>Lecture</td>
</tr>
<tr>
<td>ARTH 42078</td>
<td>HISTORY OF THE DECORATIVE AND APPLIED ARTS</td>
<td>(Cross-listed with ARTH 52078) Historical and critical examination of decorative and applied arts and their relationship to the Western societies which produced them. Prerequisite: ARTH 22006, 22007.</td>
<td>3.000</td>
<td>3.000</td>
<td>Undergraduate</td>
<td>Lecture</td>
</tr>
<tr>
<td>ARTH 42091</td>
<td>ART HISTORY SEMINAR</td>
<td>(Repeatable for credit) Open format course with topics announced in advance. Designed to allow detailed examination of selected topics. Prerequisite: Junior standing and special approval of instructor.</td>
<td>3.000</td>
<td>3.000</td>
<td>Undergraduate</td>
<td>Seminar</td>
</tr>
<tr>
<td>ARTH 42092</td>
<td>ART MUSEUM INTERNSHIP</td>
<td>(Repeatable for credit) A supervised internship in a regional art museum emphasizing the practical application of museological principles and practices. Prerequisite: Junior or senior standing and ARTH 42072.</td>
<td>3.000</td>
<td>3.000</td>
<td>Undergraduate</td>
<td>Practicum or Internship</td>
</tr>
<tr>
<td>ARTH 42095</td>
<td>SPECIAL TOPICS: ART HISTORY</td>
<td>(Repeatable for credit) (Cross-listed with ARTH 52095) Upper-division discussion and lecture course whose content changes in accordance with the interest and competence of faculty. Precise title to be inserted in</td>
<td>3.000</td>
<td>3.000</td>
<td>Undergraduate</td>
<td></td>
</tr>
</tbody>
</table>
Schedule of Classes. Prerequisite: Junior or senior standing.

1.00 TO 3.00 Credit hours
1.00 TO 3.00 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Art Department

**ARTH 42096 - INDIVIDUAL INVESTIGATION: ART HISTORY**

(Repeatable for credit) (Cross-listed with ARTH 52096) Directed independent study with art history faculty. Prerequisite: Junior or senior standing.

3.00 Credit hours
3.00 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Art Department

**ARTH 42192 - FIELD EXPERIENCE: TRAVEL STUDY IN ART HISTORY**

(Repeatable for credit) (Cross-listed with ARTH 52192) Travel-based study/field experience in art history to and at a site or sites away from Kent State University. The primary benefit will be the observation and study of works of art first hand, in addition to the presentation and discussion of historical and contextual factors. Time is made available for individual investigation of specific works sites. Prerequisite: Major in art history or special approval of instructor.

1.00 TO 3.00 Credit hours
1.00 TO 3.00 Other hours

Levels: Undergraduate
Schedule Types: Field Experience

Art Department

Course Attributes:
Experiential Learning Requirem

**ARTH 52025 - ART OF WEST AFRICA**

(Cross-listed with ARTH 42025) Arts, crafts and architecture of the Western Sudanic and Guinea Coast areas of West Africa from prehistoric times to the present. Prerequisite: Graduate standing.

3.00 Credit hours
3.00 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Art Department

**ARTH 52026 - ART OF NIGERIA**

(Cross-listed with ARTH 42026) Study of the arts, crafts and architecture of Nigeria from prehistoric times to present. Prerequisite: Graduate standing.

3.00 Credit hours
3.00 Lecture hours
<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Credits</th>
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<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 52027</td>
<td>ART OF CENTRAL AFRICA</td>
<td>3.000</td>
<td>Study of the arts, crafts and architecture of Central Africa from prehistoric times to present.</td>
<td>Graduate standing.</td>
</tr>
<tr>
<td>ARTH 52031</td>
<td>GREEK ARCHAEOLOGY AND ART</td>
<td>3.000</td>
<td>Introduction to archaeology of the Greek world with emphasis on recent discoveries and their impact on the study architecture and sculpture through the Hellenistic period.</td>
<td>Graduate standing.</td>
</tr>
<tr>
<td>ARTH 52032</td>
<td>ROMAN ARCHAEOLOGY AND ART</td>
<td>3.000</td>
<td>Introduction to archaeology of the Roman world. Emphasis on discoveries and impact on the study of Italic, Etruscan and Roman art, architecture and sculpture through Imperial period.</td>
<td>Graduate standing.</td>
</tr>
<tr>
<td>ARTH 52036</td>
<td>MEDIEVAL ART</td>
<td>3.000</td>
<td>Emphasis on major periods of Medieval art (Byzantine, Carolingian, Ottonian, Romanesque and Gothic), treating iconographic themes and styles in a variety of media.</td>
<td>Graduate standing.</td>
</tr>
</tbody>
</table>
ARTH 52038 - HAND MADE BOOKS AND ART

This course examines the history of (predominantly Western) books and reading; of books as locus of several types of visual art (decoration, illustration, vision, commentary); and of visual strategies for a range of communication tasks in selected books from the Middle Ages onward. All this prepares us to understand the variety and efficacy of approaches that have been used by those producing books by hand in the past and at present. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Art Department

ARTH 52039 - GOTHIC ART: 12TH TO 15TH CENTURIES

An examination of the development of European Gothic art from the 12th to the 15th centuries. Students will research specific works of art. The course will put emphasis on contemporary historical philosophical and literary figures. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Art Department

ARTH 52041 - ITALIAN RENAISSANCE ART

(Cross-listed with ARTH 42041) Study of development of major themes in Italian art from 1400 until about 1550, emphasizing achievements of the masters and analyzing major ideas and theories of the period. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Art Department

ARTH 52042 - NORTHERN RENAISSANCE ART

(Cross-listed with ARTH 42042) Study of stylistic and iconographic questions and technique in northern panel painting, as well as other arts in Northern Europe. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Art Department

ARTH 52043 - THE HIGH RENAISSANCE AND MANNERISM IN ITALY

(Cross-listed with ARTH 42043) Covers late 15th century and 16th century painting, sculpture and architecture in Italy. Following discussion of the High Renaissance masters students examine the works collectively known
as the Mannerists. Course gives students a firm grounding in the manifold artistic activity of the 16th century.
Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**ARTH 52044 - VENETIAN RENAISSANCE ART**

(Cross-listed with ARTH 42044) Course provides a survey of Venetian painting, sculpture and architecture from the late 1300's to the late 1500's. Upon completion students will have a comprehension of Venetian art with its unique environment and society. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**ARTH 52046 - BAROQUE ART IN EUROPE**

(Cross-listed with ARTH 42046) A study of the origins of Baroque art in Italy and its spread throughout Flanders, the Netherlands, France and Spain. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**ARTH 52051 - EUROPEAN ART, 1750-1900**

(Cross-listed with ARTH 42051) Selected studies in late 18th-century and 19th-century painting, sculpture architecture and allied arts of England, France, Germany and Spain. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**ARTH 52061 - EARLY 20TH-CENTURY ART**

(Cross-listed with ARTH 42061) A study of painting, sculpture, architecture and allied arts in Europe from 1880 to 1940. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
<table>
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<tr>
<th>Course Code</th>
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<th>Credit Hours</th>
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<td>ARTH 52062</td>
<td>PICASSO</td>
<td>Course provides a survey of the art of Picasso, starting with his childhood works. Students gain a better understanding of Picasso's pivotal importance to 20th century art and the various influences that cultivated his incredible creativity. Prerequisite: Graduate standing.</td>
<td>Graduate standing</td>
<td>3.000</td>
<td>3.000</td>
<td>Graduate</td>
<td>Lecture</td>
</tr>
<tr>
<td>ARTH 52063</td>
<td>AMERICAN ART:EUROPEAN ROOTS</td>
<td>(Cross-listed with ARTH 42063) Examines the role of European roots in the formation of American art. The complex issues and identities artists faced as a result of the expatriate experience are addressed. Prerequisite: Graduate standing.</td>
<td>Graduate standing</td>
<td>3.000</td>
<td>3.000</td>
<td>Graduate</td>
<td>Lecture</td>
</tr>
<tr>
<td>ARTH 52064</td>
<td>DADA AND SURREALISM</td>
<td>Using a roughly chronological approach, this course shall examine the profound and lasting contributions made by the Dadaists and Surrealists as well as other revolutionary modernists of the early 20th century who sought to escape the traditional and rational in art and thought with sincerity in spite of the often superficially simple or even sometimes nihilistic appearance of their efforts. Through an analysis of selected works from this period and their relevant precursors, an attempt will be made to define the progressive ideas which led to the dismantling of previous standards and the rise of an anti-art spirit which continues today in various guises. Primary documents will be considered regularly in order to provide the student with a wider appreciation for the variety of media (e.g., film, theater, typography) and the issues and characters involved. Prerequisite: Graduate standing.</td>
<td>Graduate standing</td>
<td>3.000</td>
<td>3.000</td>
<td>Graduate</td>
<td>Lecture</td>
</tr>
<tr>
<td>ARTH 52066</td>
<td>LATE MODERN ART SINCE 1940</td>
<td>A study of painting, sculpture and allied arts in the United States and Europe from 1940 to the present. Prerequisite: Graduate standing.</td>
<td>Graduate standing</td>
<td>3.000</td>
<td>3.000</td>
<td>Graduate</td>
<td>Lecture</td>
</tr>
</tbody>
</table>
**ARTH 52067 - ART OF THE 1960S**

(Cross-listed with ARTH 42067) A survey of major movements of the sixties decade, with primary emphasis on the United States. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Art Department

**ARTH 52078 - HISTORY OF DECORATIVE AND APPLIED ARTS**

(Cross-listed with ARTH 42078) Historical and critical examination of decorative and applied arts and their relationship to Western societies which produced them. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Art Department

**ARTH 52095 - SPECIAL TOPICS: ART HISTORY**

(Repeatable for credit) (Cross-listed with ARTH 42095) Discussion and lecture course whose topic changes in accordance with the interest and competence of the faculty. Precise title will be inserted in schedule of classes. Prerequisite: Graduate standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Art Department

**ARTH 52096 - INDIVIDUAL INVESTIGATION: ART HISTORY**

(Repeatable for credit) (Cross-listed with ARTH 42096) Directed independent study with art history faculty. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Art Department

**ARTH 52192 - FIELD EXPERIENCE: TRAVEL STUDY IN ART HISTORY**

(Repeatable for credit) (Cross-listed with ARTH 42192) Travel-based study/field experience in art history to and at a site or sites away from Kent State University. The primary benefit will be the observation and study of works of art first hand, in addition to the presentation and discussion of historical and contextual factors. Time
is made available for individual investigation of specific works sites. Prerequisite: Graduate standing in art history or special approval of instructor.
1.000 TO 3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Field Experience

Art Department

**ARTH 62071 - HISTORY OF PRINTS**

A chronological survey of printmaking (engraving, etching, lithography, etc.) From 1400 to the present emphasizing its technical and stylistic evolution. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Art Department

**ARTH 62091 - ART HISTORY SEMINAR**

(Repeatable for a maximum of 9 credit hours)Open format course with topics announced in advance. Designed to allow in-depth examination of selected topics. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Art Department

**ARTH 62095 - SPECIAL TOPICS:ART HISTORY**

(Repeatable for credit)Discussion and lecture course whose topic changes in accordance with the interest and competence of the faculty. Special focus on problems and issues in the different areas of the discipline. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Art Department

**ARTH 62096 - SELECTED PROBLEMS-ART HISTORY**

(Repeatable for a maximum of 9 credit hours)The course content changes each semester according to the topic,entailing discussion and lectures on specific problems issues and areas in art history. Prerequisite: Permission. Graduate standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation
Art Department

**ARTH 62098 - RESEARCH**

(Repeatable for credit) Independent research open only to art history graduate students who have completed course requirements for the Master of Arts degree. Prerequisite: Graduate standing.

1.000 TO 15.000 Credit hours

1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

Art Department

**AS 10095 - SPECIAL TOPICS**

(Repeatable for credit) This program, administered by the dean is intended to encourage interdisciplinary study to cover areas not treated adequately in traditional coursework and to make available promptly the new and significant experience of the faculty. Prerequisite: None.

1.000 TO 5.000 Credit hours

1.000 TO 5.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Center Compar/Integrative Prog Department

**AS 20095 - SPECIAL TOPICS**

(Repeatable for credit) This program, administered by the dean, is intended to encourage interdisciplinary study, to cover areas not treated adequately in traditional coursework and to make available promptly the new and significant experience of the faculty. Prerequisite: None.

1.000 TO 5.000 Credit hours

1.000 TO 5.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Center Compar/Integrative Prog Department

**AS 22001 - INTRODUCTION TO JEWISH STUDIES**

Introductory examination of issues of Jewish life, culture, religion and society from antiquity to the present. Prerequisite: None.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Center Compar/Integrative Prog Department

**AS 22069 - INTRODUCTION TO LESBIAN, GAY, BISEXUAL AND TRANSGENDERED STUDIES**

An introductory examination of lesbian, gay, bisexual and transgender issues from an interdisciplinary
AS 30092 - INTERNSHIP

(Repeatable for a maximum of 12 credit hours) Students participate in internships under the direction of a faculty member. Prerequisite: special approval.
1.000 TO 12.000 Credit hours
3.000 TO 36.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Center Compar/Integrative Prog Department

AS 30095 - SPECIAL TOPICS

(Repeatable for credit) This program, administered by the dean, is intended to encourage interdisciplinary study to cover areas not treated adequately in traditional coursework and to make available promptly the new and significant experience of the faculty. Prerequisite: None.
1.000 TO 5.000 Credit hours
1.000 TO 5.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Center Compar/Integrative Prog Department

AS 30196 - INDIVIDUAL INVESTIGATION

(Repeatable for credit) Registration requires prior approval from the college of arts and sciences office. Prerequisite: special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Center Compar/Integrative Prog Department

AS 40095 - SPECIAL TOPICS

(Repeatable for credit) (Cross-listed with AS 50095 and AS 70095) This program, administered by the dean, is intended to encourage interdisciplinary study, to cover areas not treated adequately in traditional coursework and to make available promptly the new and significant experience of the faculty. Prerequisite: None.
1.000 TO 5.000 Credit hours
3.000 Lecture hours
AS 43001 - LEGAL INFORMATION SOURCES AND SERVICES

(Cross-listed with AS 53001 and AS 73001 and LIS 60619 and LIS 80619) Fundamentals of legal research methods and major sources of American legal literature in print and electronic formats as used in other disciplines. Students learn how to formulate a research plan based on legal analysis of issues using relevant, authoritative legal resources. Prerequisite: senior standing.
3.000 Credit hours
3.000 Lecture hours

AS 50095 - SPECIAL TOPICS

(Repeatable for credit) (Cross-listed with AS 40095 and AS 70095) Topic to be announced in the schedule of classes booklet. Repeated registration permitted when content varies. Prerequisite: Graduate standing and special approval.
1.000 TO 5.000 Credit hours
1.000 TO 5.000 Lecture hours

AS 50096 - INDIVIDUAL INVESTIGATION

(Repeatable for credit) Pursuit of a subject matter beyond normal course coverage, supervised by a graduate faculty member. Prerequisite: Graduate standing.
1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

AS 53001 - LEGAL INFORMATION SOURCES AND SERVICES

(Cross-listed with AS 43001 and AS 73001 and LIS 60619 and LIS 80619) Fundamentals of legal research methods and major sources of American legal literature in print and electronic formats as used in other disciplines. Students learn how to formulate a research plan based on legal analysis of issues using relevant, authoritative legal resources. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours
<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Credit Hours</th>
<th>Lecture Hours</th>
<th>Schedule Types</th>
<th>Levels</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>AS 61000</td>
<td>INTRODUCTION TO LIBERAL STUDIES</td>
<td>Introduction to graduate-level interdisciplinary studies. The specific subjects covered are chosen by the instructor, and so may vary. Prerequisite: graduate standing.</td>
<td>2.000</td>
<td>2.000</td>
<td>Lecture</td>
<td>Graduate</td>
<td>Center Compar/Integrative Prog Department</td>
</tr>
<tr>
<td>AS 61001</td>
<td>LIBERAL STUDIES RESEARCH PAPER</td>
<td>Learning to write a graduate-level research paper. Prerequisites: graduate standing and special approval.</td>
<td>1.000</td>
<td>1.000</td>
<td>Seminar</td>
<td>Graduate</td>
<td>Center Compar/Integrative Prog Department</td>
</tr>
<tr>
<td>AS 61095</td>
<td>LIBERAL STUDIES SEMINAR</td>
<td>(Repeatable for credit) An interdisciplinary seminar designed for candidates in the liberal studies program. Topics will vary. Prerequisite: None.</td>
<td>3.000</td>
<td>3.000</td>
<td>Seminar</td>
<td>Graduate</td>
<td>Center Compar/Integrative Prog Department</td>
</tr>
<tr>
<td>AS 61098</td>
<td>LIBERAL STUDIES ESSAY</td>
<td>(Repeatable for credit) The preparation of an essay of approximately 50 pages on a topic related to the student’s program of study for the Master of Liberal Studies degree. Prerequisite: Graduate standing and special approval.</td>
<td>3.000</td>
<td>3.000</td>
<td>Research</td>
<td>Graduate</td>
<td>Center Compar/Integrative Prog Department</td>
</tr>
<tr>
<td>AS 70095</td>
<td>SPECIAL TOPICS</td>
<td>(Repeatable for credit) Topic to be announced in the schedule of classes booklet. Prerequisite: Doctoral standing; special approval.</td>
<td>1.000 TO 5.000</td>
<td>1.000 TO 5.000</td>
<td>Research</td>
<td>Graduate</td>
<td>Center Compar/Integrative Prog Department</td>
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</table>
### AS 70096 - INDIVIDUAL INVESTIGATION

(Repeatable for credit) Pursuit of a subject matter beyond normal course coverage, supervised by a graduate faculty member. Prerequisite: Doctoral standing.

<table>
<thead>
<tr>
<th>Credit hours</th>
<th>Other hours</th>
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<tbody>
<tr>
<td>1.000 TO 6.000</td>
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<tr>
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### AS 73001 - LEGAL INFORMATION SOURCES AND SERVICES

(Cross-listed with AS 43001 and AS 53001 and LIS 60619 and LIS 80619) Fundamentals of legal research methods and major sources of American legal literature in print and electronic formats as used in other disciplines. Students learn how to formulate a research plan based on legal analysis of issues using relevant, authoritative legal resources. Prerequisite: doctoral standing.

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### ASL 19201 - ELEMENTARY AMERICAN SIGN LANGUAGE I

Introduction to American Sign Language and the culture of the American signing community, in an immersion setting. Prerequisite: None.

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### ASL 19202 - ELEMENTARY AMERICAN SIGN LANGUAGE II

A continuation of the introduction to American Sign Language and the culture of the American signing community, in an immersion setting. Prerequisite: ASL 19201.

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### ASL 29201 - INTERMEDIATE AMERICAN SIGN LANGUAGE I

Modern-Classical Lang Studies Department
Continued development of receptive and expressive skills in American Sign Language and an introduction to ASL grammar, using a bilingual-bicultural approach and interaction with deaf organizations. Prerequisite: ASL 19202.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**ASL 29202 - INTERMEDIATE AMERICAN SIGN LANGUAGE II**

Continuation of ASL 29201 with an emphasis on greater exploration of American Sign Language sentence structure using a bilingual-bicultural approach. Students are involved in a community service project, providing a hands-on experience with using ASL within a community setting. Prerequisite: ASL 29201.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**ASL 39201 - ADVANCED AMERICAN SIGN LANGUAGE I**

Students enhance receptive and expressive proficiency in an immersion setting through the use of both planned and impromptu in-class discussion of current and historic events and involvement in a community service project. Students are advised to begin planning this activity early in the semester. Successful completion of ASL 29201 portfolio review required prior to registration. Prerequisite: ASL 29202.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**ASL 39202 - ADVANCED AMERICAN SIGN LANGUAGE II**

Students continue to increase their receptive and expressive proficiency in American Sign Language in an immersion setting, through in-class formal and informal presentations, discussions of current and historical events, and working in groups to complete a semester project and a community service project. Prerequisite: ASL 39201.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**ASL 49092 - PRACTICUM IN AMERICAN SIGN LANGUAGE**

In consultation with the ASL program coordinator, ASL students design a practicum experience related to signed languages and their communities. Successful presentation of cumulative portfolio required prior to registration.
Prerequisite: ASL 29202 or SPED 29202.

1.000 TO 3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Modern-Classical Lang Studies Department

Course Attributes:
Experiential Learning Requirem

**ASL 49096 - INDIVIDUAL INVESTIGATION**

(Repeatable for credit) (Cross-listed with SPED 43996) Individual investigation of problems in American Sign Language, ASL pedagogy and or deaf culture. Prerequisite: Departmental permission.

2.000 OR 3.000 Credit hours
2.000 OR 3.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Modern-Classical Lang Studies Department

**ASL 49108 - AMERICAN SIGN LANGUAGE LINGUISTICS I**

(Cross-listed with SPED 43108/53108) Lecture, discussion and application course designed to introduce students to basic linguistic terminology and concepts, as applied to American Sign Language (ASL) and taught using a bilingual-bicultural approach. Both ASL and English are used in the instruction of this class. Successful presentation of cumulative portfolio is required prior to registration in this course. Prerequisite: ASL 29202.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**ASL 49109 - AMERICAN SIGN LANGUAGE LINGUISTICS II**

Through lecture, in-class and out-of-class activities, and in-class presentations, students discuss, use, and respond to varied sentence structures and types of discourse in ASL, and compare these to English. Class is predominantly taught in ASL, but may at times use a bilingual approach. Prerequisite: ASL 49108 and special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**ASL 49201 - ADVANCED PROFICIENCY**

Students improve knowledge and use of American Sign Language and experiential knowledge of ASL culture through development, production, critique, revision and evaluation of an extended ASL presentation. This is an immersion class; voicing will not be used. Prerequisite: ASL 39202 and score of intermediate level on the
## ASL 49309 - INTRODUCTION TO DEAF STUDIES

(Cross-listed with SPED 43309/53309) Introductory survey course provides informational base and understanding of experiences of deaf people as a cultural minority. Includes etiology and prevalence data, service delivery systems, diagnosis and assessment of issues and communication systems. 20 field hours.

**Prerequisite:** None.

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**Levels:** Undergraduate  
**Schedule Types:** Lecture

Modern-Classical Lang Studies Department

### Course Attributes:
- Writing Intensive Course

## ASL 49350 - AMERICAN SIGN LANGUAGE LITERATURE

Through the use of multimedia resources, student explore the evolution of deaf literature, its historical context and multiple perspectives, and the techniques specific to ASL which make it unique. Conducted primarily in ASL, with some voicing and printed English. Prerequisite: ASL 39201 and 49309 and special approval.

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**Levels:** Undergraduate  
**Schedule Types:** Lecture

Modern-Classical Lang Studies Department

## ASL 49401 - DEAF CULTURE AND COMMUNITY

(Cross-listed with SPED 43101/53101) Students explore the different voices and perspectives which have been, and are, present within the deaf community, issues of controversy, myths and data, using a mix of ASL and English materials and discussion. Successful presentation of cumulative portfolio required prior to registration.

**Prerequisite:** ASL 29202 and 49309 and special approval.

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**Levels:** Undergraduate  
**Schedule Types:** Lecture

Modern-Classical Lang Studies Department

## ASL 49601 - ACTIVITY DESIGN, IMPLEMENTATION AND EVALUATION

Student improve receptive and expressive skills and develop ability to analyze and break down specific ASL skills into more basic components; voicing is not used. In addition to classroom time, a minimum of 90 minutes
per week working in the KSU ASL lab and/or (with permission) off-campus site. Prerequisites: ASL 39202 and passage of the Signing Competency Proficiency Interview at an intermediate level.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**ASTU 10101 - THE FOUNDATION OF THE UNITED STATES AIR FORCE I**

Survey course providing an introduction to the United States Air Force and ROTC. Officership and military customs and courtesies are discussed. Foundations of Air Force communication are covered. Prerequisite: None.

1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Aerospace Studies Department

**ASTU 10102 - THE FOUNDATION OF THE UNITED STATES AIR FORCE II**

Survey course looks at the origin and organization of the Air Force. Selected topics contributing to an understanding of the Air Force are covered. Prerequisite: None.

1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Aerospace Studies Department

**ASTU 10103 - LEADERSHIP LABORATORY**

An instructional program that prepares an individual to undertake the broad range of technical tasks associated with military leadership and defense management. This course is optional for university academic credit; however, it is mandatory for Air Force ROTC credit for scholarship or commissioning purposes. Prerequisite: None.

1.000 Credit hours
1.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Aerospace Studies Department

**ASTU 10104 - LEADERSHIP LABORATORY**

An instructional program that prepares an individual to undertake the broad range of technical tasks associated with military leadership and defense management. This course is optional for university academic credit; however, it is mandatory for Air Force ROTC credit for scholarship or commissioning purposes. Prerequisite: None.

1.000 Credit hours
1.000 Lab hours
ASTU 20101 - EVOLUTION OF UNITED STATES AIR FORCE AIR AND SPACE POWER I

Survey course examines air and space power from an historical perspective. Course covers early flight and World War I to the Korean War and ICBMS. Prerequisite: None.
1.000 Credit hours
1.000 Lecture hours

ASTU 20102 - EVOLUTION OF THE UNITED STATES AIR FORCE AIR AND SPACE POWER II

Survey course examines air and space power from an historical perspective. Course covers period from the Vietnam War to the Gulf War plus a look at the Air Force of the future. Prerequisite: None.
1.000 Credit hours
1.000 Lecture hours

ASTU 20103 - LEADERSHIP LABORATORY

An instructional program that prepares an individual to undertake the broad range of technical tasks associated with military leadership and defense management. This course is optional for university academic credit; however, it is mandatory for Air Force ROTC credit for scholarship or commissioning purposes. Prerequisite: None.
1.000 Credit hours
1.000 Lab hours

ASTU 20104 - LEADERSHIP LABORATORY

An instructional program that prepares an individual to undertake the broad range of technical tasks associated with military leadership and defense management. This course is optional for university academic credit; however, it is mandatory for Air Force ROTC credit for scholarship or commissioning purposes. Prerequisite: None.
1.000 Credit hours
1.000 Lab hours
ASTU 30101 - LEADERSHIP STUDIES I

Study of leadership, professional knowledge and communication skills required for an air force officer. The role of a leader as supervisor and counselor is discussed. Prerequisite: Permission.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Aerospace Studies Department

ASTU 30102 - LEADERSHIP STUDIES II

Study of quality management fundamentals and communication skills for the air force officer. The air force personnel evaluation system and military ethics are discussed. Prerequisite: Permission.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Aerospace Studies Department

ASTU 30103 - LEADERSHIP LABORATORY

An instructional program that prepares an individual to undertake the broad range of technical tasks associated with military leadership and defense management. This course is optional for university academic credit; however, it is mandatory for Air Force ROTC credit for scholarship or commissioning purposes. Prerequisite: None.

1.000 Credit hours
1.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Aerospace Studies Department

ASTU 30104 - LEADERSHIP LABORATORY

An instructional program that prepares an individual to undertake the broad range of technical tasks associated with military leadership and defense management. This course is optional for university academic credit; however, it is mandatory for Air Force ROTC credit for scholarship or commissioning purposes. Prerequisite: None.

1.000 Credit hours
1.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Aerospace Studies Department

ASTU 40101 - DEFENSE STUDIES I

Course examines the political, economic and social constraints upon national security and defense structure. The role of the military including joint operations is discussed. Regional defense issues studies. Prerequisite:
ASTU 40102 - DEFENSE STUDIES II

The role of the military and regional defense are studied. Current air force issues and other topics relevant to preparing an air force officer for active duty are covered. Prerequisite: Permission.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Aerospace Studies Department

ASTU 40103 - LEADERSHIP LABORATORY

An instructional program that prepares an individual to undertake the broad range of technical tasks associated with military leadership and defense management. This course is optional for university academic credit; however, it is mandatory for Air Force ROTC credit for scholarship or commissioning purposes. Prerequisite: None.

1.000 Credit hours
1.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Aerospace Studies Department

ASTU 40104 - LEADERSHIP LABORATORY

An instructional program that prepares an individual to undertake the broad range of technical tasks associated with military leadership and defense management. This course is optional for university academic credit; however, it is mandatory for Air Force ROTC credit for scholarship or commissioning purposes. Prerequisite: None.

1.000 Credit hours
1.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Aerospace Studies Department

ATTR 15001 - INTRODUCTION TO CLINICAL ATHLETIC TRAINING I

An overview of the profession of athletic training; including employment opportunities, academic and clinical preparation; and introduction to basic knowledge and skills utilized in the profession. Emphasis on leadership, mentoring, ethics and research from an introductory perspective. Prerequisite: Athletic training (ATTR) major.

2.000 Credit hours
1.000 Lecture hours
2.000 Lab hours
Health Sciences Department

**ATTR 15011 - INTRODUCTION TO CLINICAL ATHLETIC TRAINING II**

Basic concepts and skills related to the professional domains of the athletic training profession including basic modalities and rehabilitation, research, ethics, palpations, and blood borne pathogens. Moderate to advanced skills training in padding, splinting, wound care, equipment, bracing, tapings, wrappings, spine immobilization, and basic assessment techniques. Prerequisite: Athletic training (ATTR) major.

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Health Sciences Department

**ATTR 15092 - PRACTICUM IN ATHLETIC TRAINING I**

The study and clinical application of the competencies in athletic training educational domains. Specific emphasis on the introductory cognitive and psychomotor, as well as foundational behaviors of professional practice. Clinical hours and completion of specific competencies are required. Prerequisite: ATTR 15011 and special approval.

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Health Sciences Department

**Course Attributes:**
Experiential Learning Requirem

**ATTR 25036 - PRINCIPLES OF ATHLETIC TRAINING**

Principles of the profession, including injury prevention, basic sports trauma, injury management and specific sports conditions. Practical competency in emergency care and first aid; American Red Cross Professional Rescuer Certification for CPR and AED. Prerequisite: None.

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Health Sciences Department

**ATTR 25037 - PHYSICAL ASSESSMENT TECHNIQUES FOR THE LOWER EXTREMITY AND SPINE**

Anatomical and clinical assessment techniques for injuries and illnesses common to the physically active. Emphasis on orthopedic assessment strategies of the upper and lower quarters and spine for proper referral and care. Prerequisite: ATTR 25036; and ATTR 25057 or EXSC 25057 or BSCI 11010.
ATTR 25038 - PHYSICAL ASSESSMENT TECHNIQUES FOR THE UPPER EXTREMITY, HEAD AND NECK

Anatomical and clinical assessment techniques for injuries and illnesses with specific emphasis on orthopedic and neurological assessment strategies for the upper extremity, head and neck. Proper referral and care procedures are also be addressed. Prerequisites: ATTR 25036 and ATTR 25037; and ATTR 25057 or EXSC 25057 or BSCI 11010.

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Health Sciences Department

ATTR 25057 - HUMAN ANATOMY AND PHYSIOLOGY I

(Cross-listed with EXSC 25057) Comprehensive examination of anatomy and physiology related to the organization of the body and basic cell and tissue types. Specific structure and function of the muscular, skeletal, cardiovascular, nervous and respiratory systems are addressed. Prerequisite: none.

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Health Sciences Department

Course Attributes:
Kent Core-Basic Sciences, Kent Core-Basic Sciences Lab

ATTR 25058 - HUMAN ANATOMY AND PHYSIOLOGY II

(Cross-listed with EXSC 25058) Comprehensive examination of anatomy and physiology related to the human body under rest and exercise conditions. Specific structure and function of the metabolic, endocrine, lymphatic, digestive, urinary and reproductive systems are addressed. Advanced coverage of neurological, cardiovascular and respiratory systems are also addressed. Prerequisite: ATTR 25057 or EXSC 25057 or BSCI 11010.

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Health Sciences Department

Course Attributes:
**ATTR 25092 - PRACTICUM IN ATHLETIC TRAINING II**

The study and clinical application of the competencies in athletic training educational domains. Specific emphasis on the intermediate cognitive and psychomotor components. Clinical hours and completion of specific competencies are required. Prerequisite: ATTR 15092.

3.000 Credit hours
2.000 Lecture hours
15.000 Other hours

Levels: Undergraduate
Schedule Types: Lecture, Practicum or Internship

Health Sciences Department

Course Attributes:
Experiential Learning Requirem

**ATTR 35025 - ESSENTIALS OF ATHLETIC INJURY MANAGEMENT**

Common injuries related to physical activity and/or athletic participation from the cause, management and care perspectives. American Red Cross sport safety training certification (including adult/child CPR) will be granted. Emphasis on application of skills. Prerequisite: None.

1.000 Credit hours
1.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Health Sciences Department

**ATTR 35037 - ADVANCED PHYSICAL ASSESSMENT TECHNIQUES**

Anatomical, medical and clinical assessment techniques for injuries and illnesses common to the physically active. Emphasis on neurological and non-orthopedic assessment strategies for proper referral and care. Prerequisite: ATTR 25037 and 25038; and ATTR 25058 or EXSC 25058 or BSCI 11020 or BSCI 20020.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Health Sciences Department

**ATTR 35039 - THERAPEUTIC MODALITIES**

The study and practical application of physical modalities including physical principles, physiologic effects, indications/contraindications and standard application procedures. Safety and legal issues of modality usage are also addressed. Prerequisite: ATTR 25036.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab
**ATTR 35040 - STRENGTH AND CONDITIONING**

Demonstrate didactic understanding and clinical application of energy systems, anatomy and proper techniques for strength and conditioning exercises for practical applications with athletes. Prerequisites: ATTR 25057 or EXSC 25057 or BSCI 11010; and athletic training (ATTR), exercise science (EXSI) or physical education-professional (PEP) major.

2.000 Credit hours  
1.000 Lecture hours  
2.000 Lab hours

Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab

---

**ATTR 35045 - EMERGENCY MEDICAL TECHNICIAN-BASIC**

Preparing for Emergency Medical Technician certification including patient assessment, airway and cardiac management, trauma management, medical patient management and clinical experience. Prepares students to challenge the National Registry Examination for the State of Ohio for EMT-Basic. Clinical hours are required for this course through Hudson EMS. Prerequisites: none.

5.000 Credit hours  
2.000 Lecture hours  
6.000 Lab hours

Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab

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**ATTR 35050 - NEUROLOGICAL PROCESS FOR THE HEALTHCARE PROFESSIONAL**

Advanced cognitive content in the areas of normal and pathological function of the nervous system and its components. Specific emphasis on the neurophysiological basis for motor learning, special senses, and memory serves to address the central and peripheral nervous system structure and function. Growth and Development and pathological responses to hypoxia, microbiologic agents, genetic derangements, nutritional deficiencies, chemicals, drugs and aging are addressed. Prerequisites: ATTR 25057 or EXSC 25057 or BSCI 11010; and ATTR 25058 or EXSC 25058 or BSCI 11020 or BSCI 20020.

3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

---

**ATTR 35054 - BIOMECHANICS**

(Cross-listed with EXSC 35054) Anatomical and mechanical bases of human movement. Emphasis is placed on tools and techniques for motion analysis, mechanical concepts, forces and performance analysis. Lecture and laboratory. Prerequisite: ATTR 25057 or EXSC 25057 or BSCI 11010.

3.000 Credit hours  
2.000 Lecture hours  
2.000 Lab hours
ATTR 35092 - PRACTICUM IN ATHLETIC TRAINING III

The study and clinical application of the competencies in athletic training educational domains. Specific emphasis on the intermediate and advanced cognitive and psychomotor components. Clinical hours and completion of specific competencies are required. Prerequisite: ATTR 25092.

3.000 Credit hours
2.000 Lecture hours
15.000 Other hours

ATTR 43018 - ETHICS FOR ALLIED HEALTH PROFESSIONALS

Examination of specific situations in the allied health professions of athletic training and exercise science from an ethical sensitivity, reasoning and decision making perspective. A problem-oriented case study approach based on contemporary moral issues and moral theory related to clinical and academic health professions. Prerequisites: senior standing.

3.000 Credit hours
3.000 Lecture hours

ATTR 45017 - PROFESSIONAL DEVELOPMENT IN ATHLETIC TRAINING

An investigation of the issues affecting the student athletic trainer as they prepare for an entry-level career in athletic training. Professional development issues and NATABOC exam preparation are included. Prerequisite: Senior standing; athletic training majors only.

3.000 Credit hours
3.000 Lecture hours

ATTR 45038 - ORGANIZATION AND ADMINISTRATION OF ATHLETIC TRAINING

(Cross-listed with ATTR 55038) Investigation into current philosophies and legal aspects of athletic training. Organization and administration of all aspects of athletic training programs. Prerequisite: ATTR 25036.

3.000 Credit hours
Health Sciences Department

**ATTR 45039 - THERAPEUTIC REHABILITATION**

(Cross-listed with ATTR 55039) The study and clinical application of rehabilitation techniques including strategies for proper exercise selection based on anatomical and physiological considerations, program administration and guidelines for program progression. Prerequisite: ATTR 25036; and ATTR 25057 or EXSC 25057 or BSCI 11010.

- 3.000 Credit hours
- 2.000 Lecture hours
- 1.000 Lab hours

Levels: Undergraduate
Schedule Types: Lecture

Health Sciences Department

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**ATTR 45040 - PATHOLOGY AND PHARMACOLOGY FOR ALLIED HEALTH CARE PROVIDERS**

(Cross-listed with ATTR 55040) Investigation of specific pathological conditions presented by professionals, including physicians and pharmacists. Will discuss common pathologies, associated pharmacological treatment and physiologic effects for various afflictions. Prerequisite: ATTR 25058 or EXSC 25058 or BSCI 11020 or BSCI 20020.

- 3.000 Credit hours
- 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Health Sciences Department

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**ATTR 45041 - ADVANCED THERAPEUTIC INTERVENTIONS**

Addresses the physiological considerations of specific injuries and conditions commonly encountered in the athletic training profession. Focus is on contemporary rehabilitative programming for all of the major body regions. Specific units on Aquatic therapy and rehabilitation, Neurological considerations for rehabilitation, Return to Running Considerations, and Return to Throwing protocols are included. Prerequisites: ATTR 25057 or EXSC 25057 or BSCI 11010; and ATTR 25058 or EXSC 25058 or BSCI 11020 or BSCI 20020; and ATTR 35054 and ATTR 45039.

- 3.000 Credit hours
- 2.000 Lecture hours
- 1.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Health Sciences Department

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**ATTR 45091 - SENIOR SEMINAR IN ATHLETIC TRAINING**

(Repeatable for credit) Contemporary issues related to preparing students for entry-level careers in the athletic training profession including development of the foundational behaviors of professional practice. Specific
emphasis on employment preparation or graduate school preparation. Prerequisites: senior standing and athletic training (ATTR) major.

**ATTR 45096 - INDIVIDUAL INVESTIGATION IN ATHLETIC TRAINING**

(Repeatable for a maximum of 6 credit hours) Independent study completed under the supervision of a faculty member. Written approval of supervising faculty member and school director required prior to registration. Prerequisite: special approval.

1.000 TO 3.000 Credit hours
3.000 TO 9.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

**ATTR 45192 - PRACTICUM IN ATHLETIC TRAINING IV**

The study and clinical application of competencies in athletic training educational domains. Specific emphasis on the advanced cognitive and psychomotor components. Clinical hours and completion of specific competencies are required. Prerequisite: ATTR 35092.

3.000 Credit hours
2.000 Lecture hours
15.000 Other hours

Levels: Undergraduate
Schedule Types: Lecture, Practicum or Internship

**ATTR 45292 - INTERNSHIP IN ATHLETIC TRAINING I**

Internship in approved athletic training setting under the direct supervision of a certified athletic trainer. Students complete 20 hours per week in a clinical experience. Prerequisite: ATTR 45192 and special approval.

3.000 Credit hours
1.000 Lecture hours
20.000 Other hours

Levels: Undergraduate
Schedule Types: Lecture, Practicum or Internship

Course Attributes:
Experiential Learning Requirem

**ATTR 45392 - INTERNSHIP IN ATHLETIC TRAINING II**
Internship in an approved athletic training setting under the supervision of a certified and licensed athletic trainer. Students are required to perform 20 hours per week in clinical experience. Prerequisite: ATTR 45292 and special approval.

3.000 Credit hours
1.000 Lecture hours
20.000 Other hours

Levels: Undergraduate
Schedule Types: Lecture, Practicum or Internship

Health Sciences Department

Course Attributes:
Experiential Learning Requirement

**ATTR 46095 - SPECIAL TOPICS IN ATHLETIC TRAINING**

(Repeatable for credit) Selected topics in athletic training dependent upon interest. Prerequisites: none.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Health Sciences Department

**ATTR 55038 - ORGANIZATION AND ADMINISTRATION OF ATHLETIC TRAINING**

(Cross-listed with ATTR 45038) Investigation into current philosophies and legal aspects of athletic training. Organization and administration of all aspects of athletic training programs. Prerequisite: ATTR 25036 and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

**ATTR 55039 - THERAPEUTIC REHABILITATION**

(Cross-listed with ATTR 45039) The study and clinical application of rehabilitation techniques including strategies for proper exercise selection based on anatomical and physiological considerations, program administration, and guidelines for program progression. Prerequisites: graduate standing.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Health Sciences Department

**ATTR 55040 - PATHOLOGY AND PHARMACOLOGY FOR ALLIED HEALTH CARE PROVIDERS**

Investigation of specific pathological conditions presented by professionals, including physicians and
pharmacists. Will discuss common pathologies, associated pharmacological treatments and physiologic effects for various afflictions. Prerequisite: ATTR 25058 or EXSC 25058
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

**ATTR 62010 - CONTEMPORARY ISSUES IN ATHLETIC TRAINING**

A comprehensive examination of contemporary issues, trends and problems affecting athletic training professionals related to the domains of practice for athletic trainers. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

**ATTR 62012 - EDUCATION AND SUPERVISION PROCESSES IN ATHLETIC TRAINING**

A comprehensive examination of educational learning theories, curriculum design, evaluation and supervision strategies in athletic training education programs from didactic and clinical perspectives. Additional applications for continuing education programs will be included. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

**ATTR 62014 - ADVANCED CLINICAL PRACTICE IN ATHLETIC TRAINING**

A comprehensive examination of advanced topics in athletic training such as advanced evaluation skills, multi-dimensional approaches to therapeutic rehabilitation skills and applications in non-traditional athletic training settings such as industrial medicine and physician extender. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

**ATTR 62016 - CLINICAL INQUIRY IN ATHLETIC TRAINING**

Principles of athletic training research methodologies with a focus on clinical athletic training research. Completion of a clinical research project will be required in this course. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
**Health Sciences Department**

**ATTR 63018 - ETHICS FOR ALLIED HEALTH PROFESSIONALS**

Examination of specific situations in the allied health professions of athletic training and exercise science from an ethical sensitivity, reasoning and decision making perspective. A problem-oriented case study approach based upon contemporary moral issues and moral theory related to clinical and academic health professionals. 
Prerequisites: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**Health Sciences Department**

**ATTR 63094 - COLLEGE TEACHING IN HEALTH SCIENCES**

(Repeatable for a maximum of 6 credit hours) Guided teaching experiences in the Health Sciences. Specific emphasis on establishing and implementing a teaching philosophy in an instructional setting in the Health Sciences. Development of Professional Teaching Behaviors will be addressed. A comprehensive teaching experience rooted in contemporary teaching literature will guide this course. Prerequisite: graduate standing and special approval.
3.000 Credit hours
1.000 Lecture hours
2.000 Other hours

Levels: Graduate
Schedule Types: Lecture, Seminar

**Health Sciences Department**

**ATTR 63095 - RESEARCH SEMINAR**

(Repeatable for credit) (Cross-listed with ATTR 73095 and EXPH 63095 and EXPH 73095 and SRM 63095 and SRM 73095) Presentation and discussion of research by faculty and students. A total of 2 credits may be applied toward degree requirements. Prerequisite: Graduate standing.
1.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

**Health Sciences Department**

**ATTR 63096 - INDIVIDUAL INVESTIGATION IN ATHLETIC TRAINING**

(Repeatable for a maximum of 6 credit hours) Independent study completed under the supervision of a faculty member. Written approval of supervising faculty member and School director required prior to registration. Prerequisites: graduate standing and special approval.
1.000 TO 3.000 Credit hours
3.000 TO 9.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation
**ATTR 63098 - RESEARCH**

(Repeable for credit) (Cross-listed with EXPH 63098 and SRM 63098 and EXPH 83098) Research or individual investigation. Prerequisite: Graduate standing.

1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

**ATTR 63193 - VARIABLE TITLE WORKSHOP IN ATHLETIC TRAINING**

(Repeatable for credit) Workshop in athletic training; topics vary. Maximum 4 hours applied to the degree. Prerequisites: graduate standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Workshop

**ATTR 63195 - SPECIAL TOPICS IN ATHLETIC TRAINING**

(Repeatable for a maximum of 6 credit hours) Selected and varied topics of relevance in athletic training. Prerequisites: graduate standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**ATTR 63199 - THESIS I**

(Cross-listed with EXPH 63199 and SRM 63199) Thesis students must register for a total of 6 hours, 2 to 6 hours in a semester distributed over several semesters if desired. Prerequisite: Graduate standing.

2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

**ATTR 63299 - THESIS II**

(Cross-listed with EXPH 63299 and SRM 63299) Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: ATTR 63199 and graduate standing.

2.000 Credit hours
2.000 Other hours
Health Sciences Department

**ATTR 65004 - BIOMECHANICS**

(Cross-listed with EXPH 75004) Survey of biomechanics, with particular emphasis on skeletal muscle mechanics. Prerequisites: graduate standing
3.000 Credit hours
3.000 Lecture hours

Health Sciences Department

**ATTR 73094 - COLLEGE TEACHING IN HEALTH SCIENCES**

Guided teaching experiences in health sciences. Specific emphasis on establishing and implementing a teaching philosophy in an instructional setting in the health sciences. Development of Professional Teaching Behaviors will be addressed. A comprehensive teaching experience rooting in contemporary literature will guide this course. Prerequisite: doctoral standing and special approval.
3.000 Credit hours
1.000 Lecture hours
2.000 Other hours

Health Sciences Department

**ATTR 73095 - RESEARCH SEMINAR**

(Repeatable for credit) (Cross-listed with ATTR 63095 and EXPH 63095 and EXPH 73095 and SRM 63095 and SRM 73095) Presentation and discussion of research by faculty and students. A total of 2 credits may be applied toward degree requirements. Prerequisite: Doctoral standing.
1.000 Credit hours
1.000 Other hours

Health Sciences Department

**BAD 60092 - MBA INTERNSHIP**

(Repeatable for credit) (Cross-listed with BAD 70092) Practical experience with a commercial or non-profit organization under the guidance of a member of the graduate faculty. Periodic progress reports are required with a graduate level quality paper and possible presentation at the end of the course. Prerequisite: Graduate standing and special approval.
3.000 Credit hours
3.000 Other hours

Health Sciences Department
**BAD 60093 - VARIABLE TITLE WORKSHOP-BUSINESS ADMINISTRATION**

(Repeatable for credit) Workshops on selected business administration subjects designed to meet needs of special groups. Prerequisite: Graduate standing.

<table>
<thead>
<tr>
<th>Credit hours</th>
<th>Other hours</th>
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<tr>
<td>1.000 TO 6.000</td>
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</table>

Levels: Graduate  
Schedule Types: Workshop

**BAD 60095 - SPECIAL TOPICS IN BUSINESS ADMINISTRATION**

(Repeatable for credit) In-depth exposure to selected topics in business administration. Topics will vary depending on instructor and topic of current interest. Prerequisite: Graduate standing.

<table>
<thead>
<tr>
<th>Credit hours</th>
<th>Lecture hours</th>
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<tr>
<td>1.000 TO 3.000</td>
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</table>

Levels: Graduate  
Schedule Types: Lecture

**BAD 60096 - INDIVIDUAL INVESTIGATION**

For M.B.A, M.S. or M.A. candidates who have completed a minimum 12 hours of work of superior quality with permission of the director graduate school of management. Prerequisite: Graduate standing and special approval.

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<tr>
<th>Credit hours</th>
<th>Other hours</th>
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<tr>
<td>2.000 OR 3.000</td>
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</table>

Levels: Graduate  
Schedule Types: Individual Investigation

**BAD 60098 - RESEARCH**

(Repeatable for credit) Research or individual investigation for master's level graduate students. Credits earned may be applied toward meeting degree requirements if the department approves. Prerequisite: Graduate standing.

<table>
<thead>
<tr>
<th>Credit hours</th>
<th>Other hours</th>
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<tbody>
<tr>
<td>1.000 TO 15.000</td>
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</table>

Levels: Graduate  
Schedule Types: Research

**BAD 60199 - THESIS I**

Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester distributed over several semesters if desired. Prerequisite: Graduate standing.
Levels: Graduate
Schedule Types: Masters Thesis

BAD 60299 - THESIS II

Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: BAD 60199. Graduate standing.
2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Business Administration Department

BAD 61093 - WORKSHOP IN COLLEGE TEACHING

(Repeatable for credit) A series of seminars devoted to enhancing doctoral students' teaching abilities. This course is open to all doctoral students but is intended for students newly enrolled in the program. Prerequisite: Graduate standing.
1.000 OR 2.000 Credit hours
1.000 OR 2.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Business Administration Department

BAD 67093 - WORKSHOP IN ADVANCED BUSINESS TOPICS

(Repeatable for a maximum of 6 credit hours) Designed for those MBA Graduates who want advanced education in selected areas of business. A variety of topics could be addressed in this workshop. The topics may include business technology, innovation in business, advanced leadership and a variety of other areas of interest. Prerequisite: graduate standing and special approval.
1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Business Administration Department

BAD 68051 - BUSINESS PROFESSIONAL DEVELOPMENT I

Development of professional business skills for the full-time MBA student to use in both the graduate program and career development. Prerequisite: admission to MBA program and special approval.
1.000 Credit hours
1.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture, Seminar
BAD 68052 - BUSINESS PROFESSIONAL DEVELOPMENT II
Continuation of development of professional business skills for the full-time MBA student primarily focused on building and strengthening the skills needed by a manager for the workplace. Prerequisite: graduate standing and special approval.
1.000 Credit hours
1.150 Lecture hours

Levels: Graduate
Schedule Types: Lecture

BAD 70092 - MBA INTERNSHIP
(Repeatable for credit) (Cross-listed with BAD 60092 ) Practical experience with a commercial or non-profit organization under the guidance of a member of the graduate faculty. Periodic progress reports are required with a graduate-level quality paper and possible presentation at the end of the course. Prerequisite: Special approval and doctoral standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

BAD 70093 - VARIABLE TITLE WORKSHOP
(Repeatable for credit) Workshops on selected business administration subjects designed to meet needs of special groups. Prerequisite: Doctoral standing.
1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Workshop

BAD 70198 - RESEARCH
(Repeatable for credit) Research or individual investigation for doctoral level students, or master's students with at least 34 hours of graduate coursework. Prerequisite: Doctoral standing.
1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

BAD 71093 - WORKSHOP IN COLLEGE TEACHING
(Repeatable for credit) A series of seminars devoted to enhancing doctoral students' teaching abilities. This
course is open to all doctoral students but is intended for students newly enrolled in the program. Prerequisite: Doctoral standing.
1.000 OR 2.000 Credit hours
1.000 OR 2.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Business Administration Department

BAD 71094 - COLLEGE TEACHING

(Repeatable for credit) (Cross-listed with BAD 61094) Training, supervision and evaluation in college level instruction. Maximum of 2 hours applicable toward degree. Prerequisite: Doctoral standing.
1.000 OR 2.000 Credit hours
1.000 OR 2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Business Administration Department

BAD 72021 - BUSINESS CONDITIONS ANALYSIS AND PUBLIC POLICY

(Cross-listed with ECON 62021) Analysis of forces determining economic growth, employment, inflation and international competitiveness, with emphasis on understanding the business cycle and government stabilization policies. Prerequisite: BAD 64005 (may be taken concurrently). Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Business Administration Department

BAD 72022 - MANAGERIAL ECONOMICS

(Cross-listed with ECON 62022) Uses economic theory and quantitative methodologies to develop decision-making skills which enable managers of local, national and multinational companies to evaluate problems and allocate resources efficiently. Prerequisite: BAD 64005; and MATH 11012 or MATH 12002 or ECON 62010; and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Business Administration Department

BAD 72050 - MICROECONOMIC THEORY I

(Cross-listed with ECON 62050) Comprehensive analysis of methodology of economics, consumer behavior, production and costs, the firm, markets and welfare economics. It would be useful if the student had some facility in integral and differential calculus. Prerequisite: ECON 62022. Doctoral standing.
3.000 Credit hours
3.000 Lecture hours
BAD 72051 - MACROECONOMIC THEORY I

(Cross-listed with ECON 62051) Analysis of the determination of the level of income, employment, inflation, economic growth, consumption, investment, money demand and supply, the international sector and economic policy are discussed. Prerequisite: ECON 62021; ECON 62022; doctoral standing.
3.000 Credit hours
3.000 Lecture hours

BAD 72054 - ECONOMETRICS I

(Cross-listed with ECON 62054) Introduction to problems and methods of the empirical estimation of economic relationships. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

BAD 72055 - ECONOMETRICS II

(Cross-listed with ECON 62055) Covers generalized linear regression, mixed estimation, simultaneous equation systems, their identification and estimation by single equation and systems estimation. Prerequisite: ECON 62054 and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

BAD 72056 - TIME SERIES ANALYSIS

Covers various linear and nonlinear time series models, market risk and value at risk (VAR). Students will gain hands-on experience with all models learned in the course. This course uses advanced analytical software and hardware on the financial engineering trading floor. Prerequisite: Permission of instructor; doctoral standing.
3.000 Credit hours
3.000 Lecture hours
**BAD 72061 - MONETARY THEORY AND POLICY**

(Cross-listed with ECON 62061) A study of the nature and definition of money, its relationship to prices, output, employment, and interest rates and, problems related to the conduct of monetary policy. Prerequisite: ECON 62021; doctoral standing.

3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Business Administration Department

**BAD 72075 - INTERNATIONAL TRADE**

(Cross-listed with ECON 62075) Study of modern international trade theory and policy, including free trade areas, international trade organizations, current issues in international trade and the effect of international trade on domestic policy. Prerequisite: ECON 62021 and ECON 62022; doctoral standing.

3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Business Administration Department

**BAD 72076 - INTERNATIONAL FINANCE**

(Cross-listed with ECON 62076) Study of the international monetary relations between nations, including the determination of exchange rates, managed exchange rate policies, balance of payments crises, optimum currency areas and, international capital flows. Prerequisite: ECON 62021; doctoral standing.

3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Business Administration Department

**BAD 72180 - REGIONAL ECONOMICS**

Examines techniques of regional economic analysis with the object of promoting understanding of interregional disparities in developed nations and policies for alleviating problems arising from disparities. Prerequisite: Doctoral standing.

3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Business Administration Department

**BAD 74004 - QUANTITATIVE METHODS IN BUSINESS ADMINISTRATION I**

(Cross-listed with ECON 64004) Introduction to fundamentals of matrix algebra, differential calculus and linear programming. Both algebraic and transcendental functions are included in discussion. Prerequisite: Doctoral standing.
BAD 80091 - DOCTORAL SEMINAR
(Repeatable for credit) A continuing seminar for all students in the Ph.D. program which cuts across all areas of functional specialization. Prerequisite: Admission to Ph.D. program.
1.000 Credit hours
1.000 Other hours
Levels: Graduate
Schedule Types: Seminar
Business Administration Department

BAD 80098 - RESEARCH
(Repeatable for credit) Research or individual investigation for doctoral students who have not yet passed their candidacy examination. Usually research applied toward dissertation. Prerequisite: Ph.D. standing, special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours
Levels: Graduate
Schedule Types: Research
Business Administration Department

BAD 80199 - DISSERTATION I
(Repeatable for credit) Doctoral dissertation for which registration in at least two semesters is required, first of which will be semester in which dissertation work is begun and continuing until the completion of 30 hours. Prerequisite: Special approval and doctoral standing.
15.000 Credit hours
15.000 Other hours
Levels: Graduate
Schedule Types: Dissertation
Business Administration Department

BAD 80299 - DISSERTATION II
(Repeatable for credit) Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. Prerequisite: BAD 80199. Doctoral standing.
15.000 Credit hours
15.000 Other hours
Levels: Graduate
Schedule Types: Dissertation
BAD 84023 - LINEAR STATISTICAL MODELS

Linear statistical models for regression and analysis of variance. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

BMRT 11000 - INTRODUCTION TO BUSINESS

(Equivalent to BUS 10123) Overview of social, economic and consumer environments as related to large and small business. Emphasis is on production, marketing, finance, management and human resources. It is recommended that any reading courses indicated by COMPASS score are taken prior to enrolling in this course. Prerequisites: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

BMRT 11006 - BUSINESS COMPUTATIONS I

Application of algebraic and arithmetic concepts to accounting, finance and marketing. Computation of finance charges, taxes, fundamentals of inventory control and depreciation. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

BMRT 11009 - INTRODUCTION TO MANAGEMENT TECHNOLOGY

(Equivalent to MIS 24163) Study of planning, organizing, directing/leadership, controlling, staffing, decision making, and communication theories and management applications of human and material resources and methods. It is recommended that any reading courses indicted by COMPASS score are taken prior to enrolling in this course. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

BMRT 21000 - BUSINESS LAW AND ETHICS I

(Equivalent to FIN 26074) Introduction to American law as related to government, business, society and the
ethical issues that occur in the legal environment. Emphasis will focus on contract law. Relevant past and current law issues will be addressed. Prerequisite: US 00006 or Compass Reading score of 86; and ENG 01001 or Compass Writing score of 67.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**BMRT 21004 - INTRODUCTION TO BUSINESS STATISTICS**

(Equivalent to MIS 24056) Basic decision making statistics for business management. Emphasis is on probability theory, statistical inferences and decision making under uncertainty. Prerequisite: MATH 00023 or MATH 00024 or MATH 10009 or MATH 11010.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**BMRT 21008 - CASE STUDIES IN MANAGEMENT TECHNOLOGY**

Application of management theory to actual business situations. Emphasis on decision making and evaluation of methods and styles of management in all functional areas. Prerequisite: BMRT 11000 or BMRT 11009 or MIS 24163 or BUS 10123.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**BMRT 21011 - FUNDAMENTALS OF FINANCIAL MANAGEMENT**

Understanding basic financial reports for analysis and performance of a business. Preparation of sales forecasts to develop capital and expense budgets. Prerequisite: ACTT 11000 and COMT 11000 or special approval of BMRT faculty.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**BMRT 21020 - INTRODUCTION TO ENTREPRENEURSHIP**

Provides information about the functional elements of starting a small business. Includes the use of instruments, exercises and case analyses to assess entrepreneurial skills. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours
BMRT 21023 - FINANCING THE BUSINESS VENTURE

Course deals with determining capital needs, identifying sources of capital, developing a financial plan and interpreting financial statements. Both public and private loan programs will be reviewed. Prerequisite: BMRT 21020 or special approval of full-time BMRT faculty.
3.000 Credit hours
3.000 Lecture hours

BMRT 21050 - FUNDAMENTALS OF MARKETING TECHNOLOGY

(Equivalent to MKTG 25010) An overview of the process, activities, and problems associated with the conception, planning and execution of pricing, promotion, product, and placement of goods and services. Prerequisite: ECON 22060.
3.000 Credit hours
3.000 Lecture hours

BMRT 21051 - FUNDAMENTALS OF RETAILING

A survey of retailing that emphasizes skills necessary for store organization, location, layout, pricing, merchandising and inventory control. New retail concepts are stressed. Prerequisite: BMRT 11000 or special approval of BMRT faculty.
3.000 Credit hours
3.000 Lecture hours

BMRT 21052 - PROFESSIONAL SELLING TECHNIQUES

Study of personal selling as a promotional technique to determine and satisfy the needs of buyers and to build a long-term relationship among all parties. Prerequisite: BMRT 11000 or special approval of full-time BMRT faculty.
3.000 Credit hours
3.000 Lecture hours
BMRT 21053 - ADVERTISING IN BUSINESS

A practical approach to the study of advertising. Emphasis is on the effective use of the media creating advertising operations and advertising management. Prerequisite: BMRT 21050 or special approval of BMRT faculty.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

BMRT 21092 - INTERNSHIP IN MANAGEMENT TECHNOLOGY

(Repeatable for credit) Students participate in a supervised educational experience. Each credit hour requires a minimum of seven hours work without pay or 10 hours work with pay per week for 15 weeks. Prerequisite: special approval of full time BMRT faculty.

1.000 TO 3.000 Credit hours
7.000 TO 21.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Regional College Department

Course Attributes:
Experiential Learning Requirem

BMRT 21095 - SPECIAL TOPICS

(Repeatable for credit) Special topics in business technology announced when scheduled. Prerequisite: special approval from full-time BMRT faculty.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

BMRT 21096 - INDIVIDUAL INVESTIGATION IN BUSINESS TECHNOLOGY

(Repeatable for credit) Individual study in business and related fields. Open to business technology students only. Prerequisite: special approval from full-time BMRT faculty.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Regional College Department

BMRT 31005 - PURCHASING AND SUPPLY MANAGEMENT

Investigates the purchasing, planning and logistics functions of supply chain management. Process control,
negotiations, quality control, service measurement and other quantitative methods are covered. Prerequisite: BMRT 11000 or BMRT 11009.

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<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Description</th>
<th>Prerequisite</th>
<th>Credit Hours</th>
<th>Lecture Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMRT 31006</td>
<td>HUMAN RESOURCE MANAGEMENT</td>
<td>The study of contemporary issues of human resources. Covers planning, job design, selection, appraisal, compensation, training, life quality, safety/health, diversity and unions. Prerequisite: BMRT 11009 or MIS 24163.</td>
<td>BMRT 11009 or MIS 24163</td>
<td>3.000</td>
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<tr>
<td>BMRT 31009</td>
<td>SEMINAR IN MANAGEMENT TECHNOLOGY</td>
<td>Last semester students of business management technology engage in critical reading, writing and discussion to apply business theory to on-the-job experiences. Prerequisite: BMRT 21008 or special approval of full-time BMRT faculty.</td>
<td>BMRT 21008 or special approval of full-time BMRT faculty</td>
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<tr>
<td>BMRT 36401</td>
<td>APPLICATIONS OF TECHNOLOGY MANAGEMENT SOFTWARE</td>
<td>Combination of computer and business applications for managing technology within an organization. Focus is on using emerging computer software programs for the enhancement of decision making. Course is 2 hours lecture, 1 hour lab. Prerequisite: BMRT 11000 and COMT 12000; or special approval of full-time Applied Business faculty.</td>
<td>BMRT 11000 and COMT 12000; or special approval of full-time Applied Business faculty</td>
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<tr>
<td>BMRT 36410</td>
<td>SECURITY FOR BUSINESS STUDENTS</td>
<td>Concepts and principles of security and safety in industrial and commercial settings. Focus on executive oversight of corporate security functions. Includes risk analysis, security surveys, emergency preparedness and security policies and procedures. Prerequisite: Junior standing.</td>
<td>Junior standing</td>
<td>3.000</td>
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</tbody>
</table>
**BMRT 36415 - CUSTOMER SERVICE**

Analysis and definition of customer satisfaction with an emphasis on quality customer service that includes techniques for assessing company service efforts and developing customer satisfaction programs. Prerequisite: Sophomore standing.

3.000 Credit hours
3.000 Lecture hours

**BMRT 36420 - PHYSICAL SECURITY**

Elements of design, technology and procedures that deter, delay, detect and defeat criminal activity. Deployment and optional countermeasures. Budgeting based on risk analysis. Prerequisite: Junior standing.

3.000 Credit hours
3.000 Lecture hours

**BMRT 36430 - SECURITY MANAGEMENT**

Principles of security and safety in private business and institutions. Emphasis on proprietary departments and security of those departments. Focus on need for proprietary security organization, internal controls, external threats and electronic devices. Examination of departmental policies and procedures. Prerequisite: Junior standing.

3.000 Credit hours
3.000 Lecture hours

**BMRT 36440 - SECURITY INVESTIGATION**

Addresses future of private security, conducting interviews and dealing with testimonial evidence. Following leads, collecting evidence, preserving crime scenes, use of investigative tools, surveillance techniques and report writing. Prerequisite: Junior standing.

3.000 Credit hours
3.000 Lecture hours
BMRT 40092 - PRACTICUM IN APPLIED BUSINESS AND TECHNOLOGY

(Repeatable for a maximum of 4 credit hours) On sight internship or a project with a business or technology related organization approved by the Instructor. Prerequisite: junior standing and special approval.

1.00 TO 4.00 Credit hours
7.00 TO 28.00 Other hours

Levels: Undergraduate
Schedule Types: Field Experience, Practicum or Internship

Regional College Department

BMRT 40096 - INDIVIDUAL INVESTIGATION IN BUSINESS AND TECHNOLOGY

(Repeatable for a maximum of 4 credit hours) Perform an individual project or research assignment as approved by the instructor. Prerequisites: junior standing and special approval.

1.00 TO 4.00 Credit hours
7.00 TO 28.00 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Regional College Department

BMRT 46295 - SPECIAL TOPICS IN APPLIED BUSINESS

(Repeatable for credit) Specialized advance instruction oriented primarily to applied business topics. Topics will vary and will be announced as scheduled. Prerequisite: Special approval of full time technology faculty or of professor teaching the course.

2.00 TO 3.00 Credit hours
2.00 TO 3.00 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

BMRT 46409 - STRATEGIC MANAGEMENT OF TECHNOLOGY AND INNOVATION

An examination using case studies and readings of the management of technology and innovation through perspectives at the product line, business unit and corporate levels. Prerequisite: BMRT 21050 and BMRT 21011; and junior standing.

3.00 Credit hours
3.00 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

BMRT 46410 - CRISIS AND DISASTER MANAGEMENT PLANNING

Addresses planning process for mitigation and recovery strategies for natural and man-made crisis and
disasters. Includes risk assessment, incident management and planning evaluation. Prerequisite: Junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

BMRT 46418 - LABOR STUDIES IN TECHNOLOGY

This course will include the history of the labor movement, interrelationships of labor with business and industry, labor law, contemporary labor problems that emphasizes how unions are organized, contracts, arbitration and management issues. Prerequisite: Junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

BMRT 46420 - LEGAL ISSUES IN SECURITY

Survey of laws applicable to security risks including torts, labor, employment, criminal and constitutional issues. Prerequisite: Junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

BMS 40196 - INDIVIDUAL INVESTIGATION IN BIOMEDICAL SCIENCES

(May be repeated for up to 6 credit hours) Research study under the direction of a BMS faculty mentor. Students majoring in biology (BSCI), biotechnology (BTEC), chemistry (CHEM), integrated life sciences (ILS) and physics (PHY) majors are eligible to enroll in this course, but must have 18 credit hours in their major completed. Prerequisite: A minimum overall grade point average of 2.750; and departmental and faculty mentor approvals required.
1.000 TO 3.000 Credit hours
3.000 TO 9.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Biomedical Sciences Department

Course Attributes:
Experiential Learning Requirem

BMS 50701 - CLINICAL NEUROANATOMY

(Slashed with BMS 70701; Cross-listed with PSYC 43001, PSYC 53001, and PSYC 73001) This course examines the anatomical organization of the human brain, emphasizing functional aspects of various neural systems,
neuroimaging, and topics of clinical relevance. A conceptual understanding of central nervous system organization and memorization of specific neural structures and pathways, as well as knowledge of the impact of structure and systems dysfunction is required. Prerequisites: Graduate standing; and special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biomedical Sciences Department

**BMS 50702 - CURRENT TECHNIQUES IN BEHAVIORAL NEUROSCIENCE**

(Slashed with BMS 70702; Cross-listed with PSYC 43002, PSYC 53002, and PSYC 73002) This course details current and advanced techniques used in behavioral neuroscience research. Emphasis is placed on understanding the theory behind each technique, and its use in understanding the neural mechanisms of behavior. Detailed protocols for each technique will also be covered. Prerequisites: Graduate standing; and special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biomedical Sciences Department

**BMS 50703 - NEURAL MECHANISMS OF LEARNING AND MEMORY**

(Slashed with BMS 70703; Cross-listed with PSYC 43003, PSYC 53003, and PSYC 73003) Examines the neural and molecular mechanisms underlying learning and memory formation. Cellular mechanisms of learning, including long-term potentiation and basic electrophysiology in invertebrate and mammalian preps are covered. Transcriptional and post-translational modifications required for learning and memory formation, genomic signaling and protein synthesis. The course covers structural changes of neurons associated with memory formation, and the different behavioral methods for studying memory. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biomedical Sciences Department

**BMS 60120 - LABORATORY TECHNIQUES IN BIOMEDICAL SCIENCES**

(Repeatable once for credit) Minimum of two laboratory rotations per semester by arrangement with individual faculty members. Prerequisite: Special approval and graduate standing.

2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Research

Biomedical Sciences Department

**BMS 60196 - INDIVIDUAL INVESTIGATION**

(Repeatable for a maximum of 6 credit hours) (Cross-listed with BMS 70196) Directed investigation under
supervision of faculty member in biomedical sciences and with prior approval. Prerequisite: Special approval and graduate standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Biomedical Sciences Department

**BMS 60198 - RESEARCH**

(Repeatable for credit) Research for master's level graduate students. Credits earned may be applied toward degree requirements if department approves. Prerequisite: Special approval of adviser and graduate standing.

1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

Biomedical Sciences Department

**BMS 60199 - THESIS I**

Thesis students must register for a minimum of 6 hours, 2 to 6 hours in a single semester distributed over several semesters if desired. Prerequisite: Special approval of adviser and graduate standing.

2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Biomedical Sciences Department

**BMS 60220 - HUMAN MICROSCOPIC ANATOMY**

(Cross-listed with BMS 70220) Morphological basis for normal and disturbed functions; structure-function relationships in human microscopic anatomy. Lectures, special laboratory and learning techniques using human tissues. Prerequisite: BSCI 5/70517 or special approval of instructor. Graduate standing.

5.000 Credit hours
5.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biomedical Sciences Department

**BMS 60251 - THEORY AND PRACTICE OF CLONING AND GENETIC ENGINEERING**

(Cross-listed with BMS 70251) Recent advances in the development and understanding of genetic engineering, genomic DNA organization and gene therapy will be discussed. Prerequisite: BSCI 5/70158 and CHEM 5/70247 or BMS 6/70268. Graduate standing.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
**BMS 60291 - SEMINAR IN CELLULAR AND MOLECULAR BIOLOGY**

(Repeatable for credit) (Cross-listed with BMS 70291) Credits may be applied toward degree if department approves. Prerequisite: Special approval and graduate standing.
1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Seminar

**BMS 60295 - SPECIAL TOPICS IN CELLULAR AND MOLECULAR BIOLOGY**

(Repeatable for credit) (Slashed with BMS 70295) Study of subject or problem of current importance. Content dependent upon student requirements and on recent developments in field. Sections may be standard letter or satisfactory/unsatisfactory (S/U) graded. Prerequisites: Graduate standing; and special approval.
1.000 TO 5.000 Credit hours
1.000 TO 5.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**BMS 60299 - THESIS II**

Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: 6 hours of BMS 60199. Graduate standing.
2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

**BMS 60440 - CELLULAR AND MOLECULAR SIGNALING**

(Cross-listed with BSCI 60440 and BSCI 70440 and BMS 70440) The relevant and current topics associated with cellular signaling is covered. Topics include receptor pharmacology, classes, and regulation, transcription factors, cell cycle signaling, and cell-cell communication. Prerequisite: BSCI 40143 or BSCI 50143 or BSCI 70143; and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**BMS 60441 - MEDICAL PHYSIOLOGY**
(Slashed with BMS 70441) Investigation of how the integration of biophysics, biochemistry and structure induces organ function in the cardiovascular, renal, respiratory, endocrine and gastrointestinal systems. Limited discussion of how pathologies alter normal organ function. Prerequisite: Graduate standing.
5.000 Credit hours
5.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biomedical Sciences Department

**BMS 60449 - MEDICAL PHYSIOLOGY I**

(Cross-listed with BMS 70449) Biophysical and biochemical concepts of integrative organ system physiology in the human: cardiovascular, pulmonary, exercise and temperature regulation physiology. Prerequisite: BSCI 40430 and special approval. Graduate standing.
4.000 Credit hours
4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biomedical Sciences Department

**BMS 60450 - MEDICAL PHYSIOLOGY II**

(Cross-listed with BMS 70450) Biophysical and biochemical concepts of integrative organ system physiology in the human: renal, gastrointestinal and endocrine physiology. Prerequisite: BSCI 40430 and special approval. Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biomedical Sciences Department

**BMS 60462 - NEUROBIOLOGY: SYSTEMS AND BEHAVIOR**

(Slashed with BMS 70462; Cross-listed with BSCI 60462 and BSCI 80462). Provides broad coverage of the parts of the central nervous systems and how they integrate sensory information, drive motor function and regulate behavior. Prerequisites: BMS 60729 or BMS 70729; and graduate standing.
4.000 Credit hours
4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biomedical Sciences Department

**BMS 60465 - BRAIN, MIND AND BEHAVIOR**

(Slashed with BMS 70465) Detailed examination of human neuroanatomy and nervous system function. Prerequisite: Graduate standing; and special approval.
6.000 Credit hours
5.000 Lecture hours
3.000 Lab hours
### BMS 60491 - SEMINAR IN MEDICAL PHYSIOLOGY

(Repeatable for credit) (Cross-listed with BMS 70491) Credits may be applied toward degree if department approves. Prerequisite: Special approval and graduate standing.

1.000 Credit hours
1.000 Other hours

### BMS 60495 - SPECIAL TOPICS IN PHYSIOLOGY

(Repeatable for credit) (Slashed with BMS 70495) Study of subject or problem of current importance. Content dependent upon student requirements and on recent developments in field. Sections may be standard letter or satisfactory/unsatisfactory (S/U) graded. Prerequisites: Graduate standing; and special approval.

1.00 TO 5.000 Credit hours
1.00 TO 5.000 Lecture hours

### BMS 60501 - INTRODUCTION TO PHARMACOLOGY

(Slashed with BMS 70501) Satisfactory/Unsatisfactory (S/U) graded. Basic aspects of pharmacology. Intended to provide a general understanding of fundamental concepts in pharmacology and opportunities for students to read and present peer-reviewed manuscripts covering introductory pharmacological concepts. Prerequisite: Graduate standing.

1.000 Credit hours
1.000 Other hours

### BMS 60502 - MOLECULAR PHARMACOLOGY

(Slashed with BMS 70502) General principles of pharmacology including metabolism, action, interactions, side effects, toxicity and therapeutic use of select drug topics. Focus is placed on the molecular and cellular targets of drug action. Prerequisites: Graduate standing; and special approval.

4.000 Credit hours
4.000 Lecture hours
### BMS 60503 - PHARMACOLOGY JOURNAL REVIEW

(Repeatable maximum four times) (Slashed with BMS 70503) Satisfactory/Unsatisfactory (S/U) graded. Review and discussion of advanced pharmacology journal articles. Students will present and critique articles from peer-reviewed publications and actively participate in discussions. Background in physiology and biochemistry required. Prerequisite: Graduate standing.

1.000 Credit hours
1.000 Other hours

Levels: Graduate  
Schedule Types: Seminar

Biomedical Sciences Department

### BMS 60504 - CHEMOTHERAPY AND TOXICOLOGY

(Slashed with BMS 70504) Specialized topics in chemotherapy of microbial and neoplastic diseases as well as principles of toxicology. Prerequisites: Graduate standing; and special approval.

2.000 Credit hours  
2.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Biomedical Sciences Department

### BMS 60505 - DRUG DISCOVERY AND CLINICAL PHARMACOLOGY

(Slashed with BMS 70505) Basic concepts underlying drug discovery and clinical pharmacology including principles of pharmacokinetics, metabolism, pharmacogenomics and drug design. Prerequisites: Graduate standing; and special approval.

2.000 Credit hours  
2.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Biomedical Sciences Department

### BMS 60506 - HERBALS AND SUPPLEMENTS

(Slashed with BMS 70506) Provides an understanding of the basic scientific, therapeutic and pharmacological principles underlying the use of medicinal plants, herbal medications, natural products, vitamins, minerals and supplements. Prerequisites: Graduate standing; and special approval.

2.000 Credit hours  
2.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Biomedical Sciences Department

### BMS 60550 - MEDICAL PHARMACOLOGY I

(Cross-listed with BMS 70550) General principles of pharmacology including metabolism, action, interactions, side effects, toxicity and therapeutic use of drugs. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biomedical Sciences Department

BMS 60551 - MEDICAL PHARMACOLOGY II

(Cross-listed with BMS 70551) Continuation of BMS 60550/70550. Prerequisite: BMS 6/70550. Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biomedical Sciences Department

BMS 60591 - SEMINAR IN PHARMACOLOGY

(Repeatable for credit) (Cross-listed with BMS 70591) Credits may be applied toward degree if department approves. Repeated registration permitted. Prerequisite: Special approval and graduate standing.
1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Biomedical Sciences Department

BMS 60595 - SPECIAL TOPICS IN PHARMACOLOGY

(Repeatable for credit) (Slashed with BMS 70595) Study of subject or problem of current importance. Content dependent upon student requirements and on recent developments in field. Sections may be standard letter or satisfactory/unsatisfactory (S/U) graded. Prerequisites: Graduate standing; and special approval.
1.000 TO 5.000 Credit hours
1.000 TO 5.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biomedical Sciences Department

BMS 60596 - INDIVIDUAL INVESTIGATION IN PHARMACOLOGY

(Repeatable for credit) (Cross-listed with BMS 70596) Experience with various laboratory techniques and procedures used in pharmacological research with application to experimental designs. Prerequisite: Special approval and graduate standing.
1.000 TO 3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Biomedical Sciences Department
BMS 60729 - CELLULAR AND MOLECULAR NEUROSCIENCE

(Slashed with BMS 70729) The relation of aspects of the neurosciences to the fundamental properties of nervous tissue, establishing a firm base in experimental neurobiology. Prerequisites: Graduate standing; and special approval of instructor.
4.000 Credit hours
4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biomedical Sciences Department

BMS 60751 - CURRENT RESEARCH IN AUDITORY NEUROBIOLOGY

(Slashed with BMS 70751) (Repeatable for a maximum of four credit hours) Presentation-based by faculty in the Auditory Neuroscience Group. Topics will vary each semester. Each class presentation will highlight recent advances in auditory neurobiology, cover relevant background, and involve discussion of methodology, experimental design, and interpretive issues related to the research. Students will prepare a presentation on a topic chosen in conjunction with one of the faculty members. Assessment is based on presentation quality and active participation throughout the semester. Prerequisite: Graduate standing; and special approval.
1.000 Credit hours
1.000 Lecture hours

Levels: Graduate
Schedule Types: Seminar

Biomedical Sciences Department

BMS 60791 - SEMINAR IN NEUROBIOLOGY

(Repeatable for credit) (Cross-listed with BMS 70791) Credits may be applied toward degree if department approves. Prerequisite: Special approval and graduate standing.
1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Biomedical Sciences Department

BMS 60795 - SPECIAL TOPICS IN NEUROBIOLOGY

(Repeatable for credit) (Slashed with BMS 70795) Study of problems of current importance. Content dependent on student requirements and on developments in field. Sections may be standard letter or satisfactory/unsatisfactory (S/U) graded. Prerequisites: Graduate standing; and special approval.
1.000 TO 5.000 Credit hours
1.000 TO 5.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biomedical Sciences Department

BMS 61000 - RESPONSIBLE CONDUCT OF RESEARCH
Introduction to professional and ethical conduct of research. Topics include codes and laws governing research, identification of scientific misconduct, plagiarism, authorship and intellectual properties, ethical animal and human research. Prerequisite: Graduate standing.

1.000 Credit hours
1.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biomedical Sciences Department

**BMS 61001 - INTRODUCTION TO BIOMEDICAL SCIENCES**

(Slashed with BMS 71001) Seminar for all students in Biomedical Sciences. Repeat registration permitted. Prerequisite: Graduate Standing in the School of Biomedical Sciences; biological anthropology (BANT), biomedical mathematics (BMTH), cellular and molecular biology (CMBI), Neurosciences (NEUR), Pharmacology (PHRM), physiology interdisciplinary (PSII).

1.000 Credit hours
1.000 Lecture hours

Levels: Graduate
Schedule Types: Seminar

Biomedical Sciences Department

**BMS 68610 - HUMAN GROSS ANATOMY I**

(Cross-listed with BMS 78610) An intensive survey of human macromorphology. Lecture two hours per week. Laboratory six hours per week. Prerequisite: Special approval and graduate standing.

4.000 Credit hours
4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biomedical Sciences Department

**BMS 68611 - HUMAN GROSS ANATOMY II**

(Cross-listed with BMS 78611) An intensive survey of human macromorphology; a 10 week course which continues BMS 6/78610. Lecture two hours per week. Laboratory six hours per week. Prerequisite: BMS 6/78610. Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biomedical Sciences Department

**BMS 70120 - LABORATORY TECHNIQUES IN BIOMEDICAL SCIENCES**

(Repeatable once for credit) (Cross-listed with BMS 60120) Minimum of two laboratory rotations per semester by arrangement with individual faculty members. May be repeated once. Prerequisite: Doctoral standing and special approval.

2.000 Credit hours
2.000 Other hours
Biomedical Sciences Department

**BMS 70196 - INDIVIDUAL INVESTIGATION**

(Repeatable for credit) (Cross-listed with BMS 60196) Directed investigation under supervision of faculty member in biomedical sciences and with prior approval. Prerequisite: Doctoral standing and special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Biomedical Sciences Department

**BMS 70220 - HUMAN MICROSCOPIC ANATOMY**

(Cross-listed with BMS 60220) Morphological basis for normal and disturbed functions; structure-function relationships in human microscopic anatomy. Lectures, special laboratory and learning techniques using human tissues. Prerequisite: BSCI 5/70517 or special approval of instructor. Doctoral standing.
5.000 Credit hours
5.000 Lecture hours

Biomedical Sciences Department

**BMS 70251 - THEORY AND PRACTICE OF CLONING AND GENETIC ENGINEERING**

(Cross-listed with BMS 60251) Recent advances in the development and understanding of genetic engineering, genomic DNA organization and gene therapy will be discussed. Prerequisite: BSCI 5/70158 and CHEM 5/70247 or BMS 6/70268. Doctoral standing.
2.000 Credit hours
2.000 Lecture hours

Biomedical Sciences Department

**BMS 70291 - SEMINAR IN CELLULAR AND MOLECULAR BIOLOGY**

(Repeatable for credit) (Cross-listed with BMS 60291) Credits may be applied toward degree if department approves. Prerequisite: Special approval. Doctoral standing.
1.000 Credit hours
1.000 Other hours

Biomedical Sciences Department
### BMS 70295 - SPECIAL TOPICS IN CELLULAR AND MOLECULAR BIOLOGY

(Repeatable maximum ten times for credit) (Slashed with BMS 60295) Study of subject or problem of current importance. Content dependent upon student requirements and on recent developments in field. Sections may be standard letter or satisfactory/unsatisfactory (S/U) graded. Prerequisites: Doctoral standing; and special approval.

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Levels: Graduate  
Schedule Types: Lecture  

Biomedical Sciences Department

### BMS 70440 - CELLULAR AND MOLECULAR SIGNALING

(Cross-listed with BSCI 60440 and BSCI 70440 and BMS 60440) The relevant and current topics associated with cellular signaling will be covered. Topics include receptor pharmacology, classes and regulation, transcription factors, cell cycle signaling and cell-cell communication. Prerequisite: BSCI 40143 or BSCI 50143 or BSCI 70143; and doctoral standing.

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Levels: Graduate  
Schedule Types: Lecture  

Biomedical Sciences Department

### BMS 70441 - MEDICAL PHYSIOLOGY

(Slashed with BMS 60441) Investigation of how the integration of biophysics, biochemistry and structure induces organ function in the cardiovascular, renal, respiratory, endocrine and gastrointestinal systems. Limited discussion of how pathologies alter normal organ function. Prerequisite: Doctoral standing.

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Levels: Graduate  
Schedule Types: Lecture  

Biomedical Sciences Department

### BMS 70462 - NEUROBIOLOGY: SYSTEMS AND BEHAVIOR

(Slashed with BMS 60462; Cross-listed with BSCI 60462 and BSCI 80462) Provides broad coverage of the parts of the central nervous systems and how they integrate sensory information, drive motor function and regulate behavior. Prerequisites: BMS 60729 or BMS 70729; and doctoral standing.

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Levels: Graduate  
Schedule Types: Lecture  

Biomedical Sciences Department

### BMS 70465 - BRAIN, MIND AND BEHAVIOR

(Slashed with BMS 60465) Detailed examination of human neuroanatomy and nervous system function.
Prerequisite: Doctoral standing; and special approval.
6.000 Credit hours
5.000 Lecture hours
3.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Biomedical Sciences Department

BMS 70491 - SEMINAR IN MEDICAL PHYSIOLOGY

(Repeatable for credit) (Cross-listed with BMS 60491) Credits may be applied toward degree if department approves. Prerequisite: Special approval. Doctoral standing.
1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Biomedical Sciences Department

BMS 70495 - SPECIAL TOPICS IN PHYSIOLOGY

(Repeatable for credit) (Slashed with BMS 60495) Study of subject or problem of current importance. Content dependent upon student requirements and on recent developments in field. Sections may be standard letter or satisfactory/unsatisfactory (S/U) graded. Prerequisite: Doctoral standing; and special approval.
1.000 TO 5.000 Credit hours
1.000 TO 5.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biomedical Sciences Department

BMS 70501 - INTRODUCTION TO PHARMACOLOGY

(Slashed with BMS 60501) Satisfactory/Unsatisfactory (S/U) graded. Basic aspects of pharmacology. Intended to provide a general understanding of fundamental concepts in pharmacology and opportunities for students to read and present peer-reviewed manuscripts covering introductory pharmacological concepts. Prerequisite: Doctoral standing.
1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Biomedical Sciences Department

BMS 70502 - MOLECULAR PHARMACOOGY

(Slashed with BMS 60502) General principles of pharmacology including metabolism, action, interactions, side effects, toxicity and therapeutic use of select drug topics. Focus is placed on the molecular and cellular targets of drug action. Prerequisite: Doctoral standing; and special approval.
4.000 Credit hours
4.000 Lecture hours
Biomedical Sciences Department

**BMS 70503 - PHARMACOLOGY JOURNAL REVIEW**

(Repeatable maximum four times) (Slashed with BMS 60503) Satisfactory/Unsatisfactory (S/U) graded. Review and discussion of advanced pharmacology journal articles. Students will present and critique articles from peer-reviewed publications and actively participate in discussions. Background in physiology and biochemistry required.  
Prerequisite: Doctoral standing.  
1.000 Credit hours  
1.000 Other hours

Biomedical Sciences Department

**BMS 70504 - CHEMOTHERAPY AND TOXICOLOGY**

(Slashed with BMS 60504) Specialized topics in chemotherapy of microbial and neoplastic diseases as well as principles of toxicology. Prerequisites: Doctoral standing; and special approval.  
2.000 Credit hours  
2.000 Lecture hours

Biomedical Sciences Department

**BMS 70505 - DRUG DISCOVERY AND CLINICAL PHARMACOLOGY**

(Slashed with BMS 60505) Basic concepts underlying drug discovery and clinical pharmacology including principles of pharmacokinetics, metabolism, pharmacogenomics and drug design. Prerequisites: Doctoral standing; and special approval.  
2.000 Credit hours  
2.000 Lecture hours

Biomedical Sciences Department

**BMS 70506 - HERBALS AND SUPPLEMENTS**

(Slashed with BMS 60506) Provides an understanding of the basic scientific, therapeutic and pharmacological principles underlying the use of medicinal plants, herbal medications, natural products, vitamins, minerals and supplements. Prerequisites: Doctoral standing; and special approval.  
2.000 Credit hours  
2.000 Lecture hours

Biomedical Sciences Department
## BMS 70550 - MEDICAL PHARMACOLOGY I

(Cross-listed with BMS 60550) General principles of pharmacology including metabolism, action, interactions, side effects, toxicity and therapeutic use of drugs. Prerequisite: Doctoral standing.

3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture  
Biomedical Sciences Department

## BMS 70591 - SEMINAR IN PHARMACOLOGY

(Repeatable for credit) (Cross-listed with BMS 60591) Credits may be applied toward degree if department approves. Prerequisite: Special approval. Doctoral standing.

1.000 Credit hours  
1.000 Other hours

Levels: Graduate  
Schedule Types: Seminar  
Biomedical Sciences Department

## BMS 70595 - SPECIAL TOPICS IN PHARMACOLOGY

(Repeatable for credit) (Slashed with BMS 60595) Study of subject or problem of current importance. Content dependent upon student requirements and on recent developments in field. Sections may be standard letter or satisfactory/unsatisfactory (S/U) graded. Prerequisites: Doctoral standing; and special approval.

1.000 TO 5.000 Credit hours  
1.000 TO 5.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture  
Biomedical Sciences Department

## BMS 70596 - INDIVIDUAL INVESTIGATION IN PHARMACOLOGY

(Repeatable for credit) (Cross-listed with BMS 60596) Experience with various laboratory techniques and procedures used in pharmacological research with application to experimental designs. Prerequisite: Special approval. Doctoral standing.

1.000 TO 3.000 Credit hours  
1.000 TO 3.000 Other hours

Levels: Graduate  
Schedule Types: Individual Investigation  
Biomedical Sciences Department

## BMS 70701 - CLINICAL NEUROANATOMY

(Slashed with BMS 50701; Cross-listed with PSYC 43001, PSYC 53001, and PSYC 73001). This course examines the anatomical organization of the human brain, emphasizing functional aspects of various neural systems, neuroimaging, and topics of clinical relevance. A conceptual understanding of central nervous system organization and memorization of specific neural structures and pathways, as well as knowledge of the impact
of structure and systems dysfunction is required. Prerequisites: Doctoral standing; and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biomedical Sciences Department

**BMS 70702 - CURRENT TECHNIQUES IN BEHAVIORAL NEUROSCIENCE**

(Slashed with BMS 50702; Cross-listed with PSYC 43002, PSYC 53002, and PSYC 73002) This course details current and advanced techniques used in behavioral neuroscience research. Emphasis is placed on understanding the theory behind each technique, and its use in understanding the neural mechanisms of behavior. Detailed protocols for each technique will also be covered. Prerequisites: Doctoral standing; and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biomedical Sciences Department

**BMS 70703 - NEURAL MECHANISMS OF LEARNING AND MEMORY**

(Slashed with BMS 50703; Cross-listed with PSYC 43003, PSYC 53003, and PSYC 73003) Examines the neural and molecular mechanisms underlying learning and memory formation. Cellular mechanisms of learning, including long-term potentiation and basic electrophysiology in invertebrate and mammalian preps are covered. Transcriptional and post-translational modifications required for learning and memory formation, genomic signaling and protein synthesis. The course covers structural changes of neurons associated with memory formation, and the different behavioral methods for studying memory. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biomedical Sciences Department

**BMS 70729 - CELLULAR AND MOLECULAR NEUROSCIENCE**

(Slashed with BMS 60729) The relation of aspects of the neurosciences to the fundamental properties of nervous tissue, establishing a firm base in experimental neurobiology. Prerequisites: Doctoral standing; and special approval of instructor.
4.000 Credit hours
4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biomedical Sciences Department

**BMS 70751 - CURRENT RESEARCH IN AUDITORY NEUROBIOLOGY**

(Slashed with BMS 60751) (Repeatable for a maximum of four credit hours) Presentation-based by faculty in the Auditory Neuroscience Group. Topics will vary each semester. Each class presentation will highlight recent
advances in auditory neurobiology, cover relevant background, and involve discussion of methodology, experimental design, and interpretive issues related to the research. Students will prepare a presentation on a topic chosen in conjunction with one of the faculty members. Assessment is based on presentation quality and active participation throughout the semester. Prerequisites: Doctoral standing; and special approval.
1.000 Credit hours
1.000 Lecture hours

Levels: Graduate
Schedule Types: Seminar

Biomedical Sciences Department

**BMS 70791 - SEMINAR IN NEUROBIOLOGY**

(Repeatable for credit) (Cross-listed with BMS 60791) Credits may be applied toward degree if department approves. Prerequisite: Special approval. Doctoral standing.
1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Biomedical Sciences Department

**BMS 70795 - SPECIAL TOPICS IN NEUROBIOLOGY**

(Repeatable for credit) (Slashed with BMS 60795) Study of problems of current importance. Content dependent on student requirements and on developments in field. Sections may be standard letter or satisfactory/unsatisfactory (S/U) graded Prerequisite: Special approval. Doctoral standing.
1.000 TO 5.000 Credit hours
1.000 TO 5.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biomedical Sciences Department

**BMS 71000 - RESPONSIBLE CONDUCT OF RESEARCH**

(Slashed with BMS 61000; Cross-listed with PHIL 61000) Introduction to professional and ethical conduct of research. Topics include codes and laws governing research, identification of scientific misconduct, plagiarism, authorship and intellectual properties, ethical animal and human research. Prerequisite: Doctoral standing.
1.000 Credit hours
1.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biomedical Sciences Department

**BMS 71001 - INTRODUCTION TO BIOMEDICAL SCIENCES**

(Slashed with BMS 61001) Introductory seminar for new students in Biomedical Sciences graduate programs. This seminar will expose students to the different faculty research programs available in the program. Prerequisite: Doctoral standing in Biomedical Sciences.
1.000 Credit hours
1.000 Lecture hours
BMS 78610 - HUMAN GROSS ANATOMY I
(Cross-listed with BMS 68610) An intensive survey of human macromorphology. Lecture two hours per week. Laboratory six hours per week. Prerequisite: Special approval. Doctoral standing.
4.000 Credit hours
4.000 Lecture hours

BMS 78611 - HUMAN GROSS ANATOMY II
(Cross-listed with BMS 68611) An intensive survey of human macromorphology; a 10 week course which continues BMS 6/78610. Lecture two hours per week. Laboratory six hours per week. Prerequisite: BMS 6/78610. Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

BMS 78624 - PRIMATE ETHOLOGY
Detailed examination of the principles of primate ethology, including evolutionary trends in ecology, dominance, locomotion and social behavior. Prerequisite: Special approval. Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

BMS 78637 - BIOANTHROPOLOGICAL DATA ANALYSIS I
(Cross-listed with ANTH 68637) Examination of methods of univariate and bivariate experimental design. This survey emphasizes tests of hypothesis and estimation techniques with both classical and nonparametric procedures. Prerequisite: Doctoral standing.
5.000 Credit hours
5.000 Lecture hours
### BMS 78638 - BIOANTHROPOLOGICAL DATA ANALYSIS II

(Cross-listed with ANTH 68638) This survey of multivariate analysis in anthropology includes one-sample data exploration, multiple sample problems and regression methods. It also includes computer applications.

**Prerequisite:** BMS 78637. Doctoral standing.

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<tr>
<th>Credit hours</th>
<th>Lecture hours</th>
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**Levels:** Graduate  
**Schedule Types:** Lecture

Biomedical Sciences Department

### BMS 78691 - SEMINAR IN BIOLOGICAL ANTHROPOLOGY

(Repeatable for credit) Credits may be applied toward degree if department approves. 

**Prerequisite:** Special approval. Doctoral standing.

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<th>Credit hours</th>
<th>Other hours</th>
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**Levels:** Graduate  
**Schedule Types:** Seminar

Biomedical Sciences Department

### BMS 78692 - FIELD WORK IN PALEOANTHROPOLOGY

(Repeatable for credit) Excavation and/or field survey of miocene and/or plio-pleistocene hominid localities.

**Prerequisite:** Special approval. Doctoral standing.

<table>
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<th>Credit hours</th>
<th>Other hours</th>
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**Levels:** Graduate  
**Schedule Types:** Field Experience

Biomedical Sciences Department

### BMS 78695 - SPECIAL TOPICS IN BIOLOGICAL ANTHROPOLOGY

(Repeatable for credit) Study of subject or problem of current importance. Content dependent upon student requirements and on recent developments in field. Sections may be standard letter or satisfactory/unsatisfactory (S/U) graded.

**Prerequisite:** Doctoral standing; and special approval.

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<th>Credit hours</th>
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**Levels:** Graduate  
**Schedule Types:** Lecture

Biomedical Sciences Department

### BMS 80198 - RESEARCH

(Repeatable for credit) Research for doctoral students who have not yet passed candidacy examination. Prerequisite: Special approval of adviser. Doctoral standing.

<table>
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<th>Credit hours</th>
<th>Other hours</th>
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Biomedical Sciences Department
Biomedical Sciences Department

**BMS 80199 - DISSERTATION I**

(Repeatable for credit) Doctoral dissertation, for which registration in at least two semesters is required, first of which will be semester in which dissertation work is begun and continuing until the completion of 30 hours. Students must successfully complete the doctoral exam before taking this course. Prerequisite: Doctoral standing and special approval.
15.000 Credit hours
15.000 Other hours

Biomedical Sciences Department

**BMS 80299 - DISSERTATION II**

(Repeatable for credit) Continuing registration of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. Prerequisites: 30 hours of BMS 80199 and doctoral standing.
15.000 Credit hours
15.000 Other hours

Biomedical Sciences Department

**BSC 80111 - HUMAN ANATOMY**

The macroscopic anatomy of the upper limb, thorax, abdomen, head and neck, pelvis and perineum of the human body is described, utilizing audiovisual teaching aids and full cadaver dissection. The course is taught using a regional approach, with emphasis on structural and functional relationships. The laboratory instruction includes cadaver dissection supplemented with anatomical prosections, as well as cross-sectional anatomy and computerized educational material. Prerequisite: student must be enrolled in the Podiatric Medicine program.
8.000 Credit hours
4.000 Lecture hours
4.000 Lab hours

Podiatric Medicine Department

**BSC 80112 - HUMAN CELL AND TISSUE BIOLOGY**

Histology is the study of the microscopic organization of the human body. Reciprocal relationships between normal structural features and their functions are emphasized. Macromolecules, organelles, cells, fundamental body tissues and organs are compared and contrasted. Light microscopic preparations are examined in laboratories, which are closely correlated with lecture topics. Prerequisite: student must be enrolled in the Podiatric Medicine program.
6.000 Credit hours
4.000 Lecture hours
BSC 80113 - MEDICAL BIOCHEMISTRY

The study of the physical and chemical properties of the major constituents of cells and body fluids. This includes structures, functions and biochemical mechanisms involved in the biosynthesis, utilization and degradation of amino acids, carbohydrates, lipids, proteins and nucleic acids. Also included are enzyme kinetics, bioenergetics, cellular communication, nutrition and biochemistry of specialized tissues and fluids. Prerequisite: student must be enrolled in the Podiatric Medicine program.
6.000 Credit hours
6.000 Lecture hours

Levels: Professional
Schedule Types: Lecture

Podiatric Medicine Department

BSC 80114 - MEDICAL GENETICS AND EMBRYOLOGY

This course will include the basic principles of human genetics dealing with the genetic variations that impact medical practice. Molecular genetics, cytogenetics, genomics, and population genetics will be reviewed. This course will also review the major events and processes involved in normal and abnormal embryologic development of the major body organs and systems. This course is coordinated with Human Anatomy and Cell and Tissue Biology. Prerequisite: student must be enrolled in the Podiatric Medicine program.
4.000 Credit hours
4.000 Lecture hours

Levels: Professional
Schedule Types: Lecture

Podiatric Medicine Department

BSC 80124 - LOWER EXTREMITY ANATOMY

Lower extremity anatomy presents the detailed macroscopic anatomy of the lower limb. The course is augmented with radiographs, MRI, surface anatomy and cross sectional studies. The course includes an introduction to basic concepts of podiatric medicine, surgery and biomechanics. Laboratory instruction includes a detailed dissection of the lower limb, supplemented with computerized educational materials and study of natural bone specimens. Prerequisite: student must be enrolled in the Podiatric Medicine program.
8.000 Credit hours
4.000 Lecture hours
4.000 Lab hours

Levels: Professional
Schedule Types: Laboratory, Lecture

Podiatric Medicine Department

BSC 80125 - NEUROBIOLOGY

Neurobiology is the study of the structure and function of the nervous system. The course will deal with the anatomy, microscopic anatomy and physiology of the individual neurons and systems of neurons, which
comprise the component parts of the nervous system. Topics will include sensory, special sensory and motor systems, the cerebral cortex, diencephalon, cerebellum, brainstem and spinal cord. Discussions will include reference to clinical disorders related to those structures. Prerequisite: Student must be enrolled in the Podiatric Medicine program.
3.000 Credit hours
3.000 Lecture hours

Levels: Professional
Schedule Types: Lecture

Podiatric Medicine Department

**BSC 80126 - HUMAN SYSTEMS BIOLOGY**

The study of basic concepts of normal organ and organ system function, including body fluids and compartments, muscle physiology, cardiovascular physiology, renal function, respiration, gastrointestinal physiology and endocrinology. Emphasis is placed on the regulatory functions of each organ or system, as well as the contribution of each system to whole body homeostasis. The sequence of topics in this course are coordinated with those in GMD 121 Physical Assessment and Diagnosis. Prerequisite: student must be enrolled in the Podiatric Medicine program.
6.000 Credit hours
6.000 Lecture hours

Levels: Professional
Schedule Types: Lecture

Podiatric Medicine Department

**BSC 80128 - MEDICAL MICROBIOLOGY AND IMMUNOLOGY**

This course will introduce the student to the basic concepts, characteristics and techniques used in the study of the clinically significant microbial groups: viruses, bacteria, fungi, and protozoa. The structure, metabolism, genetics, control and laboratory techniques of each microbial group will be described. The roles and outcomes of these organisms in producing manifestations of human infection and disease will be investigated. This course will also introduce the student to the molecular, cellular and organismal mechanisms responsible for the human immune response system. Laboratory will provide hands on experience in staining, cultivation, identification, sensitivity testing, and immunologic techniques. Prerequisite: student must be enrolled in the Podiatric Medicine program.
6.000 Credit hours
5.000 Lecture hours
1.000 Lab hours

Levels: Professional
Schedule Types: Combined Lecture and Lab

Podiatric Medicine Department

**BSC 80218 - HUMAN SYSTEMS PATHOLOGY**

The study of disease with emphasis on epidemiology, pathogenesis, natural history, morphologic appearance and relationship to clinical manifestation. Emphasis is placed on basic cellular pathologic processes (injury, inflammation and repair, neoplasia), and description of diseases organized by organ system. An introduction to the concepts of clinical decision making through the use of case studies and current clinical literature will be emphasized. Prerequisite: student must be enrolled in the Podiatric Medicine program.
8.000 Credit hours
8.000 Lecture hours

Levels: Professional
**BSC 80219 - PHARMACOLOGY AND THERAPEUTICS**

Historically, the clinician was responsible for information about the sources, physical and chemical properties, compounding and dispensing of drugs. Today the practitioner’s responsibility requires the rational clinical use of therapeutic agents for the prevention, diagnosis, and treatment of disease based on an understanding of pharmacological principles. This course is designed to prepare practitioners to prescribe for maximum benefit and to recognize the clinical ramifications of concomitant drug therapy. Prerequisite: student must be enrolled in the Podiatric Medicine program.

4.000 Credit hours  
4.000 Lecture hours

Levels: Professional  
Schedule Types: Lecture

Podiatric Medicine Department

**BSC 80228 - HUMAN SYSTEMS PATHOLOGY**

The study of disease with emphasis on epidemiology, pathogenesis, natural history, morphologic appearance and relationship to clinical manifestation. Emphasis is placed on basic cellular pathologic processes (injury, inflammation and repair, neoplasia), and description of diseases organized by organ system. An introduction to the concepts of clinical decision making through the use of case studies and current clinical literature will be emphasized. Prerequisite: student must be enrolled in the Podiatric Medicine program.

8.000 Credit hours  
8.000 Lecture hours

Levels: Professional  
Schedule Types: Lecture

Podiatric Medicine Department

**BSC 80229 - PHARMACOLOGY AND THERAPEUTICS**

Historically, the clinician was responsible for information about the sources, physical and chemical properties, compounding and dispensing of drugs. Today the practitioner’s responsibility requires the rational clinical use of therapeutic agents for the prevention, diagnosis, and treatment of disease based on an understanding of pharmacological principles. This course is designed to prepare practitioners to prescribe for maximum benefit and to recognize the clinical ramifications of concomitant drug therapy. Prerequisite: student must be enrolled in the Podiatric Medicine program.

4.000 Credit hours  
4.000 Lecture hours

Levels: Professional  
Schedule Types: Lecture

Podiatric Medicine Department

**BSCI 10001 - HUMAN BIOLOGY**

Study of the scientific method and life's properties, emphasizing human biology. Topics include energy, genetics, reproduction, development disease, nutrition and physical fitness in humans. Prerequisite: None.

3.000 Credit hours  
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture

Biological Sciences Department

Course Attributes:
Kent Core-Basic Sciences, LER-Basic Sciences, Trnfr Module-Natural Sciences

**BSCI 10002 - LIFE ON PLANET EARTH**

Explores the fascinating breadth of life on Earth including the unique ecology and survival strategies of animals, plants and microbes in their natural habitats. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Biological Sciences Department

Course Attributes:
Kent Core-Basic Sciences, LER-Basic Sciences, Trnfr Module-Natural Sciences

**BSCI 10003 - LABORATORY EXPERIENCE IN BIOLOGY**

Introductory college-level laboratory in biology for non-majors. Two hours of laboratory per week.
Pre/corequisite: BSCI 10001 or 10002.

1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Biological Sciences Department

Course Attributes:
Kent Core-Basic Sciences, Kent Core-Basic Sciences Lab, LER-Basic Sciences

**BSCI 10100 - ANATOMY FOR VETERINARY TECHNICIANS**

Compare/identify anatomy and basic physiological functions of domestic animals: skeletal, muscles, integumentary, special sense organs, respiratory, digestive, urinary, reproductive, mammary glands, endocrine, nerves, circulatory, immune. Lecture 4 hours, laboratory 3 hours weekly. Prerequisite: None.

5.000 Credit hours
5.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Biological Sciences Department

**BSCI 10110 - BIOLOGICAL DIVERSITY**

Considered first course in biology majors' sequence. Examines the biodiversity of life from its origins to present-day prokaryotes and eukaryotes; their behavior, ecology and reproduction. Three hours lecture and two hours lab weekly. Field trips. Prerequisite: None.
BSCI 10120 - BIOLOGICAL FOUNDATIONS

Considered second course in biology majors sequence. Examines organization of life from subcellular biochemistry and molecular biology to genetics, bioenergetics and system homeostasis. Three-hour lecture and three-hour lab weekly. Field trips. Prerequisite: None.

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

BSCI 10195 - SPECIAL TOPICS IN BIOLOGY

(Repeatable for credit) Selected subjects and/or themes in biology. Prerequisite: special approval.

Levels: Undergraduate
Schedule Types: Lecture

BSCI 11001 - ANATOMY FOR PHYSICAL AND OCCUPATIONAL THERAPY

This course covers the organization of the human body with emphasis on the structure and function of the neuro-musculo-skeletal systems. Prerequisite: None.

Levels: Undergraduate
Schedule Types: Lecture

BSCI 11010 - FOUNDATIONAL ANATOMY AND PHYSIOLOGY I

Anatomy and physiology to include organization of the human body, cells, tissues, organs and systems, integumentary, skeletal, muscular and respiratory systems and overviews of the nervous and circulatory system. This course is taught on Kent State University's regional campuses for Associate degree programs.
Prerequisite: Special approval.
3.000 Credit hours
2.000 Lecture hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Biological Sciences Department

Course Attributes:
Kent Core-Basic Sciences, Kent Core-Basic Sciences Lab

**BSCI 11020 - FOUNDATIONAL ANATOMY AND PHYSIOLOGY II**

Anatomy and physiology of the circulatory, digestive, urinary, nervous, endocrine and reproductive systems. This course is taught on Kent State University's regional campuses for Associate degree programs. Prerequisites: BSCI 11010; and special approval.
3.000 Credit hours
2.000 Lecture hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Biological Sciences Department

Course Attributes:
Kent Core-Basic Sciences, Kent Core-Basic Sciences Lab

**BSCI 16001 - HORTICULTURAL BOTANY**

To provide students with an understanding of the basic anatomy and physiology and growth characteristics of plants. Lecture two hours weekly, lab three hours weekly. Offered only at the Geauga and Salem campuses. Prerequisite: None.
3.000 Credit hours
2.000 Lecture hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Biological Sciences Department

**BSCI 20020 - BIOLOGICAL STRUCTURE AND FUNCTION**

Basic design of human systems emphasizing the physiochemical and cellular bases of organ-system structure, function and development. Lecture four hours, laboratory three hours weekly. Prerequisite: None.
5.000 Credit hours
4.000 Lecture hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Biological Sciences Department
Course Attributes:
Kent Core-Basic Sciences, Kent Core-Basic Sciences Lab, LER-Basic Sciences, Trnfr Module-Natural Sciences

**BSCI 20021 - BASIC MICROBIOLOGY**

Principles of microorganisms having a direct relationship on the health and well-being of humans. Prerequisite: BSCI 20020; or BSCI 10100 and 10110; or BSCI 11010 and 11020; or ATTR 25057 and 25058; or EXSC 25057 and 25058; and CHEM 10050 or 10052 or 10054 or 10060.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Biological Sciences Department

**BSCI 20022 - BASIC MICROBIOLOGY LABORATORY**

Laboratory experience in microbiology. Three hours of laboratory per week. Cannot be used to satisfy degree requirements for biology majors. Corequisite: BSCI 20021.

1.000 Credit hours
1.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Biological Sciences Department

**BSCI 20195 - SPECIAL TOPICS IN BIOLOGY**

(Repeatable for credit)Selected subjects and/or themes in Biology. Prerequisite: special approval.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Biological Sciences Department

**BSCI 20196 - INTRODUCTION TO INDIVIDUAL INVESTIGATION**

(Repeatable for credit)Introduction to research in the biological sciences under the direction of a BSCI faculty mentor. Prerequisite: 8 hours of BSCI courses with a minimum grade of C (2.000) in those courses. Departmental and faculty mentor approvals required.

1.000 TO 2.000 Credit hours
1.000 TO 2.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Biological Sciences Department

**BSCI 21010 - ANATOMY AND PHYSIOLOGY I**

Anatomy, physiological chemistry, cytology, tissues, and homeostatic mechanisms of the integumentary, skeletal, nervous, muscular, and sensory systems. Prerequisite: None.
4.000 Credit hours
3.000 Lecture hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Biological Sciences Department

Course Attributes:
Kent Core-Basic Sciences, Kent Core-Basic Sciences Lab

### BSCI 21020 - ANATOMY AND PHYSIOLOGY II

Anatomy and physiological processes as related to the following organ systems: endocrine, circulatory, respiratory, digestive, urinary and reproductive. Prerequisite: BSCI 21010.

4.000 Credit hours
3.000 Lecture hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Biological Sciences Department

### BSCI 26002 - ECOLOGICAL PRINCIPLES OF PEST MANAGEMENT

Basic principles of integrated pest management, pesticide application, pest identification and environmental effects. Lecture three hours weekly; offered only at the Salem Campus. Prerequisite: BSCI 16001.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Biological Sciences Department

### BSCI 26003 - PLANT IDENTIFICATION AND SELECTION I

Identification and selection of horticulturally important plant species. Emphasis on woody species, shrubs and trees. Lecture two hours weekly, lab three hours weekly. Offered only at the Salem Campus. Prerequisite: HORT 16001 and BSCI 16001.

3.000 Credit hours
3.000 Lecture hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Biological Sciences Department

### BSCI 26004 - PLANT IDENTIFICATION AND SELECTION II

Identification and selection of horticulturally important plant species. Emphasis on herbaceous species, ground covers and vines. Lecture two hours weekly, lab three hours weekly. Offered only at the Salem Campus. Prerequisite: BSCI 16001 and HORT 16001.

3.000 Credit hours
BSCI 30005 - CAREER PATHWAYS IN BIOLOGY
Orients students toward various career pathways in the biological sciences. Prerequisites: BSCI 10110 and 10120.
1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Biological Sciences Department

BSCI 30030 - HUMAN PHYSIOLOGY
Integrating mechanisms, pharmacological and pathological considerations for selected organ systems. Prerequisite: BSCI 20020; or 10110 and 10120; and 9 hours chemistry.
4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Biological Sciences Department

BSCI 30050 - HUMAN GENETICS
Modern concepts of genetics applicable to the human including examination of genetically related diseases and their societal implications. Lecture three hours weekly. Prerequisite: 8 hours of biology 5 hours of chemistry.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Biological Sciences Department

BSCI 30140 - CELL BIOLOGY
Investigation of the cell as the fundamental unit of life with an emphasis on the relationship between cellular structure and function. Three-hour lecture and three-hour lab weekly. Prerequisites: BSCI 10120 and CHEM 10060 and 10062.
4.000 Credit hours
3.000 Lecture hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Biological Sciences Department
BSCI 30156 - ELEMENTS OF GENETICS

Principles of organic mechanisms for expression and transmission of traits as studied in molecules, cells, organisms and populations. Lecture three hours weekly. Prerequisites: BSCI 10110 and 10120; and MATH 11009 or MATH 11010 or MATH 12001 or MATH 12002 or MATH 12012.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Biological Sciences Department

BSCI 30171 - GENERAL MICROBIOLOGY

Fundamental principles of microbiology and of organisms including their structure, physiology, genetics, pathogenicity, classification, mechanisms of cultivation and control. Lecture three hours, lab three hours weekly. Prerequisites: BSCI 10110 and BSCI 30140; CHEM 10060, 10061, 10062 and 10063.

4.000 Credit hours
3.000 Lecture hours
1.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Biological Sciences Department

BSCI 30270 - GENERAL PLANT BIOLOGY

Covers all topics in modern plant biology, including molecular and cellular biology, physiology, anatomy, development, ecology, evolution and diversity. Prerequisite: BSCI 10110 and BSCI 10120.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Biological Sciences Department

BSCI 30271 - GENERAL PLANT BIOLOGY LABORATORY

Laboratory and greenhouse exercises in general plant biology. Prerequisite: BSCI 10110 and BSCI 10120. Corequisite: BSCI 30270

1.000 Credit hours
1.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Biological Sciences Department

BSCI 30274 - FORESTRY

Management of the forest resource within appropriate environmental constraints for sustained use relative to watershed protection, lumber production, recreation and wildlife. Prerequisite: BSCI 10110 and 10120.
BSCI 30275 - LOCAL FLORA
Identification and field study of local plants: native, naturalized and cultivated. Two-hour lecture and six-hour lab weekly. Prerequisites: BSCI 10110 and 10120.

Levels: Undergraduate
Schedule Types: Lecture

BSCI 30277 - ECONOMIC BOTANY
Biology of plants important to man and their relation to climate and geography. Lecture two hours weekly. Prerequisite: BSCI 10110 and 10120.

Levels: Undergraduate
Schedule Types: Lecture

BSCI 30360 - GENERAL ECOLOGY
Principles of ecology based on field studies of local plant and animal communities. Lecture three hours, lab three hours weekly. Prerequisite: BSCI 10110 and 10120.

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

BSCI 30361 - BIOGEOGRAPHY
Geographical distribution of biotic communities with special reference to North America and to their environmental control. Lecture three hours weekly. Prerequisite: BSCI 10110 and 10120.

Levels: Undergraduate
**BSCI 30362 - INTRODUCTION TO BIOLOGY OF THE TROPICS**

Biology and conservation of tropical ecosystems and organisms. Prerequisite: BSCI majors and junior or senior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**BSCI 30518 - VERTEBRATE ANATOMY**

Concepts and methods of functional morphology. Comparative study of vertebrate organs and systems: skeletal, muscular, digestive, respiratory, circulatory, urogenital, nervous and endocrine. Lecture three hours, lab three hours weekly. Prerequisite: BSCI 10110 or 10120.

4.000 Credit hours
3.000 Lecture hours
1.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

**BSCI 30519 - VERTEBRATE EMBRYOLOGY AND DEVELOPMENTAL ANATOMY**

Gametogenesis, fertilization, embryogenesis, organogenesis, normal/abnormal embryological development; emphasizing mammal; amphibian, bird illustrating general principles and concepts. Laboratory studies of frog, chick, pig developmental anatomy. Three one hour lectures and one three hour lab. Prerequisite: BSCI 20001 or 30518 and 30140.

4.000 Credit hours
3.000 Lecture hours
1.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

**BSCI 30520 - INTRODUCTION TO NEUROSCIENCE**

Basic principles in neuroscience from the cellular to systems level. Covers how the nervous system is organized, how it detects sensory stimuli to create a mental representation of their environment and output pathways by which the nervous system can control movement, hormone levels and physiological processes. Prerequisite: BSCI 30140.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
### BSCI 30560 - Invertebrate Zoology

Survey of the animal kingdom emphasizing evolutionary developments. Three-hour lecture and three-hour lab weekly. Prerequisites: BSCI 10110 and 10120.

4.000 Credit hours  
3.000 Lecture hours  
3.000 Lab hours  

Levels: Undergraduate  
Schedule Types: Laboratory, Lecture

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### BSCI 30580 - Entomology

Classification, biology and ecology of the principal groups of insects. Lecture three hours, lab three hours weekly. Prerequisite: BSCI 10110, 10120 and 10 hours of biology (BSCI) courses.

4.000 Credit hours  
3.000 Lecture hours  
1.000 Lab hours  

Levels: Undergraduate  
Schedule Types: Laboratory, Lecture

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### BSCI 30582 - Ornithology

Field study of natural history of local birds. Lecture three hours, lab three hours weekly. Prerequisite: BSCI 10110 and 10120.

4.000 Credit hours  
3.000 Lecture hours  
1.000 Lab hours  

Levels: Undergraduate  
Schedule Types: Laboratory, Lecture

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### BSCI 40020 - Biology of Aging

(Slashed with BSCI 50020) Current theories of aging; changes at the cellular level associated with aging in humans; course covers the normal aging process, dysfunction, and diseases of the elderly categorized by body systems. Prerequisites: BSCI 20020; or BSCI 21010 and BSCI 21020; or BSCI 11010 and BSCI 11020; or ATTR 25057 and ATTR 25058; or EXSC 25057 and EXSC 25058.

3.000 Credit hours  
3.000 Lecture hours  

Levels: Undergraduate  
Schedule Types: Lecture

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### BSCI 40099 - Senior Honors Thesis

Biological Sciences Department
(Repeatable for credit) Honors thesis research project completed during the senior year with BSCI faculty mentor and research committee. Maximum of 4 credit hours to count toward BSCI degrees as upper division elective hours. Prerequisite: Departmental faculty mentor and honors college approval.

1.000 TO 10.000 Credit hours
1.000 TO 10.000 Other hours

Levels: Undergraduate
Schedule Types: Senior Project/Honors Thesis

Biological Sciences Department

Course Attributes:
Experiential Learning Requirem

BSCI 40104 - INTRODUCTION TO BEEKEEPING

(Cross-listed with BSCI 50104) Covers basic beekeeping practices and provides students with an in-depth understanding of the honey bee colony through participation in hands-on activities, observation and experimentation. Prerequisites: BSCI 10110 and 10120; and junior or senior standing.
2.000 Credit hours
1.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Biological Sciences Department

BSCI 40142 - BIOENERGETICS

(Cross-listed with BSCI 50142 and BSCI 70142) Lecture and discussion of respiration and photosynthesis, their origin, development and control in living systems. Concepts are introduced from fundamental principles. Lecture three hours weekly. Prerequisite: BSCI 30140 and CHEM 20481 or 30481.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Biological Sciences Department

BSCI 40143 - EUKARYOTIC CELL BIOLOGY

Current survey of the structure and function of eukaryotic cells, including recent advances in research technology. Lecture three hours weekly. Prerequisite: BSCI 30140 and CHEM 20481 or 30481.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Biological Sciences Department

BSCI 40146 - DEVELOPMENTAL BIOLOGY

(Cross-listed with BSCI 50146 and BSCI 70146) Fundamental concepts and paradigms of development as
exemplified by major model organisms. Examines our modern understanding of the molecular, cellular and genetic basis of developmental biology. Prerequisite: senior standing, B or better in BSCI 30156 and BSCI 30140.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Biological Sciences Department

**BSCI 40150 - MOLECULAR MECHANISMS OF DISEASE: CANCER**

(Cross-listed with BSCI 50150 and BSCI 70150) Explores the current understanding of molecular and cellular mechanisms of disease processes, including new technologies and modern strategies in the forefront of future biomedical research. Emphasis on a review of primary literature. Prerequisite: junior or senior standing, BSCI 30156 and BSCI 30140.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Biological Sciences Department

**BSCI 40151 - MECHANISMS OF DISEASE: OBESITY AND RELATED METABOLIC DISEASES**

(Cross-listed with BSCI 50151 + BSCI 70171) Addresses obesity from multiple angles, including health and disease process, underlying physiology and cell and molecular biology, and the role of behavior. Emphasis on a review of primary literature to discuss obesity causes, consequences, and treatments. Prerequisites: BSCI 10120; and BSCI 30030 or 40430.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Biological Sciences Department

**BSCI 40158 - MOLECULAR BIOLOGY**

Molecular genetics, DNA and RNA structure, chromosomes, DNA replication, recombination, genetic transcription and translation, gene expression, current concepts and technologies. Prerequisite: BSCI 30140 and 30156.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Biological Sciences Department

**BSCI 40159 - MOLECULAR BIOLOGY LABORATORY**

Experience in research methods for studying cellular and molecular processes in plant and animal systems. Prerequisite: BSCI 30140 and 30156.
3.000 Credit hours
BSCI 40160 - MARINE BIOLOGY

(Cross-listed with BSCI 50160 and BSCI 70160) Natural history and ecology of marine organisms, with emphasis on life in coastal habitats. Lecture three hours. Prerequisite: BSCI 10110 and BSCI 10120.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Biological Sciences Department

BSCI 40162 - SOIL BIOLOGY

(Cross-listed with BSCI 50162 and BSCI 70162) The ecology and physiology of organisms that live in soil, including microbes, plants and animals. The physical and chemical aspects of soil are introduced to understand how organisms in soils impact nutrient cycles and ecosystem development. Prerequisite: junior or senior standing, BSCI 10110 and BSCI 10120.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Biological Sciences Department

BSCI 40163 - EVOLUTION

(Cross-listed with BSCI 50163 and BSCI 70163) History of evolutionary theory, the evidences of evolution, the evolutionary forces and the products of these forces. Lecture three hours weekly. Prerequisite: BSCI 30156 and 4 hours of biology (BSCI) courses.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Biological Sciences Department

BSCI 40170 - STREAM BIOLOGY

(Cross-listed with BSCI 50170 and BSCI 70170) Identification, biology and ecology of stream-inhabiting organisms. Lecture two hours, lab three hours weekly. Prerequisite: BSCI 10110 and 10120.
3.000 Credit hours
2.000 Lecture hours
1.000 Lab hours
BSCI 40174 - IMMUNOLOGY

(Cross-listed with BSCI 50174 and BSCI 70174) Survey of the mammalian host responses to self and non-self with emphasis on the cellular and molecular mechanisms by which innate and acquired immunity result. Experimental design and data analyses are related to current methodologies used to study immunology. Lectures 3 hours weekly. Prerequisite: BSCI 30171 and CHEM 10060, 10061, 10062 and 10063.
3.000 Credit hours
3.000 Lecture hours

BSCI 40191 - SENIOR SEMINAR

(Repeatable for credit) A capstone seminar course to examine biological topics and scientific contributions across subdisciplines. Discussion of current problems in the biological sciences related to societal needs and concerns. Prerequisite: biology (BSCI) major and senior standing.
1.000 Credit hours
1.000 Other hours

BSCI 40192 - INTERNSHIP IN BIOLOGICAL SCIENCES

(Repeatable for credit) Work experience and training in the biological sciences under the supervision of appropriate personnel in a government agency, nonprofit organization or business. Maximum of 4 credit hours to count toward BSCI degrees as upper division elective hours. Prerequisite: 18 hours of biology and 2.750 minimum GPA in biology (BSCI) coursework and special approval.
3.000 TO 12.000 Credit hours
3.000 TO 12.000 Other hours

BSCI 40193 - VARIABLE TITLE WORKSHOP IN BIOLOGICAL SCIENCES

(Repeatable for credit) Topics to be offered will meet specific needs in the biological sciences. S u graded. Prerequisite: Permission.
1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Biological Sciences Department
Schedule Types: Workshop

Biological Sciences Department

**BSCI 40195 - SPECIAL TOPICS IN BIOLOGY**

(Repeatable for credit) (Cross-listed with BSCI 50195 and BSCI 70195) Special topics in biology. Prerequisite: 18 hours of biology (BSCI) coursework and special approval of instructor.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours
2.000 TO 6.000 Lab hours

Levels: Undergraduate

Schedule Types: Laboratory, Lecture

All Sections for this Course

Biological Sciences Department

**BSCI 40196 - INDIVIDUAL INVESTIGATION**

(Repeatable for credit) Research study under the direction of a BSCI faculty mentor. May be repeated; however, a maximum of 6 credit hours count toward BSCI degrees as upper-division elective hours. Prerequisite: A minimum BSCI grade average of 2.750 and at least 18 credit hours of BSCI coursework. Departmental and faculty mentor approvals required.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate

Schedule Types: Individual Investigation

Biological Sciences Department

Course Attributes:

Experiential Learning Requirem

**BSCI 40220 - BIOINFORMATICS**

Analysis of biological databases, including nucleic acid and protein sequence searching, multiple sequence alignment, protein classification, phylogenetic analysis, comparative genomics, proteomics, protein structure analysis. Prerequisites: BSCI 30140 and 30156 and 40158.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Biological Sciences Department

**BSCI 40272 - PLANT ANATOMY**

(Cross-listed with BSCI 50272 and BSCI 70272) Development and structure of cells, tissues and tissue systems of seed plants. Both vegetative and reproductive structures of angiosperms will be emphasized. Lecture two hours, lab six hours weekly. Prerequisite: BSCI 10110 and 10120.

4.000 Credit hours
2.000 Lecture hours
6.000 Lab hours
Levels: Undergraduate  
Schedule Types: Laboratory, Lecture  

Biological Sciences Department  

**BSCI 40275 - SYSTEMATIC BOTANY**

(Cross-listed with BSCI 50275 and BSCI 70275) Biosystematics, angiosperm, phylogeny, survey of some major families of dicotyledons. Lecture three hours, lab three hours weekly. Prerequisite: BSCI 10110 and 10120.

4.000 Credit hours  
3.000 Lecture hours  
1.000 Lab hours  

Levels: Undergraduate  
Schedule Types: Laboratory, Lecture  

Biological Sciences Department  

**BSCI 40341 - STEM CELL BIOLOGY: PRINCIPLES AND APPLICATIONS**

(Slashed with BSCI 50341 and BSCI 70341) Examination of stem cells from various tissues, molecular mechanism of stem cell differentiation, and use of stem cells in clinical applications. Prerequisite: BSCI 30140.

3.000 Credit hours  
3.000 Lecture hours  

Levels: Undergraduate  
Schedule Types: Lecture  

Biological Sciences Department  

**BSCI 40360 - ICHTHYOLOGY**

Basic biology, natural history, behavior and ecology of the fishes. Three hour lecture and three hour lab weekly. Prerequisite: junior standing, grade of C (2.000) or better in both BSCI 10110 and BSCI 10120.

4.000 Credit hours  
3.000 Lecture hours  
3.000 Lab hours  

Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab  

Biological Sciences Department  

**BSCI 40363 - MICROBIAL ECOTOLOGY**

(Slashed with BSCI 50363 and BSCI 70363) Microbial interactions with their biotic and abiotic environment; control of distribution and physiological activities; biochemical cycles; current techniques; emphasis on bacteria in aquatic systems. Prerequisites: BSCI 30171 and BSCI 30360.

3.000 Credit hours  
3.000 Lecture hours  

Levels: Undergraduate  
Schedule Types: Lecture  

Biological Sciences Department
**BSCI 40364 - LIMNOLOGY**

(Cross-listed with BSCI 50364 and BSCI 70364) The study of the principles of aquatic ecology with emphasis on lakes and reservoirs. Prerequisite: BSCI 30360.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Biological Sciences Department

**BSCI 40368 - WETLAND ECOLOGY AND MANAGEMENT**

(Cross-listed with BSCI 50368 and BSCI 70368) Lecture, laboratory and field study of the principles of wetland ecology including adaptations of the biota to environmental conditions, comparison among different wetland habitat types and habitat management. Lecture 3 hours, lab 3 hours weekly. Prerequisite: BSCI 10110 and 10120 and 10 hours of biology (BSCI) coursework.

4.000 Credit hours
3.000 Lecture hours
1.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Biological Sciences Department

Course Attributes: Experiential Learning Requirem

**BSCI 40374 - CONSERVATION BIOLOGY**

(Cross-listed with BSCI 50374 and BSCI 70374) Provides a critical analysis of the factors that threaten biological diversity in the biosphere and the consequences on biological processes and quality of life. Prerequisite: BSCI 30360.

4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Biological Sciences Department

Course Attributes: Experiential Learning Requirem

**BSCI 40375 - ENVIRONMENTAL BIOLOGY AND MANAGEMENT**

(Cross-listed with BSCI 50375 and BSCI 70375) Introduction to current concepts in applied ecology and ecosystem management. Students will learn aspects of ecosystem management and restoration including: 1) how environmental factors affect organism survival and ecosystem structure, 2) how human impacts such as pollution, habitat fragmentation, introduction of invasive species affect ecosystems, and 3) the use of ecological principles and methods to restore and manage ecosystems. Prerequisites: BSCI 10110 and BSCI 10120 and BSCI 30360.

4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
### BSCI 40376 - TROPICAL FIELD BIOLOGY AND CONSERVATION

(Cross-listed with BSCI 50376 and BSCI 70376) Introduction to major issues in tropical ecology and conservation including the threats to the biological diversity of tropical ecosystems resulting from human activities. Students learn how to apply modern field-observation techniques to generate and test problem-solving hypotheses. Prerequisite: junior or senior standing, BSCI 10110 and BSCI 10120.

- 5.000 Credit hours
- 3.000 Lecture hours
- 6.000 Lab hours

Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab

### BSCI 40430 - ANIMAL PHYSIOLOGY

Physiologic principles and concepts. Prerequisite: BSCI 30140; CHEM 10060, 10061, 10062 and 10063.

- 3.000 Credit hours
- 3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

### BSCI 40432 - ENDOCRINOLOGY

(Cross-listed with BSCI 50432 and BSCI 70432) Principles of endocrine regulation of physiological and metabolic processes. Morphological and functional interrelationships between systems. Lecture three hours. Prerequisite: BSCI 40430.

- 3.000 Credit hours
- 3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

### BSCI 40433 - MAMMALIAN PHYSIOLOGY I

Physiology of the endocrine, nervous, and reproductive systems. Prerequisites: BSCI 30140 and CHEM 10060 and CHEM 10061 and CHEM 10062 and CHEM 10063; and CHEM 20481 or 30481.

- 3.000 Credit hours
- 3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture
**BSCI 40434 - MAMMALIAN PHYSIOLOGY II**

Physiology of cardiovascular, renal, respiratory and digestive systems. Lecture three hours. Prerequisite: BSCI 30140 and CHEM 10060 and CHEM 10061 and CHEM 10062 and CHEM 10063; and CHEM 20481 or 30481.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Biological Sciences Department

**BSCI 40450 - BIOLOGICAL CLOCKS**

(Cross-listed with BSCI 50450 and BSCI 70450) Topics covered include the characteristics of biological clocks, their ecology, molecular biology, and neurobiology, the function and organization of sleep, and the medical implications of biological rhythmicity. Prerequisite: BSCI 30156; and BSCI 30520 or 40430 or 40433 or PSYC 41363.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Biological Sciences Department

**BSCI 40515 - ANIMAL BEHAVIOR**

Explores the evolution of various animal behaviors, the functions they might serve, and the interplay among the social, ecological and physiological mechanisms that regulate their occurrence. Prerequisites: BSCI 10110 and 10120 and junior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Biological Sciences Department

**BSCI 40517 - MEDICAL HISTOLOGY**

(Cross-listed with BSCI 50517 and BSCI 70517) Study of the microscopic and submicroscopic structure of the human body in relation to function. Lecture two hours, lab three hours weekly. Prerequisites: BSCI 10110 and 10120 and 30140.

3.000 Credit hours
2.000 Lecture hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Biological Sciences Department

**BSCI 40519 - HORMONES AND BEHAVIOR**
(Cross-listed with BSCI 50519 and BSCI 70519) Current concepts of hormone and behavior interactions across species. Prerequisites: BSCI 10110 and 10120; and junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Biological Sciences Department

**BSCI 40520 - BEHAVIORAL EVOLUTION**

(Cross-listed with BSCI 50520 and BSCI 70520) Examination of how behavior contributes to survival and reproduction in an ecological context. We consider how behavior may have evolved in a wide range of animals. Prerequisite: BSCI 40163.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Biological Sciences Department

Course Attributes:
Writing Intensive Course

**BSCI 40525 - WILDLIFE RESOURCES**

(Cross-listed with BSCI 50525 and BSCI 70525) Ecological parameters are discussed relative to the preservation and management of wild animal populations. Aesthetic, economic and environmental values are discussed. Lecture three hours weekly. Prerequisite: BSCI 10110 and 10120 plus 4 hours of biology (BSCI) coursework.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Biological Sciences Department

Course Attributes:
Experiential Learning Requirem

**BSCI 40556 - VERTEBRATE ZOOLOGY**

(Cross-listed with BSCI 50556 and BSCI 70556) Field approach to identification and natural history of all Ohio vertebrates except birds. Lecture three hours, lab and field three hours weekly. Prerequisite: BSCI 10110 and 10120 plus 4 hours of biology (BSCI) coursework.
4.000 Credit hours
3.000 Lecture hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Biological Sciences Department
**BSCI 40581 - ANIMAL PARASITOLOGY**

Morphology, physiology, life-histories, systematics and economic importance of parasites. Lecture two hours lab, six hours weekly. Prerequisite: BSCI 10110, 10120 plus 4 hours of biology (BSCI) coursework.

- 4.000 Credit hours
- 2.000 Lecture hours
- 6.000 Lab hours

Levels: Undergraduate  
Schedule Types: Laboratory, Lecture

Biological Sciences Department

**BSCI 40600 - WRITING IN THE BIOLOGICAL SCIENCES**

Writing-intensive course taken with a 3- or 4-credit-hour upper-division biology course. This course may be used to satisfy the writing-intensive course requirement with approval of major department. Prerequisites: biology (BSCI) major and junior standing.

- 1.000 Credit hours
- 1.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

Biological Sciences Department  
Course Attributes: Writing Intensive Course

**BSCI 41010 - BIOPHOTONICS**

(Cross-listed with BSCI 51010 and CHEM 41010 and CHEM 51010 and PHY 41010 and PHY 51010) Interdisciplinary overview of the basics of biophotonics; application of biophotonic techniques to probe biological samples. Introduction to the foundations of optics and photonics and how the molecular structure of organic molecules translates into unique photonic properties and targeting in biological cells or tissue. Preparation of fluorescent materials, advanced spectroscopy and cell visualization using regular and confocal fluorescence microscopy. Prerequisite: special approval.

- 3.000 Credit hours
- 1.000 Lecture hours
- 6.000 Lab hours

Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab

Biological Sciences Department

**BSCI 50020 - BIOLOGY OF AGING**

(Cross-listed with BSCI 40020) Current theories of aging; changes at the cellular level associated with aging in humans; course covers the normal aging process, dysfunction, and diseases of the elderly by body systems. Prerequisite: graduate standing.

- 3.000 Credit hours
- 3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Biological Sciences Department
**BSCI 50104 - INTRODUCTION TO BEEKEEPING**

Covers basic beekeeping practices and provides students with an in-depth understanding of the honey bee colony through participation in hands-on activities, observation and experimentation. This course may not be used to fulfill degree requirements in the MS or MA Biology programs. Prerequisite: graduate standing.

- 2.000 Credit hours
- 1.000 Lecture hours
- 2.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Biological Sciences Department

**BSCI 50142 - BIOENERGETICS**

(Cross-listed with BSCI 40142 and BSCI 70142) Lecture and discussion of respiration and photosynthesis, their origin development and control in living systems. Concepts are introduced from fundamental principles. Lecture three hours weekly. Prerequisite: BSCI 40430. Graduate standing.

- 3.000 Credit hours
- 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biological Sciences Department

**BSCI 50143 - EUKARYOTIC CELL BIOLOGY**

(Cross-listed with BSCI 40143 and BSCI 70143) Current survey of the structure and function of eukaryotic cells, including recent advances in research technology. Lecture three hours weekly. Prerequisite: BSCI 40430. Graduate standing.

- 3.000 Credit hours
- 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biological Sciences Department

**BSCI 50146 - DEVELOPMENTAL BIOLOGY**

(Cross-listed with BSCI 40146 and BSCI 70146) Fundamental concepts and paradigms of development as exemplified by major model organisms. This course will examine our modern understanding of the molecular, cellular and genetic basis of developmental biology. Prerequisite: graduate standing.

- 3.000 Credit hours
- 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biological Sciences Department

**BSCI 50150 - MOLECULAR MECHANISMS OF DISEASE: CANCER**
(Cross-listed with BSCI 40150 and BSCI 70150) Explores the current understanding of molecular and cellular mechanisms of disease processes, including new technologies and modern strategies in the forefront of future biomedical research. Emphasis on a review of primary literature. Prerequisite: graduate standing.

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| (Cross-listed with BSCI 40151 + BSCI 70171) Addresses obesity from multiple angles, including health and disease process, underlying physiology and cell and molecular biology, and the role of behavior. Emphasis on a review of primary literature to discuss obesity causes, consequences and treatments. Prerequisite: graduate standing.  
3.000 Credit hours  
3.000 Lecture hours |

Levels: Graduate  
Schedule Types: Lecture

Biological Sciences Department

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BSCI 50158 - MOLECULAR BIOLOGY

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| (Cross-listed with BSCI 40158 and BSCI 70158) Molecular genetics, DNA and RNA structure, chromosomes DNA replication, recombination, genetic transcription and translation, gene expression, current concepts and technologies. Prerequisite: BSCI 30156 and graduate standing.  
3.000 Credit hours  
3.000 Lecture hours |

Levels: Graduate  
Schedule Types: Lecture

Biological Sciences Department

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BSCI 50159 - MOLECULAR BIOLOGY LABORATORY

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| (Cross-listed with BSCI 40159 and BSCI 70159) Experience in research methods for studying cellular and molecular processes in plant and animal systems. Prerequisites: graduate standing and special approval from instructor.  
3.000 Credit hours  
9.000 Lab hours |

Levels: Graduate  
Schedule Types: Laboratory

Biological Sciences Department

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BSCI 50160 - MARINE BIOLOGY

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| (Cross-listed with BSCI 40160 and BSCI 70160) Natural history and ecology of marine organisms, with emphasis on life in coastal habitats. Lecture three hours weekly. Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours |

Biological Sciences Department
### BSCI 50162 - SOIL BIOLOGY

(Cross-listed with BSCI 40162 and BSCI 70162) The ecology and physiology of organisms that live in soil, including microbes, plants and animals. The physical and chemical aspects of soil are introduced to understand how organisms in soils impact nutrient cycles and ecosystem development. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

### BSCI 50163 - EVOLUTION

Discussion of the history of evolutionary theory, the evidence of evolution the evolutionary forces and the products of those forces. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

### BSCI 50170 - STREAM BIOLOGY

(Cross-listed with BSCI 40170 and BSCI 70170) Identification, biology and ecology of stream-inhabiting organisms. Lecture two hours, laboratory three hours weekly. Prerequisite: BSCI 10181 and 10182. Graduate standing.

3.000 Credit hours
2.000 Lecture hours
1.000 Lab hours

### BSCI 50174 - IMMUNOLOGY

(Cross-listed with BSCI 40174 and BSCI 70174) Survey of the mammalian host responses to self and non-self with emphasis on the cellular and molecular mechanisms by which innate and acquired immunity result. Experimental design and data analyses are related to current methodologies used to study immunology. Lecture three hours weekly. Prerequisite: BSCI 30171 and CHEM 10060, 10061 and 10062. Graduate standing.

3.000 Credit hours
3.000 Lecture hours
### BSCI 50193 - VARIABLE TITLE WORKSHOP IN BIOLOGICAL SCIENCES

(Repeatable for credit) Topics to be offered will meet specific needs in the biological sciences. Prerequisite: Permission and graduate standing.

- 1.000 TO 6.000 Credit hours
- 1.000 TO 6.000 Other hours

Levels: Graduate  
Schedule Types: Workshop

### BSCI 50195 - SPECIAL TOPICS IN BIOLOGY

(Repeatable for credit) (Cross-listed with BSCI 40195 and BSCI 70195) Special topics in biology. Prerequisite: Special approval of instructor and graduate standing.

- 1.000 TO 3.000 Credit hours
- 1.000 TO 3.000 Lecture hours
- 2.000 TO 6.000 Lab hours

Levels: Graduate  
Schedule Types: Laboratory, Lecture

### All Sections for this Course

### BSCI 50196 - INDIVIDUAL INVESTIGATION

(Repeatable for credit) (Cross-listed with BSCI 40196 and BSCI 70196) Individual investigation in biology. Prerequisite: Special approval of instructor and graduate standing.

- 1.000 TO 3.000 Credit hours
- 1.000 TO 3.000 Other hours

Levels: Graduate  
Schedule Types: Individual Investigation

### BSCI 50272 - PLANT ANATOMY

(Cross-listed with BSCI 40272 and BSCI 70272) Development and structure of cells, tissues and tissue systems of seed plants. Both vegetative and reproductive structures of angiosperms will be emphasized. Lecture two hours, laboratory six hours weekly. Prerequisite: Graduate standing.

- 4.000 Credit hours
- 3.000 Lecture hours
- 1.000 Lab hours

Levels: Graduate  
Schedule Types: Laboratory, Lecture

### BSCI 50341 - STEM CELL BIOLOGY: PRINCIPLES AND APPLICATIONS
Examination of stem cells from various tissues, molecular mechanism of stem cell differentiation, and use of stem cells in clinical applications. Prerequisite: Graduate standing.

Levels: Graduate
Schedule Types: Lecture

Biological Sciences Department

**BSCI 50360 - ICHTHYOLOGY**

(Cross-listed with BSCI 40360 and 70360) Basic biology, natural history, behavior and ecology of the fishes. Three hour lecture and three hour lab weekly. Prerequisite: graduate standing.

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Biological Sciences Department

**BSCI 50363 - MICROBIAL ECOLOGY**

(Cross-listed with BSCI 40363 and BSCI 70363) Microbial interactions with their biotic and abiotic environment; control of distribution and physiological activities; emphasis on bacteria in aquatic systems. Prerequisite: BSCI 30171, 30360. Graduate standing.

Levels: Graduate
Schedule Types: Lecture

Biological Sciences Department

**BSCI 50364 - LIMNOLOGY**

(Cross-listed with BSCI 40364 and BSCI 70364) The study of the principles of aquatic ecology with emphasis on lakes and reservoirs. Prerequisite: graduate standing.

Levels: Graduate
Schedule Types: Lecture

Biological Sciences Department

**BSCI 50368 - WETLAND ECOLOGY AND MANAGEMENT**

(Cross-listed with BSCI 40368 and BSCI 70368) Lecture, laboratory and field study of the principles of wetland ecology including adaptations of the biota to environmental conditions, comparison among different wetland habitat types and habitat management. Lecture 3 hours lab 3 hours weekly. Prerequisite: Graduate standing.

Levels: Graduate
Schedule Types: Lecture
# Biological Sciences Department

## BSCI 50370 - ECOLOGICAL AND EVOLUTIONARY GENETICS

(Cross-listed with BSCI 70370) Genetic and genomic approaches to studying ecology and evolution in populations and communities. Prerequisite: graduate standing.

- **2.000 Credit hours**
- **2.000 Lecture hours**

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## BSCI 50371 - EVOLUTIONARY BIOLOGY

(Cross-listed with BSCI 70371) Theoretical and experimental approaches to studying evolution from genes to populations and communities. Prerequisite: graduate standing.

- **2.000 Credit hours**
- **2.000 Lecture hours**

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## BSCI 50372 - COMMUNITIES AND ECOSYSTEMS

(Cross-listed with BSCI 70372) Theory and experimental approaches to studying community and ecosystem ecology. Prerequisite: graduate standing.

- **2.000 Credit hours**
- **2.000 Lecture hours**

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## BSCI 50373 - POPULATION AND COMMUNITY ECOLOGY

(Cross-listed with BSCI 70373) Theory and experimental approaches to studying population and community ecology. Prerequisite: graduate standing.

- **2.000 Credit hours**
- **2.000 Lecture hours**

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## BSCI 50374 - CONSERVATION BIOLOGY
(Cross-listed with BSCI 40374 and BSCI 70374) Provides a critical analysis of the factors that threaten biological diversity in the biosphere and the consequences on biological processes and quality of life. Prerequisite: BSCI 30360 and graduate standing.
4.000 Credit hours
4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biological Sciences Department

**BSCI 50375 - ENVIRONMENTAL BIOLOGY AND MANAGEMENT**

(Cross-listed with BSCI 40375 and BSCI 70375) Introduction to current concepts in applied ecology and ecosystem management. Students will learn aspects of ecosystem management and restoration including: 1) how environmental factors affect organism survival and ecosystem structure, 2) how human impacts such as pollution, habitat fragmentation, introduction of invasive species affect ecosystems, and 3) the use of ecological principles and methods to restore and manage ecosystems. Prerequisite: graduate standing.
4.000 Credit hours
4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biological Sciences Department

**BSCI 50376 - TROPICAL FIELD BIOLOGY AND CONSERVATION**

(Cross-listed with BSCI 40376 and BSCI 70376) Introduction to major issues in tropical ecology and conservation including the threats to the biological diversity of tropical ecosystems resulting from human activities. Students learn how to apply modern field-observation techniques to generate and test problem-solving hypotheses. Prerequisite: graduate standing.
5.000 Credit hours
3.000 Lecture hours
6.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Biological Sciences Department

**BSCI 50432 - ENDOCRINOLOGY**

(Cross-listed with BSCI 40432 and BSCI 70432) Principles of endocrine regulation of physiological and metabolic processes. Morphological and functional interrelationships between systems. Lecture three hours weekly. Prerequisite: BSCI 40430 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biological Sciences Department

**BSCI 50433 - MAMMALIAN PHYSIOLOGY I**

Physiology of the endocrine, nervous, and reproductive systems. Prerequisite: graduate standing.
BSCI 50434 - MAMMALIAN PHYSIOLOGY II

Physiology of cardiovascular, renal, respiratory and digestive systems. Lecture three hours. Prerequisite: graduate standing.

Levels: Graduate
Schedule Types: Lecture

BSCI 50450 - BIOLOGICAL CLOCKS

(Cross-listed with BSCI 40450 and BSCI 70450) Topics covered include the characteristics of biological clocks, their ecology, molecular biology, and neurobiology, the function and organization of sleep, and the medical implications of biological rhythmicity. Students enrolling at the graduate level should have some background in neurobiology and genetics. Prerequisite: graduate standing. Corequisite: BSCI 50451.

Levels: Graduate
Schedule Types: Lecture

BSCI 50451 - CURRENT TOPICS IN BIOLOGICAL CLOCKS RESEARCH

(Cross-listed with BSCI 70451) Discussion of current research literature in the area of research on biological clocks. Prerequisite: graduate standing. Corequisite: BSCI 50450.

Levels: Graduate
Schedule Types: Seminar

BSCI 50515 - ANIMAL BEHAVIOR

Explores the evolution of various animal behaviors, the functions they might serve, and the interplay among the social, ecological and physiological mechanisms that regulate their occurrence. Prerequisite: graduate standing.

Levels: Graduate
Schedule Types: Lecture
**BSCI 50517 - MEDICAL HISTOLOGY**

(Cross-listed with BSCI 40517 and BSCI 70517) Study of the microscopic and submicroscopic structure of the human body in relation to function. Lecture two hours, laboratory three hours weekly. Prerequisite: graduate standing.

- 3.000 Credit hours
- 2.000 Lecture hours
- 3.000 Lab hours

Levels: Graduate
Schedule Types: Laboratory, Lecture

Biological Sciences Department

**BSCI 50519 - HORMONES AND BEHAVIOR**

(Cross-listed with BSCI 40519 and BSCI 70519) Current concepts of hormone and behavior interactions across species. Prerequisite: graduate standing.

- 3.000 Credit hours
- 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biological Sciences Department

**BSCI 50520 - BEHAVIORAL EVOLUTION**

(Cross-listed with BSCI 40520 and BSCI 70520) Examination of how behavior contributes to survival and reproduction in an ecological context. We consider how behavior may have evolved in a wide range of animals. Students enrolled at the graduate level in the course are expected to have had a course in evolution. Prerequisites: graduate standing and special approval. Corequisite: BSCI 50522.

- 3.000 Credit hours
- 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biological Sciences Department

**BSCI 50522 - READINGS IN BEHAVIORAL EVOLUTION**

(Cross-listed with BSCI 70522) Graduate reading course designed to give experience leading discussions and writing proposals. Students enrolled at the graduate level are expected to have had a course in evolution. Prerequisites: graduate standing and special approval. Corequisite: BSCI 50520.

- 1.000 Credit hours
- 1.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Biological Sciences Department

**BSCI 50525 - WILDLIFE RESOURCES**
Ecological parameters are discussed relative to the preservation and management of wild animal populations. Aesthetic economic and environmental values are discussed. Lecture three hours weekly. Prerequisite: Graduate standing.

Levels: Graduate
Schedule Types: Lecture

**BSCI 50556 - VERTEBRATE ZOOLOGY**

Field approach to identification and natural history of all Ohio vertebrates except birds. Lecture three hours, laboratory and field three hours weekly. Prerequisite: 4 hours of biology. Graduate standing.

Levels: Graduate
Schedule Types: Laboratory, Lecture

**BSCI 51010 - BIOPHOTONICS**

Interdisciplinary overview of the basics of biophotonics; application of biophotonic techniques to probe biological samples. Introduction to the foundations of optics and photonics and how the molecular structure of organic molecules translates into unique photonic properties and targeting in biological cells or tissue. Preparation of fluorescent materials, advanced spectroscopy and cell visualization using regular and confocal fluorescence microscopy. Prerequisites: graduate standing and special approval.

Levels: Graduate
Schedule Types: Combined Lecture and Lab

**BSCI 60080 - EXPERIMENTAL METHODS IN BIOLOGY**

The development of hypotheses, principles of experimental design and methods of gathering and evaluating data. Prerequisite: Special approval and graduate standing.

Levels: Graduate
Schedule Types: Lecture

**BSCI 60103 - BIOLOGICAL STATISTICS**

Principles of experimental design and statistical analysis, and how to choose and
interpret statistical tests using biological data sets. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biological Sciences Department

**BSCI 60144 - SELECTED READINGS IN EUKARYOTIC CELL BIOLOGY**

(Cross-listed with BSCI 70144) Directed readings in cell and molecular biology from the primary and review literature will be presented and discussed by the students. Prerequisite: Graduate standing. Corequisite: BSCI 50143
1.000 Credit hours
1.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biological Sciences Department

**BSCI 60145 - MEDICAL GENOMICS**

(Cross-listed with BSCI 80145) Explores the relationship and contribution of genetics and genomics to healthcare issues, including disease susceptibility and therapeutic efficacy. Up-to-date genomics concepts and their applications to health care and the challenges of personalized medicine including genetic analyses (e.g., linkage and estimating population risks), ethical issues in genetic testing and therapy, genetic basis of disease processes (e.g., neurological, cardiovascular and neoplastic diseases) and epigenetic processes (that may link the environment to the risk of chronic diseases) are covered. This course requires an understanding of genetics and physiology; students should contact the Department of Biological Sciences to determine if they have the requisite prior training. Prerequisites: graduate standing and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biological Sciences Department

**BSCI 60191 - SEMINAR IN BIOLOGY**

(Repeatable for credit) Departmental seminar required of all graduate students. Prerequisite: Graduate standing.
1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Biological Sciences Department

**BSCI 60194 - COLLEGE TEACHING IN BIOLOGY**

(Repeatable for credit) (Cross-listed with BSCI 70194) Training and experience in college teaching of biology. Maximum of 2 hours applicable toward degree. Required in all degree programs. Prerequisite: Special approval of instructor and graduate standing.
1.000 Credit hours
1.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biological Sciences Department

**BSCI 60198 - RESEARCH**

(Repeatable for credit) Research or individual investigation for master's level graduate students. Credits earned may be applied toward degree requirements if department approves. Prerequisite: Special approval and graduate standing.

1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

Biological Sciences Department

**BSCI 60199 - THESIS I**

Thesis students must register for a minimum of 6 hours, 2 to 6 hours in a single semester distributed over several semesters if desired. Prerequisite: Special approval and graduate standing.

2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Biological Sciences Department

**BSCI 60299 - THESIS II**

Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: BSCI 60199 and graduate standing.

2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Biological Sciences Department

**BSCI 60391 - SEMINAR IN ECOLOGY**

(Repeatable for credit) (Cross-listed with BSCI 70391) Seminar on topics in animal and plant ecology. Credits earned may be applied to degree if department approves. Prerequisite: Special approval of instructor and graduate standing.

1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Biological Sciences Department
Bsci 60431 - neuroendocrinology

Role of the central nervous system in the regulation of hormonal and vegetative functions; structure function relationships between brain and pituitary with modern views of neuroendocrine regulation. Methods for study of neuroendocrine relationships is discussed. Prerequisite: graduate standing.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biological Sciences Department

Bsci 60462 - neurobiology: systems and behavior

(Slashed with BSCI 80462; Cross-listed with BMS 60462 and BMS 70462) Provides broad coverage of the parts of the central nervous systems and how they integrate sensory information, drive motor function and regulate behavior. Prerequisite: BMS 60729 or BMS 70729; and graduate standing.

4.000 Credit hours
4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biological Sciences Department

Bsci 60491 - seminar in physiology

(Repeatable for credit) (Cross-listed with BSCI 70491) Credits may be applied toward degree if department approves. Prerequisite: Special approval of instructor and graduate standing.

1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Biological Sciences Department

Bsci 70103 - biological statistics

(Slashed with BSCI 60103) Principles of experimental design and statistical analysis, and how to choose and interpret statistical tests using biological data sets. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biological Sciences Department

Bsci 70142 - bioenergetics

(Cross-listed with BSCI 40142 and BSCI 50142) Lecture and discussion of respiration and photosynthesis, their origin development and control in living systems. Concepts are introduced from fundamental principles. Lecture three hours weekly. Prerequisite: BSCI 40430. Doctoral standing.
BSCI 70143 - EUKARYOTIC CELL BIOLOGY
(Cross-listed with BSCI 40143 and BSCI 70143) Current survey of the structure and function of eukaryotic cells, including recent advances in research technology. Lecture three hours weekly. Prerequisite: BSCI 40430. Doctoral standing.

BSCI 70144 - SELECTED READINGS IN EUKARYOTIC CELL BIOLOGY
(Cross-listed with BSCI 60144) Directed readings in cell and molecular biology from the primary and review literature will be presented and discussed by the students. Prerequisite: Doctoral standing. Corequisite: BSCI 70143.

BSCI 70146 - DEVELOPMENTAL BIOLOGY
(Cross-listed with BSCI 40146 and BSCI 50146) Fundamental concepts and paradigms of development as exemplified by major model organisms. This course will examine our modern understanding of the molecular, cellular and genetic basis of developmental biology. Prerequisite: doctoral standing.

BSCI 70150 - MOLECULAR MECHANISMS OF DISEASE: CANCER
(Cross-listed with BSCI 40150 and BSCI 50150) Explores the current understanding of molecular and cellular mechanisms of disease processes, including new technologies and modern strategies in the forefront of future biomedical research. Emphasis on a review of primary literature. Prerequisite: doctoral standing.
BSCI 70151 - MECHANISMS OF DISEASE: OBESITY AND RELATED METABOLIC DISEASES

(Cross-listed with BSCI 40151 + BSCI 50171) Addresses obesity from multiple angles, including health and disease process, underlying physiology and cell and molecular biology, and the role of behavior. Emphasis on a review of primary literature to discuss obesity causes, consequences and treatments. Prerequisite: doctoral standing.

3.00 Credit hours
3.00 Lecture hours

Levels: Graduate
Schedule Types: Lecture

BSCI 70158 - MOLECULAR BIOLOGY

(Cross-listed with BSCI 40158 and BSCI 50158) Molecular genetics, DNA and RNA structure, chromosomes, DNA replication, recombination, genetic transcription and translation, gene expression, current concepts and technologies. Prerequisite: BSCI 30156 and doctoral standing.

3.00 Credit hours
3.00 Lecture hours

Levels: Graduate
Schedule Types: Lecture

BSCI 70160 - MARINE BIOLOGY

(Cross-listed with BSCI 40160 and BSCI 50160) Natural history and ecology of marine organisms, with emphasis on life in coastal habitats. Lecture three hours weekly. Prerequisite: Doctoral standing.

3.00 Credit hours
3.00 Lecture hours

Levels: Graduate
Schedule Types: Lecture

BSCI 70162 - SOIL BIOLOGY

(Cross-listed with BSCI 40162 and BSCI 50162) The ecology and physiology of organisms that live in soil, including microbes, plants and animals. The physical and chemical aspects of soil are introduced to understand how organisms in soils impact nutrient cycles and ecosystem development. Prerequisite: doctoral standing.

3.00 Credit hours
3.00 Lecture hours

Levels: Graduate
Schedule Types: Lecture

BSCI 70163 - EVOLUTION
Discussion of the history of evolutionary theory, the evidence of evolution, the evolutionary forces and the products of those forces. Prerequisite: BSCI 30156 plus 4 hours of biology. Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biological Sciences Department

**BSCI 70170 - STREAM BIOLOGY**

(Cross-listed with BSCI 40170 and BSCI 50170) Identification, biology and ecology of stream-inhabiting organisms. Lecture two, laboratory three hours weekly. Prerequisite: BSCI 10181 and 10182. Doctoral standing.

3.000 Credit hours
2.000 Lecture hours
1.000 Lab hours

Levels: Graduate
Schedule Types: Laboratory, Lecture

Biological Sciences Department

**BSCI 70174 - IMMUNOLOGY**

(Cross-listed with BSCI 40174 and BSCI 50174) Survey of the mammalian host responses to self and non-self with emphasis on the cellular and molecular mechanisms by which innate and acquired immunity result. Experimental design and data analyses are related to current methodologies used to study immunology. Lecture three hours weekly. Prerequisite: BSCI 30171 and CHEM 10060, 10061 and 10062. Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biological Sciences Department

**BSCI 70191 - SEMINAR IN BIOLOGY**

(Repeatable for credit) Departmental seminar required of all graduate students. Prerequisite: Doctoral standing.

1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Biological Sciences Department

**BSCI 70193 - VARIABLE TITLE WORKSHOP IN BIOLOGICAL SCIENCES**

(Repeatable for credit) Topics to be offered will meet specific needs in the biological sciences. Prerequisite: Special approval and doctoral standing.

1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours
BSCI 70194 - COLLEGE TEACHING IN BIOLOGY

(Repeatable for credit) (Cross-listed with BSCI 60194) Training and experience in college teaching of biology. Maximum of 2 hours applicable toward degree. Required in all degree programs. Prerequisite: Special approval of instructor and doctoral standing.

1.000 Credit hours
1.000 Lecture hours

BSCI 70195 - SPECIAL TOPICS IN BIOLOGY

(Repeatable for credit) (Cross-listed with BSCI 40195 and BSCI 50195) Prerequisite: Special approval of instructor and doctoral standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours
2.000 TO 6.000 Lab hours

BSCI 70196 - INDIVIDUAL INVESTIGATION

(Repeatable for credit) (Cross-listed with BSCI 40196 and BSCI 50196) Prerequisite: Special approval of instructor and doctoral standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

BSCI 70272 - PLANT ANATOMY

(Cross-listed with BSCI 40272 and BSCI 50272) Development and structure of cells, tissues and tissue systems of seed plants. Both vegetative and reproductive structures of angiosperms will be emphasized. Lecture two hours, laboratory six hours weekly. Prerequisite: Doctoral standing.

4.000 Credit hours
3.000 Lecture hours
0.000 Lab hours
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Credit Hours</th>
<th>Lecture Hours</th>
<th>Lab Hours</th>
<th>Levels</th>
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<tbody>
<tr>
<td>BSCI 70341</td>
<td>STEM CELL BIOLOGY: PRINCIPLES AND APPLICATIONS</td>
<td>(Slashed with BSCI 40341 and BSCI 50341) Examination of stem cells from various tissues, molecular mechanism of stem cell differentiation, and use of stem cells in clinical applications. Prerequisite: Doctoral standing.</td>
<td>3.000</td>
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<td>Graduate</td>
<td>Lecture</td>
<td>Biological Sciences Department</td>
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<tr>
<td>BSCI 70360</td>
<td>ICHTHYOLOGY</td>
<td>(Cross-listed with BSCI 40360 and BSCI 50360) Basic biology, natural history, behavior and ecology of the fishes. Three hour lecture and three hour lab weekly. Prerequisite: doctoral standing.</td>
<td>4.000</td>
<td>3.000</td>
<td>3.000</td>
<td>Graduate</td>
<td>Combined Lecture and Lab</td>
<td>Biological Sciences Department</td>
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<tr>
<td>BSCI 70363</td>
<td>MICROBIAL ECOLOGY</td>
<td>(Cross-listed with BSCI 40363 and BSCI 50363) Microbial interactions with their biotic and abiotic environment; control of distribution and physiological activities; emphasis on bacteria in aquatic systems. Prerequisite: BSCI 30171, 30360. Doctoral standing.</td>
<td>3.000</td>
<td>3.000</td>
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<td>Graduate</td>
<td>Lecture</td>
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<tr>
<td>BSCI 70364</td>
<td>LIMNOLOGY</td>
<td>(Cross-listed with BSCI 40364 and BSCI 50364) The study of the principles of aquatic ecology with emphasis on lakes and reservoirs. Prerequisite: doctoral standing.</td>
<td>3.000</td>
<td>3.000</td>
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<td>Graduate</td>
<td>Lecture</td>
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<tr>
<td>BSCI 70368</td>
<td>WETLAND ECOLOGY AND MANAGEMENT</td>
<td>(Cross-listed with BSCI 40368 and BSCI 50368) Lecture, laboratory and field study of the principles of wetland ecology including adaptations of the biota to environmental conditions, comparison among different wetland habitat types and habitat management. Lecture 3 hours, lab 3 hours weekly. Prerequisite: Doctoral standing.</td>
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<td>Biological Sciences Department</td>
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4.000 Credit hours
3.000 Lecture hours
1.000 Lab hours

Levels: Graduate
Schedule Types: Laboratory, Lecture

Biological Sciences Department

**BSCI 70370 - ECOLOGICAL AND EVOLUTIONARY GENETICS**

(Cross-listed with BSCI 50370) Genetic and genomic approaches to studying ecology and evolution in populations and communities. Prerequisite: doctoral standing.
2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biological Sciences Department

**BSCI 70371 - EVOLUTIONARY BIOLOGY**

(Cross-listed with BSCI 50371) Theoretical and experimental approaches to studying evolution from genes to populations and communities. Prerequisite: doctoral standing.
2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biological Sciences Department

**BSCI 70372 - COMMUNITIES AND ECOSYSTEMS**

(Cross-listed with BSCI 50372) Theory and experimental approaches to studying community and ecosystem ecology. Prerequisite: doctoral standing.
2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biological Sciences Department

**BSCI 70373 - POPULATION AND COMMUNITY ECOLOGY**

(Cross-listed with BSCI 50373) Theory and experimental approaches to studying population and community ecology. Prerequisite: doctoral standing.
2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

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<tr>
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<tr>
<td>BSCI 70374</td>
<td>CONSERVATION BIOLOGY</td>
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<td>BSCI 70375</td>
<td>ENVIRONMENTAL BIOLOGY AND MANAGEMENT</td>
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<td>BSCI 70376</td>
<td>TROPICAL FIELD BIOLOGY AND CONSERVATION</td>
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<tr>
<td>BSCI 70391</td>
<td>SEMINAR IN ECOLOGY</td>
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**BSCI 70374 - CONSERVATION BIOLOGY**

(Cross-listed with BSCI 40374 and BSCI 50374) Provides a critical analysis of the factors that threaten biological diversity in the biosphere and the consequences on biological processes and quality of life. Prerequisite: BSCI 30360 and doctoral standing.

4.000 Credit hours
4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biological Sciences Department

**BSCI 70375 - ENVIRONMENTAL BIOLOGY AND MANAGEMENT**

(Cross-listed with BSCI 40375 and BSCI 50375) Introduction to current concepts in applied ecology and ecosystem management. Students will learn aspects of ecosystem management and restoration including: 1) how environmental factors affect organism survival and ecosystem structure, 2) how human impacts such as pollution, habitat fragmentation, introduction of invasive species affect ecosystems, and 3) the use of ecological principles and methods to restore and manage ecosystems. Prerequisites: doctoral standing.

4.000 Credit hours
4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biological Sciences Department

**BSCI 70376 - TROPICAL FIELD BIOLOGY AND CONSERVATION**

(Cross-listed with BSCI 40376 and BSCI 50376) Introduction to major issues in tropical ecology and conservation including the threats to the biological diversity of tropical ecosystems resulting from human activities. Students learn how to apply modern field-observation techniques to generate and test problem-solving hypotheses. Prerequisite: doctoral standing.

5.000 Credit hours
3.000 Lecture hours
6.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Biological Sciences Department

**BSCI 70391 - SEMINAR IN ECOLOGY**

(Repeatable for credit) (Cross-listed with BSCI 60391) Seminar on topics in animal and plant ecology. Credits earned may be applied to degree if department approves. Prerequisite: Special approval of instructor and doctoral standing.

1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Biological Sciences Department
**BSCI 70431 - NEUROENDOCRINOLOGY**

Role of the central nervous system in the regulation of hormonal and vegetative functions; structure function relationships between brain and pituitary with modern views of neuroendocrine regulation. Methods for study of neuroendocrine relationships is discussed. Prerequisite: doctoral standing.

2.000 Credit hours  
2.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture  

Biological Sciences Department

**BSCI 70432 - ENDOCRINOLOGY**

(Cross-listed with BSCI 40432 and BSCI 40432) Principles of endocrine regulation of physiological and metabolic processes. Morphological and functional interrelationships between systems. Lecture three hours weekly. Prerequisite: BSCI 40430 and doctoral standing.

3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture  

Biological Sciences Department

**BSCI 70433 - MAMMALIAN PHYSIOLOGY I**

Physiology of the endocrine, nervous, and reproductive systems. Prerequisite: doctoral standing.

3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture  

Biological Sciences Department

**BSCI 70434 - MAMMALIAN PHYSIOLOGY II**

Physiology of cardiovascular, renal, respiratory and digestive systems. Lecture three hours. Prerequisite: doctoral standing.

3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture  

Biological Sciences Department

**BSCI 70450 - BIOLOGICAL CLOCKS**

(Cross-listed with BSCI 40450 and BSCI 50450) Topics covered include the characteristics of biological clocks, their ecology, molecular biology, and neurobiology, the function and organization of sleep, and the medical implications of biological rhythmicity. Students enrolling at the graduate level should have some background in neurobiology and genetics. Prerequisite: doctoral standing. Corequisite: BSCI 70451.

2.000 Credit hours  
2.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture

Biological Sciences Department

**BSCI 70451 - CURRENT TOPICS IN BIOLOGICAL CLOCKS RESEARCH**

(Cross-listed with BSCI 50451) Discussion of current research literature in the area of research on biological clocks. Prerequisite: doctoral standing. Corequisite: BSCI 70450.
1.000 Credit hours
1.000 Lecture hours

Levels: Graduate
Schedule Types: Seminar

Biological Sciences Department

**BSCI 70491 - SEMINAR IN PHYSIOLOGY**

(Repeatable for credit) (Cross-listed with BSCI 60491) Credits may be applied toward degree if department approves. Prerequisite: Special approval of instructor and doctoral standing.
1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Biological Sciences Department

**BSCI 70515 - ANIMAL BEHAVIOR**

Explores the evolution of various animal behaviors, the functions they might serve, and the interplay among the social, ecological and physiological mechanisms that regulate their occurrence. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biological Sciences Department

**BSCI 70517 - MEDICAL HISTOLOGY**

(Cross-listed with BSCI 40517 and BSCI 50517) Study of the microscopic and submicroscopic structure of the mammalian body in relation to function. Lecture two hours laboratory three hours weekly. Prerequisite: 4 hours of biology. Doctoral standing.
3.000 Credit hours
2.000 Lecture hours
3.000 Lab hours

Levels: Graduate
Schedule Types: Laboratory, Lecture

Biological Sciences Department
BSCI 70519 - HORMONES AND BEHAVIOR

(Cross-listed with BSCI 40519 and BSCI 70519) Current concepts of hormone and behavior interactions across species. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biological Sciences Department

BSCI 70520 - BEHAVIORAL EVOLUTION

(Cross-listed with BSCI 40520 and BSCI 50520) Examination of how behavior contributes to survival and reproduction in an ecological context. We consider how behavior may have evolved in a wide range of animals. Students enrolled at the graduate level will be expected to have had a course in evolution. Prerequisites: doctoral standing and special approval. Corequisite: BSCI 70522.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biological Sciences Department

BSCI 70522 - READINGS IN BEHAVIORAL EVOLUTION

(Cross-listed with BSCI 50522) Graduate reading course designed to give experience leading discussions and writing proposals. Students enrolled at the graduate level will be expected to have had a course in evolution. Prerequisites: doctoral standing and special approval. Corequisite: BSCI 70520.
1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Biological Sciences Department

BSCI 70525 - WILDLIFE RESOURCES

(Cross-listed with BSCI 40525 and BSCI 50525) Ecological parameters are discussed relative to the preservation and management of wild animal populations. Aesthetic economic and environmental values are discussed. Lecture three hours weekly. Prerequisite: 4 hours of biology. Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biological Sciences Department

BSCI 70556 - VERTEBRATE ZOOLOGY

(Cross-listed with BSCI 40556 and BSCI 50556) Field approach to identification and natural history of all Ohio vertebrates except birds. Lecture three hours laboratory and field three hours weekly. Prerequisite: plus 4 hours of biology. Doctoral standing.
BSCI 80145 - MEDICAL GENOMICS

(Cross-listed with BSCI 60145) Explores the relationship and contribution of genetics and genomics to healthcare issues, including disease susceptibility and therapeutic efficacy. Up-to-date genomics concepts and their applications to health care and the challenges of personalized medicine including genetic analyses (e.g., linkage and estimating population risks), ethical issues in genetic testing and therapy, genetic basis of disease processes (e.g., neurological, cardiovascular and neoplastic diseases) and epigenetic processes (that may link the environment to the risk of chronic diseases) are covered. This course requires an understanding of genetics and physiology; students should contact the Department of Biological Sciences to determine if they have the requisite prior training. Prerequisites: doctoral standing and special approval.

Levels: Graduate
Schedule Types: Laboratory, Lecture

Biological Sciences Department

BSCI 80198 - RESEARCH

(Repeatable for credit) Research or individual investigation for doctoral students who have not yet passed candidacy examination. Prerequisite: Doctoral standing.

Levels: Graduate
Schedule Types: Research

Biological Sciences Department

BSCI 80199 - DISSERTATION I

(Repeatable for credit) Doctoral dissertation, for which registration in at least two semesters is required first of which will be semester in which dissertation work is begun and continuing until the completion of 30 hours. Prerequisite: Special approval and doctoral standing.

Levels: Graduate
Schedule Types: Dissertation

Biological Sciences Department

BSCI 80299 - DISSERTATION II

(Repeatable for credit) Continuing registration of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. Prerequisite: BSCI 80199 and doctoral standing.
BSCI 80462 - NEUROBIOLOGY: SYSTEMS AND BEHAVIOR

(Slashed with BSCI 60462; Cross-listed with BMS 60462 and BMS 70462) Provides broad coverage of the parts of the central nervous systems and how they integrate sensory information, drive motor function and regulate behavior. Prerequisite: BMS 60729 or BMS 70729; and doctoral standing.

4.000 Credit hours
4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biological Sciences Department

BST 50196 - INDIVIDUAL INVESTIGATION IN BIOSTATISTICS

(repeatable for maximum 6 credits) Individual graduate investigation or research in areas related to biostatistics. Prerequisite: graduate standing and special approval.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Biostats/Enviro Health/Epidem Department

BST 52019 - BIOSTATISTICS IN PUBLIC HEALTH

Provides students with an understanding of basic statistical methods in public health research, as well as the skills to perform and interpret basic statistical procedures. Students learn how to use statistical analysis software to analyze real data from public health-related studies. They then learn how to interpret the analysis and present the results to public health professionals and educated lay audiences. Includes lab component which enhances student awareness and informed usage of SAS for public health analysis. Students learn how to input, read, store, export, and modify data in SAS and be able to use common SAS procedures to analyze public health data and conduct independent SAS programming. Prerequisite: graduate standing.

4.000 Credit hours
3.000 Lecture hours
1.000 Lab hours

Levels: Graduate
Schedule Types: Laboratory, Lecture

Biostats/Enviro Health/Epidem Department

BST 60191 - VARIABLE CONTENT SEMINAR IN BIOSTATISTICS

(Repeatable for credit) Seminar on current and important topics in biostatistics. Subject matter varies depending on the topic. Prerequisites: Graduate standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours
**BST 60192 - PRACTICUM EXPERIENCE IN BIOSTATISTICS**

Observational and participation in public health activities of a public health agency, hospital or other approved organization. The student completes the field experience with joint supervision from the university and approved organization or agency. Prerequisites: graduate standing and special approval.

- 6.000 Credit hours
- 20.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Biostats/Enviro Health/Epidem Department

**BST 60195 - SPECIAL TOPICS IN BIOSTATISTICS**

(Repeatable for a maximum of 6 credit hours) Special topics to sample new offerings on topics in biostatistics. Prerequisites: Graduate standing.

- 1.000 TO 3.000 Credit hours
- 1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Practicum or Internship

Biostats/Enviro Health/Epidem Department

**BST 63012 - SURVIVAL ANALYSIS IN PUBLIC HEALTH**

Introduction in survival analysis for graduate students in public health. Covers survival functions, hazard rates, types of censoring and truncation. Methods of focus include life tables, Kaplan-Meier plots, log-rank tests, Cox regression models and parametric survival models. Inference for recurrent event and competing risks models are also covered. Prerequisites: BST 52019 and 63014; and graduate standing.

- 3.000 Credit hours
- 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biostats/Enviro Health/Epidem Department

**BST 63013 - EXPERIMENTAL DESIGNS IN PUBLIC HEALTH RESEARCH**

Introduces students to experimental research methods, in public health settings. First introduces a number of quasi-experimental and experimental study designs, then identifies a number of statistical methods that can be used to draw correct causal inferences from the study. Prerequisite: BST 52019 and 63014; and graduate standing.

- 3.000 Credit hours
- 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
**BST 63014 - APPLIED REGRESSION ANALYSIS OF PUBLIC HEALTH DATA**

(Cross-listed with BST 83014) Focuses on developing student proficiency in building and evaluating various regression models for public health studies. Topics covered include exploratory and descriptive methods, simple and multiple linear regression models, predictor selection, binary and multinomial logistic regression models, survival analysis, repeated measures and generalized linear models. Prerequisite: BST 52019 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

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**BST 63015 - CATEGORICAL DATA ANALYSIS OF PUBLIC HEALTH DATA**

(Cross-listed with BST 83015) Provides an applied introduction to the most important methods for analyzing categorical data in public health. Topics covered include contingency tables, logistic regression, generalized linear models, modeling matched pairs and clustered responses. Prerequisites: BST 52019 and EPI 52017; and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

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**BST 73010 - QUALITATIVE METHODS FOR PUBLIC HEALTH RESEARCH**

Surveys major methods of qualitative research and explores issues and applications in public health, including integrating qualitative and quantitative methods. Approaches examined include: Ethnography; grounded theory; phenomenology; focus groups; narrative analysis; and Photovoice. Community-Based Participatory Research is explored as an approach for conducting qualitative research in public health. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

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**BST 73011 - MULTIVARIATE ANALYSIS IN PUBLIC HEALTH**

Multivariate statistical methods are designed to evaluate more than one variable at a time. An application-oriented introduction to essential multivariate statistical methods used in public health. Topics covered include matrix theory, data screening and preliminary analyses, multivariate normal distributions, multivariate versions of the general linear model (MANOVA, multivariate multiple regression, MANCOVA), discrimination and classification, canonical correlation analysis, and methods of analyzing covariance and correlation structures (principal components and factor analysis). Also introduces and explores methods of handling missing data. Prerequisite: BST 52019 and doctoral standing.
3.000 Credit hours
3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture

Biostats/Enviro Health/Epidem Department

**BST 83012 - SURVIVAL ANALYSIS IN PUBLIC HEALTH**

Covers survival functions, hazard rates, types of censoring and truncation. Methods of focus include life tables, Kaplan-Meier plots, log-rank tests, Cox regression models and parametric survival models. Inference for recurrent event and competing risks models are also covered. Prerequisite: BST 52019; and BST 63014 or 83014; and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biostats/Enviro Health/Epidem Department

**BST 83013 - EXPERIMENTAL DESIGNS IN PUBLIC HEALTH RESEARCH**

Designed to introduce students to experimental research methods, in public health settings. First introduces a number of quasi-experimental and experimental study designs, then identifies a number of statistical methods that can be used to draw correct causal inferences from the study. Students are expected to develop two research proposals, first using quasi-experimental then an experimental design and develop a statistical analysis plan for each study. Prerequisite: BST 52019; and BST 63014 or 83014; and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biostats/Enviro Health/Epidem Department

**BST 83014 - APPLIED REGRESSION ANALYSIS OF PUBLIC HEALTH DATA**

(Cross-listed with BST 63014) Focuses on developing student proficiency in building and evaluating various regression models for public health studies. Topics covered include exploratory and descriptive methods, simple and multiple linear regression models, predictor selection, binary and multinomial logistic regression models, survival analysis, repeated measures and generalized linear models. Prerequisite: BST 52019 and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biostats/Enviro Health/Epidem Department

**BST 83015 - CATEGORICAL DATA ANALYSIS OF PUBLIC HEALTH DATA**

(Cross-listed with BST 63015) Provides an applied introduction to the most important methods for analyzing categorical data in public health. Topics covered include contingency tables, logistic regression, generalized linear models, modeling matched pairs, mixed models for categorical data and clustered responses. Prerequisites: BST 52019 and EPI 52017; and doctoral standing

3.000 Credit hours
BTEC 10210 - INTRODUCTION TO BIOTECHNOLOGY

Basic principles and applications of modern biotechnology, including recombinant DNA technology, microbial technology, fermentation, genetic engineering, plant and animal tissue culture and medical biotechnology. Lecture three hours weekly. Prerequisite: BSCI 10120.

Levels: Undergraduate
Schedule Type: Lecture

Arts and Sciences Department

BTEC 40191 - SEMINAR: RECENT DEVELOPMENTS IN BIOTECHNOLOGY

Recent developments in biotechnology explored through the presentation and discussion of research articles and reviews in the biotechnology literature. Prerequisite: BTEC 10210; BSCI 30140, 30171, 30156; CHEM 30284.

Levels: Undergraduate
Schedule Type: Seminar

Arts and Sciences Department

BTEC 40192 - INTERNSHIP IN BIOTECHNOLOGY

(Repeatable for credit) Work experience in a biotechnology laboratory. Registration requires approval of program director and is dependent on availability of internship sites. Written report of activities required. Prerequisite: Biotechnology (BTEC) major.

Levels: Undergraduate
Schedule Type: Practicum or Internship

Arts and Sciences Department

BTEC 40196 - INDIVIDUAL INVESTIGATION IN BIOTECHNOLOGY

(Repeatable for credit) Research experience in biotechnology. Registration requires approval of program director and research director. Written report required. Prerequisite: Biotechnology (BTEC) major.

Levels: Undergraduate
Schedule Type: Individual Investigation

Arts and Sciences Department
**BTEC 40210 - CASE STUDIES IN BIOTECHNOLOGY**

Case studies used to explore biotechnology practice and the application of various technologies in industry and medicine. Emphasis placed on developing problem solving, information gathering, inductive reasoning and technical communication skills. Prerequisite: BTEC 10210; BSCI 30140, 30171, 30156, 40158; CHEM 30284, 40248.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture  
Arts and Sciences Department

Course Attributes:  
Writing Intensive Course

**BTEC 40220 - BIOINFORMATICS**

Analysis of biological databases, including nucleic acid and protein sequence searching, multiple sequence alignment, protein classification, phylogenetic analysis, comparative genomics, proteomics, protein structure analysis. Prerequisites: BSCI 30140 and BSCI 30156 and BSCI 40158.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture  
Arts and Sciences Department

**BUS 10123 - EXPLORING BUSINESS**

(Equivalent to BMRT 11000) An introduction to the basic areas of business with an integrated perspective on how the various areas work together. Technological competencies and communicative skills will be developed. Team building opportunities will be announced. This course is open to any major. This course should be taken sometime during student's first 30 semester hours. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture  
Business Administration Department

**BUS 10195 - SPECIAL TOPICS**

(Repeatable for credit) Special topics course that will be offered on a semester basis with different topics and different faculty. Prerequisite: Permission.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture  
Business Administration Department
**BUS 20192 - INTERNSHIP IN BUSINESS**

(Repeatable for credit) Preparation of research report concurrent with on-the-job experience with cooperating business or other organization. Prerequisite: Permission.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Business Administration Department

Course Attributes:
Experiential Learning Requirem

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**BUS 20195 - SPECIAL TOPICS**

(Repeatable for credit) Special topics course that will be offered on a semester basis with different topics and different faculty. Prerequisite: Permission.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Division Undeclared Division
Business Administration Department

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**BUS 20293 - VARIABLE TITLE WORKSHOP IN BUSINESS**

(Repeatable for credit) Variable topics. Prerequisite: None.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Workshop

Business Administration Department

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**BUS 30061 - BUSINESS PROFESSIONAL PRACTICES**

The purpose of this course is to help students develop appropriate approaches to oral communications given organizational cultures and hierarchies, proper business etiquette (regarding dress, dining and behaviors) and other professional business acumen. This course is linked with ENG 30061. Therefore, students must be registered for the matching section of ENG 30061. Prerequisites: BUS 10123, COMM 15000, ENG 11011 and ENG 21011. Corequisite: ENG 30061.

1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Business Administration Department

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**BUS 30195 - SPECIAL TOPICS**
BUS 30234 - INTERNATIONAL BUSINESS

Learn how international business is affected by the forces of globalization: opportunities, threats and challenges that ensue from hypercompetition, and the institutional checks and balances necessary to prevent complexity deteriorating into chaos. Prerequisite: ECON 22060 and ECON 22061.

3.000 Credit hours
3.000 Lecture hours

BUS 40192 - INTERNSHIP IN BUSINESS

(Repeatable for credit) Preparation of research report concurrent with on-the-job experience with cooperating business or other organization. Prerequisite: Permission.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

BUS 40195 - SPECIAL TOPICS

(Repeatable for credit) Special topics course that will be offered on a semester basis with different topics and different faculty. Prerequisite: Permission.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

CA 10195 - SPECIAL TOPICS IN THE COLLEGE OF THE ARTS

(Repeatable for credit) This program, administered by the dean, is intended to encourage interdisciplinary study, to cover areas not treated adequately in the standard course and to make available promptly the new and significant experience of the faculty. Requests for the scheduling of these courses are made by faculty members or students to the sponsoring school or to the dean. The schools concerned clear the proposed course with the Curriculum Committee of the college. Prerequisite: none.
CA 20000 - PERFORMING ARTS I

An inter-arts course introducing expressive materials, representative literature and historical contexts of major dance, music and theatre styles with appropriate reference to other art forms. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

College of the Arts Department

CA 20001 - PERFORMING ARTS II

Continuation of Performing Arts I. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

College of the Arts Department

CA 20295 - SPECIAL TOPICS IN THE COLLEGE OF THE ARTS

(Repeatable for credit) This program, administered by the dean, is intended to encourage interdisciplinary study, to cover areas not treated adequately in the standard course and to make available promptly the new and significant experience of the faculty. Requests for the scheduling of these courses are made by faculty members or students to the sponsoring school or to the dean. The schools concerned clear the proposed course with the Curriculum Committee of the college. Prerequisite: none.
1.000 TO 5.000 Credit hours
1.000 TO 5.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

College of the Arts Department

CA 30395 - SPECIAL TOPICS IN THE COLLEGE OF THE ARTS

(Repeatable for credit) This program, administered by the dean, is intended to encourage interdisciplinary study, to cover areas not treated adequately in the standard course and to make available promptly the new and significant experience of the faculty. Requests for the scheduling of these courses are made by faculty members or students to the sponsoring school or to the dean. The schools concerned clear the proposed course with the Curriculum Committee of the college. Prerequisite: none.
1.000 TO 5.000 Credit hours
1.000 TO 5.000 Lecture hours

Levels: Undergraduate
**CA 40493 - VARIABLE TITLE WORKSHOP IN THE COLLEGE OF THE ARTS**

(Repeatable for credit) Workshop setting dealing with topics within the College of the Arts. Prerequisite: none.
1.000 TO 5.000 Credit hours
1.000 TO 5.000 Other hours

Levels: Undergraduate
Schedule Types: Workshop

College of the Arts Department

**CA 40495 - SPECIAL TOPICS IN THE COLLEGE OF THE ARTS**

(Repeatable for credit) This program, administered by the dean, is intended to encourage interdisciplinary study, to cover areas not treated adequately in the standard course, and to make available promptly the new and significant experience of the faculty. Requests for the scheduling of these courses are made by faculty members or students to the sponsoring school or to the dean. The schools concerned clear the proposed course with the Curriculum Committee of the college. Prerequisite: none.
1.000 TO 5.000 Credit hours
1.000 TO 5.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

College of the Arts Department

**CA 41495 - SPECIAL TOPICS IN THE COLLEGE OF THE ARTS**

(Repeatable for credit) This program, administered by the dean, is intended to encourage interdisciplinary study, to cover areas not treated adequately in the standard course, and to make available promptly the new and significant experience of the faculty. Requests for the scheduling of these courses are made by faculty members or students to the sponsoring school or to the dean. The school concerned clears the proposed course with the College Curriculum Committee. Prerequisite: none.
1.000 TO 5.000 Credit hours
1.000 TO 5.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

College of the Arts Department

**CACM 11001 - INTRODUCTION TO CONFLICT MANAGEMENT**

Introduces key elements of conflict management theory and practice such as active listening, assertion, collaborative problem solving, principled negotiation, mediation and nonviolent conflict intervention. These are essential "life skills" useful in personal, social and professional contexts. Includes conflict communication skills development and practice. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
CACM 21002 - GENDER, POWER AND CONFLICT

Examines gender roles and power imbalances in interpersonal relationships and the violence that often results, considering some of the ways in which these imbalances are developed, maintained and addressed. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

CACM 21010 - CROSS-CULTURAL CONFLICT MANAGEMENT

Examines cultural components of conflict in diverse settings with special emphasis on the nature and sources of cross-cultural conflict, conflict escalation and de-escalation, and power disparity. Conflict resolution techniques in tune with the cultural values of the parties in conflict are focused upon. Students examine their own cultural assumptions in order to better understand the effect of culture on conflict. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

CACM 22020 - INTERNATIONAL CONFLICT RESOLUTION

Provides a wide view of the main theories on causes, expressions and consequences of international conflicts, and explores differing mechanisms for their prevention, resolution and management. Students learn how and why international conflicts appear and progress and learn recent developments on early warning methods, negotiation techniques and peacekeeping and peacebuilding practices. Conflicts covered include international and civil wars as well as topics such as international terrorism. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

CACM 30000 - MAY 4 1970 AND ITS AFTERMATH

Study of the events of the 1960s in the US leading up to May 4, 1970 when the Ohio National Guard killed and wounded KSU students protesting the US war in Vietnam and Cambodia. Topics are considered within their
cultural, historical, social and political contexts. Also examines the aftermath of May 4th, including the controversy over constructing the Gym Annex on the May 4th site, the legal trials, the role of commemorations and memorials and the politics of remembering May 4, 1970. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Ctr for Applied Conflict Mgmt Department

**CACM 31003 - NONVIOLENCE: THEORY AND PRACTICE**

Social conflicts can be intensified and waged in a constructive manner through nonviolent action. Examines how nonviolent action methods bring about social and political change. Explores the theory and philosophy underlying strategies of nonviolent action. Utilizes a wide variety of historical and contemporary case examples of nonviolent struggles from across the globe. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Ctr for Applied Conflict Mgmt Department

**CACM 31010 - CONFLICT THEORY**

Explores the theoretical foundations of conflict and conflict management to provide a greater understanding of the nature, sources and dynamics of various types of conflict, the special challenges faced in addressing those conflicts, and the theory underlying various approaches to conflict management and resolution. Prerequisite: CACM 11001.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Ctr for Applied Conflict Mgmt Department

**CACM 32020 - STRATEGIC PLANNING**

Provides training in the principles and tactics of strategic planning for individuals, organizations, agencies and institutions. Students learn to apply the principles of conflict management to strategic planning, including assessing the current environment, developing goals and objectives and establishing a timeline for acting on a strategic plan. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Ctr for Applied Conflict Mgmt Department

**CACM 33030 - CONFLICT IN THE WORKPLACE**

Explores the causes, impact and dynamics of conflict in the workplace. Issues explored include personality conflict, incivility, ethics, teams, management style, diversity, legal issues, alternative dispute resolution, union
CAML 34040 - NEGOTIATION

Effective negotiation skills are essential for success in both our professional and personal lives. This course explores in an engaging and interactive way negotiation theories, strategies and techniques. Students will enhance their negotiation skills by learning to plan for an effective negotiation, to elicit information effectively, to build relationships, to improve their communication and persuasive abilities and to deal with a variety of situations and circumstances. There will be several opportunities to practice negotiation skills in class, to experiment with different approaches, and to develop the skills and confidence to be able to negotiate effectively and constructively. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

CAML 35050 - ENVIRONMENTAL CONFLICT RESOLUTION

Examines alternative dispute resolution principles applicable to complex, multi-party public sector disputes, especially environmental and land use disputes. Students learn about deliberative democracy, a variety of circle processes, consensus decision-making, collaborative problem-solving, digital dialogue processes, and town hall meeting structures among others. Case studies of environmental conflicts and multi-party mediation simulations are used. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

CAML 35092 - INTERNSHIP IN CONFLICT MANAGEMENT

(Repeatable for a total of 12 hours). Students work as interns with an organization, group, or business, utilizing and enhancing their skills in conflict management. Three hours of internship is required for the Applied Conflict Management major and is an elective for the Applied Conflict Management minor. Prerequisite: junior standing; completion of two upper-division CAML courses; and special approval.

1.000 TO 9.000 Credit hours
3.000 TO 27.000 Other hours

Course Attributes:
Experiential Learning Requirem
## CACM 35095 - SPECIAL TOPICS IN CONFLICT MANAGEMENT
(Repeatable for credit) Designed to provide an in-depth examination of topics and issues of interest to faculty and students. Specific topics are announced in the Schedule of Classes and on the Center for Applied Conflict Management's web site. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

Ctr for Applied Conflict Mgmt Department

## CACM 36096 - INDIVIDUAL INVESTIGATION IN CONFLICT MANAGEMENT
(Repeatable for credit) Individualized program of study and literature review in area of particular interest to the student. Prerequisites: junior standing, two upper-division CACM courses, and special approval.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate  
Schedule Types: Individual Investigation

Ctr for Applied Conflict Mgmt Department

## CACM 38080 - MEDIATION: THEORY AND TRAINING
Examines the historical development of mediation. Teaches mediation skills necessary to become a practicing mediator. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

Ctr for Applied Conflict Mgmt Department

## CACM 41004 - CAPSTONE IN APPLIED CONFLICT MANAGEMENT
Reviews, integrates and facilitates reflection on concepts and skills central to applied conflict management in order to prepare for a career in the field. Core review topics include: conflict analysis; sources and dynamics of conflicts; gender and power in relationships; reflective listening and constructive assertions; principled negotiation; intervention and mediation best practices; reconciliation and conflict transformation; nonviolent action and social change. Students must develop a personally meaningful yet accurate conceptual map of the field. Career development aspects include: creating a career plan; writing a resume; creating a job search strategy and developing job interviewing skills; learning professional networking and marketability tactics; and interacting with CACM alumni and other professionals working in the field. Prerequisites: Completion of 21 CACM course credits, 18 of which must be from the core CACM requirements. Of those 18, CACM 31010 must be completed and CACM 35092 must be either completed or in progress; and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

Ctr for Applied Conflict Mgmt Department
CACM 41010 - RECONCILIATION VERSUS REVENGE: TRANSITIONAL JUSTICE

"Transitional justice" refers to civil and political processes used to move from violence and tyranny to peace and democracy. War crimes tribunals, truth and reconciliation commissions, apologies, forgiveness, reparations and memorials will be examined. Prerequisite: CACM 22020 and 1 upper-division CACM course; and junior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Ctr for Applied Conflict Mgmt Department

Course Attributes:
Diversity Course-Global, Writing Intensive Course

CACM 42020 - QUALITATIVE RESEARCH IN CONFLICT MANAGEMENT

An overview of qualitative research methods used to gather and analyze data in conflict management. Gives students experience in collecting and analyzing data and writing a major research paper. Prerequisites: CACM 11001 and two upper-division CACM courses; and junior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Ctr for Applied Conflict Mgmt Department

Course Attributes:
Writing Intensive Course

CACM 45093 - VARIABLE TOPIC WORKSHOP IN CONFLICT MANAGEMENT

(Repeatable for a total of 6 credit hours) Variable topic offered as need arises. Specific topics will be announced in the schedule of classes. Prerequisite: special approval.

1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Undergraduate
Schedule Types: Workshop

Ctr for Applied Conflict Mgmt Department

CACM 49091 - VARIABLE TITLE SEMINAR IN CONFLICT MANAGEMENT

(Repeatable for a total of 3 credit hours) Seminar devoted to detailed study of various topics in the field of conflict management. Specific topics are announced in Schedule of Classes and on the Center for Applied Conflict Management's website. Prerequisite: Junior standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

Ctr for Applied Conflict Mgmt Department
### CADT 21092 - ANIMATION AND GAME DESIGN PRACTICUM

(Repeatable for a maximum of 6 credit hours) Supervised work experience. One credit hour for 50 work hours. Prerequisite: none.

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<th>Credit hours</th>
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Levels: Undergraduate  
Schedule Types: Practicum or Internship  
Regional College Department  
Course Attributes: Experiential Learning Requirem

### CADT 22000 - ADVANCED CAD

The use of advanced concepts and techniques of computer-aided drafting and design and related productivity improvement tools for two-and three-dimensional drawings. Prerequisite: IERT 12005.

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Levels: Undergraduate  
Schedule Types: Lecture  
Regional College Department

### CADT 22001 - CAD:ARCHITECTURE

Comprehensive study of the use of a popular computer-aided drafting package for architectural design, including systems management methods and project planning concept. Prerequisite: IERT 12005.

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Levels: Undergraduate  
Schedule Types: Lecture  
Regional College Department

### CADT 22002 - CAD:CIVIL APPLICATIONS

A course on the use of computer-aided drafting and design for civil engineering applications. Prerequisite: None.

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Levels: Undergraduate  
Schedule Types: Lecture  
Regional College Department

### CADT 22003 - SOLID MODELING

Construction given in the best usage approaches for parametric design philosophy through a hands-on, practice-intensive curriculum. Students acquire the knowledge needed to complete the process of designing models from conceptual sketching, through to solid modeling, assembly design and drawing production. Prerequisite: none.
CADT 22004 - COMPUTER ANIMATION AND GAMING

3D modeling and computerized techniques. Introduction to the basic concepts, terminology and techniques of 3D modeling, lighting, shading, imaging and animation. Prerequisite: CADT 22007 and CADT 22008.

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

CADT 22005 - MULTIMEDIA AND GAME DESIGN

Covers the creation of interactive multimedia presentations. Development of flowcharts, roughs and interactive navigation systems. Integration of images, animation, video, sound and custom code for the creation of an interactive multimedia presentation. Prerequisite: none.

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

CADT 22007 - 3-D MODELING PROJECT

A guided project course in 3-D modeling for computer animation and game design. Prerequisite: CADT 22005.

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

CADT 22008 - PROJECT IN TEXTURE AND MATERIAL CREATION

A guided project course in texture and material creation for computer animation and game design. Prerequisite: CADT 22007.

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department
CADT 22009 - APPLIED ENGINEERING SOFTWARE

A course on the use of the computer as a problem solving tool for applications in engineering and manufacturing. Emphasis is on the use of productivity software training on the use of the software applicable to engineering problems using hands-on workshop formats. Prerequisite: none.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Regional College Department

CADT 22095 - SPECIAL TOPICS IN COMPUTER ANIMATION AND GAME DESIGN TECHNOLOGY

(Repeatable for credit) Special topics in Computer Animation and game design. Repeated registration permitted. Prerequisite: none.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

CCI 10095 - SPECIAL TOPICS IN COMMUNICATION AND INFORMATION

(Repeatable for credit) Interdisciplinary and/or collaborative learning experiences in areas not covered by traditional coursework. Prerequisite: none.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

College of Comm and Info Department

CCI 10195 - SELECTED TOPICS IN COMMUNICATION AND INFORMATION

(Repeatable for credit) Interdisciplinary and-or collaborative learning experiences in areas not covered by traditional coursework. Prerequisite: none.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

College of Comm and Info Department

CCI 40095 - SPECIAL TOPICS IN COMMUNICATION AND INFORMATION

(Repeatable for credit) (Cross-listed with CCI 50095) Interdisciplinary and/or collaborative learning experiences in areas not covered by traditional coursework. Prerequisite: none.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture

College of Comm and Info Department

CCI 50095 - SPECIAL TOPICS IN COMMUNICATION AND INFORMATION

(Repeatable for credit) (Cross-listed with CCI 40095) Interdisciplinary and/or collaborative learning experiences in areas not covered by traditional coursework. Prerequisite: graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

College of Comm and Info Department

CCI 60001 - INTRODUCTION TO RESEARCH IN COMMUNICATION AND INFORMATION

(Cross-listed with CCI 80001) Overview of the process of engaging in empirical research in communication and information: defining the problem, conceptualizing key components, choosing a research method, analyzing results and reporting conclusions. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

College of Comm and Info Department

CCI 60095 - SPECIAL TOPICS IN COMMUNICATION AND INFORMATION

(Repeatable for credit) (Cross-listed with CCI 80095) Interdisciplinary and/or collaborative learning experiences in areas not covered by traditional coursework. Prerequisite: graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

College of Comm and Info Department

CCI 80000 - FOUNDATIONS OF COMMUNICATION AND INFORMATION INQUIRY

Introduction to epistemological foundations of the CCI disciplines, theory construction and academic writing for the CCI PhD. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

College of Comm and Info Department

CCI 80001 - INTRODUCTION TO RESEARCH IN COMMUNICATION AND INFORMATION

(Cross-listed with CCI 80001) Overview of the process of engaging in empirical research in communication and information: defining the problem, conceptualizing key components, choosing a research method, analyzing results and reporting conclusions. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

College of Comm and Info Department
Overview of the process of engaging in empirical research in communication and information: defining the problem, conceptualizing key components, choosing a research method, analyzing results and reporting conclusions. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

College of Comm and Info Department

**CCI 80094 - COLLEGE TEACHING IN COMMUNICATION AND INFORMATION**

Training and investigation of best practices for collegiate instruction: course development, classroom performance, evaluation and reflection, introduction to instructional research. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

College of Comm and Info Department

**CCI 80095 - SPECIAL TOPICS IN COMMUNICATION AND INFORMATION**

(Repeatable for credit) (Cross-listed with CCI 80095) Interdisciplinary and/or collaborative learning experiences in areas not covered by traditional coursework. Prerequisite: doctoral standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

College of Comm and Info Department

**CCI 80096 - INDIVIDUAL INVESTIGATION IN COMMUNICATION AND INFORMATION**

(Repeatable with the approval of the student's advisor for a maximum of 6 credit hours) Independent study of area or problem to be selected in consultation with doctoral faculty. Prerequisite: doctoral standing and special approval.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

College of Comm and Info Department

**CCI 80199 - DISSERTATION I**

(Repeatable for credit) Doctoral dissertation for which registration in at least two semesters is required, first of which will be semester in which dissertation work is begun and continuing until the completion of 30 hours. Prerequisite: doctoral standing.

15.000 Credit hours
15.000 Other hours

Levels: Graduate
CCI 80299 - DISSERTATION II

(Repeatable for credit) Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. Prerequisites: CCI 80199 or COMM 80199; and doctoral standing.
15.000 Credit hours
15.000 Other hours

Levels: Graduate
Schedule Types: Dissertation

CCI 85098 - RESEARCH IN COMMUNICATION AND INFORMATION

(Repeatable for credit) Research or individual investigation for doctoral students who have not yet passed their candidacy examination. Credits may be applied toward degree if doctoral supervisory committee and CCI College Doctoral Program Policy Committee approve. Prerequisite: doctoral standing.
1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

CS 00005 - COLLEGE ORIENTATION

This course introduces students to the expectations and responsibilities of being a college student. Students will be provided with valuable information of the resources and activities available at Kent State. Students will explore personal values, skills, abilities, and beliefs, and learn how to set academic goals that will guide them throughout their college experience. Satisfactory/unsatisfactory (S/U) graded. Prerequisite: Career and Community Studies (CCS) major; and special approval.
1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

CS 00010 - PERSONAL EXPLORATION I: NUTRITION AND PHYSICAL FITNESS

This course focuses on the importance of nutrition and physical exercise in order to take care of and to improve upon one’s personal health needs. Prerequisite: Career and Community Studies (CCS) major.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department
CCS 00015 - ACADEMIC EXPERIENCE I: DISABILITY AWARENESS

This course promotes development of self-awareness through identifying personal strengths and needs, and self-advocacy skills through various methods of communication. Students will learn of their rights, responsibilities, and of the disabilities laws that help them to advocate for necessary supports. Prerequisite: Career and Community Studies (CCS) major.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

CCS 00020 - TECHNOLOGY LABORATORY I

This course is an introduction to the uses of Flashline, BlackBoard Learn, and Microsoft Word to enhance student academic performance. Prerequisite: Career and Community Studies (CCS) major.

1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Lifespan Dev and Educ Sciences Department

CCS 00025 - FINANCIAL LITERACY I

This introductory course will provide the student with an opportunity to develop attitudes and skills to achieve personal financial wellness and satisfaction. Topics include setting up a budget, identifying where one might save money in daily living, calculating wages and understanding federal, state, and local taxes. Prerequisite: Career and Community Studies (CCS) major.

1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

CCS 00030 - PHYSICAL EDUCATION I

Students will participate in a sport or physical fitness activity in order to learn more about the topic of interest and to increase personal health. Students will practice appropriate personal and social skills, and demonstrate abilities to manage course responsibilities. Prerequisite: Career and Community Studies (CCS) major.

1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Lifespan Dev and Educ Sciences Department

CCS 00035 - HEALTH AND WELLNESS I: PERSONAL SOCIAL SKILLS

Effective communication enhances personal, family, and community health. Select personal and social skills are
presented in order to improve the health of the student. The student will participate in activities that allow them to practice and perform skills both in and outside of the classroom. The student creates a portfolio of course assignments for evaluation. Prerequisite: Career and Community Studies (CCS) major.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**CCS 00105 - INTRODUCTION TO CAREER EXPLORATION**

Students begin the exploration process that helps them to become aware of their specific abilities, interests, and needs, and how these relate to their future life work. Prerequisite: Career and Community Studies (CCS) major.
1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**CCS 00110 - PERSONAL EXPLORATION II: INDEPENDENT LIVING AND LEISURE EDUCATION**

This course focuses on two different but related topics. The first half of the semester is designed to provide college students with the opportunity to explore and develop personal leisure values, and expand their leisure interests. During the second half of the semester, students will practice various independent living skills in order to become more responsible adults. Prerequisite: Career and Community Studies (CCS) major.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**CCS 00115 - ACADEMIC EXPERIENCE II: SELF-DETERMINATION**

This course will provide students with opportunities to recognize and develop skills that can help them to increase success in all areas of their lives. Persons who are more self-determined often experience academic, employment, community living and personal satisfaction. Prerequisite: Career and Community Studies (CCS) major.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**CCS 00120 - TECHNOLOGY LABORATORY II**

Introduction to the uses of Microsoft Power Point, Publisher, and Excel in order to connect knowledge and learning experiences for student success. Prerequisite: Career and Community Studies (CCS) major.
1.000 Credit hours
2.000 Lab hours
Levels: Undergraduate
Schedule Types: Laboratory
Lifespan Dev and Educ Sciences Department

**CCS 00125 - FINANCIAL LITERACY II**

This course will provide the student with a more detailed opportunity to reflect on one’s desire and ability to save money. It will include a wide variety of ways to save, as well as, how finance institutions can help your savings grow. Prerequisite: Career and Community Studies (CCS) major.
1.000 Credit hours
1.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture
Lifespan Dev and Educ Sciences Department

**CCS 00130 - PHYSICAL EDUCATION II**

Students will participate in a sport or physical fitness activity in order to learn more about the topic of interest and to increase personal health. Students will advance appropriate personal and social skills, and demonstrate increased abilities to manage course responsibilities. Satisfactory/unsatisfactory (S/U) graded. Prerequisite: Career and Community Studies (CCS) major; and special approval.
1.000 Credit hours
2.000 Lab hours
Levels: Undergraduate
Schedule Types: Laboratory
Lifespan Dev and Educ Sciences Department

**CCS 00135 - HEALTH AND WELLNESS II: HUMAN SEXUALITY**

Focus of the course is to understand behaviors and issues related to human sexuality. Prerequisite: Career and Community Studies (CCS) major.
3.000 Credit hours
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture
Lifespan Dev and Educ Sciences Department

**CCS 00196 - FRESHMAN INDIVIDUAL STUDY**

(Repeatable for credit) Independent Study is a student-initiated experience in order to pursue an area of career interest not covered by a regular course offering; with the approval and guidance of a Career and Community Studies faculty member. In-progress (IP) mark permissible. Prerequisite: Career and Community Studies (CCS) major.
1.000 TO 3.000 Credit hours
3.000 TO 9.000 Other hours
Levels: Undergraduate
Schedule Types: Individual Investigation
**CCS 00205 - CAREER EXPLORATION I**

This course promotes assessment of specific career skills, interests, and needs, and how these relate to future life work. The student develops career awareness through evaluation of past experiences that have influenced career development and uses person-centered planning tools to develop and implement meaningful future career goals. Prerequisite: Career and Community Studies (CCS) major.

1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

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**CCS 00210 - ACADEMIC SUCCESS I**

This introductory course is designed to teach many different literacy (e.g. reading, writing, speaking, and technology) skills that college students must develop in order to have academic and social success. The student will practice to communicate effectively through speaking and writing, and will complete coursework assignments in a laboratory setting using accurate grammar, capitalization, and punctuation. Prerequisite: Career and Community Studies (CCS) major.

4.000 Credit hours
1.000 Lecture hours
9.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

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**CCS 00215 - INTRODUCTION TO COMMUNICATION SKILLS**

This course explores communication theories and practices in group, interpersonal, and public contexts. Students explore the processes of active listening, developing effective communication skills, and the processes of organizing thoughts into clear messages so that others may more easily understand. Prerequisite: Career and Community Studies (CCS) major.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

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**CCS 00225 - FINANCIAL LITERACY III**

This course provides the student with real-life situations to practice basic math skills used in budgeting and managing money wisely. The student recognizes the hidden costs associated with many of the essentials and conveniences they use daily. Prerequisite: Career and Community Studies (CCS) major.

1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
**CCS 00235 - HEALTH AND WELLNESS III: INJURY PREVENTION**

The focus of the course is to understand behaviors and issues related to personal injury and safety. Prerequisite: Career and Community Studies (CCS) major.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**CCS 00292 - SOPHOMORE PRACTICUM I**

(Repeatable for credit) This course provides the student with the opportunity to develop crucial work skills that are important in any employment positions. The student gains self-awareness of their work skills and habits and receives support as they prepare for the career that they ultimately desire. In-progress (IP) mark permissible. Prerequisite: Career and Community Studies (CCS) major; and special approval.

3.000 Credit hours
9.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

**CCS 00296 - SOPHOMORE INDEPENDENT STUDY**

(Repeatable for credit) Independent Study is a student-initiated experience in order to pursue an area of career interest not covered by a regular course offering, with the approval and guidance of a Career and Community Studies faculty member. In-progress (IP) mark permissible. Prerequisite: Career and Community Studies (CCS) major.

1.000 TO 3.000 Credit hours
3.000 TO 9.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

**CCS 00305 - CAREER EXPLORATION II**

The purpose of this course is to help the student to narrow career possibilities and to identify the career of their choice. The student conducts research into an identified career field in order to list the necessary skills, to investigate local occupational opportunities, and to specify any training experiences that are available to advance knowledge and skills in this area. Prerequisite: Career and Community Studies (CCS) major; and CCS 00205.

1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
### CCS 00310 - ACADEMIC SUCCESS II

This course supports the student as they advance skills in learning strategies and study skills, and as they apply them in coursework that prepares for a specific career interest. The student practices effective communication through reading, writing, and speaking while completing coursework assignments using accurate grammar, capitalization, and punctuation. Prerequisite: Career and Community Studies (CCS) major.

- 4.000 Credit hours
- 1.000 Lecture hours
- 9.000 Lab hours

Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab

Lifespan Dev and Educ Sciences Department

### CCS 00325 - FINANCIAL LITERACY IV

The student will understand how credit card debt, personal loans for housing, leisure, or transportation needs, and investing in savings and bonds can have an effect on the lifestyle that one hopes to achieve. Making wise financial decisions and planning is important when becoming an independent adult. Prerequisite: Career and Community Studies (CCS) major.

- 1.000 Credit hours
- 1.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

### CCS 00335 - HEALTH AND WELLNESS IV: HEALTHY LIVING AND SUBSTANCE ABUSE

This course will support behavior that encourages students to make responsible choices for lifelong health and wellness through instruction and active participation. Topics to be discussed include personal and social skills, nutrition and fitness, developing coping skills, sexuality education, substance use, and injury prevention. Prerequisite: Career and Community Studies (CCS) major.

- 3.000 Credit hours
- 3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

### CCS 00392 - SOPHOMORE PRACTICUM II

(Repeatable for credit) This course provides the student with additional opportunities to develop crucial work skills that are important in all employment positions. The student expands self-awareness of their work skills and habits and receives support as they prepare for the career that they ultimately desire. In-progress (IP) mark permissible. Prerequisite: Career and Community Studies (CCS) major.

- 3.000 Credit hours
- 9.000 Other hours

Levels: Undergraduate  
Schedule Types: Practicum or Internship

Lifespan Dev and Educ Sciences Department
CCS 00395 - SPECIAL TOPICS

(Repeatable for credit) Course topic will vary depending upon individual career choices. The student will participate in courses with like-minded peers in order to gain knowledge and skills in the career field of interest. Students must get approval from their academic advisor and course faculty prior to taking this course. Satisfactory/unsatisfactory (S/U) graded. Prerequisite: Career and Community Studies (CCS) major; and special approval.
1.000 TO 4.000 Credit hours
1.000 TO 4.000 Lecture hours
2.000 TO 8.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Lifespan Dev and Educ Sciences Department

CCS 00396 - JUNIOR INDEPENDENT STUDY

(Repeatable for credit) Independent Study is a student-initiated experience in order to pursue an area of career interest not covered by a regular course offering, with the approval and guidance of a Career and Community Studies faculty member. In-progress (IP) mark permissible. Prerequisite: Career and Community Studies (CCS) major; and special approval.
1.000 TO 3.000 Credit hours
3.000 TO 9.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Lifespan Dev and Educ Sciences Department

CCS 00405 - CAREER PREPARATION I: CHOOSING YOUR CAREER

This course prepares the student for entering the work force by creating a resume, practicing interviewing skills, and by developing networks of people who can help them to achieve their career goals. The student will participate in job shadowing opportunities in order to better understand the expectations and requirements of the career field of interest. Prerequisite: Career and Community Studies (CCS) major.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

CCS 00420 - ACADEMIC SUPPORT I

This course provides support to the student as they advance in goal setting and attainment skills. The student is supported as they increase critical thinking skills and monitors academic progress; and as they complete course assignments while working towards becoming an organized and self-determined student. Prerequisite: Career and Community Studies (CCS) major.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department
CCS 00492 - JUNIOR PRACTICUM III

(Repeatable for credit) Once a career has been initially identified, it is important early on for the student to be exposed to the requirements and environments of that field. Students will be provided opportunities to perform work relevant to their career choice. Evaluating the fit helps to ensure that they have chosen wisely. In-progress (IP) mark permissible. Prerequisite: Career and Community Studies (CCS) major; and special approval.

4.000 Credit hours
12.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Lifespan Dev and Educ Sciences Department

CCS 00495 - SPECIAL TOPICS

(Repeatable for credit) Course topic will vary depending upon individual career choices. The student will participate in courses with like-minded peers in order to gain knowledge and skills in the career field of interest. Students must get approval from their academic advisor and course faculty prior to taking this course. Prerequisite: Career and Community Studies (CCS) major and special approval.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Lecture hours
1.000 TO 4.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Lifespan Dev and Educ Sciences Department

CCS 00496 - SENIOR INDEPENDENT STUDY

Independent Study is a student-initiated experience in order to pursue an area of career interest not covered by a regular course offering, with the approval and guidance of a Career and Community Studies faculty member. In-progress (IP) mark permissible. Prerequisite: Career and Community Studies (CCS) major; and special approval.

1.000 TO 3.000 Credit hours
3.000 TO 9.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Lifespan Dev and Educ Sciences Department

CCS 00505 - CAREER PREPARATION II

This course is designed to continue to prepare the student for entering into the work force by expanding interview skills and by locating and utilizing resources such as state employment and vocational rehabilitation services to promote career decisions. Prerequisite: Career and Community Studies (CCS) major; and CCS 00405.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
Lifespan Dev and Educ Sciences Department

### CCS 00520 - ACADEMIC SUPPORT II

This sequenced course continues to provide support to the student as they advance in goal setting and attainment skills. The student is supported as they increase critical thinking skills, monitors progress, and receives support as they complete course assignments pertaining to career goals while working towards becoming an organized and self-determined student. Prerequisites: Career and Community Studies (CCS) major; and CCS 00420.

- 3.000 Credit hours
- 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

### CCS 00592 - JUNIOR PRACTICUM IV

(Repeatable for credit) This course provides additional opportunities for the student to be exposed to the requirements and environments of the career field to ensure the student’s commitment to the career choice. Additionally, the student continues to develop appropriate work habits and behaviors while obtaining specific occupation skills. In-progress (IP) mark permissible. Prerequisite: Career and Community Studies (CCS) major; and special approval.

- 4.000 Credit hours
- 12.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Lifespan Dev and Educ Sciences Department

### CCS 00595 - SPECIAL TOPICS

(Repeatable for credit) Course topic will vary depending upon individual career choices. The student will participate in courses with like-minded peers in order to gain knowledge and skills in the career field of interest. Students must get approval from their academic advisor and course faculty prior to taking this course. Satisfactory/unsatisfactory (S/U) graded. Prerequisite: Career and Community Studies (CCS) major; and special approval.

- 1.000 TO 4.000 Credit hours
- 2.000 TO 8.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Lifespan Dev and Educ Sciences Department

### CCS 00605 - COMMUNITY LIFE I: LIFE AFTER COLLEGE

This course guides the student as they plan for transitioning back to the community in which they will live after graduation. The student considers personal strengths, preferences, interests, and needs as they identify the various advantages and disadvantages of their chosen community. Prerequisite: Career and Community Studies (CCS) major. Corequisite: CCS 00606.

- 1.000 Credit hours
- 1.000 Lecture hours

Levels: Undergraduate
**CCS 00606 - COMMUNITY LIFE I LABORATORY**

Using the Personal Profile created in a coexisting course, the student conducts a thorough investigation into their community by researching all of the advantages, disadvantages, resources, demographics, and necessary amenities available to community residents. The student will then develop a Community Life Plan. Prerequisite: Career and Community Studies (CCS) major. Corequisite: CCS 00605.

3.000 Credit hours
9.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Lifespan Dev and Educ Sciences Department

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**CCS 00692 - SENIOR INTERNSHIP I**

(Repeatable for credit) Internship courses are credit-bearing work experiences that are integrated with academic instruction and relate to an individual student’s career goals. The internship occurs in a natural community setting and provides an environment and context to integrate specific career knowledge, skills, and professional behaviors. In-progress (IP) mark permissible. Prerequisite: Career and Community Studies (CCS) major; and special approval.

1.000 TO 12.000 Credit hours
3.000 TO 36.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Lifespan Dev and Educ Sciences Department

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**CCS 00695 - SPECIAL TOPICS**

(Repeatable for credit) Course topic will vary depending upon individual career choices. The student will participate in courses with like-minded peers in order to gain knowledge and skills in the career field of interest. Students must get approval from their academic advisor and course faculty prior to taking this course. Satisfactory/unsatisfactory (S/U) graded. Prerequisite: Career and Community Studies (CCS) major.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Lecture hours
2.000 TO 8.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Lifespan Dev and Educ Sciences Department

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**CCS 00705 - COMMUNITY LIFE II: MAKING COMMUNITY CONNECTIONS**

The student will develop strategies to implement the Community Life Plan. Steps will be generated to serve as a guide and checklist as students establish the necessary connections to resources such as service and medical providers, community organizations, employment, public transportation, and residential living. Prerequisite: Career and Community Studies (CCS) major. Corequisite: CCS 00705.

1.000 Credit hours
1.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**CCS 00706 - COMMUNITY LIFE II LABORATORY**

The student will implement the goals established in their Community Life Plan that was developed in a coexisting course. This is a hands-on course where the student will travel to each of the resources recorded in their Plan so that they become familiar with their community in order to increase confidence in abilities and to make crucial connections necessary for independent adult living. Prerequisite: Career and Community Studies (CCS) major. Corequisite: CCS 00705.

3.000 Credit hours
9.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Lifespan Dev and Educ Sciences Department

**CCS 00792 - SENIOR INTERNSHIP II**

(Repeatable for credit) Internship courses are credit-bearing work experiences that are integrated with academic instruction and relate to an individual student’s career goals. The internship occurs in a natural community setting and provides an environment and context to integrate specific career knowledge, skills, and professional behaviors. In-progress (IP) mark permissible. Prerequisite: Career and Community Studies (CCS) major; and special approval.

1.000 TO 12.000 Credit hours
3.000 TO 36.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Lifespan Dev and Educ Sciences Department

**CCS 00795 - SPECIAL TOPICS**

(Repeatable for credit) Course topic will vary depending upon individual career choices. The student will participate in courses with like-minded peers in order to gain knowledge and skills in the career field of interest. Students must get approval from their academic advisor and course faculty prior to taking this course. Satisfactory/unsatisfactory (S/U) graded. Prerequisite: Career and Community Studies (CCS) major; and special approval

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Lecture hours
2.000 TO 8.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Lifespan Dev and Educ Sciences Department

**CDAG 34000 - COMPUTER ANIMATION II**

Continuation of the study and technology applications of computer animation with emphasis on camera usage and the production of a comprehensive animation project involving the animation thought process (ATP). Prerequisite: CADT 22004.

3.000 Credit hours
CDAG 34001 - COMPUTER ANIMATION III

Continued study of practical technology applications of computer animation with emphasis on scripting code writing, systems line variables and fluent realism factors within the ATP. Prerequisite: CDAG 34000.

Levels: Undergraduate
Schedule Types: Lecture

CDAG 34003 - ANIMATION THEORY

A comprehensive course on the history and current status and future of animation featuring the masters of animation, their landmark achievements and the processes they unveiled. Claymation, Stop Motion, Anime, Commercial and Forensic animations will be covered. Prerequisite: None.

Levels: Undergraduate
Schedule Types: Lecture

CDAG 34004 - TECHNOLOGY OF LIGHT, COLOR, DESIGN AND LAYOUT

A course dealing with the study of the technical principles and applications of light, color, design and layout to the production of computer animation for engineering materials and products. Prerequisite: CADT 22004.

Levels: Undergraduate
Schedule Types: Lecture

CDAG 43000 - ADVANCED ANIMATION AND GAME DESIGN

Covers the process of game conceptualization and development. Learning how to model low-polygon characters and environments for the real-time 3D games. Customizing game properties, characters, animations, and terrains for purposes of visualization and game development. Prerequisite: CDAG 43003.
**CDAG 43001 - TECHNOLOGY OF MEDIA AND FILM PRODUCTION**

A course dealing with the technical and business aspects of pre- and post production planning for multimedia video or film projects. Covers a systematic approach to content organization and development, scripting, visualization proposal development contracts, budgets and legal issues. Prerequisite: CDAG 34001 and CDAG 34004.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**CDAG 43002 - GRAPHICS DESIGN TECHNOLOGY**

A course of study in the technology of creating knowledge and effects using computer-graphics concepts to create photo-realistic composite images and to restore and enhance a wide array of images. Prerequisite: CADT 22004.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**CDAG 43003 - VIRTUAL REALITY AND GAME DESIGN**

Covers the creation of interactive online multimedia presentations/portfolios and serves as an introduction to advanced 3D gaming environments for off-line distribution and presentation. Prerequisite: CDAG 34000.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**CDAG 43004 - UNIX SCRIPTING WITH APPLICATIONS**

A course in the use of UNIX scripting for animation and multimedia development. Prerequisite: COMT 21095 and CDAG 43001.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**CES 20092 - FIELD EXPERIENCE I: MIDDLE CHILDHOOD**

**CES 37800 - SMALL GROUP PROCESS**

(Cross-listed with HED 34060) Students learn to understand the dynamics of problem-solving groups and how to become effective leaders and members. Topics include climate, goals, decision making, communication, leadership, membership. Experience-based learning combined with conceptualizing. Prerequisite: None.

1.000 Credit hours

Levels: Undergraduate
Schedule Types: Field Experience

**CES 40093 - VARIABLE TITLE WORKSHOP IN COUNSELOR EDUCATION AND SUPERVISION**

(Repeatable for a maximum of 6 credit hours) Topics of special interest to students who desire to increase their knowledge in counseling and related areas. Kent faculty and experts from other institutions and agencies. Topics will be announced in the schedule of classes booklet. Satisfactory/unsatisfactory (S/U) graded. Prerequisite: None.

1.000 TO 4.000 Credit hours

Levels: Undergraduate
Schedule Types: Workshop

**CES 44084 - BEHAVIORAL SCIENCE IN HEALTH PROFESSIONS**

(Repeatable for a maximum of 12 hours) Behavioral science perspective on individual and social issues affecting medical care delivery. Individually arranged. May include field projects participation in health related investigations and presentations and personal development programs. Prerequisite: special approval.

1.000 TO 3.000 Credit hours

Levels: Undergraduate
Schedule Types: Lecture

**CES 50093 - VARIABLE TITLE WORKSHOP IN COUNSELOR EDUCATION AND SUPERVISION**

(Repeatable for credit) (Slashed with CES 70093) Workshops and training laboratories in various aspects of counseling, guidance and personnel services for counselors, supervisors, administrators and paraprofessionals. Prospective enrollees not currently admitted to graduate school may obtain special admission for graduate credit in a workshop. Topics are announced in brochures of college of continuing studies. Limit of 6 hours with
advisor's permission toward any degree program. Satisfactory/unsatisfactory (S/U) graded. In-progress (IP) mark permissible. Prerequisite: Graduate standing.
1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Lifespan Dev and Educ Sciences Department

**CES 60199 - THESIS I**

(Repeatable for credit) Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester distributed over several semesters if desired. Satisfactory/unsatisfactory (S/U) graded. In-progress (IP) mark permissible. Prerequisite: graduate standing and special approval.
2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Lifespan Dev and Educ Sciences Department

**CES 60299 - THESIS II**

(Repeatable for credit) Thesis students must continue registration each semester until all degree requirements are met. Satisfactory/unsatisfactory (S/U) graded. In-progress (IP) mark permissible. Prerequisite: CES 60199; and graduate standing.
2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Lifespan Dev and Educ Sciences Department

**CES 64084 - BEHAVIORAL SCIENCE IN THE HEALTH PROFESSIONS**

Behavioral science perspective on individual and social issues that affect medical care delivery. Individually arranged. Prerequisite: graduate standing and special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**CES 67392 - ADVANCED INDIVIDUAL COUNSELING PRACTICUM**

(Repeatable twice for credit) (Slashed with CES 87392) Supervised experience in counseling. Students meet for individual supervision and in seminar groups to assess their effectiveness in helping relationships. Satisfactory/unsatisfactory (S/U) graded. In-progress (IP) mark permissible. Prerequisite: Minimum grade of S in CES 67492 and 67592 and graduate standing.
3.000 Credit hours
13.666 Other hours
**CES 67492 - PRACTICUM I: CLINICAL MENTAL HEALTH COUNSELING**

(Cross-listed with CES 77492) Students begin supervised practice of counseling with clients, primarily in the Counseling and Human Development Center. Individual supervision and seminar discussion are used for the development of counseling skills, strategies and professional role. Satisfactory/unsatisfactory (S/U) graded. In-progress (IP) mark permissible. Prerequisites: minimum B- (2.700) grade in CES 67530 and 67531 and 67663 and 67820 and 68126 and 68182; and clinical mental health counseling (CMHC) major; and graduate standing.

3.000 Credit hours
16.000 Other hours

**CES 67530 - COUNSELING THEORIES**

(Slashed with CES 77530) A survey of counseling practice that examines the nature of counseling process and relationships as described from major theoretical perspectives. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

**CES 67531 - COUNSELING SKILLS AND TECHNIQUES**

(Slashed with CES 77531) Didactic and experiential training in basic interviewing and counseling techniques prepares the student for practicum through role playing, videotaped feedback and simulation. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

**CES 67580 - MULTICULTURAL COUNSELING**

(Slashed with CES 77580) Seminar focused on sensitivities needed to work effectively with diverse clients. Consideration given to racism, oppression, poverty, agism, gender, and relational affinity. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours
### CES 67591 - SEMINAR IN COUNSELOR EDUCATION AND SUPERVISION

(Repeatable for credit) Variable topic seminars considering problems, research and current practices for counselors and personnel workers. Topic to be announced in schedule of classes booklet. Prerequisite: graduate standing and special approval.

- **1.000 TO 3.000 Credit hours**
- **1.000 TO 3.000 Other hours**

**Levels:** Graduate  
**Schedule Types:** Seminar

Lifespan Dev and Educ Sciences Department

### CES 67592 - PRACTICUM II: CLINICAL MENTAL HEALTH COUNSELING

(Repeatable for credit) (Cross-listed with CES 77592) Involves individual counseling and group work with appropriate populations. Caseload geared toward preparation for internship. Satisfactory/unsatisfactory (S/U) graded. In-progress (IP) mark permissible. Prerequisite: CES 67492 with a grade of satisfactory; and minimum B- (2.700) in CES 67628 or 77628; and graduate standing.

- **3.000 Credit hours**
- **16.000 Other hours**

**Levels:** Graduate  
**Schedule Types:** Practicum or Internship

Lifespan Dev and Educ Sciences Department

### CES 67595 - SPECIAL TOPICS IN COUNSELOR EDUCATION AND SUPERVISION

(Repeatable for credit) (Slashed with CES 87595) Presentation of topics of special interest to students in counselor education and supervision. Offered irregularly. Topics will be announced in schedule of classes booklet. Prerequisite: graduate standing and special approval.

- **1.000 TO 3.000 Credit hours**
- **1.000 TO 3.000 Lecture hours**

**Levels:** Graduate  
**Schedule Types:** Lecture

Lifespan Dev and Educ Sciences Department

### CES 67596 - INDIVIDUAL INVESTIGATION IN COUNSELOR EDUCATION AND SUPERVISION

(Repeatable for credit) (Slashed with CES 87596) Student investigates one or more topics in counseling under supervision. Review selected literature beyond normal course coverage. Arrangements with instructor must be made prior to registration. Satisfactory/unsatisfactory (S/U) graded. In-progress (IP) mark permissible. Prerequisite: graduate standing and special approval.

- **1.000 TO 3.000 Credit hours**
- **1.000 TO 3.000 Other hours**

**Levels:** Graduate  
**Schedule Types:** Individual Investigation

Lifespan Dev and Educ Sciences Department

### CES 67628 - DIAGNOSIS IN COUNSELING
To develop diagnostic skills in interviewing and use of appropriate nosology in counseling diagnosis. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**CES 67663 - ORIENTATION TO CLINICAL MENTAL HEALTH COUNSELING**

(Slashed with CES 87663) Attention is given to the identity, professional standards and organizations, and employment settings of the clinical mental health counselor. Models of problem definition, administrative structure and service delivery are explored. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**CES 67664 - THEORIES AND PRACTICES IN ADDICTIONS COUNSELING**

(Slashed with CES 77664) Introduction to theories, models, and practices in addictions counseling, with emphasis on research supported approaches and ethical standards. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**CES 67665 - TREATMENT PLANNING IN ADDICTION COUNSELING**

(Slashed with CHDS 77665) Assessment and diagnosis of substance use disorders, and determining appropriate care levels, treatment goals and interventions. Prerequisites: CES 67664 or CES 77664; and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**CES 67695 - SPECIAL TOPICS IN CLINICAL MENTAL HEALTH COUNSELING**

(Repeatable for credit) (Cross-listed with CES 77695) Presentations of special interest to students. Offered irregularly. Topics will be announced in schedule of classes booklet. Prerequisite: graduate standing and special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
**CES 67698 - INDIVIDUAL RESEARCH IN CLINICAL MENTAL HEALTH COUNSELING**

(Repeatable for credit) Student pursues research project on selected aspect of clinical mental health counseling under supervision of instructor. Arrangements with instructor must be made prior to registration. Credit hours to be fixed at registration time. Satisfactory/unsatisfactory (S/U) graded. Prerequisite: graduate standing and special approval.

1.000 TO 9.000 Credit hours
1.000 TO 9.000 Other hours

Levels: Graduate
Schedule Types: Research

Lifespan Dev and Educ Sciences Department

**CES 67792 - INTERNSHIP I: CLINICAL MENTAL HEALTH COUNSELING**

(Repeatable for credit) Assignment to a mental health agency, private practice, etc. for extensive and intensive applications of clinical mental health counseling. The scope of practice for this internship is diagnosis and treatment of mental and emotional disorders. Prerequisite: clinical mental health counseling (CMHC) major; and graduate standing; and special approval.

3.000 Credit hours
3.000 Lecture hours
20.000 Other hours

Levels: Graduate
Schedule Types: Lecture, Practicum or Internship

Lifespan Dev and Educ Sciences Department

**CES 67820 - GROUP WORK: THEORY AND TECHNIQUES**

(Slashed with CES 77820) This is an experiential and didactic course designed to provide both an overview of groups and a basic group experience. Involvement in a group is part of this course as is practice of group leadership skills. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**CES 67858 - SEMINAR: GROUP COUNSELING**

(Cross-listed with CES 77858) Study and experience of various theoretical and methodological and practical approaches to group counseling. Includes experience as counselor and participant in peer counseling group. Prerequisite: grading standing and special approval.

2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Seminar
CES 67892 - INTERNSHIP II: CLINICAL MENTAL HEALTH COUNSELING

(Repeatable for credit) Assignment to a mental health agency, private practice, etc. for extensive and intensive applications of clinical mental health counseling. The scope of practice for this internship is diagnosis and treatment of mental and emotional disorders. Satisfactory/unsatisfactory (S/U) graded. In-progress (IP) mark permissible. Prerequisite: clinical mental health counseling (CMHC) major; and graduate standing; and special approval.
3.000 Credit hours
3.000 Lecture hours
20.000 Other hours

Levels: Graduate
Schedule Types: Lecture, Practicum or Internship

CES 68011 - FOUNDATIONS OF SCHOOL COUNSELING

(Slashed with CES 78011) Foundation course in school counseling. Focuses on the professional identity of school counselors and other pupil service personnel and on the development of comprehensive school counseling programs. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

CES 68066 - COUNSELING ADOLESCENTS

(Slashed with CES 78066) A didactic and experiential seminar focusing on adolescents frequently referred to counselors. Counseling procedures, treatment plans and referral procedures for youth will be covered. Prerequisite: minimum grade of B- (2.700) in CES 67530 and 67531 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

CES 68067 - COUNSELING CHILDREN

(Slashed with CES 78067) Seminar focusing on intra and interpersonal dynamics of children referred for treatment to counselors. Designed to supplement individual and group counseling skills with play media. Prerequisite: CES 67530 or 77530 and 67531 or 77531; and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
### CES 68068 - SCHOOL COUNSELING PROGRAM MANAGEMENT AND LEADERSHIP

(Slashed with CES 78068) Focuses on the management, leadership and implementation of comprehensive school counseling program including developmental counseling approaches, management systems and outcome research. Prerequisite: Minimum grade of B- (2.700) in CES 68011 and graduate standing.

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Levels: Graduate  
Schedule Types: Lecture  
Lifespan Dev and Educ Sciences Department

### CES 68069 - SCHOOL COUNSELING: ORIENTATION AND ETHICS

(Slashed with CES 78069) Consideration given to issues that provide an orientation to school counseling. Examples of these issues include professional preparation standards, roles and functions of school counselors, and ethical standards and legal issues. Prerequisite: Graduate standing.

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<th>3.000 Credit hours</th>
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Levels: Graduate  
Schedule Types: Lecture  
Lifespan Dev and Educ Sciences Department

### CES 68095 - SPECIAL TOPICS IN SCHOOL COUNSELING

(Repeatable for credit) Presentations of special interest to students. Offered irregularly. Topics will be announced in schedule of classes booklet. Prerequisite: Graduate standing and special approval.

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Levels: Graduate  
Schedule Types: Lecture  
Lifespan Dev and Educ Sciences Department

### CES 68126 - INTRODUCTION TO ASSESSMENT IN COUNSELING

(Slashed with CES 78126) Instruction and experience in utilizing observational, measurement and appraisal methods and instruments relevant to clinical mental health counseling and school counseling settings. Measurement theory and concepts related to the appraisal process are presented. Prerequisites: Graduate standing.

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<th>3.000 Credit hours</th>
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Levels: Graduate  
Schedule Types: Lecture  
Lifespan Dev and Educ Sciences Department

### CES 68128 - CLINICAL ASSESSMENT IN COUNSELING

(Slashed with CES 78128) Experience in selecting, administering and interpreting measures of personality and motivation. Primary attention will be placed on measures of psychopathology. Prerequisite: Minimum grade of
B- (2.700) in CES 68126 and 67628 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

### CES 68130 - PSYCHOPATHOLOGY FOR COUNSELORS

(Slashed with CES 78130) This course covers the etiology and treatment of various disorders covered in the current DSM system. Assessment, treatment and psychopharmacological aspects of treatment are considered. Prerequisite: Minimum grade of B- (2.700) in CES 67628 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

### CES 68167 - CASE CONCEPTUALIZATION AND TREATMENT PLANNING

(Repeatable twice for credit) (Slashed with CES 88167) Development of understanding of more in-depth and complex counseling processes, case conceptualization and treatment planning, and advanced skills for intervention. Didactic and role-playing methods will be used. Prerequisite: Minimum grade of B- (2.700) in CES 67628; and CES 67492; and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

### CES 68168 - ADVANCED COUNSELING THEORIES

(Repeatable twice for credit) (Slashed with CES 88168) Consideration in depth of major counseling theories, with special emphasis on comparative analysis. Original readings used. Prerequisite: Grade of S in CES 67636 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

### CES 68182 - CAREER COUNSELING

(Slashed with CES 78182) The world of work, theories of career choice, techniques in career counseling. An introductory course in the career area for practitioners in education, helping services, human resources and personnel. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours
Lifespan Dev and Educ Sciences Department

**CES 68192 - INTERNSHIP I SCHOOL COUNSELING**

(Repeatable for credit) Assignment to a school for extensive and intensive applications appropriate for school counseling. A focus on the implementation of advocacy, leadership, collaboration, and systemic change is highlighted. This course meets specific CACREP standards. Prerequisite: graduate standing and special approval.

3.000 Credit hours
3.000 Lecture hours
20.000 Other hours

Levels: Graduate
Schedule Types: Lecture, Practicum or Internship

Lifespan Dev and Educ Sciences Department

**CES 68284 - SUPERVISION OF COUNSELING**

(Repeatable twice for credit) (Slashed with CES 88284) Focuses on supervisory processes in terms of theoretical perspectives and practices of supervision. Reviews relevant literature related to the roles, functions and settings of clinical supervisor. Includes supervisory experiences. Prerequisite: Grade of S in CES 67592 or 77592; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**CES 68292 - INTERNSHIP II: SCHOOL COUNSELING**

(Repeatable for credit) Assignment to a school for extensive and intensive applications appropriate for school counseling. A focus on the application of advocacy, leadership, collaboration and systemic change are highlighted in this course. This course meets specific CACREP standards. Satisfactory/unsatisfactory (S/U) graded. In-progress (IP) mark permissible. Prerequisite: graduate standing and special approval.

3.000 Credit hours
2.000 Lecture hours
20.000 Other hours

Levels: Graduate
Schedule Types: Lecture, Practicum or Internship

Lifespan Dev and Educ Sciences Department

**CES 68392 - SCHOOL COUNSELING PRACTICUM**

(Cross-listed with CHDS 78392) Supervised counseling practice in the counseling and human development center and-or in the schools. Engage in counseling with children, teachers and colleagues. Direct observation and audio video recording and supervisory critiques used for counseling skills. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school-agency before the first day of the semester in which student teaching internship will take place. Satisfactory/unsatisfactory (S/U)
graded. In-progress (IP) mark permissible. Prerequisites: CES 67530 and CES 67531 and CES 67820 and CES 68069; and graduate standing.
3.000 Credit hours
20.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Lifespan Dev and Educ Sciences Department

**CES 68529 - COUPLES THERAPY: THEORY AND TECHNIQUES**

(Cross-listed with CES 78529) Study of selected couples therapy theories. Focus on concepts and techniques and their application in the therapeutic setting. Prerequisites: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**CES 68533 - FAMILY THERAPY: THEORY AND TECHNIQUES**

(Slashed with CES 78533) Explores systemic family therapy utilizing various philosophical orientations, theoretical concepts and techniques in a didactic experiential and applied atmosphere. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**CES 68538 - ADVANCED MULTICULTURAL COUNSELING**

(Slashed with CES 78538) This course is designed to assist helping professionals in enhancing the knowledge and skill components of multicultural counseling. Cultural and multicultural counseling experiences with constructive feedback are provided. Prerequisite: graduate standing; CES 67580 or CES 77580 and CES 67531 or CES 77531.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**CES 68592 - PRACTICUM IN COUPLES AND FAMILY THERAPY**

(Slashed with CES 78536) An intensive-extensive supervised experience in the practice of couples and family therapy. Live video and audio supervisory processes will be utilized to assist with skill development. Satisfactory/unsatisfactory (S/U) graded. In-progress (IP) mark permissible. Prerequisites: CES 67492 and CES 67592; and graduate standing in clinical mental health counseling (CMHC) or school counseling (SCON); and special approval.
3.000 Credit hours
14.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Lifespan Dev and Educ Sciences Department

**CES 70093 - VARIABLE TITLE WORKSHOP IN COUNSELOR EDUCATION AND SUPERVISION**

(Repeatable for credit) (Slashed with CES 50093) Workshops and training laboratories in various aspects of counseling, guidance and personnel services for counselors, supervisors, administrators and paraprofessionals. Prospective enrollees not currently admitted to graduate school may obtain special admission for graduate credit in a workshop. Topics are announced in brochures of College of Continuing Studies. Limit of 6 hours with adviser's permission toward any degree program. Satisfactory/unsatisfactory (S/U) graded. In-progress (IP) mark permissible. Prerequisite: doctoral standing.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Lifespan Dev and Educ Sciences Department

**CES 77492 - PRACTICUM I: CLINICAL MENTAL HEALTH COUNSELING**

(Cross-listed with CES 67492) Enrollees begin supervised practice of counseling with clients, primarily in the Counseling and Human Development Center. Individual supervision and seminar discussion are used for the development of counseling skills, strategies and professional role. Satisfactory/unsatisfactory (S/U) graded. In-progress (IP) mark permissible. Prerequisite: minimum grade of B- (2.7) in the following courses: CES 67530 or 77530; and CES 67531 or 77531; and CES 67663 or 77663; and CES 67820 or 77820; and CES 68126 or 78126; and CES 68182 or 78182; and clinical mental health counseling (CMHC) major; and doctoral standing.

3.000 Credit hours
16.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Lifespan Dev and Educ Sciences Department

**CES 77530 - COUNSELING THEORIES**

(Slashed with CES 67530) A survey of counseling practice that examines the nature of counseling process and relationships as described from major theoretical perspectives. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**CES 77531 - COUNSELING SKILLS AND TECHNIQUES**

(Slashed with CES 67531) Didactic and experiential training in basic interviewing and counseling techniques prepares the student for practicum through role playing, videotaped feedback and simulation. Prerequisite: doctoral standing.

3.000 Credit hours
CES 77580 - MULTICULTURAL COUNSELING

(Slashed with CES 67580) Seminar focused on sensitivities needed to work effectively with diverse clients. Consideration given to racism, oppression, poverty, agism, gender and relational affinity. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

CES 77584 - WRITING FOR PROFESSIONAL PUBLICATIONS

Seminar experience designed to prepare professionals to publish research findings, conceptualizations and professional field experiences in refereed journals and books. Elements of grant writing also treated. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

CES 77592 - PRACTICUM II: CLINICAL MENTAL HEALTH COUNSELING

(Repeatable for credit) (Cross-listed with CES 67592) Involves individual counseling and group work with appropriate populations. Caseload geared toward preparation for internship. Controlled registration. Satisfactory/unsatisfactory (S/U) graded. In-progress (IP) mark permissible. Prerequisite: CES 77628 and 77492; and clinical mental health counseling (CMHC) majors; and doctoral standing.

3.000 Credit hours
16.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Lifespan Dev and Educ Sciences Department

CES 77628 - DIAGNOSIS IN COUNSELING

(Slashed with CES 67628) To develop diagnostic skills in interviewing and use of appropriate nosology in counseling diagnosis. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
CES 77663 - ORIENTATION TO CLINICAL MENTAL HEALTH COUNSELING

(Slashed with CES 67663) Attention is given to the identity, professional standards and organizations and employment settings of the clinical mental health counselor. Models of problem definition, administrative structure and service delivery are explored. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

CES 77664 - THEORY AND PRACTICES IN ADDICTIONS COUNSELING

(Slashed with CES 77664) Introduction to theories, models, and practices in addictions counseling, with emphasis on research supported approaches and ethical standards. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

CES 77665 - TREATMENT PLANNING IN ADDICTIONS COUNSELING

(Slashed with CES 67665) Assessment and diagnosis of substance use disorders, and determining appropriate care levels, treatment goals and interventions. Prerequisites: CES 67664 or CES 77664; and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

CES 77695 - SPECIAL TOPICS IN CLINICAL MENTAL HEALTH COUNSELING

(Repeatable for credit) (Cross-listed with CES 67695) Presentations of special interest to students. Offered irregularly. Topics will be announced in schedule of classes booklet. Prerequisite: doctoral standing and special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

CES 77820 - GROUP WORK: THEORY AND TECHNIQUES

(Slashed with CES 67820) This is an experiential and didactic course designed to provide both an overview of groups and a basic group experience. Involvement in a group is part of this course as is practice of group
leadership skills. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**CES 77858 - SEMINAR: GROUP COUNSELING**

(Cross-listed with CES 67858) Study and experience of various theoretical and methodological and practical approaches to group counseling. Includes experience as counselor and participant in peer counseling group. Prerequisite: doctoral standing and special approval.
2.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Lifespan Dev and Educ Sciences Department

**CES 78011 - FOUNDATIONS OF SCHOOL COUNSELING**

(Slashed with CES 68011) Foundation course in school counseling. Focuses on the professional identity of school counselors and other pupil service personnel and on the development of comprehensive school counseling program. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**CES 78066 - COUNSELING ADOLESCENTS**

(Slashed with CES 68066) A didactic and experiential seminar focusing on adolescents frequently referred to counselors. Counseling procedures, treatment plans and referral procedures for youth will be covered. Prerequisite: minimum grade of B- (2.700) in CES 67530 or CES 77530; and minimum grade of B- (2.700) in CES 67531 and CES 77531 and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**CES 78067 - COUNSELING CHILDREN**

(Slashed with CES 68067) Seminar focusing on intra and interpersonal dynamics of children referred for treatment to counselors. Designed to supplement individual and group counseling skills with play media. Prerequisite: CES 67530 or CES 77530 and CES 67531 or CES 77531; and doctoral standing.
3.000 Credit hours
3.000 Lecture hours
Lifespan Dev and Educ Sciences Department

**CES 78068 - SCHOOL COUNSELING PROGRAM MANAGEMENT AND LEADERSHIP**

(Slashed with CES 68068) Focuses on the management, leadership and implementation of comprehensive school counseling program including developmental counseling approaches, management systems and outcome research. Prerequisite: Minimum grade of B- (2.700) in CES 68011 or CES 78011 and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**CES 78069 - SCHOOL COUNSELING: ORIENTATION AND ETHICS**

(Slashed with CES 68069) Consideration given to issues that provide an orientation to school counseling. Examples of these issues include professional preparation standards roles and functions of school counselors and ethical standards and legal issues. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**CES 78126 - INTRODUCTION TO ASSESSMENT IN COUNSELING**

(Slashed with CES 68126) Instruction and experience in utilizing observational, measurement and appraisal methods and instruments relevant to clinical mental health counseling and school counseling settings. Measurement theory and concepts related to the appraisal process are presented. Prerequisites: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**CES 78128 - CLINICAL ASSESSMENT IN COUNSELING**

(Slashed with CES 68128) A laboratory experience in selecting, administering and interpreting measures of personality and motivation. Primary attention will be placed on measures of psychopathology. Prerequisite: Minimum grade of B- (2.700) in CES 68126 or CES 78126; and CES 67628 or CES 77628 and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
CES 78130 - PSYCHOPATHOLOGY FOR COUNSELORS
(Slashed with CES 68130) This course covers the etiology and treatment of various disorders covered in the current DSM system. Assessment, treatment and psychopharmacological aspects of treatment are considered. Prerequisite: Minimum grade of B- (2.700) in CES 67628 or CES 77628; and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

CES 78182 - CAREER COUNSELING
(Slashed with CES 68182) The world of work, theories of career choice, techniques in career counseling. An introductory course in the career area for practitioners in education, helping services, human resources and personnel. Prerequisite: Doctoral standing and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

CES 78529 - COUPLES THERAPY: THEORY AND TECHNIQUES
(Cross-listed with CES 68529) Study of selected couples therapy theories. Focus on concepts and techniques and their application in the therapeutic setting. Prerequisites: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

CES 78533 - FAMILY THERAPY: THEORY AND TECHNIQUES
(Slashed with CES 68533) Explores systemic family therapy utilizing various philosophical orientations, theoretical concepts and techniques in a didactic experiential and applied atmosphere. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

CES 78538 - ADVANCED MULTICULTURAL COUNSELING
(Slashed with CES 68538) This course is designed to assist helping professionals in enhancing the knowledge
and skill components of multicultural counseling. Cultural and multicultural counseling experiences with constructive feedback are provided. Prerequisite: CES 67580 or CES 77580 and CES 67531 or CES 77531; and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**CES 78592 - PRACTICUM IN COUPLES AND FAMILY THERAPY**

(Repeatable for credit) (Slashed with CES 68592) An intensive-extensive supervised experience in the practice of couples and family therapy. Live video and audio supervisory processes will be utilized to assist with skill development. Satisfactory/unsatisfactory (S/U) graded. In-progress (IP) mark permissible. Prerequisite: doctoral standing in counselor education and supervision (CES) major.

3.000 Credit hours
14.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Lifespan Dev and Educ Sciences Department

**CES 80090 - DOCTORAL RESIDENCY SEMINAR IN COUNSELOR EDUCATION AND SUPERVISION**

Focus on professional identity, current issues and trends and involvement in professional activities. Satisfactory/unsatisfactory (S/U) graded. In-progress (IP) mark permissible. Prerequisite: doctoral standing in counselor education and supervision (CES) major.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Lifespan Dev and Educ Sciences Department

**CES 80199 - DISSERTATION I**

(Repeatable for credit) Doctoral candidates work on dissertation research in consultation with their advisors. Doctoral candidates will register for two consecutive semesters of CES 80199 Dissertation I for 15 hours each semester, immediately following successful completion of doctoral comprehensive exams. Thereafter, students will register for CES 80299 Dissertation II each semester, including summer, until all degree requirements have been met. Satisfactory/unsatisfactory (S/U) graded. In-progress (IP) mark permissible. Prerequisite: doctoral standing and special approval.

15.000 Credit hours
15.000 Other hours

Levels: Graduate
Schedule Types: Dissertation

Lifespan Dev and Educ Sciences Department

**CES 80299 - DISSERTATION II**

(Repeatable for credit) Continuing registration required of doctoral students who have completed the initial 30
hours of Dissertation I and continuing until all degree requirements are met. Satisfactory/unsatisfactory (S/U) graded. In-progress (IP) mark permissible. Prerequisite: CES 80199; and doctoral standing;
15.000 Credit hours
15.000 Other hours

Levels: Graduate
Schedule Types: Dissertation

Lifespan Dev and Educ Sciences Department

**CES 87392 - ADVANCED INDIVIDUAL COUNSELING PRACTICUM**

(Repeatable twice for credit) (Cross-listed with CES 67392) Supervised experience in counseling. Students meet for individual supervision and in seminar groups to assess their effectiveness in helping relationships. Satisfactory/unsatisfactory (S/U) graded. In-progress (IP) mark permissible. Prerequisite: Grade of S in CES 67492 or CES 77492 and CES 67592 or CES 77592; and minimum grade of B- (2.700) in CES 88166; and counselor education and supervision (CES) major; and doctoral standing.
3.000 Credit hours
14.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Lifespan Dev and Educ Sciences Department

**CES 87595 - SPECIAL TOPICS IN COUNSELOR EDUCATION AND SUPERVISION**

(Repeatable for credit) Presentation of topics of special interest to students in counselor education and supervision. Offered irregularly. Topics will be announced in schedule of classes booklet. Prerequisite: Doctoral standing and special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**CES 87596 - INDIV INVEST IN CES**

(Repeatable for credit) (Slashed with CES 67596) Student investigates one or more topics in counseling under supervision. Review selected literature beyond normal course coverage. Arrangements with instructor must be made prior to registration. Satisfactory/unsatisfactory (S/U) graded. In-progress (IP) mark permissible. Prerequisite: doctoral standing and special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Lifespan Dev and Educ Sciences Department

**CES 88167 - CASE CONCEPTUALIZATION AND TREATMENT PLANNING**

(Slashed with CES 68167) Development of understanding of more in-depth and complex counseling processes, case conceptualization and treatment planning, and advanced skills for intervention. Didactic and role-playing methods will be used. Prerequisite: CES 67492 or CES 77492; and minimum grade of B- (2.700) in CES 67628
or CES 77628; and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**CES 88168 - ADVANCED COUNSELING THEORIES**

(Repeatable twice for credit) (Slashed with CES 68168) Consideration in depth of major counseling theories, with special emphasis on comparative analysis. Original readings used. Prerequisite: grade of S in CES 77636; and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**CES 88281 - RESEARCH SEMINAR IN COUNSELOR EDUCATION AND SUPERVISION**

Topics or problems of current concern in counselor education and supervision services. Review of significant studies, design strategies, instrumentation, data analysis and research issues. Topic to be announced in schedule of classes booklet. Prerequisite: EVAL 75510, EVAL 85515 and EVAL 85516; doctoral standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Lifespan Dev and Educ Sciences Department

**CES 88284 - SUPERVISION OF COUNSELING**

(Repeatable twice for credit) (Slashed with CES 68284) This seminar focuses on supervisory processes in terms of theoretical perspectives and practices of supervision. Reviews relevant literature related to the roles, functions and settings of clinical supervisor. Includes supervisory experiences. Prerequisite: CES 67592 or CES 77592 with a grade of S; and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**CES 88292 - INTERNSHIP IN COUNSELOR EDUCATION AND SUPERVISION**

(Repeatable for a total of 6 credit hours) Professional service in field setting appropriate for counseling, consulting and personnel work, under supervision. May be repeated. Completion of program course requirements is necessary prior to registration. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school/agency before the first day of the semester in which student teaching/ internship will take place. Satisfactory/unsatisfactory (S/U) graded. In-progress (IP) mark
permissible. Prerequisite: doctoral standing and special approval.
3.000 TO 6.000 Credit hours
23.000 TO 46.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship, Seminar

Lifespan Dev and Educ Sciences Department

**CES 88294 - COLLEGE TEACHING IN COUNSELOR EDUCATION AND SUPERVISION**

(Repeatable for credit) Application of planning, instructional and evaluation skills. Doctoral students lead skill training groups, lecture a large class and guide group discussion with faculty supervision. Arrangements for this experience to be made before semester begins. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**CES 88298 - INDIVIDUAL RESEARCH IN COUNSELOR EDUCATION AND SUPERVISION**

(Repeatable for credit) Individual research on selected aspect of counseling and human development services under supervision of instructor. Arrangements with instructor must be made prior to registration. Satisfactory/unsatisfactory (S/U) graded. Prerequisite: doctoral standing and special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Research

Lifespan Dev and Educ Sciences Department

**CHEM 00020 - INTRODUCTION TO CHEMISTRY**

Problem-based introduction to the fundamentals of chemistry including significant figures, unit conversions, measurement, structure of matter, energy, composition of matter, atomic structure, the periodic table, introduction to bonding, and the formulas and names of both ionic and covalent compounds. Course does not count toward graduation. Prerequisite: Math ACT score of 18; or ALEKS math assessment score of 45; or minimum C (2.000) grade in MATH 00023 or higher.
2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

**CHEM 10030 - CHEMISTRY IN OUR WORLD**

A course for non-science majors that utilizes environmental and consumer topics to introduce chemical principles and develop critical-thinking skills. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

Course Attributes:
Kent Core-Basic Sciences, LER-Basic Sciences, Trnfr Module-Natural Sciences

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**CHEM 10031 - CHEMISTRY IN OUR WORLD LABORATORY**

Discovery-based experiments to introduce chemical principles and develop critical-thinking skills. A course for non-science majors; includes chemistry that is related to environmental and consumer issues. Pre/corequisite: CHEM 10030.

1.000 Credit hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Chemistry and Biochemistry Department

Course Attributes:
Kent Core-Basic Sciences, Kent Core-Basic Sciences Lab, LER-Basic Sciences, Trnfr Module-Natural Sciences

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**CHEM 10050 - FUNDAMENTALS OF CHEMISTRY**

Basic concepts of chemistry (including atomic structure, chemical bonding and reactions) necessary for courses in elementary organic chemistry and physiological chemistry. Students may only receive credit toward graduation for one of the following courses: CHEM 10050; or CHEM 10054; or CHEM 10060 and 10061; or CHEM 10960 and 10961. Prerequisite: ACT math score of 16; or MATH 00007 or MATH 00023 or MATH 00024 or MATH 11009 or MATH 11010 or MATH 11012 or MATH 12002 or MATH 12011 or MATH 12021.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

Course Attributes:
Kent Core-Basic Sciences, LER-Basic Sciences, Trnfr Module-Natural Sciences

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**CHEM 10052 - INTRODUCTION TO ORGANIC CHEMISTRY**

Chemistry of organic and biological molecules necessary for the study of physiological chemistry. Students may only receive credit toward graduation for one of the following courses: CHEM 10052; or CHEM 10054; or CHEM 20481 and 20482; or CHEM 30481 and 30482. Prerequisite: CHEM 10050 or 10060.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

Course Attributes:
Kent Core-Basic Sciences, LER-Basic Sciences, Trnfr Module-Natural Sciences
### CHEM 10053 - INORGANIC AND ORGANIC LABORATORY

Laboratory with experiments covering material from CHEM 10050, 10052 and 10054. Students may only receive credit toward graduation for one of the following courses: CHEM 10053; or CHEM 10062 and 10063; or CHEM 10960 and 10961. Prerequisite: CHEM 10050 or 10054. Corequisite CHEM 10052.

1.000 Credit hours  
3.000 Lab hours

Levels: Undergraduate  
Schedule Types: Laboratory

Chemistry and Biochemistry Department

Course Attributes:  
Kent Core-Basic Sciences, Kent Core-Basic Sciences Lab, LER-Basic Sciences, Trnfr Module-Natural Sciences

### CHEM 10054 - GENERAL AND ELEMENTARY ORGANIC CHEMISTRY

A course covering the basic concepts of general, inorganic and organic chemistry necessary for the study of physiological chemistry. Students may only receive credit toward graduation for one of the following courses: CHEM 10050; or CHEM 10052; or CHEM 10054; or CHEM 10060 and 10061; or CHEM 10960 and 10961; or CHEM 20481 and 20482; or CHEM 30481 and 30482. Prerequisite: ACT math score of 16; or MATH 00007 or MATH 00023 or MATH 00024 or MATH 11009 or MATH 11010 or MATH 11012 or MATH 12002 or MATH 12011 or MATH 12021.

5.000 Credit hours  
5.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

Chemistry and Biochemistry Department

Course Attributes:  
Kent Core-Basic Sciences, LER-Basic Sciences, Trnfr Module-Natural Sciences

### CHEM 10055 - MOLECULES OF LIFE

An integrated introduction to molecular systems and their participation in the processes of life. Prerequisite: None.

3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

Chemistry and Biochemistry Department

Course Attributes:  
Kent Core-Basic Sciences

### CHEM 10060 - GENERAL CHEMISTRY I

Chemistry for science majors, emphasizing stoichiometry, introduction to chemical reactions, thermochemistry, atomic structure, periodicity, molecular structure and chemical bonding. Students who register for this course must successfully complete the placement assessment and basic chemistry modules prior to the start of the term. Those who do not will be deregistered. Students will be informed of the requirement by the Department of Chemistry and Biochemistry. Students may only receive credit toward graduation for one of the following.
courses: CHEM 10050 or CHEM 10054 or CHEM 10060 or CHEM 10960. Prerequisite: ALEKS math assessment score of 55 or higher; or MATH ACT of 22; or a minimum C (2.000) grade in MATH 00024 or minimum C (2.000) grade in MATH 11009 or higher.

4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

Course Attributes:
Kent Core-Basic Sciences, LER-Basic Sciences, TAG - Science

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**CHEM 10061 - GENERAL CHEMISTRY II**

Continuation of CHEM 10060, emphasizing intermolecular forces, properties of mixtures, main group chemistry, kinetics, equilibrium, acid-base chemistry, thermodynamics and electrochemistry. Students may only receive credit toward graduation for one of the following courses: CHEM 10050 or CHEM 10054 or CHEM 10061 or CHEM 10961. Prerequisite: CHEM 10060.

4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

Course Attributes:
Kent Core-Basic Sciences, LER-Basic Sciences, TAG - Science

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**CHEM 10062 - GENERAL CHEMISTRY I LABORATORY**

Laboratory covering pertinent aspects of CHEM 10060. Three hours weekly. Students may only receive credit toward graduation for one of the following courses: CHEM 10053 or CHEM 10062 or CHEM 10960. Pre- or corequisite: CHEM 10060.

1.000 Credit hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Chemistry and Biochemistry Department

Course Attributes:
Kent Core-Basic Sciences, Kent Core-Basic Sciences Lab, LER-Basic Sciences, TAG - Science

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**CHEM 10063 - GENERAL CHEMISTRY II LABORATORY**

Laboratory covering pertinent aspects of CHEM 10061, including qualitative analysis. Students may only receive credit toward graduation for one of the following courses: CHEM 10053 or CHEM 10063 or CHEM 10961. Prerequisite: CHEM 10062. Pre- or corequisite: CHEM 10061.

1.000 Credit hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory
Chemistry and Biochemistry Department

Course Attributes:
Kent Core-Basic Sciences, Kent Core-Basic Sciences Lab, LER-Basic Sciences, TAG - Science

**CHEM 10960 - HONORS GENERAL CHEMISTRY**

Rigorous general chemistry course for qualified students. Stoichiometry, equilibrium, thermodynamics, kinetics, bonding, and structure. Four hours lecture one three hour lab weekly. Students may only receive credit toward graduation for one of the following courses: CHEM 10050; or CHEM 10053; or CHEM 10054; or CHEM 10060 and 10062; or CHEM 10960. Prerequisite: special approval.

5.000 Credit hours
4.000 Lecture hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Chemistry and Biochemistry Department

Course Attributes:
Honors Course, Kent Core-Basic Sciences, Kent Core-Basic Sciences Lab, LER-Basic Sciences

**CHEM 10961 - HONORS GENERAL CHEMISTRY**

A continuation of CHEM 10960. Student may only receive credit toward graduation for one of the following courses: CHEM 10050; or CHEM 10053; or CHEM 10054; or CHEM 10061 and 10063; or CHEM 10961. Prerequisite: CHEM 10960.

5.000 Credit hours
4.000 Lecture hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Chemistry and Biochemistry Department

Course Attributes:
Honors Course, Kent Core-Basic Sciences, Kent Core-Basic Sciences Lab, LER-Basic Sciences

**CHEM 20050 - CAREER PATHWAYS IN CHEMISTRY**

Designed to introduce students to the wide range of career pathways available in chemistry. Students will learn different strategies for identifying and pursuing career opportunities, and will develop their communication skills through writing assignments and oral presentations. Satisfactory/Unsatisfactory (S/U) graded. Prerequisite: None.

1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

**CHEM 20095 - SPECIAL TOPICS**

(repeatable for credit) Selected topics in chemistry. Prerequisite: special approval.
CHEM 20098 - INTRODUCTION TO CHEMICAL RESEARCH
Research experience for freshmen and sophomores. Registration requires prior approval of the research director. Does not count toward the electives for the BS or BA chemistry degree. A written report is required. Prerequisite: GPA of 2.500 in chemistry and special approval.

Levels: Undergraduate
Schedule Types: Research

Chemistry and Biochemistry Department

CHEM 20284 - PHYSIOLOGICAL CHEMISTRY
Chemistry and metabolism of carbohydrates, lipids, nucleic acids and proteins; regulation of metabolism, nature of enzyme action, clinical aspects of biochemistry. Four hours of lecture weekly. Prerequisite: CHEM 10052 or 10054 or 20481.

Levels: Undergraduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

CHEM 20481 - BASIC ORGANIC CHEMISTRY I
Survey of the structure, preparation and reactions (including mechanisms) of organic compounds emphasizing the chemistry of biologically important functional groups. Students may only receive credit toward graduation for one of the following courses: CHEM 10052 or CHEM 10054 or CHEM 20481 or CHEM 30481. Prerequisite: CHEM 10061 or 10961.

Levels: Undergraduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

CHEM 20482 - BASIC ORGANIC CHEMISTRY II
Continuation of CHEM 20481, emphasizing the chemistry of functional groups prevalent in biological chemistry.
Students may only receive credit toward graduation for one of the following courses: CHEM 10052 or CHEM 10054 or CHEM 20482 or CHEM 30482. Prerequisite: CHEM 20481.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

Course Attributes:
TAG - Science

**CHEM 30050 - INTRODUCTION TO MATERIALS CHEMISTRY**

This course provides an introduction to materials and their applications. It serves as the initiation for the materials chemistry concentration. Prerequisite: CHEM 10061 or 10961; and CHEM 30481 and PHY 23101.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

**CHEM 30105 - ANALYTICAL CHEMISTRY I**

Covers the fundamental theory, experimental methods, and applications of analytical chemistry principles in chemistry as well as other related disciplines such as life sciences and environmental science. It covers analytical measurements, experimental error, statistics, chemical equilibrium and titration, spectrometry as well as analytical separation techniques. Prerequisites: CHEM 10061.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

**CHEM 30106 - ANALYTICAL CHEMISTRY II**

Covers the theoretical basis and experimental methods of analytical chemistry not considered in Analytical Chemistry I (CHEM 30105), such as noise reduction, advanced chemical equilibria and titrations, electrochemistry, atomic spectroscopy, instrumental design, and sample preparation. Prerequisite: CHEM 30105

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

**CHEM 30107 - ANALYTICAL CHEMISTRY LABORATORY I**

Fundamental laboratory class for analytical chemistry. Provides hands-on experience to students on the subjects including data treatment, volumetric analysis, spectrophotometry, separation techniques and mass
spectroscopy. Prerequisite: CHEM 10063. Pre-/corequisite: CHEM 30105.
1.000 Credit hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Chemistry and Biochemistry Department

Course Attributes:
Writing Intensive Course

**CHEM 30108 - ANALYTICAL CHEMISTRY LABORATORY II**

Advanced analytical chemistry laboratory class which covers a broad range of modern analytical techniques, including ion-selective electrodes, voltammetry, atomic spectroscopy, mass-spectrometry and capillary electrophoresis. Unlike Analytic Chemistry Laboratory I (CHEM 30107) this class focuses on forensic rather than bioanalytical applications. Prerequisites: CHEM 30105. Pre- or corequisite: CHEM 30107.
2.000 Credit hours
6.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Chemistry and Biochemistry Department

Course Attributes:
Writing Intensive Course

**CHEM 30284 - INTRODUCTORY BIOLOGICAL CHEMISTRY**

Chemistry and metabolism of biochemically important compounds; nature of enzyme action; metabolic regulation and bioenergetics. Prerequisite: CHEM 20481; or CHEM 30481 and 30482.
4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

**CHEM 30301 - INORGANIC CHEMISTRY I**

Chemistry of hydrogen, ions in aqueous solution, redox reactions, coordination complexes: d-block chemistry, crystal field model, electronic spectra and magnetism, introduction to organometallic chemistry, periodic trends for p-block elements. Prerequisite: CHEM 10061.
2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

**CHEM 30475 - ORGANIC CHEMISTRY LABORATORY I**

Practical experience in organic laboratory techniques on both micro- and macroscale: physical methods for
purification and characterization of organic compounds, introduction to organic reactions. Prerequisite: CHEM 10063; Pre/corequisite: CHEM 20481 or 30481.
1.000 Credit hours
1.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Chemistry and Biochemistry Department

Course Attributes:
Experiential Learning Requirem, TAG - Science

CHEM 30476 - ORGANIC CHEMISTRY LABORATORY II

Continuation of CHEM 30475, involving multi-step organic experiments that utilize techniques introduced in CHEM 30475. Prerequisite: CHEM 30475. Pre- or corequisite: CHEM 20482 or 30482.
1.000 Credit hours
1.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Chemistry and Biochemistry Department

Course Attributes:
TAG - Science

CHEM 30481 - ORGANIC CHEMISTRY I

Introduction to organic chemistry from structural, mechanistic and synthetic viewpoints with an emphasis on the chemistry of biologically relevant functional groups. Students may only receive credit toward graduation for one of the following courses: CHEM 10052 or CHEM 10054 or CHEM 20481 or CHEM 30481. Prerequisite: CHEM 10061 or 10961.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

CHEM 30482 - ORGANIC CHEMISTRY II

Continuation of CHEM 30481; organic chemistry from mechanistic and synthetic viewpoints; IR and NMR spectroscopy; mass spectrometry. Students may only receive credit toward graduation for one of the following courses: CHEM 10052 or CHEM 10054 or CHEM 20482 or CHEM 30482. Prerequisite: CHEM 30481.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

CHEM 40053 - MATERIALS CHEMISTRY LABORATORY
Exploration of the synthesis, characterization and application of inorganic and organic materials. Prerequisite: CHEM 30050.

2.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Chemistry and Biochemistry Department

**CHEM 40093 - VARIABLE TITLE WORKSHOP IN CHEMISTRY**

(Repeatable for credit) Variable titled workshop in chemistry. Prerequisite: Special approval.
1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Undergraduate
Schedule Types: Workshop

Chemistry and Biochemistry Department

**CHEM 40099 - SENIOR HONORS THESIS**

(Repeatable for credit) For departmental honors may be started summer prior to senior year. Register each semester during senior year. Minimum total credit 5-hours. Prerequisite: Departmental and honors college approval.
1.000 TO 10.000 Credit hours
1.000 TO 10.000 Other hours

Levels: Undergraduate
Schedule Types: Senior Project/Honors Thesis

Chemistry and Biochemistry Department

Course Attributes:
Experiential Learning Requirement, Honors Course

**CHEM 40109 - BIOANALYTICAL CHEMISTRY**

(Cross-listed with CHEM 50109 and CHEM 70109) Covers traditional as well as newly emerging topics in the field of bioanalytical chemistry. Provides an overview of the fundamental biological targets for bioanalytical assays, such as lipids, peptides, proteins, nucleic acids and cells. Briefly introduces traditional tools, such as chromatography, electrophoresis, mass spectrometry, fluorescence techniques, immunoassays, and biosensors. Discusses approaches most recently developed in the field, which include lab-on-a-chip and single molecule techniques. Prerequisite: CHEM 30105. Corequisite: CHEM 30284 or 40245 or 40261.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

**CHEM 40113 - CHEMICAL SEPARATIONS**

(Cross-listed with CHEM 50113 and CHEM 70113) Theory, instrumentation and applications of chemical separations for chemical analysis with an emphasis on gas and liquid chromatography. Prerequisite: CHEM
CHEM 40195 - SPECIAL TOPICS IN ANALYTICAL CHEMISTRY

(Repeatable for credit) Selected topics in analytical chemistry. Prerequisite: Special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

CHEM 40245 - BIOCHEMICAL FOUNDATIONS OF MEDICINE

(Cross-listed with CHEM 50245) Chemistry and metabolism of biologically important compounds; enzyme catalysis; metabolic regulation, inborn and induced errors of metabolism. For students in integrated life science (ILS) program. Prerequisite: CHEM 30481 and pre- or corequisite: CHEM 30482.
4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

CHEM 40248 - ADVANCED BIOLOGICAL CHEMISTRY

(Cross-listed with CHEM 50248 and CHEM 70248) Chemistry of biologically important molecules. Advanced topics in metabolic and enzyme regulation; enzyme kinetics and mechanism; DNA replication, recombination and repair; gene transcription and translation; recombinant DNA technology; selected areas in molecular physiology. Three hours weekly. Prerequisite: CHEM 30284 or 40245 or 40247.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

CHEM 40251 - ADVANCED BIOLOGICAL CHEMISTRY LABORATORY

Practical experience in the chemistry of biologically important molecules. Properties of proteins, lipids and nucleic acids. Recombinant DNA technology. Six hours weekly. Prerequisite: CHEM 30284 or 40245 or 40247.
2.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Lecture
Chemistry and Biochemistry Department

Course Attributes:
Writing Intensive Course

**CHEM 40261 - PRINCIPLES OF BIOCHEMISTRY I**

(Cross-listed with CHEM 50261 and CHEM 70261) Introduction to biochemical principles regarding the structure, function and metabolism of biomolecules including water, amino acids, proteins, carbohydrates and lipids; emphases on enzymes, membranes and bioenergetics. Prerequisites: CHEM 20481 or 30482; and CHEM 40555 or 40567.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**CHEM 40262 - PRINCIPLES OF BIOCHEMISTRY II**

(Cross-listed with CHEM 50262 and CHEM 70262) Supramolecular and cellular aspects of biochemistry including DNA replication, repair, and recombination and modification; transcription and translation; signal transduction, post-translational modification; transcriptomics and proteomics. Prerequisites: CHEM 40261 or CHEM 40245; special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**CHEM 40263 - PHYSICAL BIOCHEMISTRY I**

(Cross-listed with CHEM 50263 and CHEM 70263) Principles and techniques of physical chemistry used in studying biomacromolecules and biological systems, spectroscopy, structure and properties of biological molecules. Prerequisite: CHEM 40555 or 40567.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**CHEM 40295 - SPECIAL TOPICS IN BIOCHEMISTRY**

(Repeatable for credit)Selected topics in biochemistry. Prerequisite: Special approval.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
CHEM 40302 - INORGANIC CHEMISTRY II

(Cross-listed with CHEM 50302) Physical techniques in inorganic chemistry, molecular structure and bonding, metallic and ionic solids, organometallic chemistry, homogeneous and heterogeneous catalysis; solid-state and materials chemistry, nanomaterials, nanoscience and nanotechnology. Prerequisite: CHEM 30301
2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

CHEM 40303 - INORGANIC CHEMISTRY III

(Cross-listed with CHEM 50303) Molecular symmetry, molecular orbital theory of polyatomic molecules and octahedra complexes, electronic spectra and reaction mechanisms of d-block complexes, periodic trends Groups 1 and 2 and d-block, bioinorganic chemistry. Prerequisite: CHEM 40302.
2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

CHEM 40352 - INORGANIC MATERIALS CHEMISTRY

(Cross-listed with CHEM 50352 and CHEM 70352) Broad survey of the synthesis, properties, characterization and applications of inorganic materials. Prerequisite: CHEM 30050 and 40361.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

CHEM 40364 - INTERMEDIATE INORGANIC CHEMISTRY LAB

A laboratory course providing experience in the synthesis of significant inorganic compounds and the techniques of various experimental and spectroscopic methods and chromatographic separations. Prerequisite: CHEM 40303.
1.000 Credit hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Chemistry and Biochemistry Department

CHEM 40365 - BIOLOGICAL INORGANIC CHEMISTRY

(Cross-listed with CHEM 50365 and CHEM 70365) Physical methods, s-block metals, metal ion-induced folding, electron transfer proteins, oxidoreductases, substrate binding and activation by non-redox mechanisms, biomineralization, group-atom transfer and metals in medicine. Prerequisite: CHEM 30301.
CHEM 40395 - SPECIAL TOPICS IN INORGANIC CHEMISTRY

(Repeatable for credit) Selected topics in inorganic chemistry. Prerequisite: Special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

CHEM 40451 - ORGANIC MATERIALS CHEMISTRY

(Cross-listed with CHEM 50451 and CHEM 70451) Broad survey of the synthesis, properties, characterization and applications of organic and polymeric materials. Prerequisite: CHEM 30482 and CHEM 30050.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

CHEM 40476 - SPECTROSCOPIC IDENTIFICATION OF ORGANIC COMPOUNDS

(Cross-listed with CHEM 50476 and CHEM 70476) Strategies for structural elucidation of organic compounds from analysis of infrared, proton and carbon NMR, and mass spectrometric data through lectures and problem solving. Prerequisite: CHEM 30482.
2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

CHEM 40477 - INTERMEDIATE ORGANIC CHEMISTRY LABORATORY

Continuation of CHEM 30476, including hands-on use of a high-field NMR spectrometer; single and multistep organic syntheses. Prerequisite: CHEM 30476.
1.000 Credit hours
1.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Chemistry and Biochemistry Department
CHEM 40478 - SYNTHESIS OF ORGANIC LIQUID CRYSTALS

(Cross-listed with CHEM 50478 and CHEM 70478) Synthesis of organic thermotropic liquid crystals including nematic, smectic and discotic variants. Evaluation of the phase types using polarizing microscopy and DSC. Brief introduction into their use in display devices. Prerequisite: CHEM 30482.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

CHEM 40483 - INTERMEDIATE ORGANIC CHEMISTRY

Continuation of CHEM 30482, organic chemistry from mechanistic and synthetic viewpoints. Prerequisite: CHEM 30481 and CHEM 30482.

1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

CHEM 40495 - SPECIAL TOPICS IN ORGANIC CHEMISTRY

(Repeatable for credit) Selected topics in organic chemistry. Prerequisite: Special approval.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

CHEM 40555 - ELEMENTARY PHYSICAL CHEMISTRY

(Cross-listed with CHEM 50555 and CHEM 70555) Fundamental concepts of physical chemistry, with example problems chosen emphasizing applications in chemistry and the biological sciences. Prerequisite: CHEM 10061 and MATH 22005 and PHY 23102; and chemistry (CHEM) major and junior standing. Pre- or corequisite: CHEM 30107.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

CHEM 40556 - ELEMENTARY PHYSICAL CHEMISTRY

(Cross-listed with CHEM 50556 and CHEM 70556) A continuation of CHEM 40555. Areas covered include quantum mechanics, atomic and molecular structure, spectroscopy, statistical mechanics, theories of reaction rates and the solid state. Prerequisite: CHEM 40555 or PHY 45301.

3.000 Credit hours
3.000 Lecture hours
CHEM 40557 - PHYSICAL CHEMISTRY LAB

(Cross-listed with CHEM 50557 and CHEM 70557) Experiments in numerous areas of physical chemistry, including the interpretation and reporting of obtained experimental data, correlation of results with theory and an introduction to the computer treatment of data. Prerequisite: CHEM 40556.
2.000 Credit hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Chemistry and Biochemistry Department

CHEM 40559 - NANOMATERIALS

(Slashed with CHEM 50559 and CHEM 70559) Fundamental aspects of nanomaterials ranging from nanoparticles to three-dimensional (3D) nanostructures emphasizing their synthesis, chemistry and applications. Prerequisite: CHEM 10061. Pre- or co-requisite: CHEM 40555 or CHEM 40567.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

CHEM 40567 - BASIC CONCEPTS OF PHYSICAL CHEMISTRY

Traditional aspects of physical chemistry with minimal calculus treatment. Applications to the health sciences emphasized. Four hours lecture weekly. Cannot be used to satisfy requirements for chemistry concentration within the Bachelor of Science in Chemistry. Prerequisite: CHEM 10062, PHY 13002, MATH 12002.
4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

CHEM 40568 - ELEMENTARY PHYSICAL CHEMISTRY LABORATORY

Provides hands-on experience with calorimetry, viscosimetry and spectroscopic techniques. Prerequisite: CHEM 40555 or 40567.
1.000 Credit hours
1.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Chemistry and Biochemistry Department
### CHEM 40571 - SURFACE CHEMISTRY

(Cross-listed with CHEM 50571 and CHEM 70571) Treatment of basic principles and concepts in surface and colloid chemistry. Relationship to practical systems emphasized. Two hours lecture weekly. Prerequisite: CHEM 40555 or 40567.

- 2.000 Credit hours
- 2.000 Lecture hours

**Levels:** Undergraduate  
**Schedule Types:** Lecture

Chemistry and Biochemistry Department

### CHEM 40575 - MOLECULAR SPECTROSCOPY

(Cross-listed with CHEM 50575 and CHEM 70575) Survey of the fundamental principles of the interaction of radiation with matter, with an emphasis on the interpretation of microwave, infrared and ultraviolet-visible spectra. Introduction to group theory and its application to spectroscopic interpretation. Description of modern experimental techniques. Prerequisite: CHEM 40556.

- 3.000 Credit hours
- 3.000 Lecture hours

**Levels:** Undergraduate  
**Schedule Types:** Lecture

Chemistry and Biochemistry Department

### CHEM 40595 - SPECIAL TOPICS IN PHYSICAL CHEMISTRY

(Repeatable for credit) Selected topics in physical chemistry. Prerequisite: Special approval.

- 1.000 TO 3.000 Credit hours
- 1.000 TO 3.000 Lecture hours

**Levels:** Undergraduate  
**Schedule Types:** Lecture

Chemistry and Biochemistry Department

### CHEM 40795 - CURRENT TOPICS IN CHEMICAL EDUCATION

(Repeatable for credit) (Cross-listed with CHEM 50795) Recent advances in chemical research, instrumentation and theory important to chemical educators. Prerequisite: Permission.

- 1.000 TO 3.000 Credit hours
- 1.000 TO 3.000 Lecture hours

**Levels:** Undergraduate  
**Schedule Types:** Lecture

Chemistry and Biochemistry Department

### CHEM 40796 - INDIVIDUAL INVESTIGATION

(Repeatable for credit) Registration requires prior approval of the research director. Written report required. Maximum of two hours may be applied to the four hour CHEM 40000 elective requirement for the chemistry concentration within the B.S. in Chemistry. Prerequisite: 2.500 GPA in chemistry and special approval.

- 1.000 TO 8.000 Credit hours
- 1.000 TO 8.000 Other hours

Chemistry and Biochemistry Department
Levels: Undergraduate
Schedule Types: Individual Investigation

Chemistry and Biochemistry Department

CHEM 41010 - BIOPHOTONICS

(Cross-listed with BSCI 41010 and BSCI 51010 and CHEM 51010 and PHY 41010 and PHY 51010) Interdisciplinary overview of the basics of biophotonics; application of biophotonic techniques to probe biological samples. Introduction to the foundations of optics and photonics and how the molecular structure of organic molecules translates into unique photonic properties and targeting in biological cells or tissue. Preparation of fluorescent materials, advanced spectroscopy and cell visualization using regular and confocal fluorescence microscopy. Prerequisite: special approval.
3.000 Credit hours
1.000 Lecture hours
6.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Chemistry and Biochemistry Department

CHEM 50093 - VARIABLE TITLE WORKSHOP IN CHEMISTRY

(Repeatable for credit) Variable titled workshop in chemistry. Prerequisite: Graduate standing and special approval.
1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Chemistry and Biochemistry Department

CHEM 50109 - BIOANALYTICAL CHEMISTRY

(Cross-listed with CHEM 40109 and CHEM 70109) Covers traditional as well as newly emerging topics in the field of bioanalytical chemistry. The course will provide an overview of the fundamental biological targets for the bioanalytical assays, such as lipids, peptides, proteins, nucleic acids, and cells. The course will then briefly introduce traditional tools, such as chromatography, electrophoresis, mass spectrometry, fluorescence techniques, immunoassays, and biosensors. Finally, the course will discuss approaches most recently developed in the field, which include lab-on-a-chip and single molecule techniques. Prerequisite: CHEM 30105; and graduate standing; and special approval. Corequisite: CHEM 30284 or 40245 or 40261.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

CHEM 50113 - CHEMICAL SEPARATIONS

(Cross-listed with CHEM 40113 and CHEM 70113) Theory, instrumentation and applications of chemical separations for chemical analysis. Emphasis on gas and liquid chromatography. Prerequisite: CHEM 30106 and graduate standing.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Hours</th>
<th>Levels: Graduate</th>
<th>Schedule Types: Lecture</th>
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<tbody>
<tr>
<td>CHEM 50245</td>
<td>BIOCHEMICAL FOUNDATIONS OF MEDICINE</td>
<td>(Cross-listed with CHEM 40245) Introduction to chemistry and metabolism of important compounds in biological systems; enzymes and characteristics of enzyme catalysis; regulation of metabolism at molecular, cellular and organism levels; inborn and induced errors of metabolism. Designed and scheduled for and priority given to students in integrated life sciences program. Prerequisite: CHEM 30481. Graduate standing.</td>
<td>4.000</td>
<td>Graduate</td>
<td>Lecture</td>
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<tr>
<td>CHEM 50248</td>
<td>ADVANCED BIOLOGICAL CHEMISTRY</td>
<td>(Cross-listed with CHEM 40248 and CHEM 70248) Chemistry of biologically important molecules. Advanced topics in: metabolic and enzyme regulation; enzyme kinetics and mechanism; DNA replication, recombination and repair; gene transcription and translation; recombinant DNA technology; selected areas in molecular physiology. Three hours weekly. Prerequisite: CHEM 30284 or CHEM 40245 or CHEM 40247; graduate standing.</td>
<td>3.000</td>
<td>Graduate</td>
<td>Lecture</td>
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<tr>
<td>CHEM 50261</td>
<td>PRINCIPLES OF BIOCHEMISTRY I</td>
<td>(Cross-listed with CHEM 40261 and CHEM 70261) Introduction to biochemical principles regarding the structure, function and metabolism of biomolecules including water, amino acids, proteins, carbohydrates and lipids; emphases on enzymes, membranes and bioenergetics. Prerequisite: graduate standing.</td>
<td>3.000</td>
<td>Graduate</td>
<td>Lecture</td>
</tr>
<tr>
<td>CHEM 50262</td>
<td>PRINCIPLES OF BIOCHEMISTRY II</td>
<td>(Cross-listed with CHEM 40262 and CHEM 70262) Supramolecular and cellular aspects of biochemistry including DNA replication, repair, and recombination and modification; transcription and translation; signal transduction, post-translational modification; transcriptomics and proteomics. Prerequisites: special approval; and graduate standing.</td>
<td>3.000</td>
<td>Graduate</td>
<td>Lecture</td>
</tr>
</tbody>
</table>
CHEM 50263 - PHYSICAL BIOCHEMISTRY I

(Cross-listed with CHEM 40263 and CHEM 70263) Principles and techniques of physical chemistry used in studying biomacro-molecules and biological systems. Topics covered are thermodynamics, spectroscopy, structure and properties of biological molecules. Prerequisite: CHEM 40555 or 40567. Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

CHEM 50302 - INORGANIC CHEMISTRY II

(Cross-listed with CHEM 40302) Physical techniques in inorganic chemistry, molecular structure and bonding, metallic and ionic solids, organometallic chemistry, homogeneous and heterogeneous catalysis; solid-state and materials chemistry, nanomaterials, nanoscience and nanotechnology. Prerequisite: CHEM 30301 and graduate standing.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

CHEM 50303 - INORGANIC CHEMISTRY III

(Cross-listed with CHEM 40303) Molecular symmetry, molecular orbital theory of polyatomic molecules and octahedral complexes, electronic spectra and reaction mechanisms of d-block complexes, periodic trends Groups 1 and 2 and d-block, bioinorganic chemistry. Prerequisite: CHEM 50302 and graduate standing.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

CHEM 50352 - INORGANIC MATERIALS CHEMISTRY

(Cross-listed with CHEM 40352 and CHEM 70352) Broad survey of the synthesis, properties, characterization and applications of inorganic materials. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
CHEM 50365 - BIOLOGICAL INORGANIC CHEMISTRY

(Cross-listed with CHEM 40365 and CHEM 70365) Physical methods, s-block metals, metal-induced stabilization, electron transfer proteins, oxidoreductases, hydrolases and lyases, metal transport and storage, nitrogenases, group-atom transfer and metals in medicine. Prerequisite: CHEM 30360 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

CHEM 50451 - ORGANIC MATERIALS CHEMISTRY

(Cross-listed with CHEM 40451 and CHEM 70451) Broad survey of the synthesis, properties, characterization and applications of organic and polymeric materials. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

CHEM 50476 - SPECTROSCOPIC IDENTIFICATION OF ORGANIC COMPOUNDS

(Cross-listed with CHEM 40476 and CHEM 70476) Strategies for structural elucidation of organic compounds from analysis of infrared, proton and carbon NMR and mass spectrometric data through lectures and problem solving. Prerequisite: CHEM 30482 and graduate standing.
2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

CHEM 50478 - SYNTHESIS OF ORGANIC LIQUID CRYSTALS

(Cross-listed with CHEM 40478 and CHEM 70478) Synthesis of organic thermotropic liquid crystals including nematic, smectic and discotic variants. Evaluation of the phase types using polarizing microscopy and DSC. Brief introduction into their use in display devices. Prerequisite: CHEM 30482; graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

CHEM 50555 - ELEMENTARY PHYSICAL CHEMISTRY

(Cross-listed with CHEM 40555 and CHEM 70555) Fundamental concepts of physical chemistry, with example
problems chosen emphasizing application in chemistry and the biological science. Prerequisite: CHEM 10061 and MATH 22005 and PHY 23102 and graduate standing. Pre- or corequisite: CHEM 30107.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

**CHEM 50556 - ELEMENTARY PHYSICAL CHEMISTRY**

(Cross-listed with CHEM 40556 and CHEM 70556) A continuation of CHEM 50555. Areas covered are chemical kinetics, quantum chemistry and the solid state. Prerequisite: CHEM 50555 or PHY 45301; graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

**CHEM 50557 - PHYSICAL CHEMISTRY LABORATORY**

(Cross-listed with CHEM 40557 and CHEM 70557) Experiments in numerous areas of physical chemistry, including the interpretation and reporting of obtained experimental data, correlation of results with theory and an introduction to the computer treatment of data. Corequisite or prerequisite: CHEM 50555 and 50556; graduate standing.

2.000 Credit hours
4.000 Lab hours

Levels: Graduate
Schedule Types: Laboratory

Chemistry and Biochemistry Department

**CHEM 50559 - NANOMATERIALS**

(Slashed with CHEM 40559 and CHEM 70559). Fundamental aspects of nanomaterials ranging from nanoparticles to three-dimensional (3D) nanostructures emphasizing their synthesis, chemistry and applications. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

**CHEM 50571 - SURFACE CHEMISTRY**

(Cross-listed with CHEM 40571 and CHEM 70571) Treatment of basic principles and concepts in surface and colloid chemistry. Relationship to practical systems emphasized. Prerequisite: CHEM 40555 or 40567. Graduate standing.

2.000 Credit hours
2.000 Lecture hours
CHEM 50575 - MOLECULAR SPECTROSCOPY

(Cross-listed with CHEM 40575 and CHEM 70575) Survey of the fundamental principles of the interaction of radiation with matter, with an emphasis on the interpretation of microwave, infrared and ultraviolet-visible spectra. Introduction to group theory and its application to spectroscopic interpretation. Description of modern experimental techniques. Prerequisite: CHEM 40556 and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

CHEM 50795 - CURRENT TOPICS IN CHEMICAL EDUCATION

(Repeatable for credit) (Cross-listed with CHEM 40795) Designed to present recent advances in chemical research, instrumentation and theory to chemistry educators. Prerequisite: Special approval and graduate standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

CHEM 51010 - BIOPHOTONICS

(Cross-listed with BSCI 41010 and BSCI 51010 and CHEM 41010 and PHY 41010 and PHY 51010) Interdisciplinary overview of the basics of biophotonics; application of biophotonic techniques to probe biological samples. Introduction to the foundations of optics and photonics and how the molecular structure of organic molecules translates into unique photonic properties and targeting in biological cells or tissue. Preparation of fluorescent materials, advanced spectroscopy and cell visualization using regular and confocal fluorescence microscopy. Prerequisites: graduate standing and special approval.

3.000 Credit hours
1.000 Lecture hours
6.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Chemistry and Biochemistry Department

CHEM 60199 - THESIS I

Thesis students must register for a total of 6 hours, 2 to 6 hours in single semester distributed over several semesters if desired. Prerequisite: Graduate standing.

2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Graduate
**CHEM 60254 - BIOMEMBRANES**

(Cross-listed with CHEM 70254) Biological membranes; composition, structure, dynamics and biogenesis; structure/function of protein mediated membrane transport. Prerequisite: graduate standing.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

**CHEM 60291 - SEMINAR: RECENT DEVELOPMENTS IN BIOCHEMISTRY**

(Repeatable for credit) (Cross-listed with CHEM 70291) Presentation and discussion of original papers from current literature. Participation by students and faculty. Prerequisite: Graduate standing.

1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Chemistry and Biochemistry Department

**CHEM 60299 - THESIS II**

Thesis students must continue registration until all degree requirements are met. Prerequisite: CHEM 60199 and graduate standing.

2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Chemistry and Biochemistry Department

**CHEM 60327 - MODERN INORGANIC CHEMISTRY**

(Cross-listed with CHEM 70327) Synthesis, structure and reactivity of inorganic compounds including transition metal and organometallic complexes. Prerequisite: CHEM 40362. Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

**CHEM 60347 - CHEMICAL CRYSTALLOGRAPHY**

(Cross-listed with CHEM 70347) Structure solution and refinement methods of X-ray diffraction data. Emphasis will be placed on single crystal techniques. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

**CHEM 60391 - SEMINAR: RECENT DEVELOPMENTS IN INORGANIC CHEMISTRY**

(Repeatable for credit) (Cross-listed with CHEM 70391) Presentation and discussion of current research papers in inorganic chemistry. Participation by students and faculty. Prerequisite: Graduate standing.

1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Chemistry and Biochemistry Department

**CHEM 60472 - ADVANCED ORGANIC CHEMISTRY-SYNTHETIC ASPECTS**


3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

**CHEM 60473 - STEREOSELECTIVE ORGANIC SYNTHESIS**

(Cross-listed with CHEM 70473) Modern methods of asymmetric synthesis; introduction to selected methods for stereoselective N-heterocycle synthesis; application of these methods in natural product synthesis. Prerequisite: CHEM 30482; graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

**CHEM 60591 - SEMINAR: RECENT DEVELOPMENTS IN PHYSICAL CHEMISTRY**

(Repeatable for credit) (Cross-listed with CHEM 70591) Presentation and discussion of original papers from current literature. Prerequisite: Graduate standing.

1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Chemistry and Biochemistry Department
CHEM 60894 - COLLEGE TEACHING OF CHEMISTRY

(Repeatable for credit) (Cross-listed with CHEM 70894) Experience in teaching of chemistry at college level. Prerequisite: Graduate standing.
1.000 Credit hours
1.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

CHEM 60898 - MASTERS RESEARCH

(Repeatable for credit) Research for master's students. Credits earned may be applied toward degree if department approves. Prerequisite: Graduate standing.
1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

Chemistry and Biochemistry Department

CHEM 61191 - SEMINAR: PROBLEM SOLVING IN ANALYTICAL CHEMISTRY

(Repeatable for credit) (Cross-listed with CHEM 71191) Discussion of recent chemical analysis methods, sample preparation and data handling, as well as practical student experience involving characterization of real samples. Prerequisite: Graduate standing.
1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Chemistry and Biochemistry Department

CHEM 61491 - SEMINAR: PROBLEM SOLVING IN ORGANIC CHEMISTRY

(Repeatable for credit) (Cross-listed with CHEM 71491) Practical experience in solution of current problems of structure, synthesis and mechanism in organic chemistry. Participation extends throughout nine-month academic year. Repeat registration permitted. Prerequisite: Graduate standing.
1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Chemistry and Biochemistry Department

CHEM 62191 - SEMINAR: ANALYTICAL CHEMISTRY

(Repeatable for credit) (Cross-listed with CHEM 72191) Students register once each year. Participation extends throughout the academic year. Prerequisite: Graduate standing.
1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Chemistry and Biochemistry Department

**CHEM 62291 - SEMINAR:BIOCHEMISTRY**

(Repeatable for credit) (Cross-listed with CHEM 72291) Students register once each year. Participation extends throughout the academic year. Prerequisite: Graduate standing.
1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Chemistry and Biochemistry Department

**CHEM 62391 - SEMINAR:INORGANIC CHEMISTRY**

(Repeatable for credit) (Cross-listed with CHEM 72391) Students register once each year. Participation extends throughout the academic year. Prerequisite: Graduate standing.
1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Chemistry and Biochemistry Department

**CHEM 62491 - SEMINAR:ORGANIC CHEMISTRY**

(Repeatable for credit) (Cross-listed with CHEM 72491) Students register once each year. Participation extends throughout the academic year. Prerequisite: Graduate standing.
1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Chemistry and Biochemistry Department

**CHEM 62591 - SEMINAR:PHYSICAL CHEMISTRY**

(Repeatable for credit) (Cross-listed with CHEM 72591) Students register once each year. Participation extends throughout the academic year. Prerequisite: Graduate standing.
1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Chemistry and Biochemistry Department

**CHEM 70093 - VARIABLE TITLE WORKSHOP IN CHEMISTRY**
CHEM 70109 - BIOANALYTICAL CHEMISTRY

(Cross-listed with CHEM 40109 and CHEM 50109) Covers traditional as well as newly emerging topics in the field of bioanalytical chemistry. The course will provide an overview of the fundamental biological targets for the bioanalytical assays, such as lipids, peptides, proteins, nucleic acids, and cells. The course will then briefly introduce traditional tools, such as chromatography, electrophoresis, mass spectrometry, fluorescence techniques, immunoassays, and biosensors. Finally, the course will discuss approaches most recently developed in the field, which include lab-on-a-chip and single molecule techniques. Prerequisite: CHEM 30105; and doctoral standing; and special approval. Corequisite: CHEM 30284 or 40245 or 40261.

Levels: Graduate
Schedule Types: Lecture

CHEM 70113 - CHEMICAL SEPARATIONS

(Cross-listed with CHEM 40113 and CHEM 50113) Theory, instrumentation and applications of chemical separations for chemical analysis. Emphasis on gas and liquid chromatography. Prerequisite: CHEM 30106 and doctoral standing.

Levels: Graduate
Schedule Types: Lecture

CHEM 70195 - ADVANCED TOPICS, ANALYTICAL

(Repeatable for credit) Advanced topics in analytical chemistry. Prerequisite: Special approval and doctoral standing.

Levels: Graduate
Schedule Types: Lecture

CHEM 70248 - ADVANCED BIOLOGICAL CHEMISTRY

(Cross-listed with CHEM 40248 and CHEM 50248) Chemistry of biologically important molecules. Advanced topics in: metabolic and enzyme regulation; enzyme kinetics and mechanism; DNA replication; recombination
and repair; gene transcription and translation; recombinant DNA technology; selected areas in molecular physiology. Three hours weekly. Prerequisite: CHEM 30284 or 40245 or 40247 doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

**CHEM 70254 - BIOMEMBRANES**

(Cross-listed with CHEM 60254) Biological membranes; composition, structure, dynamics and biogenesis; structure/function of protein mediated membrane transport. Prerequisite: doctoral standing.
2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

**CHEM 70261 - PRINCIPLES OF BIOCHEMISTRY I**

(Cross-listed with CHEM 40261 and CHEM 50261) Introduction to biochemical principles regarding the structure, function and metabolism of biomolecules including water, amino acids, proteins, carbohydrates and lipids; emphases on enzymes, membranes and bioenergetics. Prerequisites: special approval and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

**CHEM 70262 - PRINCIPLES OF BIOCHEMISTRY II**

(Cross-listed with CHEM 40262 and CHEM 50262) Supramolecular and cellular aspects of biochemistry including DNA replication, repair, and recombination and modification; transcription and translation; signal transduction, post-translational modification; transcriptomics and proteomics. Prerequisites: CHEM 60261 or CHEM 70261; special approval; and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

**CHEM 70263 - PHYSICAL BIOCHEMISTRY I**

(Cross-listed with CHEM 40263 and CHEM 50263) Principles and techniques of physical chemistry used in studying biomacro-molecules and biological systems. Topics covered are thermodynamics, spectroscopy, structure and properties of biological molecules. Prerequisite: CHEM 40555 or 40567. Doctoral standing.
3.000 Credit hours
3.000 Lecture hours
Chemistry and Biochemistry Department

**CHEM 70291 - SEMINAR: RECENT DEVELOPMENTS IN BIOCHEMISTRY**

(Repeatable for credit) Presentation and discussion of original papers from current literature. Participation by students and faculty. Prerequisite: doctoral standing.

1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Chemistry and Biochemistry Department

**CHEM 70295 - ADVANCED TOPICS IN BIOCHEMISTRY**

(Repeatable for credit) Advanced topics in biochemistry. Prerequisite: Special approval and doctoral standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

**CHEM 70327 - MODERN INORGANIC CHEMISTRY**

(Cross-listed with CHEM 60327) Synthesis, structure and reactivity of inorganic compounds including transition metal and organometallic complexes. Prerequisite: CHEM 40362. Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

**CHEM 70347 - CHEMICAL CRYSTALLOGRAPHY**

(Cross-listed with CHEM 60347) Structure solution and refinement methods of X-ray diffraction data. Emphasis will be placed on single-crystal techniques. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

**CHEM 70352 - INORGANIC MATERIALS CHEMISTRY**

(Cross-listed with CHEM 40352 and CHEM 50352) Broad survey of the synthesis, properties, characterization and applications of inorganic materials. Prerequisite: Doctoral standing.
CHEM 70365 - BIOLOGICAL INORGANIC CHEMISTRY

(Cross-listed with CHEM 40365 and CHEM 50365) Physical methods, s-block metals, metal-induced stabilization, electron transfer proteins, oxidoreductases, hydrolases and lyases, metal transport and storage, nitrogenases, group-atom transfer and metals in medicine. Prerequisite: CHEM 30360 and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

CHEM 70391 - SEMINAR:RECENT DEVELOPMENTS IN INORGANIC CHEMISTRY

(Repeatable for credit) (Cross-listed with CHEM 60391) Presentation and discussion of current research papers in inorganic chemistry. Participation by students and faculty. Prerequisite: Doctoral standing.

1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Chemistry and Biochemistry Department

CHEM 70395 - ADVANCED TOPICS, INORGANIC

(Repeatable for credit) Advanced topics in inorganic chemistry. Prerequisite: Special approval and doctoral standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

CHEM 70451 - ORGANIC MATERIALS CHEMISTRY

(Cross-listed with CHEM 40451 and CHEM 50451) Broad survey of the synthesis, properties characterization and applications of organic and polymeric materials. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Chemistry and Biochemistry Department
CHEM 70472 - ADVANCED ORGANIC CHEMISTRY-SYNTHETIC ASPECTS

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

CHEM 70473 - STEREOSELECTIVE ORGANIC SYNTHESIS

(Cross-listed with CHEM 60473) Modern methods of asymmetric synthesis; introduction to selected methods for stereoselective N-heterocycle synthesis; application of these methods in natural product synthesis. Prerequisite: CHEM 30482; doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

CHEM 70476 - SPECTROSCOPIC IDENTIFICATION OF ORGANIC COMPOUNDS

(Cross-listed with CHEM 40476 and CHEM 50476) Strategies for structural elucidation of organic compounds from analysis of infrared, proton and carbon NMR, and mass spectrometric data through lectures and problem solving. Prerequisite: CHEM 30482 and doctoral standing.
2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

CHEM 70478 - SYNTHESIS OF ORGANIC LIQUID CRYSTALS

(Cross-listed with CHEM 40478 and CHEM 70478) Synthesis of organic thermotropic liquid crystals including nematic, smectic and discotic variants. Evaluation of the phase types using polarizing microscopy and DSC. Brief introduction into their use in display devices. Prerequisite: CHEM 30482; doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

CHEM 70495 - ADVANCED TOPICS, ORGANIC

(Repeatable for credit) Advanced topics in organic chemistry. Prerequisite: Permission.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

**CHEM 70541 - ADVANCED PHYSICAL CHEMISTRY**

(Cross-listed with CHEM 60541) Covers basic materials of modern physical chemistry in two broad areas: thermodynamics and introductory quantum mechanics. Prerequisite: CHEM 50556. Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

**CHEM 70555 - ELEMENTARY PHYSICAL CHEMISTRY**

(Cross-listed with CHEM 40555 and CHEM 50555) Fundamental concepts of physical chemistry, with example problems chosen emphasizing applications in chemistry and the biological sciences. Prerequisites: CHEM 10061 and MATH 22005 and PHY 23102 and doctoral standing. Pre- or corequisite: CHEM 30107.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

**CHEM 70556 - ELEMENTARY PHYSICAL CHEMISTRY**

(Cross-listed with CHEM 40556 and CHEM 50556) Fundamental concepts of physical chemistry of current interest. Included are biological and medical aspects of physical chemistry. Graduate credit given to nonchemistry and nonphysics majors and with permission to certain chemistry majors. Prerequisite: CHEM 5/70555; graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

**CHEM 70557 - PHYSICAL CHEMISTRY LABORATORY**

(Cross-listed with CHEM 40557 and CHEM 50557) Experiments in numerous areas of physical chemistry, including the interpretation and reporting of obtained experimental data correlation of results with theory and an introduction to the computer treatment of data. Corequisite or prerequisite: CHEM 70555 and 70556; doctoral standing.

2.000 Credit hours
4.000 Lab hours

Levels: Graduate
Schedule Types: Laboratory
**CHEM 70559 - NANOMATERIALS**

(Slashed with CHEM 40559 and CHEM 50559) Fundamental aspects of nanomaterials ranging from nanoparticles to three-dimensional (3D) nanostructures emphasizing their synthesis, chemistry and applications. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**CHEM 70571 - SURFACE CHEMISTRY**

(Cross-listed with CHEM 40571 and CHEM 50571) Treatment of basic principles and concepts in surface and colloid chemistry. Relationship to practical systems emphasized. Prerequisite: CHEM 40555 or 40567. Doctoral standing.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**CHEM 70575 - MOLECULAR SPECTROSCOPY**

(Cross-listed with CHEM 40575 and CHEM 50575) Survey of the fundamental principles of the interaction of radiation with matter, with an emphasis on the interpretation of microwave, infrared and ultraviolet-visible spectra. Introduction to group theory and its application to spectroscopic interpretation. Description of modern experimental techniques. Prerequisite: CHEM 40556 and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**CHEM 70591 - SEMINAR: RECENT DEVELOPMENTS IN PHYSICAL CHEMISTRY**

(Repeatable for credit) (Cross-listed with CHEM 60591) Presentation and discussion of original papers from current literature. Prerequisite: Doctoral standing.

1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Seminar

**CHEM 70595 - ADVANCED TOPICS, PHYSICAL**
Advanced topics in physical chemistry. Prerequisite: Special approval and doctoral standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

**CHEM 70894 - COLLEGE TEACHING OF CHEMISTRY**

(Repeatable for credit) (Cross-listed with CHEM 60894) Experience in teaching of chemistry at college level. Prerequisite: Doctoral standing.
1.000 Credit hours
1.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Chemistry and Biochemistry Department

**CHEM 71191 - SEMINAR: PROBLEM SOLVING IN ANALYTICAL CHEMISTRY**

(Repeatable for credit) (Cross-listed with CHEM 61191) Discussion of recent chemical analysis methods, sample preparation and data handling as well as practical student experience involving characterization of real samples. Prerequisite: Doctoral standing.
1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Chemistry and Biochemistry Department

**CHEM 71491 - SEMINAR: PROBLEM SOLVING IN ORGANIC CHEMISTRY**

(Repeatable for credit) (Cross-listed with CHEM 61491) Practical experience in solution of current problems of structure, synthesis and mechanism in organic chemistry. Participation extends throughout nine month academic year. Prerequisite: Doctoral standing.
1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Chemistry and Biochemistry Department

**CHEM 72191 - SEMINAR: ANALYTICAL CHEMISTRY**

(Repeatable for credit) (Cross-listed with CHEM 62191) Students register once each year. Participation extends throughout the academic year. Prerequisite: Doctoral standing.
1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Chemistry and Biochemistry Department

**CHEM 72291 - SEMINAR:BIOCHEMISTRY**

(Repeatable for credit) (Cross-listed with CHEM 62291) Students register once each year. Participation extends throughout the academic year. Prerequisite: Doctoral standing.
1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Chemistry and Biochemistry Department

**CHEM 72391 - SEMINAR:INORGANIC CHEMISTRY**

(Repeatable for credit) (Cross-listed with CHEM 62391) Students register once each year. Participation extends throughout the academic year. Prerequisite: Doctoral standing.
1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Chemistry and Biochemistry Department

**CHEM 72491 - SEMINAR:ORGANIC CHEMISTRY**

(Repeatable for credit) (Cross-listed with CHEM 62491) Students register once each year. Participation extends throughout the academic year. Prerequisite: Doctoral standing.
1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Chemistry and Biochemistry Department

**CHEM 72591 - SEMINAR:PHYSICAL CHEMISTRY**

(Repeatable for credit) (Cross-listed with CHEM 62591) Students register once each year. Participation extends throughout the academic year. Prerequisite: Doctoral standing.
1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Chemistry and Biochemistry Department

**CHEM 80199 - DISSERTATION I**

(Repeatable for credit) Doctoral dissertation, for which registration in two semesters is required, first of which will be semester in which dissertation work is begun and continuing until the completion of 30 hours.
Prerequisite: Special approval and doctoral standing.
15.000 Credit hours
15.000 Other hours

Levels: Graduate
Schedule Types: Dissertation

Chemistry and Biochemistry Department

**CHEM 80299 - DISSERTATION II**

(Repeatable for credit) Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. Prerequisite: CHEM 80199 and doctoral standing.
15.000 Credit hours
15.000 Other hours

Levels: Graduate
Schedule Types: Dissertation

Chemistry and Biochemistry Department

**CHEM 80898 - RESEARCH**

(Repeatable for credit) Research for doctoral students. Credits earned may be applied toward degree if department approves. Prerequisite: Doctoral standing.
1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

Chemistry and Biochemistry Department

**CHIN 15101 - ELEMENTARY CHINESE I**

An introduction to Mandarin Chinese in the context of modern Chinese-speaking cultures. Prerequisite: None.
5.000 Credit hours
5.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**CHIN 15102 - ELEMENTARY CHINESE II**

A continuation of the introduction to Mandarin Chinese in the context of modern chinese-speaking cultures. Prerequisite: CHIN 15101.
5.000 Credit hours
5.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department
### CHIN 25201 - INTERMEDIATE CHINESE I

Continued development of speaking, listening, reading and writing skills using a variety of cultural materials. Prerequisite: CHIN 15102.

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<th>Credit hours</th>
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Levels: Undergraduate  
Schedule Types: Lecture

Modern-Classical Lang Studies Department

### CHIN 25202 - INTERMEDIATE CHINESE II

Continuation of CHIN 25201. Prerequisite: CHIN 25201.

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<th>Credit hours</th>
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Levels: Undergraduate  
Schedule Types: Lecture

Modern-Classical Lang Studies Department

### CHIN 30095 - SPECIAL TOPICS

(Repeatable for credit) Topic to be announced in schedule of classes. Prerequisite: Permission.

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<tr>
<th>Credit hours</th>
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Levels: Undergraduate  
Schedule Types: Lecture

Modern-Classical Lang Studies Department

### CHIN 35201 - ADVANCED INTERMEDIATE CHINESE I

Continuation of Intermediate Chinese II. Emphasis is on building active vocabulary for comprehension, reading authentic texts, writing of connected discourse and the development of conversational proficiency. Prerequisite: CHIN 25202.

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<th>Credit hours</th>
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Levels: Undergraduate  
Schedule Types: Lecture

Modern-Classical Lang Studies Department

### CHIN 35202 - ADVANCED INTERMEDIATE CHINESE II

Continuation of Advanced Intermediate Chinese I. Emphasis is on building active vocabulary for comprehension, reading authentic texts, writing of connected discourse and the development of conversational proficiency. Prerequisite: CHIN 35201

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<th>Credit hours</th>
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Levels: Undergraduate
**CHIN 45096 - INDIVIDUAL INVESTIGATION**

(Repeatable for a total of 6 credit hours) Individual study supervised by a faculty member on an approved topic dealing with Chinese language and-or culture. Prerequisite: CHIN 25201.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Modern-Classical Lang Studies Department

**CHIN 45201 - ADVANCED CHINESE I**

Continuation of Advanced Intermediate Chinese II. Emphasis is on building active vocabulary for comprehension, reading authentic texts, writing of connected discourse and the development of higher levels of conversational proficiency. Prerequisite: CHIN 35202.

5.000 Credit hours
5.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**CHIN 45202 - ADVANCED CHINESE II**

Continuation of Advanced Chinese I. Prerequisite: CHIN 45201.

5.000 Credit hours
5.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**CHIN 45301 - CHINESE CULTURE**

Survey of Chinese culture including ethnic, religious, and linguistic diversity and the roots of China's current socio-cultural context. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**CHIN 45302 - BUSINESS CHINESE**

Study of the business protocol, language functions, texts and vocabulary associated with travel and business in the Chinese-speaking world. Prerequisite: CHIN 35202.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

CI 40093 - VARIABLE TITLE WORKSHOP IN CURRICULUM AND INSTRUCTION

(Repeatable for credit) (Cross-listed with CI 50093 and CI 70093) Variable topic workshop designed to respond to curriculum trends and issues, and specialized needs. Prerequisite: Permission.
1.000 TO 5.000 Credit hours
1.000 TO 5.000 Other hours

Levels: Undergraduate
Schedule Types: Workshop

Teaching Learning and Curricul Department

CI 47095 - SPECIAL TOPICS IN CURRICULUM AND INSTRUCTION

(Repeatable for credit) Prerequisite: special approval.
1.000 TO 5.000 Credit hours
1.000 TO 5.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

CI 47096 - INDIVIDUAL INVESTIGATION IN CURRICULUM AND INSTRUCTION

(Repeatable for credit) Prerequisite: special approval.
1.000 TO 5.000 Credit hours
1.000 TO 5.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Teaching Learning and Curricul Department

CI 47195 - SPECIAL TOPICS IN CURRICULUM AND INSTRUCTION

(Repeatable for credit) Student teaching. Prerequisite: special approval.
1.000 TO 5.000 Credit hours
1.000 TO 5.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Teaching Learning and Curricul Department

CI 47330 - READING AND WRITING IN ADOLESCENCE/ADULTHOOD

(Cross-listed with CI 57330) Understanding of literacy learning in adolescence and adulthood (ages 12-21) with
an emphasis on strategies for text learning, literacy in electronic environments and teaching students who struggle as readers and writers. Prerequisite: Admission to advanced study.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**CI 47501 - TEACHING MATHEMATICS IN EARLY AND MIDDLE GRADES**

Addresses pedagogical content knowledge for the teaching and learning of mathematics in grades K-9, based on the national content and process standards. Prerequisite: Advanced standing, minimum C (2.000) in MATH 14001 or 14002.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**CI 47502 - SCIENCE TEACHING IN EARLY AND MIDDLE GRADES**

(Cross-listed with CI 57502) Addresses pedagogical content knowledge for the teaching and learning of science in grades K-9. In addition students examine how to best align science practice to state and national standards. Prerequisite: Admission to advanced study.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**CI 47503 - TEACHING SOCIAL STUDIES IN EARLY AND MIDDLE GRADES**

(Cross-listed with CI 57503) Addresses pedagogical content knowledge for the teaching and learning of social studies in grades k-9,based on the national content and process standards. Prerequisite: Admission to advanced study.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**CI 47504 - TEACHING READING AND WRITING IN MIDDLE GRADES**

(Cross-listed with CI 57504) Addresses pedagogical content knowledge for the teaching and learning of reading and writing in grades 4-9, based on the national content and process standards. Prerequisite: Admission to advanced study.

3.000 Credit hours
3.000 Lecture hours
Teaching Learning and Curricul Department

**CI 50093 - VARIABLE TITLE WORKSHOP IN CURRICULUM AND INSTRUCTION**

(Repeatable for credit) (Cross-listed with CI 40093 and CI 70093) Variable topic workshop designed to respond to curriculum trends and issues, and specialized needs. Prerequisite: Graduate standing and special approval.
1.000 TO 5.000 Credit hours
1.000 TO 5.000 Other hours

Levels: Graduate
Schedule Types: Workshop

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Teaching Learning and Curricul Department

**CI 50095 - SPECIAL TOPICS: SEMINAR/WORKSHOP IN CURRICULUM AND INSTRUCTION**

(Repeatable for credit) Special topic: seminar workshop for international baccalaureate program, Prerequisite: Graduate standing.
1.000 Credit hours
1.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

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Teaching Learning and Curricul Department

**CI 53093 - VARIABLE TITLE WORKSHOP IN EXERCISE, LEISURE AND SPORT**

(Repeatable for credit) (Cross-listed with SRM 53093) Workshop in exercise, leisure and sport studies topics vary. Maximum 4 hours may be applied to degree. Prerequisite: Graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Workshop

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Teaching Learning and Curricul Department

**CI 55015 - PSYCHOLOGY OF COACHING**

(Cross-listed with PEP 45015) Factors affecting athletic performance emphasizing skill, motivation, personality and practice conditions. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

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Teaching Learning and Curricul Department

**CI 55020 - CONTEMPORARY ATHLETIC COACHING**

A focus on the philosophy, skills, strategies and tactics of coaching within contemporary society. Prerequisite:
Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**CI 55051 - ELEMENTARY SCHOOL PHYSICAL EDUCATION METHODS**

(Cross-listed with PEP 45051) Approaches to teaching in elementary school physical education. Focus on establishing an environment for learning, planning standards based lessons, instructional effectiveness, and assessment of student learning. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school-agency before the first day of field experience. Prerequisite: Special approval; and graduate standing; and students in the Physical Education Teacher Education (PETE) concentration in the Curriculum and Instruction (CI) major within the Master of Education (MED) degree. Corequisite: CI 55053.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Teaching Learning and Curricul Department

**CI 55053 - ELEMENTARY SCHOOL PHYSICAL EDUCATION CONTENT**

(Cross-listed with PEP 45053) Physical education content for the elementary school child with emphasis on developmentally appropriate learning in three domains. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school-agency before the first day of field experience. Prerequisite: Special approval and graduate standing. Corequisite: CI 55051.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Teaching Learning and Curricul Department

**CI 55058 - SECONDARY SCHOOL PHYSICAL EDUCATION METHODS**

(Cross-listed with PEP 45058) Approaches to teaching in secondary physical education. Focus on management of the learning environment, planning for learning outcomes in three domains, instructional effectiveness, and sequential curriculum development. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school-agency before the first day of field experience. Prerequisite: Special approval and graduate standing. Corequisite: CI 55059.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab
CI 55059 - SECONDARY SCHOOL PHYSICAL EDUCATION CONTENT

(Cross-listed with PEP 45059) Introduction and development of content, standards-based curriculum models, management and organizational skills related to sports and activities utilized in secondary school physical education. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school-agency before the first day of field experience. Prerequisite: Special approval and graduate standing. Corequisite: CI 55058.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

CI 57330 - READING AND WRITING IN ADOLESCENCE/ADULTHOOD

(Cross-listed with CI 47330) Understanding of literacy learning in adolescence and adulthood (ages 12-21) with an emphasis on strategies for text learning, literacy in electronic environments, and teaching students who struggle as readers and writers. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

CI 57501 - TEACHING MATHEMATICS IN EARLY AND MIDDLE GRADES

(Cross-listed with CI 47501) This course addresses pedagogical content knowledge for the teaching and learning of mathematics in grades K-9, based on the national content and process standards. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

CI 57502 - SCIENCE TEACHING IN EARLY AND MIDDLE GRADES

(Cross-listed with CI 47502) This course addresses pedagogical content knowledge for the teaching and learning of science in grades K-9. In addition students will examine how to best align science practice to state and national standards. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisites</th>
<th>Credit Hours</th>
<th>Lecture Hours</th>
<th>Schedule Types</th>
<th>Levels</th>
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</thead>
<tbody>
<tr>
<td>CI 57503</td>
<td>Teaching Social Studies in Early and Middle Grades</td>
<td>(Cross-listed with CI 47503) This course addresses pedagogical content knowledge for the teaching and learning of social studies in grades K-9, based on the national content and process standards. Prerequisite: Graduate standing.</td>
<td>3.000 Credit hours, 3.000 Lecture hours</td>
<td>Graduate</td>
<td>Lecture</td>
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<td>Graduate</td>
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<tr>
<td>CI 57504</td>
<td>Teaching Reading and Writing in Middle Grades</td>
<td>(Cross-listed with CI 47504) Addresses pedagogical content knowledge for the teaching and learning of reading and writing in grades K-9, based on the national content and process standards. Prerequisite: Graduate standing.</td>
<td>3.000 Credit hours, 3.000 Lecture hours</td>
<td>Graduate</td>
<td>Lecture</td>
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<td>Graduate</td>
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<tr>
<td>CI 60199</td>
<td>Thesis I</td>
<td>Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester distributed over several semesters if desired. Prerequisite: Graduate standing and special approval.</td>
<td>2.000 TO 6.000 Credit hours, 2.000 TO 6.000 Other hours</td>
<td>Graduate</td>
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<td>Masters Thesis</td>
<td>Graduate</td>
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<tr>
<td>CI 60299</td>
<td>Thesis II</td>
<td>Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: CI 60199 and graduate standing.</td>
<td>2.000 Credit hours, 2.000 Other hours</td>
<td>Graduate</td>
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<td>Masters Thesis</td>
<td>Graduate</td>
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<tr>
<td>CI 61125</td>
<td>Issues and Trends in Social Studies Education</td>
<td>(Cross-listed with CI 71125) This course will provide an overview of historical trends and contemporary issues in social studies education. Prerequisite: Graduate standing.</td>
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<td>Graduate</td>
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<td>Graduate</td>
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3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**CI 61126 - RESEARCH IN SOCIAL STUDIES TEACHING AND LEARNING**

(Cross-listed with CI 71126) During this course students will examine, discuss and study research in the teaching and learning of social studies as well as develop their own study of social studies teaching and learning. Prerequisite: Graduate standing.

Levels: Graduate
Schedule Types: Lecture

**CI 61127 - TECHNOLOGY AND SOCIAL STUDIES**

(Cross-listed with CI 71127) Course provides experiences with and study of various uses of technology in social studies teaching and learning. During the course we will examine implications and effects of technology on student learning, teaching and society as a whole. Prerequisite: Graduate standing.

Levels: Graduate
Schedule Types: Lecture

**CI 61130 - MULTICULTURAL EDUCATION:STRATEGIES**

(Cross-listed with CI 71130) Teachers will be provided with knowledge and strategies for teaching children to function effectively in a pluralistic society. Prerequisite: Graduate standing.

Levels: Graduate
Schedule Types: Lecture

**CI 61133 - ISSUES AND TRENDS IN ELEMENTARY SCIENCE**

(Cross-listed with CI 71133) New discoveries in science, including issues in society with direct science content. Emphasis is on practical and simple classroom applications. Prerequisite: Graduate standing.

Levels: Graduate
Schedule Types: Lecture
### CI 61134 - RESEARCH TRENDS IN SCIENCE EDUCATION

(Cross-listed with CI 71134) Course in issues relating to research methods pertinent to science education. Prerequisite: Graduate standing.

- **3.000 Credit hours**
- **3.000 Lecture hours**

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

### CI 61140 - CULTURE AND MULTICULTURALISM IN SCIENCE EDUCATION

(Cross-listed with CI 71140) This course provides a general introduction to the impacts of multiculturalism and the social studies of science on science education. Implications for science educational curriculum theory, classroom practice and research are explored. Topics examined include, race and gender in science education, teaching the culture of science and teaching science in a global context. Prerequisite: Graduate standing.

- **3.000 Credit hours**
- **3.000 Lecture hours**

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

### CI 61141 - NATURE OF SCIENCE IN SCIENCE EDUCATION

(Cross-listed with CI 71141) Course in issues relating to the nature of science as it impacts science education. Prerequisite: Graduate standing.

- **3.000 Credit hours**
- **3.000 Lecture hours**

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

### CI 63193 - VARIABLE TITLE WORKSHOP IN EXERCISE, LEISURE AND SPORT

(Repeatable for credit) Workshop in exercise, leisure and sport topics vary. Maximum 4 hours applied to the degree. Prerequisite: Special approval and graduate standing.

- **1.000 TO 3.000 Credit hours**
- **1.000 TO 3.000 Other hours**

Levels: Graduate
Schedule Types: Workshop

Teaching Learning and Curricul Department

### CI 65025 - CONTEMPORARY ISSUES IN SPORT PEDAGOGY - AN INTERNATIONAL PERSPECTIVE

An international perspective on the investigation and study of current problems, issues and trends in sport pedagogy. Prerequisites: graduate standing.

- **3.000 Credit hours**
CI 65037 - ADAPTED PHYSICAL EDUCATION

This online course is designed to prepare physical education teachers to provide safe, appropriate, and individualized accommodations to students with disabilities. All information presented is structured around research-based and cross-culturally appropriate practices in adapted physical education that have been implemented in physical education programs globally. This web-based program includes lecture notes, supplemental readings, and video clips. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

CI 65044 - PEDAGOGICAL ANALYSIS OF PHYSICAL EDUCATION AND SPORT

An analysis of contemporary pedagogical models, practices and theories relevant to the multidimensional environments of physical education and sport. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

CI 65055 - CURRICULUM DEVELOPMENT IN SPORT PEDAGOGY

The analysis, development and design of curricular theory and practice in physical education and sport. An examination of current and future issues in curriculum implementation. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

CI 65392 - ADVANCED PRACTICUM IN PHYSICAL EDUCATION

(Repeatable for credit) A sixteen week practicum, in K-12 physical education, combining full-time student teaching and student teaching seminar. Eight weeks student teaching at the preschool to fifth grade level and eight weeks at the sixth to twelfth grade level. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school/agency before the first day of the semester in which student teaching/ internship will take place. Prerequisite: Special approval and graduate standing; and Official valid certification of Child Safety Training, approved Basic Life Support and A.L.I.C.E. Training must be presented to the campus office of clinical experience or designated faculty/staff at Regional campuses as prerequisite for student teaching.
10.000 Credit hours  
3.000 Lecture hours  
32.000 Other hours  

Levels: Graduate  
Schedule Types: Practicum or Internship, Seminar  

Teaching Learning and Curricul Department  

**CI 65592 - PRACTICUM IN ADAPTED PHYSICAL EDUCATION**  
(Repeatable for credit) (Cross-listed with CI 75592) Supervised and supervisory experiences in motor development for all ages and abilities, including conceptual bases for assessment and individualized task analysis. Prerequisite: Special approval and graduate standing.  
3.000 Credit hours  
9.000 Other hours  

Levels: Graduate  
Schedule Types: Practicum or Internship  

Teaching Learning and Curricul Department  

**CI 65692 - INTERNSHIP IN ATHLETIC COACHING**  
(Repeatable for a maximum of 4 credits) Supervised experience in organized sport focused upon the duties of a coach; can involve one or more level (youth, school, college, professional) and sport. A focus on the philosophy, skills, strategies and tactics of coaching within contemporary society. 45 contact hours per credit. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school-agency before the first day of the semester in which student teaching-internship will take place. Prerequisite: Graduate standing and special approval.  
2.000 TO 4.000 Credit hours  
6.000 TO 12.000 Other hours  

Levels: Graduate  
Schedule Types: Practicum or Internship  

Teaching Learning and Curricul Department  

**CI 67001 - FUNDAMENTALS OF CURRICULUM**  
(Cross-listed with CI 77001) Orientation to the curriculum field. Theoretical examination of foundations, elements, design and development of school, college and nonschool curricula. Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  

Levels: Graduate  
Schedule Types: Lecture  

Teaching Learning and Curricul Department  

**CI 67002 - CURRICULUM LEADERSHIP**  
(Cross-listed with CI 77002) This course explores the theories and practices of curriculum leadership with reference to the current politics of education and the democratic ideals of information-age, pluralistic societies. Mandated accountability reform is critically compared to invited professional renewal. Prerequisite: CI 67001; graduate standing.
### CI 67003 - TEACHER EDUCATION

(Cross-listed with CI 77003) This course is designed to provide a broad overview of teacher education, including curriculum, organization, governance and policy. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

### CI 67004 - PROFESSIONAL DEVELOPMENT IN TEACHING

(Cross-listed with CI 77004) This course is designed to provide a broad overview and conceptual framework for professional development; its historical, cultural, psychological and social contexts. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

### CI 67005 - INTERCULTURAL DIMENSIONS OF TEACHING AND LEARNING

(Cross-listed with CI 77005) Increasing intercultural interaction in schools and communities across the nation and around the world are prompting educational changes in terms of what is being taught and how it is being taught. Educators at all levels are increasingly being called upon to enhance their own intercultural competence and to consider how best to translate this to students in their charge. Addresses teaching and learning in the intercultural K-16 context. Prerequisites: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

### CI 67007 - CRITICAL REFLECTION IN CI

Capstone course for a master's degree in curriculum and instruction. Students critique their content area studies with reference to the standard of curriculum-based pedagogy. Three concepts inform this critique: continuing professional development, multicultural education, curriculum leadership for reform and renewal. Prerequisite: CI 67001 and graduate standing.

2.000 Credit hours
2.000 Lecture hours
Teaching Learning and Curricul Department

**CI 67010 - CURRICULUM EVALUATION**

(Cross-listed with CI 77010) This course is designed to help students learn to plan for and use a variety of techniques to gather information in systematic ways, across different phases of curriculum planning, development, implementation, and evaluation to enhance decision-making processes. Students will develop evaluation questions around a curriculum or program of their choice and then design a detailed evaluation plan. 
Prerequisite: Graduate Standing.
3.000 Credit hours
3.000 Lecture hours

Teaching Learning and Curricul Department

**CI 67091 - SEMINAR IN CURRICULUM AND INSTRUCTION**

(Repeatable for credit) (Cross-listed with CI 77091) A wide range of topics for advanced graduate inquiry. Normally a balance of theoretical study and creative application. Prerequisite: Instructor's special approval and graduate standing.
1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Teaching Learning and Curricul Department

**CI 67092 - ADVANCED PRACTICUM AND INTERNSHIP IN CURRICULUM AND INSTRUCTION**

(Repeatable for credit) (Cross-listed with CI 77092) Supervised practicum in curriculum design, development, implementation, and/or leadership. Planned with and directed by a graduate faculty member. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned schoolagency before the first day of the semester in which student teaching internship will take place.
Prerequisite: Graduate standing and special approval.
1.000 TO 3.000 Credit hours
3.000 TO 9.000 Other hours

Teaching Learning and Curricul Department

**CI 67095 - SPECIAL TOPICS IN CURRICULUM AND INSTRUCTION**

(Repeatable for credit) (Cross-listed with CI 77095) Specialized offerings in response to emerging or selected program needs in curriculum design, development and implementation. Prerequisite: Graduate standing and special approval.
1.000 TO 5.000 Credit hours
1.000 TO 5.000 Lecture hours
Teaching Learning and Curricul Department

CI 67096 - INDIVIDUAL INVESTIGATION IN CURRICULUM AND INSTRUCTION

(Repeatable for credit) (Cross-listed with CI 77096) Directed independent reading and/or research of special interest or need in student's program. Planned with and directed by a graduate faculty member. Prerequisite: Graduate standing and special approval.
1.000 TO 5.000 Credit hours
1.000 TO 5.000 Other hours

Teaching Learning and Curricul Department

CI 67098 - RESEARCH IN CURRICULUM AND INSTRUCTION

(Repeatable for credit) Students pursue an individualized research project on a specialized topic with approval and under direction of instructor. Prerequisite: Graduate standing and special approval.
1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Teaching Learning and Curricul Department

CI 67105 - IMPROVING CLASSROOM INSTRUCTION

(Cross-listed with CI 77105) Emphasizes motivation, varied materials and methods, individual needs and sources of teacher help. Class members define goals and means. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Teaching Learning and Curricul Department

CI 67107 - CURRICULUM AND ORGANIZATION IN THE MIDDLE GRADES

(Cross-listed with CI 77107) History, philosophy, curriculum and organization of schools serving children ages 8-15. Emphasis on development of programs and curriculum that are responsive to the needs of early adolescents. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Teaching Learning and Curricul Department

CI 67108 - TEACHING AND LEARNING IN THE MIDDLE GRADES
Pedagogical theories and practices; approaches to instruction, relationship of teaching to learning and development for children ages 8-15. Prerequisite: Graduate standing.

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**CI 67224 - TEACHING MATHEMATICS USING COMPUTERS AND CALCULATORS**

(Cross-listed with CI 77224) The purpose is to develop knowledge of research and theories regarding teaching and learning mathematics via computing devices. Further to develop proficiency in the use of computing devices and software that would be used in the teaching and learning of mathematics. Prerequisite: Graduate standing.

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**CI 67225 - RESEARCH IN MATHEMATICS EDUCATION**

(Cross-listed with CI 77225) Current research theory, methodology and results in mathematics education will be investigated. Implications for instructional practice and curriculum design will be examined. Prerequisite: Graduate standing.

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**CI 67226 - IMPROVING MATHEMATICS INSTRUCTION IN MIDDLE CHILDHOOD**

(Cross-listed with CI 77226) Instructional psychology and materials including technology for the effective teaching of mathematics in grade three through eight with a theoretical emphasis on cognitive development. Prerequisite: Graduate standing.

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**CI 67227 - ASSESSMENT IN MATHEMATICS EDUCATION**

(Cross-listed with CI 77227) Investigation of standards and practices in mathematical assessments as recommended by NCTM and current research. Prerequisite: Completion of 2 of the following: ADED 52267, CI 67224, CI 67226 or ECED 50147. Graduate standing.

Levels: Graduate
Schedule Types: Lecture
### CI 67228 - INTERVENTION IN MATHEMATICS INSTRUCTION

(Cross-listed with CI 77228) Investigation of alternative methods of teaching mathematics to diverse learners who experience difficulties in learning mathematics. Prerequisite: Completion of 2 of the following: ADED 52267, CI 67224, CI 67226 or ECED 50147. Graduate standing.

- **2.000 Credit hours**
- **2.000 Lecture hours**

### CI 67240 - INTRODUCTION TO ENVIRONMENTAL EDUCATION

(Cross-listed with CI 77240) Survey course emphasizes current debates in environmental issues, exploring the interconnectedness of ecology, understanding the impact of culture and education on notions of environmental concerns, and how these ideas can be investigated within classroom contexts. The course is designed for teachers, science educators and other concerned citizens of the earth. Prerequisite: Graduate standing.

- **3.000 Credit hours**
- **3.000 Lecture hours**

### CI 67292 - PRACTICUM IN MATHEMATICAL ASSESSMENT

(Cross-listed with CI 77292) (Repeatable for credit) Experience in designing and administering both formal and informal assessments. Prerequisite: Completion of 2 of the following: ADED 52267, CI 67224, CI 67226 or ECED 50147. Graduate standing.

- **2.000 Credit hours**
- **6.000 Other hours**

### CI 67310 - THEORY AND PRACTICE IN THE TEACHING OF READING

(Cross-listed with CI 77310) Nature and development of reading, approaches to instruction, relation to learning and development. Prerequisite: Graduate standing.

- **3.000 Credit hours**
- **3.000 Lecture hours**
CI 67312 - TEACHING WRITING AS A PROCESS

(Cross-listed with CI 77312) Emphasizes a process approach to writing instruction in grades K through 12. Examines the steps and studies of composing, evaluation and components of a school wide program. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

CI 67314 - SURVEY OF YOUNG ADULT LITERATURE

(Cross-listed with CI 77314) Presents a survey of selected types of literature appropriate for students in middle school, junior high and high school. Emphasis on evaluating, selecting and teaching. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

CI 67315 - SURVEY OF CHILDREN'S LITERATURE

(Cross-listed with CI 77315 and ENG 66052 and ENG 76052) Wide reading in children's literature, with particular application to school curriculum and field of reading. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

CI 67319 - DIAGNOSIS AND REMEDIATION IN READING

(Cross-listed with CI 77319) Theory and application of diagnostic principles and remedial reading approaches with school-age children. Cultural, linguistic, cognitive and affective factors in diagnosing and remediating reading problems. Prerequisite: CI 6/77310. Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

CI 67320 - TEACHER AS LITERACY RESEARCHER

Capstone experience in master's program in literacy in which students pursue an individualized literacy research program. Prerequisite: EVAL 65510 or EVAL 65511 or CI 67351 and graduate standing.
3.000 Credit hours
CI 67330 - READING IN CONTENT AREAS

(Cross-listed with CI 77330) Information and competencies for improving students' reading and studying in the content areas. Focus on intermediate grades through postsecondary years. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

CI 67337 - THEORY AND PRACTICE OF TEACHING LITERATURE-SECONDARY AND COLLEGE

(Cross-listed with CI 77337) This course provides a rationale for and means of relating literary theory to classroom practice and pedagogical research. For secondary and post secondary English teachers. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

CI 67339 - WRITING ASSESSMENT AND RESPONSE

(Cross-listed with CI 77339) Exploration of issues in writing assessment, theoretical base for effective formative response to student writing and design, and implementation of writing assessment measures. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

CI 67351 - PERSPECTIVES ON LITERACY RESEARCH

(Cross-listed with CI 77351) Inquiry into basic concepts and agendas for research through a study of historical, landmark and ground-breaking studies in literacy. Prerequisite: Reading specialization (READ) major and graduate standing.
3.000 Credit hours
3.000 Lecture hours
**CI 67352 - LITERACY COACHING**

(Cross-listed with CI 77352) Focus on principles and strategies related to literacy coaching p--adult, within classrooms, schools and districts. Prerequisite: CI 67310 or 77310; and 67319 or 77319; and 67323 or 77323; and 67330 or 77330; and MCED 50005 and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**CI 67353 - MULTICULTURAL VOICES IN TEACHING CHILDREN'S AND YOUNG ADULT LITERATURE**

(Cross-listed with CI 77353) Exploring diverse voices in children's and young adult literature in K-12 literacy classrooms to support culturally responsive teaching and learning and broaden student understandings of diversity Prerequisite: M.Ed. or M.A. in Reading Specialization (READ) major.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**CI 67392 - ADVANCED PRACTICUM AND INTERNSHIP IN READING**

(Repeatable for credit) (Cross-listed with CI 77392) Supervised program requiring application of theory and practices in reading in field settings. Planned with and directed by a graduate faculty member. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school/agency before the first day of the semester in which student teaching/ internship will take place. Prerequisite: Graduate standing and special approval.

1.000 TO 10.000 Credit hours
3.000 TO 30.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Teaching Learning and Curricul Department

**CI 67395 - SPECIAL TOPICS IN READING**

(Repeatable for credit) (Cross-listed with CI 77395) Specialized offerings in response to emerging or selected program needs in reading. Prerequisite: Graduate standing and special approval.

1.000 TO 5.000 Credit hours
1.000 TO 5.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**CI 67396 - INDIVIDUAL INVESTIGATION IN READING AND LANGUAGE ARTS**
(Repeatable for credit) (Cross-listed with CI 77396) Directed independent reading and/or research of special interest or need in student's program. Planned with and directed by a graduate faculty member. Prerequisite: Graduate standing and special approval.

1.000 TO 5.000 Credit hours
1.000 TO 5.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Teaching Learning and Curricul Department

**CI 67517 - NEW LITERACIES IN PRACTICE**

(Cross-listed with CI 87517) Developing technologies are changing the very definition of "literacy." Designed to provide an overview of current (and past) theory and practices related to the growing line of inquiry known as "new literacies." Participants of the class follow their own paths of inquiry related to the question: How is our definition of "literacy" changing? Participants engage in discussions of theoretical positions related to this question (from perspectives as "new literacies," "multiliteracies," and "arts-based knowing" to name a few) as well as encounter such "nuts and bolts" information as how to set up a blog or a wiki and basics of video editing. Appropriate for any educator who is interested in examining how "new literacies" are transforming our classrooms. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**CI 67592 - PRACTICUM MATH INTERVENTION**

(Repeatable for credit) (Cross-listed with CI 77592) Experience in providing leadership in designing intervention programs for schools, and designing curriculum and instruction for individual learners that experience difficulties in learning mathematics. Prerequisite: Graduate standing.

3.000 Credit hours
9.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Teaching Learning and Curricul Department

**CI 67692 - CLINICAL PRACTICUM IN CORRECTIVE READING**

(Cross-listed with CI 77692) Application of previous courses includes supervised diagnostic/prescriptive reading work with school-age pupils and diagnostic/remedial reporting. Prerequisite: CI 67319. Graduate standing.

4.000 Credit hours
12.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Teaching Learning and Curricul Department

**CI 67791 - SEMINAR IN MATHEMATICS EDUCATION**

(Repeatable for credit) An in-depth exploration of the theoretical frameworks and methodologies used in current
research in mathematics education will be conducted. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Teaching Learning and Curricul Department

**CI 70093 - VARIABLE TITLE WORKSHOP IN CURRICULUM AND INSTRUCTION**

(Repeatable for credit) (Cross-listed with CI 40093 and CI 50093) Variable topic workshop designed to respond to curriculum trends and issues, and specialized needs. Prerequisite: Doctoral standing and special approval.

1.000 TO 5.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Teaching Learning and Curricul Department

**CI 71125 - ISSUES AND TRENDS IN SOCIAL STUDIES EDUCATION**

(Cross-listed with CI 61125) This course will provide an overview of historical trends and contemporary issues in social studies education. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**CI 71126 - RESEARCH IN SOCIAL STUDIES TEACHING AND LEARNING**

(Cross-listed with CI 61126) During this course students will examine, discuss and study research in the teaching and learning of social studies as well as develop their own study of social studies teaching and learning. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**CI 71127 - TECHNOLOGY AND SOCIAL STUDIES**

(Cross-listed with CI 61127) Course provides experiences with and study of various uses of technology in social studies teaching and learning. During the course we will examine implications and effects of technology on student learning teaching and society as a whole. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
### CI 71130 - MULTICULTURAL EDUCATION: STRATEGIES

(Cross-listed with CI 61130) Teachers will be provided with knowledge and strategies for teaching children to function effectively in a pluralistic society. Prerequisite: Doctoral standing.

- 3.00 Credit hours
- 3.00 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

### CI 71133 - ISSUES AND TRENDS IN ELEMENTARY SCIENCE

(Cross-listed with CI 61133) New discoveries in science, including issues in society with direct science content. Emphasis is on practical and simple classroom applications. Prerequisite: Doctoral standing.

- 3.00 Credit hours
- 3.00 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

### CI 71134 - RESEARCH TRENDS IN SCIENCE EDUCATION

(Cross-listed with CI 61134) Course in issues relating to research methods pertinent to science education. Prerequisite: Doctoral standing.

- 3.00 Credit hours
- 3.00 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

### CI 71140 - CULTURE AND MULTICULTURALISM IN SCIENCE EDUCATION

(Cross-listed with CI 61140) This course provides a general introduction to the impacts of multiculturalism and the social studies of science on science education. Implications for science educational curriculum theory, classroom practice and research are explored. Topics examined include race and gender in science education, teaching the culture of science and teaching science in a global context. Prerequisite: Doctoral standing.

- 3.00 Credit hours
- 3.00 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

### CI 71141 - NATURE OF SCIENCE IN SCIENCE EDUCATION

(Cross-listed with CI 61141) Course in issues relating to the nature of science as it impacts science education. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**CI 75592 - PRACTICUM IN ADAPTED PHYSICAL EDUCATION**

(Repeatable for credit) (Cross-listed with CI 65592) Supervised and supervisory experiences in motor development for all ages and abilities, including conceptual bases for assessment and individualized task analysis. Prerequisite: Special approval and doctoral standing.

3.000 Credit hours
9.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Teaching Learning and Curricul Department

**CI 77001 - FUNDAMENTALS OF CURRICULUM**

(Cross-listed with CI 67001) Orientation to the curriculum field. Theoretical examination of foundations elements design and development of school college and non school curricula. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**CI 77002 - CURRICULUM LEADERSHIP**

Explores the theories and practices of curriculum leadership with reference to the current politics of education and the democratic ideals of information-age, pluralistic societies. Mandated accountability reform is critically compared to invited professional renewal. CI 77001 or compatible professional experience with fundamentals of curriculum work is recommended. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**CI 77003 - TEACHER EDUCATION**

(Cross-listed with CI 67003) This course is designed to provide a broad overview of teacher education, including curriculum, organization, governance and policy. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
CI 77004 - PROFESSIONAL DEVELOPMENT IN TEACHING

(Cross-listed with CI 67004) This course is designed to provide a broad overview and conceptual framework for professional development; its historical, cultural, psychological and social contexts. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

CI 77005 - INTERCULTURAL DIMENSIONS OF TEACHING AND LEARNING

(Cross-listed with CI 67005) Increasing intercultural interaction in schools and communities across the nation and around the world are prompting educational changes in terms of what is being taught and how it is being taught. Educators at all levels are increasingly being called upon to enhance their own intercultural competence and to consider how best to translate this to students in their charge. Addresses teaching and learning in the intercultural K-16 context. Prerequisites: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

CI 77010 - CURRICULUM EVALUATION

(Cross-listed with CI 67010) This course is designed to help students learn to plan for and use a variety of techniques to gather information in systematic ways, across different phases of curriculum planning, development, implementation, and evaluation to enhance decision-making processes. Students will develop evaluation questions around a curriculum or program of their choice and then design a detailed evaluation plan. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

CI 77092 - ADVANCED PRACTICUM IN CURRICULUM AND INSTRUCTION

(Repeatable for credit) (Cross-listed with CI 67092) Supervised practicum in curriculum design, development, implementation, and/or leadership. Planned with and directed by a graduate faculty member. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned schoolagency before the first day of the semester in which student teaching internship will take place. Prerequisites: doctoral standing and special approval.
1.000 TO 3.000 Credit hours
3.000 TO 9.000 Other hours

Levels: Graduate
**CI 77095 - SPECIAL TOPICS IN CURRICULUM AND INSTRUCTION**

(Repeatable for credit) (Cross-listed with CI 67095) Specialized offerings in response to emerging or selected program needs in curriculum design, development and implementation. Prerequisite: Doctoral standing and special approval.
1.000 TO 5.000 Credit hours
1.000 TO 5.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**CI 77096 - INDIVIDUAL INVESTIGATION IN CURRICULUM AND INSTRUCTION**

(Repeatable for credit) (Cross-listed with CI 67096) Directed independent reading and/or research of special interest or need in student's program. Planned with and directed by a graduate faculty member. Prerequisite: Doctoral standing and special approval.
1.000 TO 5.000 Credit hours
1.000 TO 5.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

**CI 77105 - IMPROVING CLASSROOM INSTRUCTION**

(Cross-listed with CI 67105) Emphasizes motivation, varied materials and methods individual needs and sources of teacher help. Class members define goals and means. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**CI 77107 - CURRICULUM AND ORGANIZATION IN THE MIDDLE GRADES**

(Cross-listed with CI 67107) History, philosophy, curriculum and organization of schools serving children ages 8-15. Emphasis on development of programs and curriculum that are responsive to the needs of early adolescents. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**CI 77108 - TEACHING AND LEARNING IN THE MIDDLE GRADES**
(Cross-listed with CI 67108) Pedagogical theories and practices; approaches to instruction, relationship of teaching to learning and development for children, ages 8-15. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**CI 77224 - TEACHING MATHEMATICS USING COMPUTERS AND CALCULATORS**

(Cross-listed with CI 67224) The purpose is to develop knowledge of research and theories regarding teaching and learning mathematics via computing devices. Further to develop proficiency in the use of computing devices and software that would be used in the teaching and learning of mathematics. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**CI 77225 - RESEARCH IN MATHEMATICS EDUCATION**

(Cross-listed with CI 67225) Current research theory, methodology and results in mathematics education will be investigated. Implications for instructional practice and curriculum design will be examined. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**CI 77226 - IMPROVING MATHEMATICS INSTRUCTION IN MIDDLE CHILDHOOD**

(Cross-listed with CI 67226) Instructional psychology and materials including technology for the effective teaching of mathematics in grade three through eight with a theoretical emphasis on cognitive development. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**CI 77227 - ASSESSMENT IN MATHEMATICS EDUCATION**

(Cross-listed with CI 67227) Investigation of standards and practices in mathematical assessments as recommended by NCTM and current research. Prerequisite: Completion of 2 of the following: ADED 52267, CI 67224, CI 67226, or ECED 50147. Doctoral standing.
2.000 Credit hours
2.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**CI 77228 - INTERVENTION IN MATHEMATICS INSTRUCTION**

(Cross-listed with CI 67228) Investigation of alternative methods of teaching mathematics to diverse learners who experience difficulties in learning mathematics. Prerequisite: Completion of 2 of the following: ADED 52267, CI 67224, CI 67226, or ECED 50147. Doctoral standing.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**CI 77240 - INTRODUCTION TO ENVIRONMENTAL EDUCATION**

(Cross-listed with CI 67240) Survey course emphasizing current debates in environmental issues, exploring the interconnectedness of ecology, understanding the impact of culture and education on notions of environmental concerns, and how these ideas can be investigated within classroom contexts. The course is designed for teachers, science educators and other concerned citizens of the earth. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**CI 77292 - PRACTICUM IN MATHEMATICAL ASSESSMENT**

(Repeatable for credit) (Cross-listed with CI 67292) Experience in designing and administering both formal and informal assessments. Prerequisite: Completion of 2 of the following: ADED 52267, CI 67224, CI 67226, or ECED 50147. Doctoral standing.

2.000 Credit hours
6.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Teaching Learning and Curricul Department

**CI 77310 - THEORY AND PRACTICE IN THE TEACHING OF READING**

(Cross-listed with CI 67310) Nature and development of reading, approaches to instruction, relation to learning and development. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department
**CI 77312 - TEACHING WRITING AS A PROCESS**

(Cross-listed with CI 67312) Emphasizes a process approach to writing instruction in grades K through 12. Examines the steps and studies of composing evaluation and components of a school-wide program. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**CI 77314 - SURVEY OF YOUNG ADULT LITERATURE**

(Cross-listed with CI 67314) Presents a survey of selected types of literature appropriate for students in middle school, junior high and high school. Emphasis on evaluating, selecting and teaching. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**CI 77315 - SURVEY OF CHILDREN'S LITERATURE**

(Cross-listed with CI 67315 and ENG 66052 and ENG 76052) Wide reading in children's literature, with particular application to school curriculum and field of reading. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**CI 77319 - DIAGNOSIS AND REMEDIATION IN READING**

(Cross-listed with CI 67319) Theory and application of diagnostic principles and remedial reading approaches with school-age children. Cultural linguistic cognitive and affective factors in diagnosing and remediating reading problems. Prerequisite: CI 6/77310. Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**CI 77330 - READING IN CONTENT AREAS**

(Cross-listed with CI 67330) Information and competencies for improving students' reading and studying in the content areas. Focus on intermediate grades through postsecondary years. Prerequisite: Doctoral standing.
3.000 Credit hours
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>CI 77337</td>
<td>THEORY AND PRACTICE IN TEACHING LITERATURE-SECONDARY AND COLLEGE</td>
<td>(Cross-listed with CI 67337) This course provides a rationale for and means of relating literary theory to classroom practice and pedagogical research. For secondary and post secondary English teachers. Prerequisite: Doctoral standing.</td>
<td>3.000 Credit hours 3.000 Lecture hours</td>
</tr>
<tr>
<td>CI 77339</td>
<td>WRITING ASSESSMENT AND RESPONSE</td>
<td>(Cross-listed with CI 67339) Exploration of issues in writing assessment, theoretical base for effective formative response to student writing, and design and implementation of writing assessment measures. Prerequisite: Doctoral standing.</td>
<td>3.000 Credit hours 3.000 Lecture hours</td>
</tr>
<tr>
<td>CI 77351</td>
<td>PERSPECTIVES ON LITERACY RESEARCH</td>
<td>(Cross-listed with CI 67351) Inquiry into basic concepts and agendas for research through a study of historical, landmark and ground-breaking studies in literacy. Prerequisite: Curriculum and instruction (CI) major and doctoral standing.</td>
<td>3.000 Credit hours 3.000 Lecture hours</td>
</tr>
<tr>
<td>CI 77352</td>
<td>LITERACY COACHING</td>
<td>(Cross-listed with CI 67352) Focus on principles and strategies related to literacy coaching, p--adult, within classrooms, schools and districts. Prerequisites: CI 67310 or CI 77310; and CI 67319 or CI 77319; and CI 67323 or CI 77323; and CI 67330 or CI 77330; and MCED 50005; and doctoral standing.</td>
<td>3.000 Credit hours 3.000 Lecture hours</td>
</tr>
</tbody>
</table>
### CI 77353 - MULTICULTURAL VOICES IN TEACHING CHILDREN'S AND YOUNG ADULT LITERATURE

(Cross-listed with CI 67353) Exploring diverse voices in children's and young adult literature in K-12 literacy classrooms to support culturally responsive teaching and learning and broaden student understandings of diversity. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

### CI 77392 - ADVANCED PRACTICUM AND INTERNSHIP IN READING

(Repeatable for credit) (Cross-listed with CI 67392) Supervised program requiring application of theory and practices in reading in field settings. Planned with and directed by a graduate faculty member. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school/agency before the first day of the semester in which student teaching/internship will take place. Prerequisite: Doctoral standing and special approval.

1.000 TO 10.000 Credit hours
3.000 TO 30.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

### CI 77395 - SPECIAL TOPICS IN READING

(Repeatable for credit) (Cross-listed with CI 67395) Specialized offerings in response to emerging or selected program needs in reading. Prerequisite: Doctoral standing and special approval.

1.000 TO 5.000 Credit hours
1.000 TO 5.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

### CI 77396 - INDIVIDUAL INVESTIGATION IN READING AND LANGUAGE ARTS

(Repeatable for credit) (Cross-listed with CI 67396) Directed independent reading and/or research of special interest or need in student's program. Planned with and directed by a graduate faculty member. Prerequisite: Doctoral standing and special approval.

1.000 TO 5.000 Credit hours
1.000 TO 5.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation
**CI 77592 - PRACTICUM MATH INTERVENTION**

(Repeatable for credit) (Cross-listed with CI 67592) Experience in providing leadership in designing intervention programs for schools, and designing curriculum and instruction for individual learners that experience difficulties in learning mathematics. Prerequisites: ADED 52267, CI 67224 and 67226, ECED 50147. Doctoral standing.

3.000 Credit hours
9.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Teaching Learning and Curricul Department

**CI 77692 - CLINICAL PRACTICUM IN CORRECTIVE READING**

(Cross-listed with CI 67323) Application of previous courses includes supervised diagnostic/prescriptive reading work with school-age pupils and diagnostic/remedial reporting. Prerequisite: CI 67319 and doctoral standing.

4.000 Credit hours
12.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Teaching Learning and Curricul Department

**CI 77791 - SEMINAR IN MATHEMATICS EDUCATION**

(Repeatable for credit) An in-depth exploration of the theoretical frameworks and methodologies used in current research in mathematics education will be conducted. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Teaching Learning and Curricul Department

**CI 80089 - RESIDENCY I**

Beginning doctoral seminar. Students begin to explore the field of curriculum and instruction by reading and discussing foundational and current theories and research in the field. Students will begin to identify and explore their research interests in the field. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**CI 80090 - RESIDENCY II**

Advanced doctoral seminar. This will be a structured opportunity for students to synthesize research from the field, explore research options for their dissertation study, review literature for their research studies and discuss the development of their research. Prerequisite: CI 80089; doctoral standing.

3.000 Credit hours
3.000 Lecture hours
Levels: Graduate  
Schedule Types: Lecture  

Teaching Learning and Curricul Department

**CI 80199 - DISSERTATION I**

(Repeatable for credit) Doctoral dissertation for which registration in at least two semesters is required, first of which will be semester in which dissertation work is begun and continuing until the completion of 30 hours. Prerequisite: Doctoral standing.  
15.000 Credit hours  
15.000 Other hours  

Levels: Graduate  
Schedule Types: Dissertation  

Teaching Learning and Curricul Department

**CI 80299 - DISSERTATION II**

(Repeatable for credit) Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. Prerequisite: Doctoral standing; CI 80199.  
15.000 Credit hours  
15.000 Other hours  

Levels: Graduate  
Schedule Types: Dissertation  

Teaching Learning and Curricul Department

**CI 87000 - THEORY AND RESEARCH IN TEACHING**

Focuses on critical study of contrasting approaches to the study of teaching processes. Surveys issues to give students a more critical perspective and to provoke thought about the relationship among theory research and practice. Required of Curriculum and Instruction Ph.D. students. Prerequisite: Doctoral standing and special approval.  
3.000 Credit hours  
3.000 Lecture hours  

Levels: Graduate  
Schedule Types: Lecture  

Teaching Learning and Curricul Department

**CI 87001 - THEORY AND RESEARCH IN CURRICULUM**

Focuses on historic and contemporary examples of curriculum theory and their application in curriculum design, development and evaluation. Examines modes of inquiry used by curriculum researchers and contemporary curriculum issues. Required of CI Ph.D students. Prerequisite: CI 6/77001. Doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  

Levels: Graduate  
Schedule Types: Lecture
### CI 87002 - FORMS OF INQUIRY IN CURRICULUM AND INSTRUCTION

Introduction to the history, context, philosophy and ethics of inquiry in curriculum and instruction. Emphasis on acquainting Curriculum and Instruction doctoral students with faculty lines of inquiry and research foci while preparing doctoral students for critical consumption of and significant contribution to inquiry in curriculum and instruction. Prerequisite: Doctoral standing.

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<thead>
<tr>
<th>Credit hours</th>
<th>Other hours</th>
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<td>3.000</td>
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</tbody>
</table>

Levels: Graduate  
Schedule Types: Research

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### CI 87091 - SEMINAR IN CURRICULUM AND INSTRUCTION

(Repeatable for credit) (Cross-listed with CI 67091) A wide range of topics for advanced graduate inquiry. Normally a balance of theoretical study and creative application. Prerequisite: Doctoral standing and instructor's special approval.

<table>
<thead>
<tr>
<th>Credit hours</th>
<th>Other hours</th>
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<tbody>
<tr>
<td>1.000 TO 4.000</td>
<td>1.000 TO 4.000</td>
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</table>

Levels: Graduate  
Schedule Types: Seminar

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### CI 87098 - RESEARCH IN CURRICULUM AND INSTRUCTION

(Repeatable for credit) Students pursue an individualized research project on a specialized topic with approval and under direction of instructor. Prerequisite: Doctoral standing and special approval.

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<tr>
<th>Credit hours</th>
<th>Other hours</th>
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<td>1.000 TO 15.000</td>
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</tbody>
</table>

Levels: Graduate  
Schedule Types: Research

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### CI 87340 - RESEARCH IN READING

An introduction to a perspective on psychological processes underlying levels of reading from prereading to mature reading with implications for instruction. Prerequisite: Doctoral standing and special approval.

<table>
<thead>
<tr>
<th>Credit hours</th>
<th>Lecture hours</th>
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<tbody>
<tr>
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</tbody>
</table>

Levels: Graduate  
Schedule Types: Lecture

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### CI 87342 - SEMINAR IN READING AND LANGUAGE

Exploration of some of the issues, methods and findings on the relationship of reading and language.
Examination of selected issues such as dialect bilingualism readability language based-strategies for reading instruction. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
Teaching Learning and Curricul Department

CI 87343 - RESEARCH IN TEACHING OF WRITING

Issues and methodologies in research in the teaching of writing. Students will review the literature and conduct research in a significant area of writing instruction. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
Teaching Learning and Curricul Department

CI 87391 - SEMINAR IN READING

(Repeatable for credit)Variable topic seminar for advanced study of specialized areas and topics. Normally designed around research and theory applied to practice. Prerequisite: Doctoral standing and special approval.
1.000 TO 4.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar
Teaching Learning and Curricul Department

CI 87398 - RESEARCH IN READING AND LANGUAGE ARTS

(Repeatable for credit)Students pursue an individualized research project on a specialized topic with approval and under direction of instructor. Prerequisite: Doctoral standing and special approval.
1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research
Teaching Learning and Curricul Department

CI 87517 - NEW LITERACIES IN PRACTICE

(Cross-listed with CI 67517) Developing technologies are changing the very definition of "literacy." Course designed to provide an overview of current (and past) theory and practices related to the growing line of inquiry known as "new literacies." Participants of the class follow their own paths of inquiry related to the question: How is our definition of “literacy” changing? Participants engage in discussions of theoretical positions related to this question (from perspectives as "new literacies," "multiliteracies," and "arts-based knowing" to name a few) as well as encounter such "nuts and bolts" information as how to set up a blog or a wiki and basics of video editing. Appropriate for any educator who is interested in examining how “new literacies” are transforming our classrooms. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**CI 87791 - DOCTORAL SEMINAR IN MATHEMATICS EDUCATION**

(Repeatable for a maximum of 12 credit hours) Doctoral Seminar in Math Education. Faculty adviser recommendation required for registration. Prerequisites: Doctoral standing and CI major.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Teaching Learning and Curricul Department

**CLAS 21201 - ENGLISH WORDS FROM CLASSICAL ELEMENTS**

Building of English vocabulary through study of basic roots from Latin and Greek; prefixes, suffixes, rules for accent and pronunciation; specialized scientific and legal terminology. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**CLAS 21404 - THE GREEK ACHIEVEMENT**

A survey of the cultural achievements of the ancient Greeks as manifested in their poetry, philosophy, history and art from the Homeric period through the New Testament. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

Course Attributes:
Diversity Course-Global, Kent Core-Humanities, LER-Humanities, Trnfr Module-Humanities

**CLAS 21405 - THE ROMAN ACHIEVEMENT**

A survey of the cultural achievements of the ancient Romans as manifested in their literature and art from the Etruscans through the Christians. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department
**CLAS 21406 - SPORT AND ANCIENT DAILY LIFE**

Investigation of the development of combat sports in the ancient world and the culture in which they evolved. Also emphasized is the development from amateur athletics in the Greek world to the Roman professional gladiators and charioteers. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**CLAS 40793 - VARIABLE TITLE WORKSHOP IN CLASSICS**

(Repeatable for credit) Workshops individually designed to provide instruction and training in specific areas of classical studies. Prerequisite: Departmental permission.

1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Undergraduate
Schedule Types: Workshop

Modern-Classical Lang Studies Department

**CLAS 41005 - HISTORY OF ANCIENT GREECE**

(Cross-listed with CLAS 51005 and HIST 41003 and HIST 51003) Survey of Greek history from the Bronze Age to the rise of Macedonia and Alexander the Great. Prerequisite: junior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**CLAS 41006 - ROMAN HISTORY**

(Cross-listed with CLAS 51006, HIST 41006, HIST 51006 and HIST 71006) A survey of Roman history from its beginnings to the fall of the Roman Empire. Prerequisite: Junior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**CLAS 41092 - FIELD EXPERIENCE IN CLASSICS**

(Repeatable for a maximum of 7 credit hours if the destination differs) (Cross-listed with CLAS 51092) Travel-
based study/field experience in Classics at a site or sites away from Kent State University under the supervision of members of the Classics faculty. The primary purpose is the observation and study of artifacts, monuments and sites which pertain to Classical antiquity. Examples of travel/study include field trips to museums, study trips to Rome or other cites and participation in an archaeological field school. Prerequisite: none.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Undergraduate
Schedule Types: Field Experience

Modern-Classical Lang Studies Department

Course Attributes:
Experiential Learning Requirem

CLAS 41095 - SPECIAL TOPICS IN CLASSICS
(Repeatable for a maximum of 6 credit hours) (Cross-listed with CLAS 51095) Topic announced in the schedule of classes. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

CLAS 41096 - INDIVIDUAL INVESTIGATION
(repeatable for a total of 9 hours) investigation of problems in archaeology, mythology and ancient comparative literature. Prerequisite: Departmental permission.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Modern-Classical Lang Studies Department

CLAS 41097 - COLLOQUIUM IN CLASSICS
(Repeatable for credit) (Cross-listed with CLAS 51097) Detailed study of an aspect of antiquity that engages issues of current interest, for example women in antiquity, ancient Christianity, multiculturalism in antiquity. Prerequisite: None.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Colloquium

Modern-Classical Lang Studies Department

CLAS 41301 - CLASSICAL MYTHOLOGY
(Cross-listed with CLAS 51301) Assessment of major streams of ancient mythology stressing broad humanistic concepts of religion, philosophy and literature. Prerequisite: Sophomore standing.
3.000 Credit hours
CLAS 41304 - LATIN LITERATURE IN TRANSLATION

(Cross-listed with CLAS 51304) Major works of Latin literature, studied in their historical context by genre; knowledge of Latin not required. Authors read include Plautus, Terence, Lucretius, Cicero, Catullus, Vergil, Horace, Petronius, Seneca, Suetonius, Tacitus and Juvenal. Prerequisite: Junior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

Course Attributes:
Experiential Learning Requirem, Writing Intensive Course

CLAS 41305 - CLASSICAL LITERARY STUDIES

(Repeatable for a maximum of 12 credit hours) (Cross-listed with CLAS 51305) Study of a particular literary genre. Topics are individually designed to provide instruction and training of a specific genre of Greek or Roman literature. Prerequisite: junior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

CLAS 41401 - GREEK ARCHAEOLOGY AND ART

(Slashed with CLAS 51401, Cross-listed with ARTH 42031 and ARTH 52031) Introduction to archaeology of the Greek world with emphasis on recent discoveries and their impact on the study of Greek art, architecture and sculpture through the Hellenistic period. Prerequisite: Junior or Senior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

CLAS 41402 - ROMAN ARCHAEOLOGY AND ART

(Slashed with CLAS 51402, Cross-listed with ARTH 42032 and ARTH 52032) Introduction to archaeology of the Roman world with emphasis on recent discoveries and their impact on the study of Etruscan and Roman art, architecture and sculpture through the Imperial period. Prerequisite: Junior or Senior Standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department
Modern-Classical Lang Studies Department

**CLAS 41404 - ANCIENT CHRISTIANITIES**

(Cross-listed with CLAS 51404) In-depth examination of the formative period of Christianity and the diverse “Christianities” during the first 100 years after the death of Jesus of Nazareth, including the Judaic context for the birth of Christianity, diversity among the earliest Christian communities, and the process by which the New Testament canon was formed. Study of a variety of texts produced by the early church. Prerequisite: junior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**CLAS 41503 - GREEK LITERATURE IN TRANSLATION**

(Cross-listed with CLAS 51503) Major works of Greek literature, studied in their historical context and by genre knowledge of Greek is not required. Prerequisite: Junior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

Course Attributes:
Experiential Learning Requirem, Writing Intensive Course

**CLAS 50793 - VARIABLE TITLE WORKSHOP IN CLASSICS**

(Repeatable for credit) Workshops individually designed to provide instruction and training in specific areas of classical studies. Prerequisite: Special approval and graduate standing.

1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Modern-Classical Lang Studies Department

**CLAS 51005 - HISTORY OF ANCIENT GREECE**

(Cross-listed with CLAS 41005 and HIST 41003 and HIST 51003) Survey of Greek history from the Bronze Age to the rise of Macedonia and Alexander the Great. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
### CLAS 51006 - ROMAN HISTORY

(Cross-listed with CLAS 41006, HIST 41006, HIST 51006 and HIST 71006) A survey of Roman history from its beginnings to the fall of the Roman Empire. Prerequisite: Graduate standing.

- 3.000 Credit hours
- 3.000 Lecture hours

**Levels:** Graduate  
**Schedule Types:** Lecture

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### CLAS 51092 - FIELD EXPERIENCE IN CLASSICS

(Repeatable for a maximum of 7 credit hours if destination differs) (Cross-listed with CLAS 41092) Travel-based study/field experience in Classics at a site or sites away from Kent State University under the supervision of members of the Classics faculty. The primary purpose is the observation and study of artifacts, monuments and sites which pertain to Classical antiquity. Examples of travel/study include field trips to museums, study trips to Rome or other cites and participation in an archaeological field school. Prerequisite: graduate standing.

- 1.000 TO 4.000 Credit hours
- 1.000 TO 4.000 Other hours

**Levels:** Graduate  
**Schedule Types:** Field Experience

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### CLAS 51095 - SPECIAL TOPICS IN CLASSICS

(Repeatable for a maximum of 6 credit hours) (Cross-listed with CLAS 41095) Topic announced in the schedule of classes. Prerequisite: graduate standing.

- 3.000 Credit hours
- 3.000 Lecture hours

**Levels:** Graduate  
**Schedule Types:** Lecture

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### CLAS 51097 - COLLOQUIUM IN CLASSICS

(Repeatable for credit) (Cross-listed with CLAS 41097) Detailed study of an aspect of antiquity that engages issues of current interest, for example women in antiquity, ancient Christianity, multiculturalism in antiquity. Prerequisite: Graduate standing.

- 3.000 Credit hours
- 3.000 Other hours

**Levels:** Graduate  
**Schedule Types:** Colloquium

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### CLAS 51301 - CLASSICAL MYTHOLOGY
CLAS 51304 - LATIN LITERATURE IN TRANSLATION

(Cross-listed with CLAS 41304) Major works of Latin literature, studied in their historical context by genre; knowledge of Latin not required. Authors read include Plautus, Terence, Lucretius, Cicero, Catullus, Vergil, Horace, Petronius, Seneca and Juvenal. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

CLAS 51305 - CLASSICAL LITERARY STUDIES

(Repeateable for a maximum of 12 credit hours) (Cross-listed with CLAS 41305) Study of a particular literary genre. Topics are individually designed to provide instruction and training of a specific genre of Greek or Roman literature. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

CLAS 51401 - GREEK ARCHAEOLOGY AND ART

(Slashed with CLAS 41401, Cross-listed with ARTH 42031 and ARTH 52031) Introduction to archaeology of the Greek world with emphasis on recent discoveries and their impact on the study of Greek art, architecture and sculpture through the Hellenistic period. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

CLAS 51402 - ROMAN ARCHAEOLOGY AND ART

(Slashed with CLAS 41402, Cross-listed with ARTH 42032 and ARTH 52032) Introduction to archaeology of the Roman world with emphasis on recent discoveries and their impact on the study of Etruscan and Roman art, architecture and sculpture through the Imperial period. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department
Modern-Classical Lang Studies Department

**CLAS 51404 - ANCIENT CHRISTIANITIES**

(Cross-listed with CLAS 41404) In-depth examination of the formative period of Christianity and the diverse “Christianities” during the first 100 years after the death of Jesus of Nazareth, including the Judaic context for the birth of Christianity, diversity among the earliest Christian communities, and the process by which the New Testament canon was formed. Study of a variety of texts produced by the early church. Prerequisite: graduate standing.  
3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**CLAS 51503 - GREEK LITERATURE IN TRANSLATION**

(Cross-listed with CLAS 41503) Major works of Greek literature studied in their historical context and by genre; knowledge of Greek not required. Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**CLI 80101 - INTRODUCTION TO PATIENT CARE I**

This clinical rotation provides the first year student an opportunity to directly observe patient care at the Cleveland Foot and Ankle Institute. During the course of patient care students will assist in the development of differential diagnoses and observe patient management under the supervision of residents and faculty members. Students interact with other students, staff, residents and clinicians. It is important during the course of patient care that the student understands the patient’s concerns, complaints, psychosocial status, past medical history and medications. Students also develop good patient communication skills. The student should use this opportunity as a guide to become professional and ethical podiatric physicians. Prerequisite: student must be enrolled in the Podiatric Medicine program.  
1.000 Credit hours  
4.000 Other hours

Levels: Professional  
Schedule Types: Clinic

Podiatric Medicine Department

**CLI 80200 - STANDARDIZED PATIENTS ROTATION**

Offers second year students the opportunity to interview standardized patients and receive feedback on their patient interviewing and history recording skills which prepares them to function competently in a doctor/patient encounter. Some students find that interviewing patients comes naturally, while for others it is more a learned skill. The standardized patients are actors who have been coached to simulate actual patients so accurately that the simulation could possibly fool even a skilled clinician. Prerequisite: student must be enrolled
in the Podiatric Medicine program.
1.000 Credit hours
4.000 Other hours

Levels: Professional
Schedule Types: Clinic

Podiatric Medicine Department

**CLI 80201 - INTRODUCTION TO PATIENT CARE II**

This clinical rotation provides the second year student to directly observe patient care at the Cleveland Foot and Ankle Clinic and assist in the performance of history-taking and physical examinations. During the course of patient care at the Cleveland Foot and Ankle Clinic, student elicit and perform a history and physical, develop differential diagnoses, and follow through with a regime for patient management under the supervision of a resident and faculty members. Students interact with other students, staff, residents and clinicians. It is important during the course of patient care that the student understands the patient’s concerns, complaints, psychosocial status, past medical history and medications. The student should also understand differential diagnoses, diagnosis, treatment and future plans for the patient. Students develop good patient communication skills. The student should use this opportunity as a guide to become a professional and ethical podiatric physician. Prerequisite: student must be enrolled in the Podiatric Medicine program.

1.000 Credit hours
1.000 Other hours

Levels: Professional
Schedule Types: Clinic

Podiatric Medicine Department

**CLI 80310 - PODIATRIC SURGERY ROTATION**

Stresses complete pre-operative and post-operative management of the surgical patient. Many foot deformities can be corrected with surgery. Work up for the purposes of establishing proper diagnosis, selection of appropriate surgical procedure and designing a proper follow-up plan are necessary components of successful surgical outcome. Proper post-operative patient care as well as early recognition of potential surgical complications are stressed. These are essential to a successful surgical practice. While the scope of surgery varies greatly with differences in postgraduate training, there exists a basic core of knowledge and various techniques that are consistent with successful surgical outcome. In order to be a successful surgeon, it is imperative that the student master those basic skills that will be utilized through his or her career. This rotation is the foundation upon which surgical careers are built. Prerequisite: student must be enrolled in the Podiatric Medicine program.

4.000 Credit hours
16.000 Other hours

Levels: Professional
Schedule Types: Clinic

Podiatric Medicine Department

**CLI 80315 - SURGICAL SKILLS WORKSHOP**

Provides students with the knowledge and hands-on training pertaining to the physical skills that are necessary to perform surgery of the foot and ankle. An effort is made to correlate didactic information learned in the classroom with the rationale behind why many surgical procedures are performed. Adequate demonstration of surgical skills are provided along with practice time and constructive performance feedback. Prerequisite: Student must be enrolled in the Podiatric Medicine program.

4.000 Credit hours
16.000 Other hours
CLI 80320 - RADIOLOGY ROTATION

Clinical rotations function by adapting and applying classroom information to real life, “hands-on” situations. A majority of foot complaints necessitate the taking and the reading of radiographs. As specialists of the foot and ankle, podiatrists are in a unique situation in being able to take and interpret radiographs in their own offices. Radiographic analysis is therefore an integral component of podiatric medical education. The Radiology/Medical Imaging rotation focuses on those skills commonly performed by the podiatrist. This includes positioning and developing radiographs along with recognizing the most common pedal pathologies. Prerequisite: student must be enrolled in the Podiatric Medicine program.

4.000 Credit hours
16.000 Other hours

Levels: Professional
Schedule Types: Clinic

Podiatric Medicine Department

CLI 80340 - CARDIOPULMONARY RESUSCITATION/ADVANCED CARDIOPULMONARY RESUSCITATION

CPR/ACLS is taught to third-year students at the beginning of the year. It is basic cardiopulmonary and advanced cardiopulmonary resuscitation. Students practice and take a written exam to demonstrate proficiency in these areas as required by the American Heart Association. Prerequisite: student must be enrolled in the Podiatric Medicine program.

1.000 Credit hours
4.000 Other hours

Levels: Professional
Schedule Types: Clinic

Podiatric Medicine Department

CLI 80351 - PODIATRIC MEDICINE/BIOMECHANICS (EUCLID)

Gives students the opportunity to perform primary foot and ankle care under the supervision of the clinical faculty. Students learn basic podiatric palliative care techniques on patients, as well as how to record the findings in the medical record. Students are evaluated on their ability to present the case history, treat the patient and properly record their findings. Students receive clinical conferences on a variety of podiatric medical topics with practical exams in many areas. Two months are spent at the Cleveland Foot and Ankle Institute. One month is spent at the Cleveland VA Hospital. This rotation also provides the student with the opportunity for observation and practice of examination skills required in performing a musculoskeletal and biomechanical evaluation. This involves the development of skill in obtaining a biomechanical/musculoskeletal history, arthrometric evaluation, visual gait analysis and musculoskeletal examination to include muscle strength testing, flexibility and range of motion. The student is also taught, and provided opportunities for practice, various methods of obtaining and evaluating proper biomechanical cast impressions of the feet for the purpose of fabricating orthotic devices. Emphasis in this rotation is on the practice and refinement of clinical evaluation and manual skills. Prerequisite: student must be enrolled in the Podiatric Medicine program.

4.000 Credit hours
16.000 Other hours

Levels: Professional
Schedule Types: Clinic

Podiatric Medicine Department
**CLI 80352 - PODIATRIC MEDICINE/BIOMECHANICS (INDEPENDENCE)**

Gives students the opportunity to perform primary foot and ankle care under the supervision of the clinical faculty. Students learn basic podiatric palliative care techniques on patients, as well as how to record their findings in the medical record. Students are evaluated on their ability to present the case history, treat the patient and properly record their findings. Students receive clinical conferences on a variety of podiatric medical topics, with practical exams in many areas. Two months are spent at the Cleveland Foot and Ankle Institute. One month is spent at the Cleveland VA Hospital. Also provides the student with the opportunity for observation and practice of examination skills required in performing a musculoskeletal and biomechanical evaluation. This involves the development of skill in obtaining a biomechanical/musculoskeletal history, arthrometric evaluation, visual gait analysis and musculoskeletal examination to include muscle strength testing, flexibility and range of motion. The student is also taught, and provided opportunities for practice, various methods of obtaining and evaluating proper biomechanical cast impressions of the feet for the purpose of fabricating orthotic devices. Emphasis is on the practice and refinement of clinical evaluation and manual skills. Prerequisite: student must be enrolled in the Podiatric Medicine program.

4.000 Credit hours  
16.000 Other hours  

Levels: Professional  
Schedule Types: Clinic

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**CLI 80365 - PRIMARY CARE/VETERANS ADMINISTRATION**

This is a one-month rotation at a veteran’s health care facility, which emphasizes the skills necessary to function effectively in government health care facilities. Prerequisite: student must be enrolled in the Podiatric Medicine program.

4.000 Credit hours  
16.000 Other hours  

Levels: Professional  
Schedule Types: Clinic

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**CLI 80370 - HISTORY AND PHYSICAL ROTATION**

The history and physical rotation is a one month experience in one of the several area hospitals, which is designed to provide experience in history and physical examinations. Each rotation site will provide the same core experiences, (based on the goals and objectives), in patient assessment techniques (i.e., history and physical examination), the understanding of disease processes and management strategies. In addition to the core experiences, each rotation site may add additional exposures and training. Prerequisite: student must be enrolled in the Podiatric Medicine program.

4.000 Credit hours  
16.000 Other hours  

Levels: Professional  
Schedule Types: Clinic

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**CLI 80380 - SIMULATED PATIENTS I**

Clinical course offered as part of the core clinical rotations in the third year. Covers general medicine rotation,
simulated patients interactions and clinical skills exam exposure. Prerequisite: student must be enrolled in the Podiatric Medicine program.
4.000 Credit hours
4.000 Other hours

Levels: Professional
Schedule Types: Clinic

Podiatric Medicine Department

**CLI 80381 - SIMULATED PATIENTS II**

Clinical course offered as part of the core clinical rotations in the third year. Covers general medicine rotation, simulated patients interactions and clinical skills exam exposure. Prerequisite: student must be enrolled in the Podiatric Medicine program.
4.000 Credit hours
4.000 Other hours

Levels: Professional
Schedule Types: Clinic

Podiatric Medicine Department

**CLI 80440 - SENIOR CLINICAL ROTATION**

The senior podiatric rotation is a two-month rotation at the Cleveland Foot and Ankle Institute, which emphasizes competencies needed to enter hospital residency training. Experiences are gained in primary clinical sites and external sites affiliated with the college. Prerequisite: student must be enrolled in the Podiatric Medicine program.
4.000 Credit hours
16.000 Other hours

Levels: Professional
Schedule Types: Clinic

Podiatric Medicine Department

**CLI 80441 - SENIOR CLINICAL ROTATION I**

The senior podiatric rotation is a one-month rotation at the Cleveland Foot and Ankle Institute, which emphasizes competencies needed to enter hospital residency training. Experiences are gained in primary clinical sites and external sites affiliated with the college. Prerequisite: Students must be enrolled in the Podiatric Medicine program in order to register for this course.
4.000 Credit hours
48.000 Other hours

Levels: Professional
Schedule Types: Clinic

Podiatric Medicine Department

**CLI 80442 - SENIOR CLINICAL ROTATION II**

The senior podiatric rotation is a one-month rotation at the Cleveland Foot and Ankle Institute, which emphasizes competencies needed to enter hospital residency training. Experiences are gained in primary clinical sites and external sites affiliated with the college. Prerequisite: Students must be enrolled in the Podiatric Medicine program in order to register for this course.
CLI 80445 - SENIOR ROTATION VETERANS ADMINISTRATION HOSPITAL

Designed to provide clinical experiences in primary care management, treatment, and problem solving for that special population in the VA medical center, Brecksville nursing home environment and extended care facilities. This rotation also gives the students the opportunity to gain experience by providing care to the medically disenfranchised veterans. Additionally, intensive educational opportunities are offered to evaluate and treat various degrees of chronic and acute wounds, as well as offer some surgical experience. Finally all students are offered an opportunity to participate in a specialized surgical clinic, designed to be interactive and skills oriented, followed by surgical case presentations and group discussions. Prerequisite: student must be enrolled in the Podiatric Medicine program.

4.000 Credit hours
16.000 Other hours

Levels: Professional
Schedule Types: Clinic

Podiatric Medicine Department

CLI 80455 - COMMUNITY MEDICINE/MEDICAL IMAGING ROTATION

In addition to the rotations on campus, the college operates several community medicine clinics in various sites throughout the city of Cleveland to fulfill the college’s commitment to serve the community. Students are assigned to these clinics and treat patients under the supervision of members of the clinical faculty. Students are afforded the opportunity to provide care and develop an understanding and appreciation of community based health problems. Also included is training in various imaging modalities including plain film radiography, MRI and CT scanning. Prerequisite: student must be enrolled in the Podiatric Medicine program.

4.000 Credit hours
16.000 Other hours

Levels: Professional
Schedule Types: Clinic

Podiatric Medicine Department

CLI 80460 - CLERKSHIP ROTATION I

Designed to enhance the clinical education and patient exposure of the podiatric medical student. This interdisciplinary training affords students an opportunity to share and expand their knowledge with experience members of the health care team in Cleveland and around the country. Office and hospital based programs available in almost every state, offer a diversity of clinical experiences. Students are expected to participate in a minimum of five months of external rotations during their fourth year. An orientation is conducted and a complete handbook of information is provided to the third year student to assist in this important educational process. Prerequisite: student must be enrolled in the Podiatric Medicine program.

4.000 Credit hours
4.000 Other hours

Levels: Professional
Schedule Types: Clinic

Podiatric Medicine Department
CLI 80465 - CLERKSHIP ROTATION II

Designed to enhance the clinical education and patient exposure of the podiatric medical student. This interdisciplinary training affords students an opportunity to share and expand their knowledge with experience members of the health care team in Cleveland and around the country. Office and hospital based programs available in almost every state, offer a diversity of clinical experiences. Students are expected to participate in a minimum of five months of external rotations during their fourth year. An orientation is conducted and a complete handbook of information is provided to the third year student to assist in this important educational process. Prerequisite: student must be enrolled in the Podiatric Medicine program.

4.000 Credit hours
4.000 Other hours

Levels: Professional
Schedule Types: Clinic

Podiatric Medicine Department

CLI 80470 - CLERKSHIP ROTATION III

Designed to enhance the clinical education and patient exposure of the podiatric medical student. This interdisciplinary training affords students an opportunity to share and expand their knowledge with experience members of the health care team in Cleveland and around the country. Office and hospital based programs available in almost every state, offer a diversity of clinical experiences. Students are expected to participate in a minimum of five months of external rotations during their fourth year. An orientation is conducted and a complete handbook of information is provided to the third year student to assist in this important educational process. Prerequisite: student must be enrolled in the Podiatric Medicine program.

4.000 Credit hours
4.000 Other hours

Levels: Professional
Schedule Types: Clinic

Podiatric Medicine Department

CLI 80475 - CLERKSHIP ROTATION IV

Designed to enhance the clinical education and patient exposure of the podiatric medical student. This interdisciplinary training affords students an opportunity to share and expand their knowledge with experience members of the health care team in Cleveland and around the country. Office and hospital based programs available in almost every state, offer a diversity of clinical experiences. Students are expected to participate in a minimum of five months of external rotations during their fourth year. An orientation is conducted and a complete handbook of information is provided to the third year student to assist in this important educational process. Prerequisite: student must be enrolled in the Podiatric Medicine program.

4.000 Credit hours
4.000 Other hours

Levels: Professional
Schedule Types: Clinic

Podiatric Medicine Department

CLI 80480 - CLERKSHIP ROTATION V

Designed to enhance the clinical education and patient exposure of the podiatric medical student. This interdisciplinary training affords students an opportunity to share and expand their knowledge with experience members of the health care team in Cleveland and around the country. Office and hospital based programs
available in almost every state, offer a diversity of clinical experiences. Students are expected to participate in a minimum of five months of external rotations during their fourth year. An orientation is conducted and a complete handbook of information is provided to the third year student to assist in this important educational process. Prerequisite: student must be enrolled in the Podiatric Medicine program.

4.000 Credit hours
4.000 Other hours

Levels: Professional
Schedule Types: Clinic

Podiatric Medicine Department

**CLI 80485 - CLERKSHIP ROTATION VI**

Designed to enhance the clinical education and patient exposure of the podiatric medical student. This interdisciplinary training affords students an opportunity to share and expand their knowledge with experience members of the health care team in Cleveland and around the country. Office and hospital based programs available in almost every state, offer a diversity of clinical experiences. Students are expected to participate in a minimum of five months of external rotations during their fourth year. An orientation is conducted and a complete handbook of information is provided to the third year student to assist in this important educational process. Prerequisite: student must be enrolled in the Podiatric Medicine program.

4.000 Credit hours
4.000 Other hours

Levels: Professional
Schedule Types: Clinic

Podiatric Medicine Department

**CLI 80491 - SENIOR MEDICINE ROTATION**

Two-month external rotation at an area hospital. Students are instructed in skills, values and knowledge necessary to perform a complete medical history and physical. Prerequisite: student must be enrolled in the Podiatric Medicine program.

4.000 Credit hours
16.000 Other hours

Levels: Professional
Schedule Types: Clinic

Podiatric Medicine Department

**CLI 80521 - SENIOR MEDICINE ROTATION I**

One month external rotation at an area hospital. Students are instructed in skills, values and knowledge necessary to perform a complete medical history and physical. Satisfactory/Unsatisfactory (S/U) graded. Prerequisite: Students must be enrolled in the Podiatric Medicine program in order to register for this course.

4.000 Credit hours
48.000 Other hours

Levels: Professional
Schedule Types: Clinic

Podiatric Medicine Department

**CLI 80522 - SENIOR MEDICINE ROTATION II**
One-month external rotation at an area hospital. Students are instructed in skills, values and knowledge necessary to perform a complete medical history and physical. Satisfactory/Unsatisfactory (S/U) graded. Prerequisite: Students must be enrolled in the Podiatric Medicine program in order to register for this course.

4.000 Credit hours
48.000 Other hours

Levels: Professional
Schedule Types: Clinic

Podiatric Medicine Department

**CLI 80585 - SENIOR COMPETENCY**

A multiple station Objective Structured Clinical Examination (OSCE), to be held during March, April and May at the end of the M4 medical year. Students are required to take the exam. Students are expected to correctly answer or achieve a minimum of 75 percent of all questions/cases/skills to achieve mastery. Any student failing to achieve 75 percent of the total questions is required to repeat the entire exam. Students failing to demonstrate mastery of the material after two exams receive an unsatisfactory grade on their transcript for CLI 440 and CLI 498. Satisfactory/Unsatisfactory (S/U) graded. Prerequisite: Student must be enrolled in the Podiatric Medicine program.

2.000 Credit hours
2.000 Other hours

Levels: Professional
Schedule Types: Clinic

Podiatric Medicine Department

**CLS 49010 - CLINICAL MICROBIOLOGY: THEORY**

Theoretical consideration of laboratory isolation, cultivation, identification and characterization of pathogenic microorganisms. Prerequisite: Medical technology (MEDT) major.

4.000 Credit hours
8.000 Other hours

Levels: Undergraduate
Schedule Types: Clinic

Biological Sciences Department

**CLS 49011 - CLINICAL MICROBIOLOGY: APPLICATIONS**

Applied and practical considerations of theoretical aspects of laboratory isolation, cultivation, identification and characterization of pathogenic microorganisms. Letter grades and ip. Prerequisite: Medical technology (MEDT) major.

4.000 Credit hours
8.000 Other hours

Levels: Undergraduate
Schedule Types: Clinic

Biological Sciences Department

**CLS 49012 - CLINICAL IMMUNOLOGY: THEORY**

Theoretical considerations of laboratory practices involving quantitation and detection of antigens and antibodies and the significance of these findings in pathological states. Prerequisite: Medical technology (MEDT)
CLS 49013 - CLINICAL IMMUNOLOGY: APPLICATIONS
Applied and practical consideration of laboratory practices in immunology and serology relating to diagnosis of disease states. Prerequisite: Medical technology (MEDT) major.
1.000 Credit hours
2.000 Other hours
Levels: Undergraduate
Schedule Types: Clinic

CLS 49014 - CLINICAL MYCOLOGY: THEORY AND APPLICATIONS
Theoretical, applied and practical consideration of the isolation, identification and characterization of pathogenic fungi and their relation to human disease states. Prerequisite: Medical technology (MEDT) major.
1.000 Credit hours
2.000 Other hours
Levels: Undergraduate
Schedule Types: Clinic

CLS 49015 - CLINICAL PARASITOLOGY: THEORY AND APPLICATIONS
Theoretical, applied and practical considerations of the isolation identification and characterization of human parasites and their relations to pathologic conditions. Prerequisite: Medical technology (MEDT) major.
1.000 Credit hours
2.000 Other hours
Levels: Undergraduate
Schedule Types: Clinic

CLS 49020 - CLINICAL CHEMISTRY: THEORY
Theoretical considerations of the principles of clinical chemistry relating to the identification and quantitation of biologically important substances in blood and other body fluids. Prerequisite: Medical technology (MEDT) major.
4.000 Credit hours
8.000 Other hours
Levels: Undergraduate
Schedule Types: Clinic
**CLS 49021 - CLINICAL CHEMISTRY:APPLICATIONS**

Applied and practical considerations of clinical chemistry principles relating to significant changes in body fluids as the result of pathologic conditions. Prerequisite: Medical technology (MEDT) major.

3.000 Credit hours
6.000 Other hours

Levels: Undergraduate
Schedule Types: Clinic

Biological Sciences Department

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**CLS 49022 - URINALYSIS:THEORY**

Theoretical considerations of the physiological activities of the renal system together with laboratory principles of analysis of urine and other body fluids. Prerequisite: Medical technology (MEDT) major.

1.000 Credit hours
2.000 Other hours

Levels: Undergraduate
Schedule Types: Clinic

Biological Sciences Department

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**CLS 49023 - URINALYSIS:APPLICATIONS**

Applied and practical considerations of laboratory practices in urine and other body fluid analysis as aids in diagnosis of disease. Prerequisite: Medical technology (MEDT) major.

1.000 Credit hours
2.000 Other hours

Levels: Undergraduate
Schedule Types: Clinic

Biological Sciences Department

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**CLS 49030 - IMMUNOHEMATOLOGY:THEORY**

Theoretical consideration of laboratory procedures involved in blood grouping and typing; identification of blood group antigens and antibodies collection and preparation of blood for transfusion. Prerequisite: Medical technology (MEDT) major.

2.000 Credit hours
4.000 Other hours

Levels: Undergraduate
Schedule Types: Clinic

Biological Sciences Department

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**CLS 49031 - IMMUNOHEMATOLOGY:APPLICATIONS**

Applied and practical consideration of laboratory methods for the administration of blood and its components. Prerequisite: Medical technology (MEDT) major.

2.000 Credit hours
4.000 Other hours
**CLS 49032 - COAGULATION: THEORY AND APPLICATIONS**

Theoretical consideration of the coagulation mechanism and its relation to pathological states; identification of abnormalities and deficiencies. Prerequisite: Medical technology (MEDT) major.

1.000 Credit hours
2.000 Other hours

**CLS 49033 - CLINICAL HEMATOLOGY: THEORY**

Theoretical considerations of the development of formed elements; identification of marrow and blood cells; study of normal and abnormal cellular blood components. Prerequisite: Medical technology (MEDT) major.

2.000 Credit hours
4.000 Other hours

**CLS 49034 - CLINICAL HEMATOLOGY: APPLICATIONS**

Applied and practical consideration of laboratory methods and procedures in identification and enumeration of normal and abnormal formed elements of blood. Prerequisite: Medical technology (MEDT) major.

2.000 Credit hours
4.000 Other hours

**CLS 49040 - TOPICS IN LABORATORY MANAGEMENT**

Consideration of topics relating to safety, education, personnel, budgeting, scheduling and medical legal problems. Repeatable for a total of 4 hours. Prerequisite: Medical technology (MEDT) major.

1.000 Credit hours
2.000 Other hours

**CLS 49095 - SPECIAL TOPICS IN MEDICAL TECHNOLOGY**

(Repeatable for a maximum of 4 credit hours)Topical consideration of special techniques encountered in nuclear
medicine, cytology, cytogenetics, virology, toxicology and special instrumentation. Prerequisite: Medical technology (MEDT) major.

1.000 TO 4.000 Credit hours
2.000 TO 8.000 Other hours

Levels: Undergraduate
Schedule Types: Clinic

Biological Sciences Department

**CMD 80325 - PUBLIC HEALTH JURISPRUDENCE**

Presents issues of concern to the practicing podiatrist and includes; the development of public health in America, disease prevention and control, environmental effects on health and disease, substance abuse, the role of the federal government in the provision of public health, the US health care system, occupational medicine, women's health issues, ethics in podiatric medicine and medical jurisprudence. Prerequisite: student must be enrolled in the Podiatric Medicine program.

2.000 Credit hours
2.000 Lecture hours

Levels: Professional
Schedule Types: Lecture

Podiatric Medicine Department

**CMD 80424 - BUSINESS ADMINISTRATION**

This course presents issues of concern to the podiatrist about to enter medical practice. Topics include the complete scope of business issues necessary to prepare the student to compete in a changing medical marketplace. Prerequisite: student must be enrolled in the Podiatric Medicine program.

2.000 Credit hours
2.000 Lecture hours

Levels: Professional
Schedule Types: Lecture

Podiatric Medicine Department

**CMGT 10001 - INTRODUCTION TO CONSTRUCTION MANAGEMENT**

Serves to introduce the basic terms, concepts, procedures and current trends in the construction industry. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

**CMGT 11044 - CONSTRUCTION SAFETY**

The theories and principles of construction safety and health applied to real-world setting. Upon completion of course materials and required attendance hours, students receive their OSHA 30 certification. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours
### CMGT 11071 - CONSTRUCTION MATERIALS AND METHODS I

An introduction to principles of building construction including preparation for the structures and environmental control sequences. Includes a more detailed and systematic look at wood light frame construction. Prerequisite: none.

- **Credit hours:** 3.000
- **Lecture hours:** 3.000

### CMGT 21071 - CONSTRUCTION MATERIALS AND METHODS II

Ties together steel and concrete structural systems and the integration of building service systems with a focus on the construction and detailing of building enclosure systems. Prerequisite: none.

- **Credit hours:** 3.000
- **Lecture hours:** 3.000

### CMGT 22200 - CONSTRUCTION DOCUMENT READING

The reading and understanding of the drawings that are used to communicate information about commercial and residential buildings. Prerequisite: none.

- **Credit hours:** 3.000
- **Lecture hours:** 3.000

### CMGT 25000 - PRINCIPLES OF L.E.E.D.

Review LEED as it applies to the construction industry with a focus on preparation for the LEED Green Associate exam. Prerequisite: none.

- **Credit hours:** 1.000
- **Lecture hours:** 1.000

### CMGT 31015 - CONSTRUCTION TECHNOLOGY
This course provides basic concepts and practices of the construction industry, including estimating, materials, tools, techniques and production of residential construction. Prerequisite: ID 14512.

3.000 Credit hours
1.000 Lecture hours
4.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Applied Eng/Sustainability/Tech Department

**CMGT 31023 - CONSTRUCTION SURVEYING**

The study of surveying including fieldwork using state of the art equipment and its relationship to the construction documents. Prerequisite: CMGT 22200.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Applied Eng/Sustainability/Tech Department

**CMGT 31033 - MECHANICAL SYSTEMS**

An overview of mechanical systems in commercial and residential buildings. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainability/Tech Department

**CMGT 31040 - ELECTRICAL SYSTEMS FOR CONSTRUCTION MANAGERS**

An overview of electrical systems in commercial and residential buildings. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainability/Tech Department

**CMGT 32001 - PROPOSAL DEVELOPMENT AND ANALYSIS**

(Repeatable twice for credit) Create and combine Project Management, Safety, and Quality Control plans and prepare quantity takeoffs and schedule for a construction project, in the form of a construction proposal and presentation. Further analysis will be done on general construction proposals. Prerequisite: CMGT 10001 and special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
CMGT 41040 - CONSTRUCTION ESTIMATING I

Introduction to estimating and the quantity takeoff process needed to complete accurate estimates for all types of construction projects. Prerequisite: CMGT 22200.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

CMGT 41041 - CONSTRUCTION ESTIMATING II

Putting costs to the project, finalizing the bid, incorporating the estimate into the schedule, buying out the project, bidding ethics and using computer spreadsheets including Excel to automate estimating functions. Prerequisite: CMGT 41040.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

CMGT 42105 - CONSTRUCTION CONTRACTS AND LAW

The fundamentals of construction contracts and law, the impact of information technology on contracts and contracting, and the effect of contracts and law on the management, administration and the costs of construction work. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

CMGT 42107 - CONSTRUCTION SCHEDULING

The traditional theory of planning, scheduling and controlling construction projects. Current industry standard computer applications for scheduling is utilized. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

CMGT 42110 - CONSTRUCTION MANAGEMENT CAPSTONE
The application of all previous construction management courses and experiences to ensure all major learning objectives have been obtained and that these learning objectives can be applied to performance similar to industry practices. Prerequisite: senior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

CMGT 51040 - CONSTRUCTION ESTIMATING I

Introduction to estimating and the quantity takeoff process needed to complete accurate estimates for all types of construction projects. The ability to read and understand construction drawings is needed. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

CMGT 51041 - CONSTRUCTION ESTIMATING II

Putting costs to the project, finalizing the bid, incorporating the estimate into the schedule, buying out the project, bidding ethics and using computer spreadsheets including Excel to automate estimating functions. Prerequisites: CMGT 41040 or CMGT 51040 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

CMGT 52105 - CONSTRUCTION CONTRACTS AND LAW

The fundamentals of construction contracts and law, the impact of information technology on contracts and contracting, and the effect of contracts and law on the management, administration and the costs of construction work. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

CMGT 52107 - CONSTRUCTION SCHEDULING

The traditional theory of planning, scheduling and controlling construction projects. Current industry standard computer applications for scheduling are utilized. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours
CMGT 52110 - APPLIED CONSTRUCTION MANAGEMENT

A comprehensive application of construction management principles and practices to various situations and projects according to construction industry methods and performance standards. Prerequisites: graduate standing and special approval.
3.000 Credit hours
3.000 Lecture hours

CMGT 62040 - CONSTRUCTION METHODS IMPROVEMENTS

A focused study of the philosophy and principles of quality management as applied to the construction industry. Course presents a project-based approach to the principles and practices of Total Quality Management (TQM) in construction projects and the application of TQM and other quality measures during different phases of the construction process. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

CMGT 62050 - INTERNATIONAL CONSTRUCTION MANAGEMENT

Topics include operating and sustaining an international business or business presence, the global market, project funding, case studies, and best practices. Course includes project specific case studies. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

CMGT 67320 - APPLIED SUSTAINABILITY IN CONSTRUCTION MANAGEMENT

Investigation of strategies and methods used by construction managers and others to assist in developing sustainable built environments. Takes a close look at standards for environmentally sustainable construction and at the application of Best Management Practices for construction activities. Focus is on LEED Certification, International Standards on Environmental Management Systems, and other established criteria, guidelines, standards, and tools associated with Green Building. Provides an in-depth discussion and practical application of LEED assessment, guidelines and standards for various building sectors. Includes a major individual design project/case study involving research in green construction and design on a particular construction project, along with the application of LEED guidelines, assessment and methods to the project. Prerequisite: graduate standing and special approval.
3.000 Credit hours
COMM 15000 - INTRODUCTION TO HUMAN COMMUNICATION

An inquiry into the nature and function of human communication in interpersonal, group and public contexts. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Communication Studies Department

Course Attributes:
Kent Core-Additional, LER-Additional Course, TAG - Communication, Trnfr Module-Composition

COMM 20000 - FOUNDATIONS OF COMMUNICATION

The foundations of communication studies course serves as an introduction to the major. Provides an introduction to communication studies faculty, research and the major concentrations of the school; highlights possible careers in communication studies; and introduces possible ways students can supplement curriculum efforts through involvement. Prerequisite: None.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Lecture

Communication Studies Department

COMM 20001 - INTERPERSONAL COMMUNICATION

Introduction to human interpersonal communication. Components and structures situations and contexts are described nonevaluative focus with emphasis on informal experience. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Communication Studies Department

Course Attributes:
TAG - Communication

COMM 21000 - COMMUNICATION GRAMMAR REVIEW

Designed to increase grammar, punctuation, spelling and syntax skills and proficiency. Students must earn a grade of C (2.00) or better in this course to fulfill the grammar requirement. Does not count toward communication studies (COMM) course requirements. Prerequisite: None.
1.000 Credit hours
COMM 21008 - SOCIAL MEDIA STRATEGIES

(Cross-listed with JMC 21008) Designed to help students understand and use social media in critical and strategic ways that will improve their lives and careers. Helps students harness the power and potential of the social Web, including strategies used to position and market organizations as well as individuals. Exposes students to the latest social-media applications and to critical views of social media's impact on business, society and culture. Students are also introduced to interaction perspectives of social media, which are embedded within both the communication studies and the journalism and mass communication curriculum. Students emerge from the class with a strategic plan designed to enhance their lives and their careers.
Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Communication Studies Department

COMM 25464 - ARGUMENTATION

Introduction to principles of oral and written argumentation. Prerequisite: COMM 15000.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Communication Studies Department

COMM 25863 - BUSINESS AND PROFESSIONAL COMMUNICATION

Fundamentals of public and conference speaking, conducting meetings, electronic presentations, interviewing and interpersonal relations as applied to business and organizational settings. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Communication Studies Department

COMM 25902 - COMMUNICATION THEORY

Study of the process of human communication. Emphasis on source, message, channel and receiver dimensions of communication. Examination of major theories of communication and social influence. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
Communication Studies Department

Course Attributes:
TAG - Communication

**COMM 26000 - CRITICISM OF PUBLIC DISCOURSE**

A critical examination of selected public speeches representing diverse viewpoints on a variety of historic and contemporary issues, emphasizing methods of evaluating public oral communication and the role of speechmaking in free societies. Prerequisite: Sophomore standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Communication Studies Department

Course Attributes:
Diversity Course-Domestic, Kent Core-Humanities, LER-Humanities, Trnfr Module-Humanities

**COMM 26001 - PUBLIC COMMUNICATION IN SOCIETY**

Examines communication in public settings. Content includes issues in mass media, political communication and political advertising, news, crisis communication, public opinion, and communication in executive, legislative and judicial settings. Students explore the influence of mediated messages via application of mass communication theories and constructs. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Communication Studies Department

**COMM 26501 - INTRODUCTION TO HEALTH COMMUNICATION**

Introduction to the roles of communication in health, health and risk behavior, health care, and health promotion, including interpersonal, organizational and media contexts. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Communication Studies Department

**COMM 30000 - COMMUNICATION RESEARCH METHODS**

Introduction to qualitative and quantitative research methods in communication. Students should complete this course early in their program of study. Prerequisite: COMM 25902; cumulative GPA of 2.000 or better.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
COMM 35550 - SMALL GROUP COMMUNICATION
An examination of group communication in social and family contexts throughout the life-span. Prerequisite: cumulative GPA of 2.000 or better.
3.000 Credit hours
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture

COMM 35600 - COMMUNICATION IN SMALL GROUPS AND TEAMS
Focuses on the application and practice of group communication skills and techniques applied to goal-oriented small group situations. The course explores communication theory and research about small groups and teams, relating in group and teams, managing conflict in groups and teams, leadership in groups and teams, and problem-solving in groups and teams. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture

COMM 35852 - INTERCULTURAL COMMUNICATION
Theory and application of communication between people of different cultures and different national systems. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture

COMM 35860 - INTERVIEWING
Techniques, principles and practical skills for interviews most likely to occur in business environments; job searches and selection interviews, information-gathering interviews, performance appraisals, counseling interviews and persuasive interviews. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture
**COMM 35864 - ORGANIZATIONAL COMMUNICATION**

Application of communication theory to organizational settings. Exploration of communication structures processes and methods in organizations. Prerequisite: Minimum grade of C (2.000) in COMM 20000; and pass the Grammar Test with a 680 or better or have a minimum grade of C (2.000) in COMM 21000; and a cumulative GPA of 2.000 or better.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**COMM 35912 - GENDER AND COMMUNICATION**

Explores how gender is socially constructed in everyday communicative interactions and institutional contexts, including close relationships, organizations, school settings and the media. In the process, this course uncovers how the social construction of gender perpetuates power imbalances in society. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**COMM 36501 - COMMUNICATION IN HEALTH CARE**

Examination of the dynamics of communication in health care settings, including provider-patient interaction, using communication theory, research and health advocacy skills across a variety of health care contexts. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**COMM 36505 - COMMUNICATION, AGING AND CULTURE**

Examination of the roles of aging and culture on human communication. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
COMM 40001 - ADVANCED INTERPERSONAL COMMUNICATION

Advanced treatment of interpersonal communication theory and research. Interpersonal principles are applied to group and organizational contexts. Prerequisite: COMM 20001 and minimum grade of C (2.000) in COMM 20000; and pass the Grammar Test with a 680 or better or have a minimum grade of C (2.000) in COMM 21000; and a cumulative GPA of 2.000 or better.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

COMM 41000 - SPORTS COMMUNICATION

An examination of the inter-relationship between sports and communication in today's society. Students discuss and examine sports through communication lenses (groups, interpersonal, media/mediated, and organizational). Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

COMM 42000 - MEDIA, WAR AND PROPAGANDA

Examines the influence of TV, movies, and media images of war, the war effort and portrayals of enemies, protesters and anti-war groups on communication research, including mass communication and persuasion. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

COMM 43000 - COMMUNICATION TECHNOLOGY AND HUMAN INTERACTION

Aims to help students develop a critical understanding of diverse newer media and how they are used, and affect human interaction. In achieving this goal, students are expected to learn how newer media are different from and similar to face-to-face communication or traditional mass media, newer media's social and psychological effects on human interactions, and theoretical frameworks explaining these media. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
Communication Studies Department

COMM 45006 - MEDIA USE AND EFFECTS

The course examines the ways in which communication scholars have conceptualized and analyzed media processes, uses and effects. We explore such issues as media portrayals, news coverage, political campaigns, sex and violence in the media, media entertainment, children and television, and newer communication technologies. Prerequisite: None. 3.000 Credit hours 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Communication Studies Department

COMM 45007 - FREEDOM OF SPEECH

(Cross-listed with COMM 55007) Examines historic and contemporary instances relating to freedom of speech; study of limits, rights, responsibilities and socio-legal-rhetorical issues. Prerequisite: None. 3.000 Credit hours 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Communication Studies Department

COMM 45091 - SEMINAR IN COMMUNICATION STUDIES

(Repeatable for a maximum of 9 credit hours) Examination of selected communication topics/areas and related research. Prerequisite: none. 1.000 TO 4.000 Credit hours 1.000 TO 4.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

Communication Studies Department

COMM 45092 - INTERNSHIP IN COMMUNICATION STUDIES

(Repeatable for credit) A formal, cooperative field experience with a designated organization or agency as designed by the students and the internship coordinator. Prerequisite: cumulative GPA of 2.000 or better; COMM 20000 with a grade of C (2.000) or better; and junior standing. 3.000 TO 6.000 Credit hours 21.000 TO 42.000 Lecture hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Communication Studies Department

Course Attributes:
Experiential Learning Requirem
COMM 45093 - VARIABLE TITLE WORKSHOP IN COMMUNICATION

(Repeatable for credit) No more than three credits may be counted as part of the upper-division credits required in the communication major. Prerequisite: None.
1.000 TO 5.000 Credit hours
1.000 TO 5.000 Other hours

Levels: Undergraduate
Schedule Types: Workshop

Communication Studies Department

COMM 45095 - SPECIAL TOPICS IN COMMUNICATION STUDIES

(Repeatable for credit) (Cross-listed with COMM 55095 and COMM 75095) Offered when unusual resources permit a topic different from existing courses. Topic will be announced when scheduled. Prerequisite: None.
1.000 TO 6.000 Credit hours
1.000 TO 6.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Communication Studies Department

COMM 45196 - INDEPENDENT STUDY: COMMUNICATION STUDIES

(Repeatable for a maximum of 6 credit hours) Readings and/or research on problems approved by undergraduate coordinator in consultation with student's adviser and faculty project director. Prerequisite: cumulative GPA of 2.000 or better; and COMM 20000 with a minimum grade of C (2.000); and junior standing; and special approval.
1.000 TO 6.000 Credit hours
6.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Communication Studies Department

COMM 45459 - COMMUNICATION AND CONFLICT

(Slashed with COMM 55459) Examination of issues related to managing conflict in communication. Critique and synthesis of conceptual approaches and research pertaining to conflict in interpersonal, organizational and public communication settings. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Communication Studies Department

COMM 45766 - COMMUNICATION IN A GLOBAL SOCIETY

Offers a broad-based treatment of a variety of topics in our "globalizing" world from the standpoint of communication. Considers the importance of communication on multiple levels of the international landscape, ranging from the very ways globalization is defined and framed to new communication media and networks, to
campaigns and debates about global issues, and including the transformation of organizational and institutional relationships as well as local-to-global interactions. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Communication Studies Department

COMM 45807 - HIGH IMPACT PROFESSIONAL SPEAKING

Principles and practices of effective communication in a variety of professional contexts. Emphasis on professional presentation skills development. Prerequisite: COMM 15000 and junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Communication Studies Department

COMM 45865 - ORGANIZATIONAL COMMUNICATION TRAINING AND DEVELOPMENT

Theory and application of diagnosing communication problems in an organization and the intervention process. Prerequisite: COMM 35864.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Communication Studies Department

COMM 45902 - COMMUNICATION AND INFLUENCE

Explores theories and strategies of social influence in contemporary society. Students discuss and critique influential communication practices such as interpersonal persuasion, product and services advertisements, social movements and political messages. Course addresses global perspectives on persuasion. Prerequisite: COMM 25902; and minimum grade of C (2.000) in COMM 20000; and minimum 2.000 cumulative GPA; and Grammar test with minimum score of 680 or COMM 21000 with a minimum of C (2.000) grade.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Communication Studies Department

Course Attributes:
Writing Intensive Course

COMM 45957 - LANGUAGE, MEANING AND COGNITION

Overview of language use in social contexts, including basic components of language production; semantics; pragmatics (speech acts); the production and comprehension of sentences; message production; message comprehension; language and society (conversational rules; coherence); individual differences in language use
COMM 45959 - NONVERBAL COMMUNICATION

Survey of theory and research in nonverbal codes of communication through readings, field study and classroom interaction. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Communication Studies Department

COMM 45960 - HEALTH COMMUNICATION

(Cross-listed with COMM 55960) Examines communication processes and research related to health and health care from the perspectives of public, professional and primary discourses. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Communication Studies Department

COMM 46091 - SENIOR SEMINAR

Capstone course helps students synthesize major coursework. Students complete a career exploration project, examine ethics and issues in communication and also do a portfolio of their achievements. Prerequisites: Minimum grade of C (2.00) in COMM 20000; and a cumulative GPA of 2.00 or better; and senior standing.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

Communication Studies Department

Course Attributes:
Experiential Learning Requirem

COMM 46092 - PRACTICUM IN APPLIED COMMUNICATION

A formal cooperative field experience with a designated organization or agency, as designed by the student and the practicum director. Pre/corequisites: cumulative GPA of 2.00 or better; and COMM 20000 with a minimum grade of C (2.00) or better; and COMM 35864; and JMC 20005; and VCD 37000; and senior standing; and special approval.
3.000 Credit hours
COMM 46503 - HEALTH COMMUNICATION AND MEDIA

Investigation of health messages in traditional and new media, including both incidental communication and planned campaigns. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

COMM 46507 - EVERYDAY INTERPERSONAL COMMUNICATION AND HEALTH

Examination of the roles of everyday interpersonal communication in physical and psychosocial health and risk behavior. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

COMM 46601 - RELATIONAL COMMUNICATION

Provides an exploration of theory and research about the interactions among individuals in relationships. Subtopics of the course include communication and the development, maintenance and dissolution of personal relationships; relationships across the life span; individual differences in relationships and relational processes, qualities, and outcomes. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

COMM 46605 - COMMUNICATION ACROSS THE LIFESPAN

Explores common life stages (childhood, youth, midlife, and old age) and the transitioning of communication within and between these different stages of development. Sub-topics include life span communication and: family, friendships, social and gender role development, interpersonal conflict management, and the use of varied communication technologies facilitating human interaction across the life span. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours
COMM 46608 - FAMILY COMMUNICATION

Examines the interactions among individuals in families. Sub-topics of the course include family communication and storytelling, identity, rules, conflict, intimacy, stress, external influences on family communication, and family communication and the media. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Communication Studies Department

COMM 55007 - FREEDOM OF SPEECH

(Cross-listed with COMM 45007) Examines historic and contemporary instances relating to freedom of speech; study of limits, rights, responsibilities and socio-legal-rhetorical issues. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Communication Studies Department

COMM 55093 - VARIABLE TITLE WORKSHOP IN COMMUNICATION STUDIES

(Repeatable for credit) Variable topic workshop in communication studies. Prerequisite: Graduate standing.
1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Communication Studies Department

COMM 55095 - SPECIAL TOPICS

(Repeatable for credit) (Cross-listed with COMM 45095 and COMM 75095) Offered when resources permit a topic different from existing courses. Topic will be announced when scheduled. Prerequisite: Graduate standing.
1.000 TO 4.000 Credit hours
1.000 TO 4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Communication Studies Department

COMM 55459 - COMMUNICATION AND CONFLICT
(Cross-listed with COMM 45459) Examination of issues related to managing conflict in communication. Critique and synthesis of conceptual approaches and research pertaining to conflict in interpersonal, organizational and public communication settings. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Communication Studies Department

COMM 55766 - COMMUNICATION IN A GLOBAL SOCIETY

(Cross-listed with COMM 45766) Offers a broad-based treatment of a variety of topics in our "globalizing" world from the standpoint of communication. Considers the importance of communication on multiple levels of the international landscape, ranging from the very ways globalization is defined and framed to new communication media and networks, to campaigns and debates about global issues, and including the transformation of organizational and institutional relationships as well as local-to-global interactions. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Communication Studies Department

COMM 55960 - HEALTH COMMUNICATION

(Cross-listed with COMM 45960) Examines communication processes and research related to health and health care from the perspectives of public, professional and primary discourses. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Communication Studies Department

COMM 60199 - THESIS I

Thesis student must register for a total of 6 hours, 2 to 6 hours in a single semester or distributed over several semesters if desired. Prerequisite: Graduate standing.
2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Communication Studies Department

COMM 60299 - THESIS II

Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: COMM 60199 and graduate standing.
2.000 Credit hours
2.000 Other hours
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisites</th>
<th>Credit Hours</th>
<th>Lecture Hours</th>
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<tbody>
<tr>
<td>COMM 61198</td>
<td>Masters Project in Communication Studies</td>
<td>One of the non-thesis options for graduation. Students propose a theory-driven applied research project on a communicative phenomenon or issue. The final written paper is evaluated by the students' academic advisor and the Graduate Coordinator to deem satisfactory for graduation. Prerequisites: COMM 65000 and COMM 65020 and COMM 65652.</td>
<td>3.000 Other hours</td>
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<tr>
<td>COMM 64092</td>
<td>Masters Internship in Communication Studies</td>
<td>(Repeatable for credit) One of the non-thesis options for graduation. Students choose and secure an internship position with a designated organization or agency that requires the student to utilize communication skills and knowledge. Students complete 135 hours of internship. The employer, the academic advisor, and the Graduate Coordinator evaluate the student's overall performance. The advisor and the Graduate Coordinator determine whether the student complete the requirements. Prerequisites: COMM 65000 and COMM 65020 and COMM 65652; and graduate standing; and special approval.</td>
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<tr>
<td>COMM 65000</td>
<td>Foundations of Communication Inquiry</td>
<td>(Cross-listed with COMM 75000) Philosophy of science, epistemological and theory construction principles which are the foundation of inquiry into the process of communication. Prerequisite: Graduate standing.</td>
<td>3.000 Lecture hours</td>
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<tr>
<td>COMM 65020</td>
<td>Quantitative Research Methods in Communication</td>
<td>(Cross-listed with COMM 75020) An examination of basic quantitative social scientific research methods and procedures for the study of communication. Prerequisite: Graduate standing.</td>
<td>3.000 Lecture hours</td>
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COMM 65060 - COMMUNICATION MEASUREMENT AND ANALYSIS

(Cross-listed with COMM 75060) A survey of self-report, observational and psychological instruments used in communication research. Uses of the computer in analyzing data obtained in communication research. Prerequisite: Graduate standing. 3.000 Credit hours 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

COMM 65091 - SEMINAR IN PERSUASION

(Repeatable for credit) (Cross-listed with COMM 75091) Examination of selected areas of persuasion research. Emphasis on synthesizing research results and formulating explanatory models of persuasive behavior. Prerequisite: Special approval and graduate standing. 3.000 OR 4.000 Credit hours 3.000 TO 4.000 Other hours

Levels: Graduate
Schedule Types: Seminar

COMM 65093 - VARIABLE TITLE WORKSHOP IN COMMUNICATION

(Repeatable for credit) Variable topic workshop in communication studies. Prerequisite: Graduate standing. 1.000 TO 6.000 Credit hours 1.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Workshop

COMM 65096 - INDIVIDUAL INVESTIGATION

(Repeatable for a maximum of 6 credit hours) (Cross-listed with COMM 75096) Independent study of area or problem to be selected in consultation with graduate staff. Prerequisite: Graduate standing. 1.000 TO 6.000 Credit hours 1.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

COMM 65098 - RESEARCH

(Repeatable for credit) Research or individual investigation for master's level graduate students. Credits may be applied toward meeting degree requirements if school approves. Prerequisite: Graduate standing. 1.000 TO 15.000 Credit hours
COMM 65591 - SEMINAR IN SMALL GROUP COMMUNICATION

(Repeatable for credit) (Cross-listed with COMM 75591) Research theories and findings in small group communication. Prerequisite: COMM 35550. Graduate standing.
3.000 OR 4.000 Credit hours
3.000 OR 4.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Communication Studies Department

COMM 65652 - THEORIES OF COMMUNICATION

(Cross-listed with COMM 75652) Introduction to approaches in the study of human communication. Focuses on differing views of interaction from theory building and research-generation perspective. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Communication Studies Department

COMM 65661 - COMMUNICATION IN AN INFORMATION SOCIETY

(Cross-listed with COMM 75661) Examines how the development and use of newer communication technologies have influenced human communication. Considers the evolution, social and psychological impact, and culture of newer communication technologies such as the Internet, and how research adapts to these newer media. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Communication Studies Department

COMM 65662 - MASS MEDIA EFFECTS

(Cross-listed with COMM 75662) Examines perspectives on media effects, the impact media have on individuals and societies, and how individual, societal and communication elements influence media uses and effects. Explores issues such as media portrayals, campaigns, violence and children and the media. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
**COMM 65665 - PERSONAL AND MEDIATED COMMUNICATION**

(Cross-listed with COMM 75665) Examination of the interface of interpersonal and mediated communication in everyday life. Includes topics such as parasocial interaction, talk radio, TV co-viewing, cell phones, teleconferencing, computer-mediated relationships and media portrayals. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**COMM 65670 - INTERPERSONAL COMMUNICATION**

(Cross-listed with COMM 75670) Survey of recent theoretical developments and research in interpersonal communication. Topics include relationship development, interaction, interpersonal traits, compliance, conversational analysis and research methods. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**COMM 65673 - FAMILY COMMUNICATION**

(Cross-listed with COMM 85673) Family Communication examines the study of theory and research about the interactions among individuals in families. The course also examines how families interact with external entities. Finally, the course explores health communication, media uses or new communication technologies and work-life balance issues from a family communication perspective. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**COMM 65675 - COMMUNICATION, UNCERTAINTY AND PRIVACY MANAGEMENT**

(Cross-listed with COMM 85675) Communication, uncertainty, and the management of private information examines theory and research about disclosure and uncertainty issues in communication in a variety of contexts. Course content examines disclosure and uncertainty management applications in relational contexts, health contexts, organizational contexts, and contexts involving human interaction occurring through technology. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
COMM 65677 - RELATIONAL COMMUNICATION
(Cross-listed with COMM 85677) Relational communication provides an exploration of theory and research about the interactions among individuals in personal relationships. Subtopics of the course include communication and the development, maintenance, and dissolution of personal relationships, relationships across the life span, individual differences in relationships and relational processes, qualities and outcomes. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Communication Studies Department

COMM 65679 - COMMUNICATION ACROSS THE LIFESPAN
(Cross-listed with COMM 85679) Overview of research examining communication across the lifespan, including issues related to communication and cognition, communicative uses of language, communication in close relationships and differences in media uses and effects. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Communication Studies Department

COMM 65680 - INTERCULTURAL/INTERNATIONAL COMMUNICATION
Examination of theoretical perspectives, research issues and the rhetorical analyses of intercultural and international communication. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Communication Studies Department

COMM 65683 - INTERGROUP COMMUNICATION
(Cross-listed with COMM 85683) Overview of theory and research of communication between groups of individuals, including issues of discrimination, language, identity, social status, religion and demographics. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Communication Studies Department

COMM 65685 - COMMUNICATION AND COGNITION
(Cross-listed with COMM 85685) Application of cognitive theory and research findings to understanding and
explaining message production, interpersonal communication, individual differences in adaptive ability, persuasion, political communication, media processing and media effects. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Communication Studies Department

COMM 65766 - COMMUNICATION IN A GLOBAL SOCIETY

Overview of, analysis of, and critical reflection on topics and issues related to globalization, largely from a communication perspective yet drawing from other disciplines, and including topics such as framing and narratives of globalization and fragmentation, images of national and "civilizational" identity, discourses of marketization and consumerism, organizational communication dynamics of "the anti-globalization movement" and "globalization from below," definitions and frameworks of security, symbols of war and peace, debates over corporate social responsibility, frames of environmental sustainability, the roles of new media in alternative organizational and institutional formation, and understanding global problems in terms of communication networks. Contributes to the core curriculum for the global communication concentration in the MA program in COMM. Open to PhD students in CCI, plus other masters students within CCI. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Communication Studies Department

COMM 65794 - TEACHING OF COLLEGE COMMUNICATION

(Repeatable for credit) (Cross-listed with COMM 75794) Training and experience in college teaching. Maximum of three hours applicable toward master's degree requirements. Prerequisite: Graduate standing.

2.000 TO 4.000 Credit hours
2.000 TO 4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Communication Studies Department

COMM 65851 - ORGANIZATIONAL COMMUNICATION

(Cross-listed with COMM 75851) Structure, methodology and application of communication theory in industrial and organizational settings. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Communication Studies Department

COMM 65891 - SEMINAR IN ORGANIZATIONAL COMMUNICATION

(Repeatable for credit) Theories and problems of human communication within, between and/or among formal organizations. Prerequisite: Special approval and graduate standing.
3.000 OR 4.000 Credit hours
3.000 OR 4.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Communication Studies Department

COMM 66501 - HEALTH COMMUNICATION

(Cross-listed with COMM 86501) Investigation of the role of communication theory, research, and practice in health beliefs and behavior, health care, and health promotion. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Communication Studies Department

COMM 66503 - HEALTH COMMUNICATION AND MEDIA EFFECTS

(Cross-listed with COMM 86503) Overview of theory and research on the processing and effects of health messages in the media. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Communication Studies Department

COMM 66506 - HEALTH COMMUNICATION AND NEW MEDIA

(Cross-listed with COMM 86506) Investigation of the implementation and effects of new media technologies and their implications for health communication. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Communication Studies Department

COMM 66507 - INTERPERSONAL COMMUNICATION AND HEALTH

(Cross-listed with COMM 86507) Investigation of the interpersonal communication processes that influence and/or are influenced by health and health contexts. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Communication Studies Department
COMM 66508 - HEALTH COMMUNICATION LITERACY
(Cross-listed with COMM 86508) Investigation of the concept and consequences of communication as it relates to health literacy, including social, cultural, educational, and political forces that affect health literacy levels, and strategies for creating accessible health communication. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture

Communication Studies Department

COMM 66509 - PUBLIC COMMUNICATION CAMPAIGNS
(Cross-listed with COMM 86509) Overview of the major issues surrounding the development, dissemination, and effects of public communication campaigns. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture

Communication Studies Department

COMM 75000 - FOUNDATIONS OF COMMUNICATION INQUIRY
(Cross-listed with COMM 65000) Philosophy of science, epistemological and theory construction principles which are the foundation of inquiry into the process of communication. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture

Communication Studies Department

COMM 75020 - QUANTITATIVE RESEARCH METHODS IN COMMUNICATION
(Cross-listed with COMM 65020) An examination of basic quantitative social scientific research methods and procedures for the study of communication. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture

Communication Studies Department

COMM 75060 - COMMUNICATION MEASUREMENT AND ANALYSIS
(Cross-listed with COMM 65060) A survey of self-report, observational and psychological instruments used in communication research. Uses of the computer in analyzing data obtained in communication research. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours
**COMM 75091 - SEMINAR IN PERSUASION**

(Repeatable for credit) (Cross-listed with COMM 65091) Examination of selected areas of persuasion research. Emphasis on synthesizing research results and formulating explanatory models of persuasive behavior. 
Prerequisite: Special approval and doctoral standing.

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**COMM 75093 - VARIABLE TITLE WORKSHOP IN COMMUNICATION STUDIES**

(Repeatable for credit) Variable title workshop in communications. Prerequisite: Doctoral standing.

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**COMM 75095 - SPECIAL TOPICS**

(Repeatable for credit) (Cross-listed with COMM 45095 and COMM 55095) Offered when resources permit a topic different from existing courses. Topic will be announced when scheduled. Prerequisite: Doctoral standing.

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**COMM 75096 - INDIVIDUAL INVESTIGATION**

(Repeatable for credit) (Cross-listed with COMM 65096) Independent study of area or problem to be selected in consultation with graduate staff. Prerequisite: Doctoral standing.

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**COMM 75591 - SEMINAR IN SMALL GROUP COMMUNICATION**

(Repeatable for credit) (Cross-listed with COMM 65591) Research theories and findings in small group
**COMM 75652 - THEORIES OF COMMUNICATION**

(Cross-listed with COMM 65652) Introduction to approaches in the study of human communication. Focuses on differing views of interaction from theory building and research generation perspective. Prerequisite: Doctoral standing.

- 3.000 Credit hours
- 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Communication Studies Department

**COMM 75661 - COMMUNICATION IN AN INFORMATION SOCIETY**

(Cross-listed with COMM 65661) Examines how the development and use of newer communication technologies have influenced how people communicate. Considers the evolution, social and psychological impact and culture of newer communication technologies especially the Internet, and how research adapts to such technologies. Prerequisite: Doctoral standing.

- 3.000 Credit hours
- 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Communication Studies Department

**COMM 75662 - MASS MEDIA EFFECTS**

(Cross-listed with COMM 65662) Examines perspectives on media effects, the impact media have on individuals and societies and how individual, societal and communication elements influence media uses and effects. Explores issues such as media portrayals, campaigns, violence and children and the media. Prerequisite: Doctoral standing.

- 3.000 Credit hours
- 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Communication Studies Department

**COMM 75665 - PERSONAL AND MEDIATED COMMUNICATION**

(Cross-listed with COMM 65665) Examination of the interface of interpersonal and mediated communication in everyday life. Includes topics such as parasocial interaction, talk radio, TV co-viewing, cell phones, teleconferencing, computer-mediated relationships and media portrayals. Prerequisite: Doctoral standing.

- 3.000 Credit hours
- 3.000 Lecture hours
### COMM 75670 - INTERPERSONAL COMMUNICATION

(Cross-listed with COMM 65670) Survey of recent theoretical developments and research in interpersonal communication. Topics include relationship development, interaction, interpersonal traits, compliance, conversational analysis and research methods. Prerequisite: Doctoral standing.

- 3.000 Credit hours
- 3.000 Lecture hours

### COMM 75680 - INTERCULTURAL/INTERNATIONAL COMMUNICATION

Examination of theoretical perspectives, research issues and the rhetorical analyses of intercultural and international communication. Prerequisite: Doctoral standing.

- 3.000 Credit hours
- 3.000 Lecture hours

### COMM 75794 - TEACHING OF COLLEGE COMMUNICATION

(Repeatable for credit) (Cross-listed with COMM 65794) Training and experience in college teaching. Maximum of three hours applicable toward master's degree requirements. Prerequisite: Doctoral standing.

- 2.000 TO 4.000 Credit hours
- 2.000 TO 4.000 Lecture hours

### COMM 75851 - ORGANIZATIONAL COMMUNICATION

(Cross-listed with COMM 65851) Structure, methodology and application of communication theory in industrial and organizational settings. Prerequisite: Doctoral standing.

- 3.000 Credit hours
- 3.000 Lecture hours

### COMM 75891 - SEMINAR IN ORGANIZATIONAL COMMUNICATION
Theories and problems of human communication within, between and/or among formal organizations. Prerequisite: Special approval and doctoral standing.
3.000 OR 4.000 Credit hours
3.000 OR 4.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Communication Studies Department

**COMM 80199 - DISSERTATION I**

(Repeatable for credit) Doctoral dissertation for which registration in at least two semesters is required, first of which will be semester in which dissertation work is begun and continuing until the completion of 30 hours. Prerequisite: Doctoral standing.
15.000 Credit hours
15.000 Other hours

Levels: Graduate
Schedule Types: Dissertation

Communication Studies Department

**COMM 80299 - DISSERTATION II**

(Repeatable for credit) Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. Prerequisite: COMM 80199 and doctoral standing.
15.000 Credit hours
15.000 Other hours

Levels: Graduate
Schedule Types: Dissertation

Communication Studies Department

**COMM 85098 - RESEARCH**

(Repeatable for credit) Research or individual investigation for doctoral students who have not yet passed their candidacy examination. Credits may be applied toward degree if school approves. Prerequisite: doctoral standing.
1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

Communication Studies Department

**COMM 85673 - FAMILY COMMUNICATION**

(Cross-listed with COMM 65673) Family Communication examines the study of theory and research about the interactions among individuals in families. The course also examines how families interact with external entities. Finally, the course explores health communication, media uses or new communication technologies and work-life balance issues from a family communication perspective. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture

Communication Studies Department

**COMM 85675 - COMMUNICATION, UNCERTAINTY AND PRIVACY MANAGEMENT**

(Cross-listed with COMM 65675) Communication, uncertainty and the management of private information examines theory and research about disclosure and uncertainty issues in communication in a variety of contexts. Course content examines disclosure and uncertainty management applications in relational contexts, health contexts, organizational contexts, and contexts involving human interaction occurring through technology. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Communication Studies Department

**COMM 85677 - RELATIONAL COMMUNICATION**

(Cross-listed with COMM 65677) Relational communication provides an exploration of communication theory and research about the interactions among individuals in personal relationships. Subtopics of the course include communication and the development, maintenance, and dissolution of personal relationships, relationships across the life span, individual differences in relationships and relational processes, qualities and outcomes. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Communication Studies Department

**COMM 85679 - COMMUNICATION ACROSS THE LIFESPAN**

(Cross-listed with COMM 65679) Overview of research examining communication across the lifespan, including issues related to communication and cognition, communicative uses of language, communication in close relationships and differences in media uses and effects. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Communication Studies Department

**COMM 85683 - INTERGROUP COMMUNICATION**

(Cross-listed with COMM 65683) Overview of theory and research of communication between groups of individuals, including issues of discrimination, language, identity, social status, religion and demographics. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours
COMM 85685 - COMMUNICATION AND COGNITION

(Cross-listed with COMM 65685) Application of cognitive theory and research findings to understanding and explaining message production, interpersonal communication, individual differences in adaptive ability, persuasion, political communication, media processing and media effects. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Communication Studies Department

COMM 85766 - COMMUNICATION IN A GLOBAL SOCIETY

Overview of, analysis of, and critical reflection on topics and issues related to globalization, largely from a communication perspective yet drawing from other disciplines, and including topics such as framing and narratives of globalization and fragmentation, images of national and "civilizational" identity, discourses of marketization and consumerism, organizational communication dynamics of "the anti-globalization movement" and "globalization from below," definitions and frameworks of security, symbols of war and peace, debates over corporate social responsibility, frames of environmental sustainability, the roles of new media in alternative organizational and institutional formation, and understanding global problems in terms of communication networks. Contributes to the doctoral program in Communication and Information, especially for students interested in international dimensions of communication. Open to graduate students outside the CCI. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Communication Studies Department

COMM 86501 - HEALTH COMMUNICATION

(Cross-listed with COMM 66501) Investigation of the role of communication theory, research, and practice in health beliefs and behavior, health care and health promotion. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Seminar

Communication Studies Department

COMM 86503 - HEALTH COMMUNICATION AND MEDIA EFFECTS

(Cross-listed with COMM 66503) Overview of theory and research on the processing and effects of health messages in the media. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture

Communication Studies Department

**COMM 86506 - HEALTH COMMUNICATION AND NEW MEDIA**

(Cross-listed with COMM 66506) Investigation of the implementation and effects of new media technologies and their implications for health communication. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Communication Studies Department

**COMM 86507 - INTERPERSONAL COMMUNICATION AND HEALTH**

(Cross-listed with COMM 66507) Investigation of the interpersonal communication processes that influence and/or are influenced by health and health contexts. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Communication Studies Department

**COMM 86508 - HEALTH COMMUNICATION LITERACY**

(Cross-listed with COMM 66508) Investigation of the concept and consequences of communication as it relates to health literacy, including social, cultural, educational, and political forces that affect health literacy levels, and strategies for creating accessible health communication. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Communication Studies Department

**COMM 86509 - PUBLIC COMMUNICATION CAMPAIGNS**

(Cross-listed with COMM 66509) Overview of the major issues surrounding the development, dissemination, and effects of public communication campaigns. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Communication Studies Department

**COMT 11000 - INTRODUCTION TO COMPUTER SYSTEMS**
(Equivalent to MIS 24053) Covers the basic concepts and use of computer systems, including hardware, personal productivity software, Internet usage and file management. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

Course Attributes:
TAG - Business

**COMT 11002 - VISUAL BASIC PROGRAMMING**

Visual Basic.NET language introducing concepts of object-oriented, event-driven program design and implementation. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**COMT 11004 - SURVEY OF INFORMATION TECHNOLOGY**

This overview course will provide an introduction to information technologies, career paths and professional certifications available. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**COMT 11005 - INTRODUCTION TO OPERATING SYSTEMS AND NETWORKING TECHNOLOGY**

Survey of desktop and network OS essentials, including file and disk management, system tools utilization, resource sharing and introductory network concepts. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**COMT 11006 - INTRODUCTION TO WEB SITE TECHNOLOGY**

Focuses on web site technologies including HTML. Students learn the history of the Internet and effective search techniques. Prerequisites: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
COMT 11009 - COMPUTER ASSEMBLY AND CONFIGURATION

Covers disk operating system functions and features; hardware/software installation procedures; file and directories management; system configuration/optimization; backup procedures. Prerequisite: COMT 11005 or CS 33211 or DSCI 26010 or TECH 10001.
4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

COMT 12000 - PERSONAL PRODUCTIVITY SOFTWARE

Covers intermediate concepts and integration of computer applications. Emphasis on software suites, specifically word processing, electronic spreadsheets, database and presentation applications. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

COMT 20001 - C++ PROGRAMMING

Course using C++ introducing concepts of software development, object-oriented event-driven programming, testing and debugging, simple and complex data types language syntax and semantics. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

COMT 20011 - JAVA PROGRAMMING

Course using Java introducing concepts of software development, object-oriented event-driven programming, testing and debugging, simple and complex data types, language syntax and semantics. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

COMT 21002 - NETWORK SETUP AND CONFIGURATION
Introduces networking in LAN and WAN environments. Topics include network protocol, configuration, operation, setup, installation, administration, management and security. Pre/corequisite: COMT 11009.
4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**COMT 21005 - VISUAL BASIC DATABASE PROGRAMMING**

Advanced course in the visual basic language focusing on database systems development. Prerequisite: COMT 11002 or CS 13001 or DSCI 15310 or MIS 24065.
4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**COMT 21007 - INTERNET ETHICS AND POLICIES**

Covers the ethics, issues and policies regarding the Internet. It includes discussion/research on intellectual property/freedom, hacking, pornography, privacy, etc. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**COMT 21008 - COMPUTER METHODS IN SCIENCE AND ENGINEERING**

Use of computers in problems related to science and engineering. Course will include introduction to elements of a high level scientific language. Prerequisites: MATH 19001.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**COMT 21009 - SEMINAR IN COMPUTER TECHNOLOGY**

Capstone course for COMT students encompassing critical reading, writing and discussion applying the current theories of computer technologies to on-the-job experiences. Students will develop a portfolio to confirm their level of knowledge. Prerequisite: COMT 11002 and 11005 and 11006 and 11009 and 21002 and 21010.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar
COMT 21010 - WORKGROUP PRODUCTIVITY SOFTWARE

Research project-oriented course emphasizing workgroup methodologies for group project management, problem definition, data retrieval and analysis, conclusions and recommendations. Prerequisite: COMT 12000; or ITAP 16639 and 26611.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

COMT 21011 - TECHNIQUES OF MULTIMEDIA WEB DESIGN

Focuses on developing and managing effective web sites using multimedia elements including sound and video. Prerequisite: COMT 11006 or COMT faculty special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

COMT 21036 - WEB SCRIPTING I

This course will focus on client-side scripting needed to create interactive and dynamic Web sites. The use of scripting in context with various technologies will be explored. Prerequisites: COMT 11002 and COMT 11006; or CS 13001 and CS 27101; or TECH 2631; or MIS 24065.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

COMT 21092 - COMPUTER PRACTICUM

(Repeatable for credit) Supervised work experience in information technology environment; 45 hours supervised work experience per credit hour. Prerequisite: sophomore standing.
1.000 TO 3.000 Credit hours
3.000 TO 9.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

COMT 21095 - SPECIAL TOPICS IN COMPUTER TECHNOLOGY
COMT 21096 - INDIVIDUAL INVESTIGATION IN COMPUTER TECHNOLOGY

(Repeatable for credit) Individual study in computer field. Open to computer technology majors. Prerequisite: Permission.
1.000 TO 4.000 Credit hours
7.000 TO 28.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Regional College Department

COMT 21100 - LOCAL AREA NETWORK TROUBLESHOOTING

Covers local area network troubleshooting techniques. Topics include identifying the scope of the problem, systematic troubleshooting approaches, problem resolution and ongoing maintenance. Prerequisite: COMT 21002 or CS 33211 or DSCI 26010; or TECH 23010 and TECH 26301.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

COMT 21110 - INTERNETWORKING

Introduces internetworking concepts. Topics include networking standards, cabling, TCP/IP, router configuration, LAN and WAN segments and other related topics. Prerequisite: COMT 21002 or CS 33211 or DSCI 26010; or TECH 23010 and 26301.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

COMT 21200 - ETHICAL HACKING

Tools and techniques ethical hackers and security testers use to discover vulnerabilities and solutions to protect computer networks. Prerequisite: COMT 21002 or CS 33211 or DSCI 26010; or TECH 23010 and TECH 26301.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
### COMT 36095 - SPECIAL TOPICS IN COMPUTER TECHNOLOGY

(Repeatable for credit) Various special courses will be announced in the schedule of classes under this course number with different section numbers. Prerequisite: none.
2.000 TO 3.000 Credit hours
2.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

### COMT 36301 - ADVANCED C++ PROGRAMMING

Course using C++: classes and data abstraction, stream IO, inheritance, standard template library, Microsoft Foundation Classes, system programming concepts using Unified Modeling Language. Prerequisite: COMT 20001.
4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

### COMT 36302 - C SHARP PROGRAMMING

Introduces concepts of software development, object-oriented event-driven programming, testing and debugging, simple and complex data types, language syntax and semantics. Prerequisite: COMT 20001 or COMT 20011.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

### COMT 36303 - DIGITAL IMAGE MANIPULATION

Course covers various concepts involved in the creation and manipulation of digital images. Prerequisite: COMT 11006.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

### COMT 36308 - ERGONOMICS IN COMPUTER SYSTEMS

Introduction to ergonomics, usability design, and assessment methods for the development of computer hardware, software, and systems. Prerequisite: junior standing.
COMT 36309 - PROGRAMMING MOBILE APPLICATIONS

Introduces the unique program design considerations required by mobile device platforms such as PDAs and Smartphones. Practical programming examples will utilize Visual Basic and the .NET Compact Framework. Prerequisite: COMT 11002 or CS 13001 or DSCI 15310 or MIS 24065.

COMT 36310 - MULTIMEDIA DEVELOPMENT TOOLS

Course focuses on advanced technologies for Web development, including DHTML, plug-ins, etc. Students will learn to create more interactive and dynamic web sites. Prerequisite: COMT 21011.

COMT 36311 - ADVANCED JAVA PROGRAMMING

Course using Java abstract data types and objects, object-oriented, event-driven design, file organization and access, and systems programming concepts. Prerequisite: COMT 20011.

COMT 36314 - SEMINAR IN EMERGING COMPUTER AND INFORMATION TECHNOLOGIES

Survey of new and emerging technologies in computer and information technology. Prerequisite: Junior standing.
COMT 36315 - CERTIFICATION PREPARATION IN COMPUTER TECHNOLOGY

(Repeatable for a maximum of 6 credit hours) Certification preparation course to help students prepare for professional certification attempts in Computer Technology. Certification is not guaranteed. Certification fees may apply. Prerequisite: special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

COMT 36318 - SURVEY OF INFORMATION SECURITY, INTERNET FRAUD AND COMPUTER FORENSICS

This lecture-based, survey course provides a non-technical introduction to contemporary issues in information security, Internet fraud and computer forensics. Prerequisite: ENG 21011 or HONR 10297; and junior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

Course Attributes:
Writing Intensive Course

COMT 36320 - COMPUTER FORENSICS

Hands-on skills in incident response, forensic preparation, and data recovery, and analysis. Prerequisite: COMT 21002 or CS 33211 or DSCI 26010; or TECH 23010 and TECH 26301

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

COMT 36321 - NETWORK FORENSICS

Emphasizing hands-on skills in live incident response, the proper use of network forensic tools, network monitoring, live data capture, evidence analysis, data integrity and other related topics. Prerequisite: COMT 21002 or CS 33211 or DSCI 26010; or TECH 23010 and TECH 26301.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

COMT 36330 - LOCAL AREA NETWORK SECURITY FUNDAMENTALS

Examines the primary issues involved in securing resources in a LAN, including threat assessment,
countermeasures, best practices, security protocols, cryptography and management-related issues. Prerequisite: COMT 21002 or CS 33211 or DSCI 26010; or TECH 23010 and TECH 26301.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**COMT 36331 - INTERNETWORKING II**

Reinforcing Internetworking concepts. Topics include network standards, LAN switching, VLANs, network designs, routing protocols and configuration, LAN and WAN segments, and other related topics. Prerequisite: COMT 21110.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**COMT 36336 - WEB SCRIPTING II**

Focuses on server-side scripting needed to create interactive and dynamic web sites. Prerequisite: COMT 21036 or special approval of COMT faculty.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**COMT 36340 - HELP DESK SUPPORT**

Examination of help desks that exist, importance within organizations, the roles and skills required, and methods and technologies commonly employed. Prerequisite: COMT 11009 or TECH 23010.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**COMT 36350 - PROGRAMMING OFFICE PRODUCTIVITY APPLICATIONS**

Introduces the use of Visual Basic for Applications (VBA) as a tool to create customized programs that automate repetitive and/or complex tasks performed using office suite applications. Prerequisite: COMT 11002 and COMT 21010.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
COMT 36355 - COMMAND LINE UTILITIES

Preparing students to perform effectively in Windows, Linux, and various server command line environments. Command syntax, batch files, script files, internal & external commands, and other related topics will be covered. Prerequisite: COMT 21002 or CS 33211 or DSCI 26010; or TECH 23010 and TECH 26301.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

COMT 36392 - INTERNSHIP FOR COMPUTER TECHNOLOGY STUDENTS

(Repeatable for a maximum of 6 credit hours) An arranged work experience for students in the IT field. Students complete 45 hours of internship per credit. Prerequisite: junior standing.

1.000 TO 3.000 Credit hours
3.000 TO 9.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

COMT 40000 - CYBERSECURITY

Builds on a background in networking and focuses on cybersecurity best practices, standard models, and regulatory requirements. Prerequisite: COMT 21002; or DSCI 26010; or CS 33211; or TECH 23010 and TECH 26301.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

COMT 41002 - CLOUD TECHNOLOGY

Concepts of cloud computing, including storage; services; technology; and management. Prerequisite: COMT 21002; or DSCI 26010; or CS 33211; or TECH 23010 and TECH 26301.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
COMT 46300 - ADVANCED COMPUTER ASSEMBLY AND CONFIGURATION

Focus is on advanced system components, streamlined operating system installation procedures, and current technology in LAN connectivity. Prerequisite: COMT 11009 and junior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

COMT 46303 - DIGITAL VIDEO EDITING

Utilizes digital imaging technologies to produce videos. Includes timelines; filming, importing/exporting video; audio; effects, transitions, and captions. Prerequisite: COMT 36303.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

COMT 46308 - ADVANCED VISUAL BASIC PROGRAMMING

Advanced concepts of Visual Basic: Classes and Objects, Inheritance, Polymorphism, Arrays, Exception Handling, Files and Streams, DLLs. Prerequisite: COMT 11002 or CS 13001 or DSCI 15310 or MIS 24065.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

COMT 46309 - VISUAL BASIC WEB PROGRAMMING

Using Visual Basic to develop secure, data-aware web applications. Topics covered include HTML and CSS, testing and debugging, master pages, state management, security and authentication, SQL and object data sources, AJAX, and WCF services. Prerequisite: COMT 11002 or CS 13001 or DSCI 15310 or MIS 24065.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

COMT 46310 - TECHNOLOGY OF OPERATING SYSTEMS

Course covering installation, configuration, tuning, and communication among state of the art desktop operating systems, using available system tools, utilities and files. Prerequisites: COMT 21002 or CS 33211 or DSCI 26010; or TECH 23010 and TECH 26301.

3.000 Credit hours
3.000 Lecture hours
**COMT 46311 - TECHNOLOGY OF NETWORKING**

Advanced topics of enterprise network management, including DNS, WINS, IP addressing, routing basics, subnet masking, firewalls, storage redundancy techniques, and general tuning, optimizing, troubleshooting, recovery strategies. Prerequisites: COMT 21002 or CS 33211 or DSCI 26010; or TECH 23010 and TECH 26301.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**COMT 46312 - SCRIPTING FOR NETWORK ADMINISTRATORS**

Covers scripting technologies to configure and manage resources and services of LAN servers and workstations. Prerequisites: COMT 21002 and COMT 21036.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**COMT 46313 - VIRTUAL MACHINE CONFIGURATION AND ADMINISTRATION**

Focus on configuring and administering virtual machine software. Prerequisite: COMT 21002 or CS 33211 or DSCI 26010; or TECH 23010 and TECH 26301.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**COMT 46314 - TECHNOLOGY OF APPLICATION SERVICES**

Focus is on the core service roles provided by application services including configuration, maintenance and security. Prerequisite: COMT 21002 or CS 32111 or DSCI 26010; or TECH 23010 and TECH 26301.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**COMT 46315 - SQL WITH ORACLE**
Focus is on SQL and relational databases using Oracle. Prerequisite: COMT 21005 or CS 13001 or DSCI 15310 or MIS 24065.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**COMT 46320 - CLOUD FORENSICS**

Concepts of cloud forensics, including legal consideration and software tools involved with discovery in the cloud. Prerequisite: COMT 21002; or DSCI 26010; or CS 33211; or TECH 23010 and TECH 26301.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**COMT 46321 - WEB DATABASE INTEGRATION**

Focus is on integrating data sources into web sites. Current topics include advanced concepts in server-side processing principles, web forms, database programming objects and Structured Query Language. Prerequisite: COMT 21036.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**COMT 46331 - LOCAL AREA NETWORK SECURITY AND FIREWALLS**

Examines the primary issues involved in defining and configuring a local area network defense perimeter including LAN security analysis, implementing firewalls, and intrusion detection systems. Prerequisite: COMT 36330.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**COMT 46340 - DATA DESIGN AND IMPLEMENTATION**

Explores the role and design of databases in organizations, with emphasis on the technologies used in their implementation. Emphasis on SQL. Prerequisite: COMT 21005 and COMT 21010.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
COOP 20092 - COOPERATIVE EDUCATION

Limited to students on approved, full-time cooperative work assignments. No academic credit or grade is awarded for the assignment. Prerequisite: special approval.

0.000 Credit hours
0.000 Other hours

Levels: Undergraduate
Schedule Types: Cooperative Education

Office of the Provost Department

Course Attributes:
Experiential Learning Requirem, Variable Title

CPHY 60199 - THESIS I

Thesis students must register for a total of 6 hours, 2-6 hours in a single semester or distributed over two semesters if desired. Prerequisite: Approval of adviser and graduate standing.

2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Arts and Sciences Department

CPHY 60299 - THESIS II

Thesis students must continually register each semester until all degree requirements are met. Prerequisite: CPHY 60199 and graduate standing.

2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Arts and Sciences Department

CPHY 60498 - RESEARCH

(Repeatable for credit) Research or individual investigation. Credits earned may be applied toward meeting degree requirements if approved. Prerequisite: Permission and graduate standing.

1.000 TO 15.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Research

Arts and Sciences Department

CPHY 62241 - SOFT MATTER
Lectures on soft materials, including binary fluid mixtures, polymers, colloids, thermotropic and lyotropic liquid crystals. Structures, defects, and textures of phases with orientational and partial translational order. Dynamics of phase transitions. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Arts and Sciences Department

**CPHY 62242 - CHARACTERIZATION OF SOFT MATERIALS**

(Cross-listed with CPHY 72242) Basic techniques in characterization using X-ray scattering, neutron scattering, light scattering, NMR, optical microscopy, scanning electron microscopy, transmission electron and tunneling electron microscopy and ellipsometry. Laboratory measurements, error analysis, cell fabrication. Prerequisite: graduate standing.

4.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Arts and Sciences Department

**CPHY 62245 - FUNDAMENTALS OF LIQUID CRYSTAL SCIENCE**

Basic liquid crystals structures and their main physical properties, such as visco-elastic, electric, magnetic and optical properties except the nature of their phase transitions. Also discussed is their interactions with surfaces and the structural defects that they can form. Prerequisite: graduate standing.

4.000 Credit hours
4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Arts and Sciences Department

**CPHY 62248 - LIQUID CRYSTAL OPTICS AND PHOTONICS**

(Cross-listed with CPHY 72248) Optics of cholesterics, liquid crystalline photonic bandgap materials, nonlinear optics of liquid crystals; optomechanical effects in liquid crystal elastomers. Prerequisite: graduate standing.

4.000 Credit hours
4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Arts and Sciences Department

**CPHY 62249 - LABVIEW FOR DATA ACQUISITION AND INSTRUMENT CONTROL**

(Cross-listed with CPHY 72249) Introduction to laboratory data acquisition and instrument control using LabView Software. Prerequisite: graduate standing.

1.000 Credit hours
1.000 Lecture hours
CPHY 62335 - ADVANCED LIQUID CRYSTALLINE AND POLYMERIC MATERIALS

(Cross-listed with CPHY 72335) Liquid crystals and polymers are soft matters of two important disciplines of science and technology. They both have a similar history and are rich in physical and optical properties useful for fundamental and applied research. This course introduce students to recent advances in liquid crystals and polymers with emphasis on structure-property relationships, physical and optical properties, and their applications. Prerequisite: doctoral standing.

4.000 Credit hours
3.000 Lecture hours
2.000 Lab hours

CPHY 62450 - LIQUID CRYSTAL OPTICS I: THEORY

(Slashed with CPHY 72450) Provides an introduction to optical phenomena with an emphasis on liquid crystals, from geometrical optics to Maxwell's equations. Basic principles are used to analyze and solve optics problems arising in liquid crystal engineering. Prerequisite: Graduate standing.

2.000 Credit hours
2.000 Lecture hours

CPHY 62452 - LIQUID CRYSTAL OPTICS II: OPTICAL SYSTEMS

(Slashed with CPHY 72452) Focuses on the study of practical optical systems with an emphasis on liquid crystals. Starting with the understanding of basic optical components such as lenses, mirrors, filters and polarizers, students study the principles of optical system design. Practical concepts and techniques for the implementation of optical instruments and displays will be mastered through lectures and lab work. Prerequisites: CPHY 62450; and graduate standing.

2.000 Credit hours
1.000 Lecture hours
2.000 Lab hours

CPHY 62454 - LIQUID CRYSTAL OPTICS III: APPLICATIONS

(Slashed with CPHY 72454) Focuses on the study of practical optical systems for liquid crystal optical devices. Fundamental optical characteristics of liquid crystal displays and the standard methods of characterization are studied in the lab. Prerequisites: CPHY 62450; and graduate standing. Corequisite: CPHY 62452.

1.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Laboratory

Arts and Sciences Department

**CPHY 62460 - LIQUID CRYSTAL MATERIALS SCIENCE**

(Slashed with CPHY 72460) Familiarizes students with the basic, underlying chemical concepts in liquid crystal science. These concepts include molecular structures and properties of liquid crystal molecules, miscibility rules and micro-segregation of chemically incompatible molecular segments, physical and electronic properties of aromatic compounds including heterocycles and fluorinated aromatics, properties of aliphatic and perfluorinated hydrocarbons, unsaturation, and chirality. Other aspects that will be covered in later sections of this course relate to auxiliary and novel materials used in liquid crystal devices such as polymers, carbon nanomaterials, metal and semiconductor nanoparticles, and photo-responsive organic materials. Prerequisite: Graduate standing.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Arts and Sciences Department

**CPHY 62462 - LIQUID CRYSTAL SCIENCE: PHYSICAL PROPERTIES**

(Slashed with CPHY 72462) Basics of liquid crystal defects and their behavior in magnetic and electric fields. Prerequisite: Graduate standing. Pre- or Corequisite: CPHY 62460.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Arts and Sciences Department

**CPHY 62640 - LIQUID CRYSTAL, POLYMER AND COLLOID COMPOSITES**

(Cross-listed with CPHY 72640) Interdisciplinary science of systems consisting of liquid crystal, polymer and colloid. Statistical physics of composite systems, mixing free energy, phase separation principle, phase diagrams and phase separation dynamics. States, structures and free energies of liquid crystal, polymer and colloidal systems. Polymer dispersed liquid crystals (PDLCs), polymer stabilized liquid crystals (PSCTs) and their applications. Laboratory experiments on composite systems and fabrication of PDLC and PSCT light shutters. Prerequisite: graduate standing.

4.000 Credit hours
3.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Arts and Sciences Department

**CPHY 62643 - LIQUID CRYSTAL APPLICATIONS**

(Cross-listed with CPHY 72643) Apply knowledge of liquid crystals and optics to the design of liquid crystal
electro-optical devices. Emphasis is on modeling of devices and the use of that modeling to optimize device characteristics. Several particular device designs are considered to familiarize the student with the state of the art in liquid crystal displays and other electro-optical applications of liquid crystals and to prepare them to advance the art in future designs. Prerequisite: graduate standing.

4.000 Credit hours
4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Arts and Sciences Department

**CPHY 62647 - STRUCTURED FLUIDS**

(Cross-listed with CPHY 72647) The basics of fluids having internal structures, such as long range orientational order and/or one and two dimensional positional order. Materials include thermotropic smectic, lamellar lyotropic and columnar liquid crystals, soap films, fluid foams, fluid fibers and Langmuir monolayers. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Arts and Sciences Department

**CPHY 62650 - COMPUTATIONAL MATERIALS SCIENCE**

(Cross-listed with CPHY 72650) Materials modeling at the classical (i.e. non-quantum) level. Monte Carlo methods; molecular dynamics simulation; mesoscale models; numerical methods; case studies. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Arts and Sciences Department

**CPHY 62651 - NANOBIO TECHNOLOGY**

(Cross-listed with CPHY 72651) This interdisciplinary course presents the concepts, principles and the state-of-the-arts of nanotechnologies and their applications in biological and biomedical science and engineering. Focus is on the fundamental physical principles and engineering technologies of device miniaturization and system integration for bioapplications. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Arts and Sciences Department

**CPHY 64491 - SEMINAR: LIQUID CRYSTALS**

(Repeatable for credit) (Cross-listed with CPHY 74491) Discussion of current literature or original research in liquid crystals. Participation by students faculty and guests. Prerequisite: Special approval and graduate
standing.
1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Arts and Sciences Department

**CPHY 64495 - SPECIAL TOPICS IN CHEMICAL PHYSICS**
(Repeatable for credit) (Cross-listed with CPHY 74495) Topic to be announced when scheduled. Prerequisite: Special approval and graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Arts and Sciences Department

**CPHY 65002 - LIQUID CRYSTAL DEVICE ENGINEERING I**
(Slashed with CPHY 75002) Introduction to liquid crystal device technology including a hands-on investigation of the component parts of LCDs and how the devices function. Covers the basics of liquid crystals as related to LC technology; examples of current LC technology with an emphasis on the fundamental science behind the technology and hands-on characterization of it; and the consideration of next generation LC device technology, such as 3D displays and optical devices. Prerequisite: Graduate standing.
2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Arts and Sciences Department

**CPHY 65004 - LIQUID CRYSTAL DEVICE ENGINEERING II**
(Slashed with CPHY 75004) Provides an introduction to LC device design including a hands on look at the designs of devices, the basic modeling tools used in 1D and 2D devices, and the consideration of the modeling and effect of defects in LC devices. Prerequisites: CPHY 65002; and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Arts and Sciences Department

**CPHY 65006 - LIQUID CRYSTAL DEVICE PROTOTYPING**
(Slashed with CPHY 75006) Liquid crystal device prototyping; introduction to liquid crystal device manufacturing methods. Prerequisite: Graduate standing.
2.000 Credit hours
1.000 Lecture hours
2.000 Lab hours
CPHY 65008 - LIQUID CRYSTAL DEVICE CONSTRUCTION

(Slashed with CPHY 75008) Students acquire the knowledge and experience in basic techniques and procedures for the construction of liquid crystal cells. Based on the cleanroom techniques, ITO glass handling, film deposition, surface alignment treatment and cell assembly experienced, students are prepared for successive lab courses and the capstone project. Prerequisite: Graduate standing.
1.000 Credit hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Arts and Sciences Department

CPHY 65010 - LIQUID CRYSTAL CHARACTERIZATION

(Slashed with CPHY 75010) Focuses on experimental techniques which are used to characterize liquid crystals and liquid crystal devices. The students will learn principles and uses of characterization and test equipment to measure physical properties of liquid crystal materials and test the performance of liquid crystal cells. Prerequisite: Graduate standing.
2.000 Credit hours
1.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Arts and Sciences Department

CPHY 65012 - LIQUID CRYSTAL DEVICE TESTING

(Slashed with CPHY 75012) Focuses on experimental techniques which are used to test liquid crystal devices. Students will use advanced equipment in the Liquid Crystal Institute Clean Room Facility to measure the response and evaluate the performance of liquid crystal devices. Prerequisite: Graduate standing.
2.000 Credit hours
1.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Arts and Sciences Department

CPHY 65020 - LIQUID CRYSTAL ANALOG ELECTRONICS

(Slashed with CPHY 75020) Familiarizes students with both theory and laboratory experiments on analog electronics for liquid crystal devices. Key topics are circuit analysis, operational amplifiers and data acquisition, analysis and equipment control using LabView. Prerequisite: Graduate standing.
2.000 Credit hours
1.000 Lecture hours
2.000 Lab hours
Levels: Graduate
Schedule Types: Combined Lecture and Lab

Arts and Sciences Department

**CPHY 65022 - LIQUID CRYSTAL DIGITAL ELECTRONICS**

(Slashed with CPHY 75022) Familiarizes students with both theory and laboratory experiments on digital electronics for liquid crystal displays. Key topics are AD, DA and logic circuits, microcontrollers and digital communications. Prerequisites: CPHY 65020; and graduate standing.

2.000 Credit hours
1.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Arts and Sciences Department

**CPHY 65098 - MASTER'S PROJECT: ENGINEERING APPLICATIONS OF LIQUID CRYSTALS**

Offers an opportunity for students to carry out a project that aims to develop a liquid crystal device for a particular application, experiencing the complete development process from the field analysis, idea generation, concept design, feasibility study, implementation and testing. Prerequisites: CPHY 62460 or CPHY 72460; and CPHY 62462 or CPHY 72462; and CPHY 62450 or CPHY 72450; and CPHY 62452 or CPHY 72452; and CPHY 62454 or CPHY 72454; and CPHY 65008 or CPHY 75008; and CPHY 65022 or CPHY 75022; and graduate standing.

6.000 Credit hours
6.000 Other hours

Levels: Graduate
Schedule Types: Master's Project

Arts and Sciences Department

**CPHY 72241 - SOFT MATTER**

(Cross-listed with CPHY 62241) Lectures on soft materials, including binary fluid mixtures, polymers, colloids, thermotropic and lyotropic liquid crystals. Structures, defects, and textures of phases with orientational and partial translational order. Dynamics of phase transitions. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Arts and Sciences Department

**CPHY 72242 - CHARACTERIZATION OF SOFT MATERIALS**

(Cross-listed with CPHY 62242) Basic techniques in characterization using X-ray scattering, neutron scattering, light scattering, NMR, optical microscopy, scanning electron microscopy, transmission electron and tunneling electron microscopy and ellipsometry. Laboratory measurements, error analysis, cell fabrication. Prerequisite: doctoral standing.

4.000 Credit hours
2.000 Lecture hours
2.000 Lab hours
CPHY 72245 - FUNDAMENTALS OF LIQUID CRYSTAL SCIENCE

Basic liquid crystals structures and their main physical properties, such as visco-elastic, electric, magnetic and optical properties, except the nature of their phase transitions. It also discusses their interactions with surfaces and the structural defects that they can form. Prerequisite: doctoral standing.

4.000 Credit hours
4.000 Lecture hours

CPHY 72248 - LIQUID CRYSTAL OPTICS AND PHOTONICS

(Cross-listed with CPHY 62248) Optics of cholesterics, liquid crystalline photonic bandgap materials, nonlinear optics of liquid crystals; optomechanical effects in liquid crystal elastomers. Prerequisite: Doctoral standing.

4.000 Credit hours
4.000 Lecture hours

CPHY 72249 - LABVIEW FOR DATA ACQUISITION AND INSTRUMENT CONTROL

(Cross-listed with CPHY 62249) Introduction to laboratory data acquisition and instrument control using Labview software. Prerequisite: doctoral standing.

1.000 Credit hours
1.000 Lecture hours

CPHY 72335 - ADVANCED LIQUID CRYSTALLINE AND POLYMERIC MATERIALS

(Cross-listed with CPHY 62335) Liquid crystals and polymers are soft matters of two important disciplines of science and technology. They both have a similar history and are rich in physical and optical properties useful for fundamental and applied research. This course introduce students to recent advances in liquid crystals and polymers with emphasis on structure-property relationships, physical and optical properties, and their applications. Prerequisite: doctoral standing.

4.000 Credit hours
3.000 Lecture hours
2.000 Lab hours
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<th>Prerequisites</th>
<th>Credit Hours</th>
<th>Lecture Hours</th>
<th>Lab Hours</th>
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<td>CPHY 72450</td>
<td>LIQUID CRYSTAL OPTICS I: THEORY</td>
<td>Provides an introduction to optical phenomena with an emphasis on liquid crystals, from geometrical optics to Maxwell's equations. Basic principles are used to analyze and solve optics problems arising in liquid crystal engineering. Prerequisite: Doctoral standing.</td>
<td>2.000 Credit hours; 2.000 Lecture hours</td>
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<td>CPHY 72452</td>
<td>LIQUID CRYSTAL OPTICS II: OPTICAL SYSTEMS</td>
<td>Focuses on the study of practical optical systems with an emphasis on liquid crystals. Starting with the understanding of basic optical components such as lenses, mirrors, filters and polarizers, students study the principles of optical system design. Practical concepts and techniques for the implementation of optical instruments and displays will be mastered through lectures and lab work. Prerequisites: CPHY 72450; and doctoral standing.</td>
<td>2.000 Credit hours; 1.000 Lecture hours; 2.000 Lab hours</td>
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<td>CPHY 72454</td>
<td>LIQUID CRYSTAL OPTICS III: APPLICATIONS</td>
<td>Focuses on the study of practical optical systems for liquid crystal optical devices. Fundamental optical characteristics of liquid crystal displays and the standard methods of characterization are studied in the lab. Prerequisites: CPHY 72450; and doctoral standing. Corequisite: CPHY 72452.</td>
<td>1.000 Credit hours; 2.000 Lab hours</td>
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<td>CPHY 72460</td>
<td>LIQUID CRYSTAL MATERIALS SCIENCE</td>
<td>Familiarizes students with the basic, underlying chemical concepts in liquid crystal science. These concepts include molecular structures and properties of liquid crystal molecules, miscibility rules and micro-segregation of chemically incompatible molecular segments, physical and electronic properties of aromatic compounds including heterocycles and fluorinated aromatics, properties of aliphatic and perfluorinated hydrocarbons, unsaturation, and chirality. Other aspects that will be covered in later sections of this course relate to auxiliary and novel materials used in liquid crystal devices such as polymers, carbon nanomaterials, metal and semiconductor nanoparticles, and photo-responsive organic materials. Prerequisite: Doctoral standing.</td>
<td>2.000 Credit hours; 2.000 Lecture hours</td>
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Arts and Sciences Department

**CPHY 72462 - LIQUID CRYSTAL SCIENCE: PHYSICAL PROPERTIES**

(Slashed with CPHY 62462) Basics of liquid crystal defects and their behavior in magnetic and electric fields. Prerequisite: Doctoral standing. Pre- or Corequisite: CPHY 72460.

3.000 Credit hours
3.000 Lecture hours

Arts and Sciences Department

**CPHY 72640 - LIQUID CRYSTAL, POLYMER AND COLLOID COMPOSITES**

(Cross-listed with CPHY 62640) Interdisciplinary science of systems consisting of liquid crystal, polymer and colloid. Statistical physics of composite systems, mixing free energy, phase separation principle, phase diagrams and phase separation dynamics. States, structures and free energies of liquid crystal, polymer and colloidal systems. Polymer dispersed liquid crystals (PDLCs), polymer stabilized liquid crystals (PSLCs) and their applications. Laboratory experiments on composite systems and fabrication of PDLC and PSLC light shutters. Prerequisite: doctoral standing.

4.000 Credit hours
3.000 Lecture hours
1.000 Lab hours

Arts and Sciences Department

**CPHY 72643 - LIQUID CRYSTAL APPLICATIONS**

(Cross-listed with CPHY 62643) Apply knowledge of liquid crystals and optics to the design of liquid crystal electro-optical devices. Emphasis is on modeling of devices and the use of that modeling to optimize device characteristics. Several particular device designs are considered to familiarize the student with the state of the art in liquid crystal displays and other electro-optical applications of liquid crystals and to prepare them to advance the art in future designs. Prerequisite: doctoral standing.

4.000 Credit hours
4.000 Lecture hours

Arts and Sciences Department

**CPHY 72647 - STRUCTURED FLUIDS**

(Cross-listed with CPHY 62647) The basics of fluids having internal structures, such as long range orientational order and/or one and two dimensional positional order. Such materials include thermotropic smectic, lamellar lyotropic and columnar liquid crystals, soap films, fluid foams, fluid fibers and Langmuir monolayers. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours
CPHY 72650 - COMPUTATIONAL MATERIALS SCIENCE

(Cross-listed with CPHY 62650) Materials modeling at the classical (i.e. non-quantum) level. Monte Carlo methods; molecular dynamics simulation; mesoscale models; numerical methods; case studies. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

CPHY 72651 - NANOBIOTECHNOLOGY

(Cross-listed with CPHY 62651) This interdisciplinary course presents the concepts, principles and the state-of-the-arts of nanotechnologies and their applications in biological and biomedical science and engineering. Focus is on the fundamental physical principles and engineering technologies of device miniaturization and system integration for bioapplications. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

CPHY 74491 - SEMINAR: LIQUID CRYSTALS

(Repeatable for credit) (Cross-listed with CPHY 64491) Discussion of current literature or original research in liquid crystals. Participation by students, faculty and guests. Prerequisite: Special approval and doctoral standing.

1.000 Credit hours
1.000 Other hours

CPHY 74495 - SPECIAL TOPICS IN CHEMICAL PHYSICS

(Repeatable for credit) (Cross-listed with CPHY 64495) Topic to be announced when scheduled. Prerequisite: Special approval and doctoral standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours
CPHY 75002 - LIQUID CRYSTAL DEVICE ENGINEERING I

(Slashed with CPHY 65002) Introduction to liquid crystal device technology including a hands-on investigation of the component parts of LCDs and how the devices function. Covers the basics of liquid crystals as related to LC technology; examples of current LC technology with an emphasis on the fundamental science behind the technology and hands-on characterization of it; and the consideration of next generation LC device technology, such as 3D displays and optical devices. Prerequisite: Doctoral standing.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Arts and Sciences Department

CPHY 75004 - LIQUID CRYSTAL DEVICE ENGINEERING II

Provides an introduction to LC device design including a hands on look at the designs of devices, the basic modeling tools used in 1D and 2D devices, and the consideration of the modeling and effect of defects in LC devices. Prerequisites: CPHY 75002; and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Arts and Sciences Department

CPHY 75006 - LIQUID CRYSTAL DEVICE PROTOTYPING

(Slashed with CPHY 65006) Liquid crystal device prototyping; an introduction to liquid crystal device manufacturing methods. Prerequisite: Doctoral standing.

2.000 Credit hours
1.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Arts and Sciences Department

CPHY 75008 - LIQUID CRYSTAL DEVICE CONSTRUCTION

(Slashed with CPHY 65008) Students acquire the knowledge and experience in basic techniques and procedures for the construction of liquid crystal cells. Based on the cleanroom techniques, ITO glass handling, film deposition, surface alignment treatment and cell assembly experienced, students are prepared for successive lab courses and the capstone project. Prerequisite: Doctoral standing.

1.000 Credit hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Laboratory

Arts and Sciences Department
**CPHY 75010 - LIQUID CRYSTAL CHARACTERIZATION**

(Slashed with CPHY 65010) Focuses on experimental techniques which are used to characterize liquid crystals and liquid crystal devices. The students will learn principles and uses of characterization and test equipment to measure physical properties of liquid crystal materials and test the performance of liquid crystal cells. Prerequisite: Doctoral standing.

2.000 Credit hours  
1.000 Lecture hours  
2.000 Lab hours

Levels: Graduate  
Schedule Types: Combined Lecture and Lab

Arts and Sciences Department

**CPHY 75012 - LIQUID CRYSTAL DEVICE TESTING**

(Slashed with CPHY 65012) Focuses on experimental techniques which are used to test liquid crystal devices. Students will use advanced equipment in the Liquid Crystal Institute Clean Room Facility to measure the response and evaluate the performance of liquid crystal devices. Prerequisite: Doctoral standing.

2.000 Credit hours  
1.000 Lecture hours  
2.000 Lab hours

Levels: Graduate  
Schedule Types: Combined Lecture and Lab

Arts and Sciences Department

**CPHY 75020 - LIQUID CRYSTAL ANALOG ELECTRONICS**

(Slashed with CPHY 65020) Familiarizes students with both theory and laboratory experiments on analog electronics for liquid crystal devices. Key topics are circuit analysis, operational amplifiers and data acquisition, analysis and equipment control using LabView. Prerequisite: Doctoral standing.

2.000 Credit hours  
1.000 Lecture hours  
2.000 Lab hours

Levels: Graduate  
Schedule Types: Combined Lecture and Lab

Arts and Sciences Department

**CPHY 75022 - LIQUID CRYSTAL DIGITAL ELECTRONICS**

(Slashed with CPHY 65022) Familiarizes students with both the theory and laboratory experiments on digital electronics for liquid crystal displays. Key topics are AD, DA and logic circuits, microcontrollers and digital communications. Prerequisites: CPHY 75020; and doctoral standing.

2.000 Credit hours  
1.000 Lecture hours  
2.000 Lab hours

Levels: Graduate  
Schedule Types: Combined Lecture and Lab

Arts and Sciences Department
CPHY 80199 - DISSERTATION I

(Repeatable for credit) Doctoral dissertation for which registration in at least two semesters is required, first of which will be semester in which dissertation work is begun, and continuing until the completion of 30 hours. Prerequisite: Special approval and doctoral standing.

15.000 Credit hours
15.000 Other hours

Levels: Graduate
Schedule Types: Dissertation

Arts and Sciences Department

CPHY 80299 - DISSERTATION II

(Repeatable for credit) Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. Prerequisite: Completion of 30 hours of CPHY 80199. Doctoral standing.

15.000 Credit hours
15.000 Other hours

Levels: Graduate
Schedule Types: Dissertation

Arts and Sciences Department

CPHY 80498 - RESEARCH

(Repeatable for credit) Research or individual investigation for doctoral student who has not yet passed candidacy exam. Credit earned may be applied toward degree. Prerequisite: Doctoral standing.

1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

Arts and Sciences Department

CRIM 12000 - INTRODUCTION TO JUSTICE STUDIES

Surveys the U.S. criminal justice system and its component institutions and processes, including overviews of policing, corrections, courts, and their inter-relations in the criminal justice system. An overview is also provided of the nature and measurement of crime, patterns of offending and victimization, and criminal justice responses to offending and victimization. Historical and emerging issues are introduced including a variety of insights related to effective, professional and ethical practices in criminal justice. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Sociology Department

Course Attributes:
TAG - Social/Behavior Sciences

CRIM 22100 - BASIC INTERVIEWING
Foundation of basic interviewing principles including communication models, question format, distortions, topic control, inhibitors, facilitators, listening, types of interviews and practical exercises. Prerequisite: CRIM12000.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Sociology Department

CRIM 22300 - POLICE ROLE

Systematic analysis of the police role. An examination of the related research with an emphasis on divergent perspective and development of conceptual models. Prerequisite: CRIM 12000.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Sociology Department

Course Attributes:
TAG - Social/Behavior Sciences

CRIM 22301 - THE INVESTIGATIVE PROCESS

An examination of established investigative processes, techniques employed in conducting a systematic investigation and legal implications. Prerequisite: CRIM 12000.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Sociology Department

CRIM 26701 - CORRECTIONS

Course topics include history of corrections, punishment, community corrections, correctional institutions, correctional administration, issues in corrections, and future trends of corrections. Prerequisite: CRIM 12000.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Sociology Department

Course Attributes:
TAG - Social/Behavior Sciences

CRIM 26704 - ISSUES IN LAW AND SOCIETY

General treatment of the legal system with special emphasis on its origin, structure and functional consequences on issues and problems in modern society. Prerequisite: None.
CRIM 27095 - SPECIAL TOPICS IN CRIMINOLOGY AND JUSTICE STUDIES

(Repeatable for a maximum of 6 credit hours) Intensive analysis of issues significant and current in the field which are not covered in regular courses. Prerequisite: none.

2.000 OR 3.000 Credit hours
2.000 OR 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Sociology Department

CRIM 27311 - VICTIMOLOGY

Patterns of victim-offender relationship and process of victimization. Role of victims in criminal process. Problems of adjustment to victimization and issues in victim compensation. Prerequisite: CRIM 12000.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Sociology Department

CRIM 32200 - POLICE AND COMMUNITY

An examination of the rights of individuals, citizen involvement, the police as members of the community, and the development implementation and evaluation of related programs. Prerequisite: CRIM 12000 and CRIM 22300; and sophomore standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Sociology Department

CRIM 32500 - CRISIS INTERVENTION

Crisis intervention situations in criminal justice are considered. The service role of criminal justice personnel, community resources and skill development are also considered. Prerequisite: CRIM 12000; and CRIM 22300 or CRIM 27311; and sophomore standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
CRIM 33200 - CRIMINAL LAW
Developmental backgrounds and principles of criminal law; structure, functions of criminal law; rules of criminal liability and procedural requisites in criminal proof. Case analysis included. Prerequisite: CRIM 12000.
3.000 Credit hours
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture
Sociology Department

CRIM 33300 - DEVELOPMENT OF JUSTICE IN AMERICA
Course focuses on the evolution of the criminal justice process from its establishment in the United States to the present. Prerequisite: CRIM 12000 and sophomore standing.
3.000 Credit hours
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture
Sociology Department

CRIM 33400 - CRIME AND JUSTICE IN POPULAR CULTURE
Crime and criminal justice as they are socially constructed and portrayed in popular culture including television, news and entertainment, popular film and other media of popular culture. Critical analysis of relations between popular culture, media institutions, crime and justice. Role of popular culture media in shaping public opinions about crime and justice, and in turn the relevance of public opinion for understanding criminal justice politics and policy. Prerequisite: CRIM 12000 and sophomore standing.
3.000 Credit hours
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture
Sociology Department

CRIM 34200 - CRIMINAL PROCEDURES AND EVIDENCE
This course focuses on the use of evidence and the legal procedures followed in the processing of criminal cases. Case analysis and writing assignments required. Prerequisite: CRIM 12000 or PLST 18000.
3.000 Credit hours
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture
Sociology Department

CRIM 34311 - YOUTH AND THE JUSTICE SYSTEM
Analysis of situations involving the legal rights of children and youths which demand intervention by justice institutions or service agencies. Prerequisite: CRIM 12000.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Sociology Department

CRIM 36702 - CRIMINOLOGY

Examines crime from the legal and social viewpoints; including extent and patterns of criminal behavior. Special emphasis on theoretical explanations of criminal behavior and crime rates. Prerequisite: CRIM 12000 or SOC 12050; and junior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Sociology Department

CRIM 36703 - JUVENILE DELINQUENCY

Social and personal factors in juvenile delinquency; operation of juvenile justice system; prevention and control of delinquency. Prerequisite: CRIM 12000 and 36702.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Sociology Department

CRIM 37091 - SEMINAR IN CRITICAL ISSUES IN CRIMINOLOGY AND JUSTICE STUDIES

(Repeatable for credit) Intense analysis of issues significant and current in the justice field which are not covered in regular courses. In-progress (IP) mark permissible. Prerequisite: CRIM 12000 and sophomore standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

Sociology Department

CRIM 37095 - SPECIAL TOPICS IN CRIMINOLOGY AND JUSTICE STUDIES

(Repeatable for a maximum of 6 credit hours) Intensive analysis of issues significant and current in the field which are not covered in regular courses. Repeatable for a total of 6 hours. Prerequisite: none.

3.000 Credit hours
CRIM 37311 - MINORITIES IN CRIME AND JUSTICE
Focus on the role of social and ethnic minorities as victims, offenders and participants in the justice process. Prerequisite: junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
Sociology Department

Course Attributes:
Diversity Course-Domestic

CRIM 37411 - WOMEN IN CRIME AND JUSTICE
Women as a significant group in crime and their role in the development and operation of the criminal justice system. Prerequisite: junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
Sociology Department

Course Attributes:
Diversity Course-Domestic

CRIM 37511 - IMMIGRATION: LAW, CRIME AND JUSTICE
Covers issues of immigration related to law, crime, and justice. Students will be introduced to issues of international diversity through the consideration of issues of law, criminal justice, and social justice related to immigration. Topics to be covered include legal and illegal immigration, immigration law enforcement, immigrants as criminal offenders and as crime victims, police-community relations, immigrants in correctional or detention facilities, and immigration as a national security concern and controversy. Prerequisite: junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
Sociology Department

Course Attributes:
Diversity Course-Domestic

CRIM 44400 - JUSTICE ADMINISTRATION
Identification of administrative and management functions, leadership management styles and supervision of personnel in justice organizations. Prerequisite: CRIM 12000, CRIM 22300 and CRIM 26704.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Sociology Department

**CRIM 45093 - VARIABLE TITLE WORKSHOP IN CRIMINOLOGY AND JUSTICE STUDIES**

(Repeatable for credit) (Slashed with CRIM 55093) Satisfactory/unsatisfactory (S/U) graded. Prerequisite: Special approval.

1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Undergraduate
Schedule Types: Workshop

Sociology Department

**CRIM 45096 - INDIVIDUAL INVESTIGATION**

(Repeatable for a maximum of 6 credit hours when topic varies) Involves an individual research project of considerable depth in a subject area not covered by regular course offerings. Prior consent of supervising faculty member is required. Prerequisites: CRIM 12000 and 26704; and SOC 32210; and junior standing; and special approval.

1.000 TO 3.000 Credit hours
3.000 TO 9.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Sociology Department

**CRIM 46200 - ADVANCED CRIMINAL AND LEGAL ISSUES**

Focuses on reading, analyzing, and discussing current criminal, evidentiary and procedural issues as set forth in recent and historical U.S. Supreme Court cases. Case analysis, discussion and writing assignments are required. Prerequisite: CRIM 12000 or PLST 18000; and junior standing.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

Sociology Department

**CRIM 46701 - CRIME, JUSTICE AND SUBSTANCE ABUSE**

(Slashed with CRIM 56701) Examination of the relationship between drug and alcohol abuse and criminal behavior. Efforts to regulate, control, prevent and treat chemical abuse offenders are considered. Prerequisite: CRIM 12000 and CRIM 26704.

3.000 Credit hours
3.000 Lecture hours
CRIM 46705 - COMMUNITY CORRECTIONS
(Slashed with CRIM 56705) This course is devoted to an examination of formal and informal approaches to correctional supervision and treatment through probation, parole and community residential treatment. Prerequisite: CRIM 12000 and CRIM 26701.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Sociology Department

CRIM 46707 - CORRECTIONAL INSTITUTIONS
A thorough examination of the correctional institution, including the structure and organization, personnel, inmate social world and examination of the issues in contemporary correctional institutions. Prerequisite: 12 credit hours of criminology and justice studies (CRIM) coursework, including CRIM12000 and CRIM 26701.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Sociology Department

CRIM 46708 - TREATMENT METHODS
(Slashed with CRIM 56708) Various methods of treatment are applied to corrections field. Focus is on specific techniques in community and institutional correctional settings. Direct observation utilized when possible. Prerequisite: CRIM 12000 and 26701; and junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Sociology Department

CRIM 46792 - INTERNSHIP
(Repeatable for a maximum of 12 credit hours) Work experience under direction of supervising faculty member in a private, federal, state or local justice agency or law agency. Students must have a 2.00 major GPA in Criminology and Justice Studies (CRJU) to enroll in this course. Prerequisite: 9 credit hours of criminology and justice studies (CRIM) coursework, including CRIM 12000; and a minimum 2.00 cumulative GPA; and junior standing; and special approval.
3.000 TO 9.000 Credit hours
3.000 TO 9.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship
**CRIM 46798 - RESEARCH IN CRIMINOLOGY AND JUSTICE STUDIES**

(Repeatable for a maximum of 12 credit hours) Individual research under direct supervision of a faculty member to provide direct hands-on research experience working on faculty research projects. Prior consent of supervising faculty member is required. Only 6 hours of nontraditional coursework can count towards the major. Prerequisite: CRIM 12000 and CRIM 26704; and SOC 32210; and special approval.

3.000 TO 12.000 Credit hours
3.000 TO 12.000 Other hours

Levels: Undergraduate
Schedule Types: Research

**CRIM 46800 - INTELLIGENCE AND NATIONAL SECURITY**

(Slashed with CRIM 56800) Addresses topics related to global security, including economic and industrial espionage, trade secret thefts, law and technology and cyber-crimes. Implications of industrial espionage and intellectual property theft for the global economy, national and international security, and the control and regulation of white collar crime. Foundational exploration of Intelligence and Counterintelligence (IC) as concepts, processes and careers. Prerequisite: CRIM 12000 and junior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**CRIM 46801 - HOMELAND SECURITY**

(Slashed with CRIM 56801) Explores the nexus between terrorism and homeland security as it relates to homeland security strategy, assessment, evaluation, preparation, responses, and recovery actions and mechanisms relating to terrorism and homeland security. There is a focus on the importance of coordination of various assessments, plans, strategies and implementation of plans of action involving local, county, state, federal and international responses pertaining to terrorism and homeland security. Prerequisite: CRIM 12000 and junior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**CRIM 46802 - TERRORISM AND COUNTERTERRORISM**

(Slashed with CRIM 56802) Examines the origins and evolution of modern terrorism, challenges posed by
CRIM 46803 - INFORMATION AND CYBER SECURITY

(Slashed with CRIM 56803) Vulnerabilities of computer networks and techniques for protecting networks and data are discussed. Basic elements of symmetric and asymmetric cryptography, secure e-commerce, involving secure transmission, authentication, digital signatures, digital certificates and Public Key Infrastructure (PKI) are presented. Provides students with an introduction to the field of information security risk assessment. Incorporates cases in risk analysis derived from actual state and law enforcement agencies or private firms. Prerequisite: CRIM 12000 and junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Sociology Department

CRIM 46904 - ISSUES IN POLICE WORK

(Slashed with CRIM 56904) Analysis of police practices and functions at the municipal, state and federal level. Examination of emerging trends and issues in policing. Review of changes in police department policies and research on problem-solving in policing. Prerequisites: CRIM 12000 and CRIM 22300; and junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Sociology Department

CRIM 47002 - HUMAN SERVICE AGENCIES AND LAW

(Slashed with CRIM 57002) An overview of the law as it pertains to human service agencies, as well as on the relationships between such agencies and the criminal and juvenile justice systems. Focused attention is given to agencies that closely connect with vulnerable populations (such as children and the poor) and those that work closely with policing and corrections (such as mental health agencies and halfway houses). Prerequisite: CRIM 12000 and junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Sociology Department

CRIM 47003 - RESTORATIVE JUSTICE AND VICTIM ASSISTANCE
An inquiry into the theories and research in restorative justice, as well as an assessment of victim assistance protocols and programs. Examines restorative justice and victim assistance initiatives that provide an alternative framework for dealing with crime that places victim needs in a primary position, while addressing legal concerns and interagency differences. Prerequisites: CRIM 12000 and CRIM 27311; and junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Sociology Department

CRIM 47004 - LEGAL PERSPECTIVES AND RIGHTS IN VICTIMIZATION

An analysis of the legal rights of victims of crime at state and federal levels as well as a review of how these laws relate to the treatment of victims within the criminal and juvenile justice systems, with particular focus on the courts and correctional institutions. Relevant legislative and Constitutional changes and challenges are also addressed. Prerequisites: CRIM 12000 and CRIM 27311; and junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Sociology Department

CRIM 47095 - SPECIAL TOPICS IN CRIMINOLOGY AND JUSTICE STUDIES

(Repeatable for credit) Intensive analysis of issues significant and current in the field which are not covered in regular courses. Prerequisite: CRIM 12000 and 26704.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Sociology Department

CRIM 47211 - COURT FUNCTIONS

Analysis of the structure, functions and critical role of incumbents in the criminal court. Prerequisite: CRIM 12000 and 26704.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Sociology Department

CRIM 47311 - COMPARATIVE JUSTICE SYSTEMS

A systematic comparison of the developmental backgrounds, structure and functioning of the major systems of justice in the modern world. Prerequisite: CRIM 12000 and 26704.
3.000 Credit hours
CRIM 55093 - VARIABLE TITLE WORKSHOP IN CRIMINOLOGY AND JUSTICE STUDIES

(Repeatable for credit) (Slashed with CRIM 45093) Classroom presentations and field study focused on professional and disciplinary concerns. Specific content varies with workshop topic. Prerequisite: Special approval and graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Workshop

CRIM 56701 - CRIME, JUSTICE AND SUBSTANCE ABUSE

(Slashed with CRIM 46701) Examination of the relationship between drug and alcohol abuse and criminal behavior. Efforts to regulate, control, prevent and treat chemical abuse offenders are considered. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

CRIM 56705 - COMMUNITY CORRECTIONS

(Slashed with CRIM 46705) Study of community-based correctional supervision and treatment, examining probation, parole, and related residential programs. Topics covered include the history and organization of, and best practices in, community corrections. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

CRIM 56708 - TREATMENT METHODS

(Slashed with CRIM 46708) Addresses institutional- and community-based treatment of offenders. Coverage includes the theoretical foundations of treatment and common intervention strategies, including evidence-based practices. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
CRIM 56709 - EMERGING TRENDS AND ISSUES IN CORRECTIONS

Explores recent developments pertinent to the field of corrections, including sentencing trends, innovative practices, and legal developments. Analysis of emerging strategies for offender treatment, re-entry, and institutional and community safety. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

CRIM 56800 - INTELLIGENCE AND NATIONAL SECURITY

(Slashed with CRIM 46800) Addresses topics related to global security, including economic and industrial espionage, trade secret thefts, law and technology and cyber-crimes. Implications of industrial espionage and intellectual property theft for the global economy, national and international security, and the control and regulation of white collar crime. Foundational exploration of Intelligence and Counterintelligence (IC) as concepts, processes and careers. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

CRIM 56801 - HOMELAND SECURITY

(Slashed with CRIM 46801) Explores the nexus between terrorism and homeland security as it relates to homeland security strategy, assessment, evaluation, preparation, responses, and recovery actions and mechanisms relating to terrorism and homeland security. There is a focus on the importance of coordination of various assessments, plans, strategies and implementation of plans of action involving local, county, state, federal and international responses pertaining to terrorism and homeland security. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

CRIM 56802 - TERRORISM AND COUNTERTERRORISM

(Slashed with CRIM 46802) Examines the origins and evolution of modern terrorism, challenges posed by terrorist groups to states and to the international system, and strategies employed to confront and combat terrorism. Assesses a wide variety of terrorist organizations, and explores the psychological, socioeconomic, political, and religious causes of terrorist violence past and present. Also analyzes the strengths and weaknesses of various counterterrorism efforts. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
## CRIM 56803 - INFORMATION AND CYBER SECURITY

(Slashed with CRIM 46803) Vulnerabilities of computer networks and techniques for protecting networks and data are discussed. Basic elements of symmetric and asymmetric cryptography, secure e-commerce, involving secure transmission, authentication, digital signatures, digital certificates and Public Key Infrastructure (PKI) are presented. Provides students with an introduction to the field of information security risk assessment. Incorporates cases in risk analysis derived from actual state and law enforcement agencies or private firms. Prerequisite: graduate standing.

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**Levels:** Graduate  
**Schedule Type:** Lecture

## CRIM 56904 - ISSUES IN POLICE WORK

(Slashed with CRIM 46904) Analysis of police practices and functions at the municipal, state and federal level. Examination of emerging trends and issues in policing. Review of changes in police department policies and research on problem-solving in policing. Prerequisite: graduate standing.

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**Levels:** Graduate  
**Schedule Type:** Lecture

## CRIM 57002 - HUMAN SERVICE AGENCIES AND THE LAW

(Slashed with CRIM 47002) An overview of the law as it pertains to human service agencies, as well as on the relationships between such agencies and the criminal and juvenile justice systems. Focused attention is given to agencies that closely connect with vulnerable populations (such as children and the poor) and those that work closely with policing and corrections (such as mental health agencies and halfway houses). Prerequisite: graduate standing.

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**Levels:** Graduate  
**Schedule Type:** Lecture

## CRIM 57003 - RESTORATIVE JUSTICE AND VICTIM ASSISTANCE

(Slashed with CRIM 47003) An inquiry into the theories and research in restorative justice, as well as an assessment of victim assistance protocols and programs. Examines restorative justice and victim assistance initiatives that provide an alternative framework for dealing with crime that places victim needs in a primary position, while addressing legal concerns and interagency differences. Prerequisite: graduate standing.

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CRIM 66761 - LAW, JUSTICE AND SOCIETY

Review of the origins, structure and functioning of law in relation to social context and process. Critical assessment of the use of law and legal institutions to address societal problems. Examination of the role that social inequality plays in crime and justice, nationally and internationally. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Sociology Department

CRIM 66762 - PROSEMINAR IN ISSUES IN CONTEMPORARY JUSTICE

Capstone experience required of all MA students. An analysis of current issues in the legislative, policing, judicial, and correctional components of the justice system. Students synthesize knowledge through the completion of an approved, written project that is analytical and research-based. Prerequisite: graduate standing; and CRIM 56705 or CRIM 66766; and CRIM 56800 and CRIM 66761 and CRIM 66763 and CRIM 66768 and CRIM 66770 and CRIM 66772.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Sociology Department

CRIM 66763 - THEORIES OF CRIME AND DELINQUENCY

Study of the nature and causes of criminal and delinquent behavior, with an emphasis on major contemporary criminological theories. Includes critical analysis of relevant research and policy implications. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Sociology Department

CRIM 66766 - INSTITUTIONAL CORRECTIONS

Explores the historical development and theoretical foundations of the correctional institution, including jails and prisons, the structure of institutions and operational challenges. Incorporates overview of contemporary issues and the correctional institution as a social system. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Sociology Department

CRIM 66768 - RESEARCH METHODS IN CRIMINOLOGY AND CRIMINAL JUSTICE

Examines the methodology of research designs and techniques used in criminology and criminal justice.
Provides students with an overview of the logic of research in order to critically evaluate research in the field. Focuses on the specific skills needed to conduct basic and evaluation research. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Sociology Department

**CRIM 66770 - JUSTICE INSTITUTIONS**

Introduces students to the analysis of U.S. criminal justice institutions. Examines methods of institutional analysis, theories of administration, and the application of these theories to the understanding of police, courts and corrections. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Sociology Department

**CRIM 66772 - VICTIMOLOGY**

Exploration of victimology, the scientific study of the physical, emotional, and financial harm people suffer because of criminal activities. Examination of the impact of crime on victims, measuring crime through victimization, patterns of victim-offender relationships, and the role of the victim within the criminal and juvenile justice systems. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Sociology Department

**CRIM 66773 - CONTEMPORARY POLICING**

The fundamental question of this course is how to create the most effective police organization. This course examines the various theories and research on police service. Examines the nature of coercion in human interaction and the legitimate use of force by police. Study of the various philosophies and research on the Standard Model of policing, Community-Oriented Policing, and Problem-Oriented Policing. Reviews theories of police administration and the research corroborating or refuting the validity of those theories. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Sociology Department

**CRIM 66795 - SPECIAL TOPICS**

(Repeatable for credit) Offered irregularly, this course provides opportunity to study special issues developments and programs in justice studies. Topics vary. Prerequisite: Special approval and graduate
standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Sociology Department

CRIM 66796 - INDIVIDUAL INVESTIGATION

(Repeatable for credit) Intensive study of a subject which the student cannot normally pursue in a regularly scheduled course. Individual investigation topic must be approved by instructor and graduate coordinator. Prerequisite: Special approval and graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Sociology Department

CS 10001 - COMPUTER LITERACY

Introduction to history, language, procedures, applications, abuses and impact of computers. Hands-on experience with microcomputers. Not open to students with previous experience. Prerequisite: None.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Computer Science Department

CS 10051 - INTRODUCTION TO COMPUTER SCIENCE

An introductory, broad and hands-on coverage of aspects of computer science, including algorithms, problem solving, operating systems concepts, computer architecture, programming languages and modern applications. Three-credit lecture with one-credit lab. Prerequisite: none.
4.000 Credit hours
3.000 Lecture hours
1.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Computer Science Department

Course Attributes:
Kent Core-Math and Crit Reason, LER-Math and Crit Reasoning

CS 10061 - INTRODUCTION TO COMPUTER PROGRAMMING

Emphasizes programming in a high-level language, includes structured programming, program design, expressions, data control, arrays, records, strings and functions. Prerequisite: MATH 11009 or 11010; or minimum SAT 480/ACT 20 and Compass Algebra score of 55; or minimum SAT 620/ACT 26 and Compass Algebra score of 36.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Computer Science Department

**CS 13001 - COMPUTER SCIENCE I-PROGRAMMING AND PROBLEM SOLVING**

Computer science concepts including algorithm development and problem solving strategies focused on procedural abstraction. High-level programming concepts including data types, expressions, program structures, functions, parameter passing, scope, extent, arrays, introduction to recursion and an introduction to object oriented-concepts. Prerequisite: MATH 11010 or MATH 12001 with a minimum grade of C (2.000).

4.000 Credit hours
3.000 Lecture hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Computer Science Department

**CS 13011 - COMPUTER SCIENCE IA-PROCEDURAL PROGRAMMING**

Computer science concepts including algorithm development and problem solving strategies focused on programming abstractions. High-level programming concepts including variables, branching, iteration, and functions. Prerequisite: MATH 11010 or MATH 12001 with a minimum grade of C (2.000).

2.000 Credit hours
1.500 Lecture hours
1.500 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Computer Science Department

**CS 13012 - COMPUTER SCIENCE IB-OBJECT ORIENTED PROGRAMMING**

Computer science concepts including algorithm development and problem solving strategies focused on programming abstractions. High-level programming concepts including introduction to recursion and an introduction to object oriented-concepts. Prerequisite: CS 13011 with a minimum grade of C (2.000).

2.000 Credit hours
1.500 Lecture hours
1.500 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Computer Science Department

**CS 13401 - USER LEVEL COMPUTER SECURITY**

Introduction to computer and network safety; detection and removal of viruses, detection and defense against spyware and rootkits, firewall description and use, protection mechanisms against computer system hacking, spam, identity theft and phishing, protecting wireless networks, safe computing. Includes many in-lecture tutorials. Prerequisite: none.
CS 19995 - SPECIAL TOPICS IN COMPUTER SCIENCE

(Repeatable for credit) Special topics from all areas of computer science. Prerequisite: Permission.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Computer Science Department

CS 23001 - COMPUTER SCIENCE II-DATA STRUCTURES AND ABSTRACTION

Computer science concepts and problem solving focusing on data structure and abstraction. Object-oriented concepts and programming including encapsulation, information hiding, object design, generics, polymorphism and an introduction to inheritance. Dynamic memory structures including dynamic arrays, pointers, linked-lists and the use of recursion for problem solving. Abstract data types including stacks, queues, lists, trees and graphs. Prerequisite: CS 13001 or CS 13012 with a minimum grade of C (2.000). Corequisite: CS 23022.

4.000 Credit hours
3.000 Lecture hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Computer Science Department

CS 23022 - DISCRETE STRUCTURES FOR COMPUTER SCIENCE

(Cross-listed with MATH 23022) Discrete structures for computer scientists with a focus on: mathematical reasoning, combinatorial analysis, discrete structures, algorithmic thinking, applications and modeling. Specific topics include logic, sets, functions, relations, algorithms, proof techniques, counting, graphs, trees, Boolean algebra, grammars and languages. Prerequisite: minimum grade of C (2.000) in MATH 11009 or 11010.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Computer Science Department

CS 27101 - INTRODUCTION TO WEB INTERFACE DESIGN

Introduction to principles for the design and implementation of user-centered website interfaces, website interface evaluation, human computer interaction, effective data organization and manipulation and tools for website creation. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours
### CS 29995 - SPECIAL TOPICS IN COMPUTER SCIENCE

(Repeatable for credit) Special topics from all areas of computer science. Prerequisite: Permission.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

### CS 33006 - SOCIAL AND ETHICAL ISSUES IN COMPUTING

Social issues, including historical and social context, professional responsibilities, risks and liabilities and intellectual property. Prerequisite: C (2.000) or better in CS 13001.
3.000 Credit hours
3.000 Lecture hours

### CS 33007 - INTRODUCTION TO DATABASE SYSTEM DESIGN

An introduction to the basic theoretical aspects of database systems, file organization, search methodologies, language design and performance evaluation techniques, initial modeling concepts and their use in hierarchical, network, relational and object-oriented database designs. Prerequisite: minimum grade of C (2.000) in CS 23001.
3.000 Credit hours
3.000 Lecture hours

### CS 33011 - SPEED PROGRAMMING TECHNIQUES

Discussion and practice of pertinent aspects related to programming under time constraints. Prerequisite: CS 23001.
3.000 Credit hours
3.000 Other hours
CS 33092 - SPEED PROGRAMMING PRACTICUM

(Repeateable for credit)Practice of pertinent aspects from CS 3301. Prerequisite: CS 33011.
2.000 Credit hours
2.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Computer Science Department

Course Attributes:
Experiential Learning Requirem

CS 33101 - STRUCTURE OF PROGRAMMING LANGUAGES

Introduction to syntax, semantics, behavior and implementation issues in imperative, functional, logic and object-oriented languages; type theory, concurrency, data dependency, nondeterminism and internet languages. Prerequisite: C (2.000) or better in CS 23001.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Computer Science Department

CS 33192 - INTERNSHIP IN COMPUTER SCIENCE

(Repeateable for credit for a maximum of 12 credit hours) Supervised work experience in computer science. Since this work will be outside the department a report and final presentation will be required; a site visit might also be necessary. Satisfactory/unsatisfactory (S/U) graded. Prerequisite: special approval.
1.000 TO 3.000 Credit hours
3.000 TO 9.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Computer Science Department

Course Attributes:
Experiential Learning Requirem

CS 33211 - OPERATING SYSTEMS

Introduction to operating systems, processes and threads, CPU scheduling, mutual exclusion and synchronization, deadlock, memory management, file systems, networking and distributed systems. Prerequisite: CS 23001 with a minimum grade of C (2.000). Pre or Co-requisite: CS 35101.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Computer Science Department
CS 33223 - UNIX TOOLS

Course will cover UNIX operating system environment topics that will make the user more productive. Topics will include the user environment, shells, files, the file system, editors, scripting languages, document processing, processes, remote access and documentation. Prerequisite: CS 13001.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Computer Science Department

CS 33901 - SOFTWARE ENGINEERING

An introduction to software engineering concepts: life cycle models; modeling languages; requirements analysis; specification; design; testing; validation; project management and maintenance. Prerequisite: C (2.000) or better in CS 23001.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Computer Science Department

CS 35101 - COMPUTER ARCHITECTURE

Functional overview of computer systems, interconnection of basic components, system performance measures, instruction set design, arithmetic logic unit, control unit, memory system, pipelining, interrupts and input-output. Prerequisite: CS 13001.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Computer Science Department

CS 35201 - COMPUTER COMMUNICATION NETWORKS

An introduction to net-centric systems, data communication protocols, network architectures, routing protocols, network management, congestion control, network security, compression techniques, mobile and wireless networks, and WWW as an example of a client-server system. Prerequisite: minimum grade of C (2.000) in CS 23001.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Computer Science Department

CS 38101 - INTRODUCTION TO GAME PROGRAMMING

Game engine scripting, event driven and data driven programming, game engine data structures, basic game related graphics and AI concepts, a short game development project. Prerequisite: minimum grade of C (2.000)
or better in CS 23001.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Computer Science Department

**CS 39995 - SPECIAL TOPICS IN COMPUTER SCIENCE**

(Repeatable for credit) Special topics from all areas of computer science. Prerequisite: Permission.
1.000 TO 3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Computer Science Department

**CS 41038 - INTERMEDIATE LOGIC**

(Cross-listed with MATH 41038 and MATH 51038 and PHIL 41038 and PHIL 51038) Study of first order predicate calculus with identity and function symbols. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Computer Science Department

**CS 41045 - METALOGIC**

(Cross-listed with CS 51045 and MATH 41045 and MATH 51045 and PHIL 41045 and PHIL 51045) Consideration of various metatheorems including soundness and completeness of propositional and predicate calculus, undecidability of predicate calculus and incompleteness of the theory of arithmetic. Prerequisite: PHIL 41038.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Computer Science Department

**CS 42201 - INTRODUCTION TO NUMERICAL COMPUTING I**

An introduction to numerical methods and software for solving many common scientific computing problems. Linear systems, least-squares data fitting, nonlinear equations and systems and optimization problems. Prerequisite: MATH 12003; and MATH 21001 or MATH 32051; and CS 10061 or CS 13001.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Computer Science Department
CS 42202 - INTRODUCTION TO NUMERICAL COMPUTING II

(Cross-listed with CS 52202 and MATH 42202 and MATH 52202) A continuation of CS 42201. Topics include interpolation, numerical differentiation and integration, and numerical solution of ordinary differential equations. Prerequisite: MATH 32044 or MATH 32052; and MATH 42201 or CS 42201.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Computer Science Department

CS 43006 - THEORY OF OBJECT-ORIENTED PROGRAMMING

(Cross-listed with CS 53006) In depth course on the theory and principles of object-based and object-oriented programming using a language such as C++. The course covers advanced topics in inheritance and interface planning, generic (type independent) programming, factors of polymorphism, structure and organization of class libraries and object oriented design principles. Prerequisite: CS 23001.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Computer Science Department

CS 43111 - STRUCTURE OF COMPILERS

(Cross-listed with CS 53111) Techniques used to write compilers including lexical analysis, syntax analysis, syntax-directed translation, type checking, run-time environments, and intermediate code generation. Prerequisite: CS 35101 and 33101.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Computer Science Department

CS 43202 - SYSTEMS ADMINISTRATION

(Cross-listed with CS 53202) The setting up and day-to-day administration of multiuser multitasking systems, such as the various versions of UNIX, together with the analysis of problems which can arise in these activities. Prerequisite: CS 33211.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Computer Science Department

CS 43203 - SYSTEMS PROGRAMMING
Implementation and maintenance of system programs, system utilities; command interpreters, editors, file maintenance programs, text processors. Interrupt handling. Device drivers. Prerequisite: CS 23001 with a minimum grade of C.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Computer Science Department

CS 43401 - SECURE PROGRAMMING

Code vulnerabilities, static code analysis, error handling, secure I/O, race conditions and mediation, handling buffer and integer overflow, handling vulnerabilities in web and database programming, privacy and cryptography, random number generators. Prerequisites: C (2.000) or better in CS 23001 and junior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Computer Science Department

CS 44001 - COMPUTER SCIENCE III-PROGRAMMING PATTERNS

(Slashed with CS 54001) CS III Programming Patterns extends students' knowledge of object oriented programming, and improves their C++ programming skills. Specifically, it covers procedural and object-based programming, inheritance, polymorphism, popular design patterns, and generic programming. Prerequisite: CS 23001 with a minimum grade of C (2.000).

4.000 Credit hours
3.000 Lecture hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Computer Science Department

CS 44105 - WEB PROGRAMMING I

(Slashed with CS 54105) This course is the first of a two-course sequence on Web Programming covering from basic to advanced topics on Web Programming based on open standards and best practices. Topics covered include the HyperText Markup Language (HTML), specifying look and feel using Cascading Style Sheets (CSS), client side programming in Javascript, server side programming in PHP, and the Hypertext Transfer Protocol (HTTP). Prerequisite: CS 23001 with a minimum grade of C (2.000).

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Computer Science Department

CS 44106 - WEB PROGRAMMING II

(Slashed with CS 54106) This course is the second of a two-course sequence on Web Programming covering
advanced topics on Web Programming based on open standards and best practices. This is a project course exploring advanced aspects of Web programming. Topics covered include advanced server side programming in PHP; database driven websites; structured query language (SQL) and MySQL; E-commerce; web hosting using Apache, PHP and MySQL; basic and digest authentication; web security, encryption and digital certificates; Extensible Markup Language (XML) for the web, AJAX and web services; scalable vector graphics (SVG); mobile websites. Prerequisite: CS 44105.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Computer Science Department

CS 44201 - ARTIFICIAL INTELLIGENCE

(Cross-listed with CS 54201) Examines goals, problems, concepts and methods of artificial intelligence, heuristic versus algorithmic methods, natural language comprehension, theorem proving. Prerequisite: CS 23001.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Computer Science Department

CS 44901 - SOFTWARE DEVELOPMENT PROJECT

With the supervision of the instructor, students will work in teams to design and implement a realistic software project similar to projects they would encounter in the workplace. Prerequisites: CS 23001 with a minimum grade of C (2.000); and junior standing.

4.000 Credit hours
3.000 Lecture hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Computer Science Department

Course Attributes:
Experiential Learning Requirem, Writing Intensive Course

CS 45203 - COMPUTER NETWORK SECURITY

(Cross-listed with CS 55203) Overview of network security including attacks and vulnerabilities and defense measures, secure network design, network and transport layers security, intrusion detection techniques, defense against denial of service attacks, network hardware, software, and applications attacks and their defense, security policies, legal and ethical issues in cyber and computer crimes. Prerequisite: CS 35201.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Computer Science Department
# CS 45231 - INTERNET ENGINEERING

Design fundamentals and working principles of internet systems at the IP layer and above. DNS, inter-domain routing, internet client server programming, application level protocols (HTTP, XML, etc.) web server architecture, browser internet security and multimedia serving. Prerequisite: CS 23001, 33211 and 35201.

3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

Computer Science Department

# CS 46101 - DESIGN AND ANALYSIS OF ALGORITHMS

(Cross-listed with CS 56101) Introduction to algorithmic concepts, design and complexity analysis of algorithms, searching, sorting, graphs, geometric algebraic and parallel algorithms. Prerequisite: MATH 12003 and C (2.000) or better in CS 23001.

3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

Computer Science Department

# CS 47101 - COMPUTER GRAPHICS

Display file generation, interactive graphics techniques, display devices, three-dimensional graphics, graphic system design, graphic languages and applications in man-machine communications. Prerequisite: CS 23001.

3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

Computer Science Department

# CS 47201 - HUMAN COMPUTER INTERACTION

Approaches the human-computer interaction as an activity of the human whose productivity is increased by the use of the computer as a tool. Examines physiology and psychology considers the structure and operation of the computer and models the interaction between the two. Prerequisite: CS 23001.

3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

Computer Science Department

# CS 47205 - INFORMATION SECURITY

(Slashed with CS 57205) An introduction to concepts and methodology useful for information security, as specified by the NSTISSI NO. 4011 standard from the NSA. Prerequisite: CS 23001 with a minimum grade of C (2.000).

3.000 Credit hours
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture

Computer Science Department

CS 47221 - INTRODUCTION TO CRYPTOLOGY

Introduction to cryptography, classical cryptology, authentication, complexity issues, encryption standards, algebraic foundations, survey of existing cryptology protocols: AES/Rijndael, block chaining, asymmetric techniques. Prerequisites: C (2.000) or better in CS 23001 and junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Computer Science Department

CS 48101 - GAME ENGINE CONCEPTS

Introduction to 3D game engine design, game memory management, multithreading in games, sprites and bitmap animation level design, path finding, audio-visual effects, AI and physical modeling in games, networked gaming. Prerequisites: minimum grade of C (2.000) in CS 23001.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Computer Science Department

CS 48102 - GAME DEVELOPMENT PRACTICUM

With the supervision of the instructor, students will work in teams to design and implement a computer game or 3D interactive learning environment using a game engine in a professional setup. Prerequisites: CS 33007 and 33901 and 35201 and 48101; and junior standing.
4.000 Credit hours
3.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Computer Science Department

Course Attributes:
Experiential Learning Requirem, Writing Intensive Course

CS 49901 - CAPSTONE PROJECT

The course is an integrative experience that brings together all components of the undergraduate computer science curriculum in an applied, hands-on real-world setting. The course is three-credits lecture and one-credit lab. Prerequisites: CS 33007 and 33901 and 35201.
4.000 Credit hours
4.000 Other hours
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisites</th>
<th>Credit Hours</th>
<th>Lecture Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 49995</td>
<td>SPECIAL TOPICS IN COMPUTER SCIENCE</td>
<td>(Repeatable for credit) (Cross-listed with CS 59995) Special topics from all areas of computer science.</td>
<td>Prerequisite: special approval.</td>
<td>1.000 TO 4.000</td>
<td>4.000</td>
</tr>
<tr>
<td>CS 49996</td>
<td>INDIVIDUAL STUDY</td>
<td>(Repeatable for credit). Prerequisite: special approval.</td>
<td></td>
<td>1.000 TO 4.000</td>
<td>1.000 TO 4.000</td>
</tr>
<tr>
<td>CS 49998</td>
<td>RESEARCH</td>
<td>(Repeatable for credit). Prerequisite: special approval.</td>
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<td>1.000 TO 15.000</td>
<td>1.000 TO 15.000</td>
</tr>
<tr>
<td>CS 51045</td>
<td>METALOGIC</td>
<td>(Cross-listed with CS 41045 and MATH 41045 and MATH 51045 and PHIL 41045 and PHIL 51045) Consideration</td>
<td>Prerequisite: Graduate standing.</td>
<td>3.000</td>
<td>3.000</td>
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</tbody>
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computer science department

CS 52201 - INTRODUCTION TO NUMERICAL COMPUTING I
(Cross-listed with CS 42201 and MATH 42201 and MATH 52201) An introduction to numerical methods and software for solving many common scientific computing problems. Linear systems, least-squares data fitting, nonlinear equations and systems, and optimization problems. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

CS 52202 - INTRODUCTION TO NUMERICAL COMPUTING II
(Cross-listed with CS 42202 and MATH 42202 and MATH 52202) A continuation of CS 52201. Topics include interpolation numerical differentiation and integration and numerical solution of ordinary differential equations. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

CS 53006 - THEORY OF OBJECT-ORIENTED PROGRAMMING
(Cross-listed with CS 43006) In-depth course on the theory and principles of object-based and object-oriented programming using a language such as C++. The course covers advanced topics in inheritance and interface planning, generic (type independent) programming, factors of polymorphism, structure and organization of class libraries, and object-oriented design principles. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

CS 53111 - STRUCTURE OF COMPILERS
(Cross-listed with CS 43111) Techniques used to write compilers including lexical analysis, syntax analysis, syntax directed translation, type checking, run-time environments and intermediate code generation. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department
### CS 53202 - SYSTEMS ADMINISTRATION

(Cross-listed with CS 43202) The setting up and day-to-day administration of multiuser multitasking systems, such as the various versions of UNIX together with the analysis of problems which can arise in these activities. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

### CS 53203 - SYSTEMS PROGRAMMING

(Cross-listed with CS 43203) Design, implementation and maintenance of system programs, system utilities; command interpreters, editors, file maintenance programs, text processors. Interrupt handling. Device drivers. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

### CS 53401 - SECURE PROGRAMMING

Code vulnerabilities, static code analysis, error handling, secure I/O, race conditions and mediation, handling buffer and integer overflow, handling vulnerabilities in web and database programming, privacy and cryptography, random number generators. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

### CS 54001 - COMPUTER SCIENCE III-PROGRAMMING PATTERNS

(Slashed with CS 44001) Extends students' knowledge of object oriented programming, and improves their C++ programming skills. Specifically, it covers procedural and object-based programming, inheritance, polymorphism, popular design patterns, and generic programming. Prerequisite: Graduate standing.

4.000 Credit hours
3.000 Lecture hours
3.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Computer Science Department

### CS 54105 - WEB PROGRAMMING I

(Slashed with CS 44105) This course is the first of a two-course sequence on Web Programming covering from basic to advanced topics on Web Programming based on open standards and best practices. Topics covered
include the HyperText Markup Language (HTML), specifying look and feel using Cascading Style Sheets (CSS), client side programming in Javascript, server side programming in PHP, and the Hypertext Transfer Protocol (HTTP). Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

**CS 54106 - WEB PROGRAMMING II**

(Slashed with CS 44106) This course is the second of a two-course sequence on Web Programming covering advanced topics on Web Programming based on open standards and practices. This is a project course exploring advanced aspects of Web programming. Topics covered include advanced server side programming in PHP; database driven websites; structured query language (SQL) and MySQL; E-commerce; web hosting using Apache, PHP MySQL; basic and digest authentication; web security, encryption and digital certificates; Markup Language (XML) for the web, AJAX and web services; scalable vector graphics (SVG); websites. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

**CS 54201 - ARTIFICIAL INTELLIGENCE**

(Cross-listed with CS 44201) Examines goals, problems, concepts and methods of artificial intelligence heuristic versus algorithmic methods, natural language comprehension, theorem proving. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

**CS 55201 - COMPUTER COMMUNICATION NETWORKS**

An introduction to net-centric systems, data communication protocols, network architectures, routing protocols, network management, congestion control, network security, compression techniques, mobile and wireless networks, and WWW as an example of a client server system. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

**CS 55203 - COMPUTER NETWORK SECURITY**

(Cross-listed with CS 45203) Overview of network security including attacks and vulnerabilities and defense
measures, secure network design, network and transport layers security, intrusion detection techniques, defense against denial of service attacks, network hardware, software, and applications attacks and their defense, security policies, legal and ethical issues in cyber and computer crimes. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

**CS 55231 - INTERNET ENGINEERING**

(Cross-listed with CS 45231) Design fundamentals and working principles of internet systems at the IP layer and above. DNS, inter-domain routing, internet client server programming, application level protocols (HTTP, XML, etc.) Web server architecture, browser, internet security, and multimedia serving. Prerequisite: CS 33001 and 55201; graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

**CS 56101 - DESIGN AND ANALYSIS OF ALGORITHMS**

(Cross-listed with CS 46101) Introduction to algorithmic concepts, practical techniques for the design and analysis of algorithms; searching, sorting, integer and floating point arithmetic; vector and matrix manipulation. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

**CS 57101 - COMPUTER GRAPHICS**

(Cross-listed with CS 47101) Display file generation, interactive graphics techniques, display devices, three-dimensional graphics, graphic system design, graphic languages and applications in man-machine communications. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

**CS 57201 - HUMAN COMPUTER INTERACTION**

(Cross-listed with CS 47201) Approaches the human-computer interaction as an activity of the human whose productivity is increased by the use of the computer as a tool. Examines physiology and psychology considers the structure and operation of the computer and models the interaction between the two. Prerequisite:
Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

**CS 57205 - INFORMATION SECURITY**

(Cross-listed with CS 47205) An introduction to concepts and methodology useful for information security, as specified by the NSTISSI NO. 4011 standard from the NSA. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

**CS 57221 - INTRODUCTION TO CRYPTOLOGY**

Introduction to cryptography, classical cryptology, authentication, complexity issues, encryption standards, algebraic foundations, survey of existing cryptology protocols: AES/Rijndael, block chaining, asymmetric techniques. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

**CS 59893 - VARIABLE TITLE WORKSHOP IN COMPUTER SCIENCE**

(Repeatable for credit) Studies in special topics in computer science. Prerequisite: Special approval and graduate standing.
1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Computer Science Department

**CS 59995 - SPECIAL TOPICS IN COMPUTER SCIENCE**

(Repeatable for credit) (Cross-listed with CS 49995) Various special courses will be announced in the schedule of classes under this title. Prerequisite: Special approval and graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department
CS 60093 - VARIABLE TITLE WORKSHOP IN COMPUTER SCIENCE

(Repeatable for credit) Studies of special topics in computer science. Not acceptable for credit toward a graduate degree in computer science without approval of the student's adviser. Prerequisite: Special approval and graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Computer Science Department

CS 60094 - COLLEGE TEACHING OF COMPUTER SCIENCE

(Repeatable for credit) (Cross-listed with CS 70094) Techniques and problems of college teaching of computer science. Student presentation of computer science papers will be included. Prerequisite: Graduate standing.
1.000 Credit hours
1.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

CS 61002 - ALGORITHMS AND PROGRAMMING I

An introduction to the algorithms and tools used in computer science; includes programming in a high level language. No credit for CS majors. Prerequisite: Graduate standing.
4.000 Credit hours
4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

CS 61003 - ALGORITHMS AND PROGRAMMING II

Further exploration into the tools used in computer science. No credit for CS majors. Prerequisite: CS 61002; graduate standing.
4.000 Credit hours
4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

CS 61092 - PRACTICUM IN CS FOR INFORMATION ARCHITECTURE AND KNOWLEDGE MANAGEMENT

(Repeatable for credit) This course is an alternative to IAKM 60199 for students interested in pursuing a CS thesis. Credit for IAKM 60199 or any other project course is not allowed. Prerequisite: Graduate standing.
1.000 TO 5.000 Credit hours
1.000 TO 5.000 Other hours
CS 61199 - THESIS I FOR INFORMATION ARCHITECTURE AND KNOWLEDGE MANAGEMENT

Thesis students must register for a minimum of 6 hours. No credit for CS students. Prerequisite: Graduate standing.
2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

CS 61299 - THESIS II FOR INFORMATION ARCHITECTURE AND KNOWLEDGE MANAGEMENT STUDENTS

Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: CS 61199.
2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

CS 63005 - ADVANCED DATABASE SYSTEMS DESIGN

(Cross-listed with CS 73005) Introduction to a variety of advanced database topics and on-going trends in modern database systems. The course includes advanced issues of object-oriented database, XML, advanced client server architecture and distributed database techniques. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

CS 63015 - DATA MINING TECHNIQUES

(Cross-listed with CS 73015) Concepts and techniques of data mining. Data mining is a process of discovering information from a set of large databases. This course takes a database perspective on data mining. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department
CS 63201 - ADVANCED OPERATING SYSTEMS

(Cross-listed with CS 73201) Introduction to distributed systems, interprocess communication, distributed mutual exclusion, synchronization and deadlock, distributed process management and distributed file systems. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

CS 63301 - PARALLEL AND DISTRIBUTED COMPUTING

(Cross-listed with CS 73301) Overview of parallel and distributed computing; structuring parallel and distributed programs; parallel programming using SIMD, SPMD, MIMD and associative computing; parallel and distributed architecture using existing machines as case studies. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

CS 63304 - CLUSTER COMPUTING

(Cross-listed with CS 73304) This course will investigate clusters of computers as a computing platform, hardware and software tradeoffs for clusters and application performance and programming of clusters. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

CS 63901 - SOFTWARE ENGINEERING METHODOLOGIES

(Cross-listed with CS 73901) Software process models; modeling languages; software process improvement; requirement analysis and elicitation; advanced systems and architectural design; estimation; verification and validation; reuse; and metrics. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

CS 63902 - SOFTWARE EVOLUTION

(Cross-listed with CS 73902) Methods and techniques supporting later lifecycle activities, including software testing and maintenance, reuse and reverse engineering. Prerequisite: Graduate standing.
3.000 Credit hours
CS 64201 - ADVANCED ARTIFICIAL INTELLIGENCE

Additional topics in AI such as logic programming, advanced problem-solving systems, understanding natural languages, vision, learning, plan-generating systems. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

CS 64301 - PATTERN RECOGNITION PRINCIPLES

(Cross-listed with CS 74301) Introduction to mathematical pattern recognition, feature selection, distribution-free classification, statistical classification, nonsupervised learning, sequential learning and application. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

CS 64401 - IMAGE PROCESSING

(Cross-listed with CS 74401) This course covers digital processing of digital imagery. Digitization of TV imagery, noise removal, image enhancement, edge and texture detection, object recognition and scene analysis. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

CS 65101 - ADVANCED COMPUTER ARCHITECTURE

(Cross-listed with CS 75101) System performance measures, processor implementation, pipelining, system interconnection, memory hierarchy interrupts, stack architecture, vector and multiprocessors. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department
CS 65202 - ADVANCED COMMUNICATION NETWORKS
(Cross-listed with CS 75202) This course covers central problems that confront network designers in high-speed networking such as real-time traffic, congestion control, quality of service (QoS), performance analysis, traffic management and internet routing. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

CS 65203 - WIRELESS AND MOBILE COMMUNICATION NETWORKS
(Cross-listed with CS 75203) Examines how wireless systems work and how mobile systems are supported by the underlying network infrastructure. Course covers the architecture and the interactions among different functional units in wireless and mobile systems. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

CS 65208 - DISTRIBUTED MULTIMEDIA LANGUAGES AND SYSTEMS
(Cross-listed with CS 75208) MPEG standards, multimedia formats, 3-D object and movement representation, multimedia storage, QoS maintenance, transmission and buffering, multimedia clocks and synchronization, content based indexing, matching and retrieval of 2-D and 3-D objects, XML based distributed multimedia languages, synchronous and reactive languages. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

CS 65301 - SYSTEM MODELING AND PERFORMANCE EVALUATION
(Cross-listed with CS 75301) Provides a detailed study of queuing, network models and their application to operating systems, computer time sharing and multi access systems. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

CS 66101 - ADVANCED TOPICS IN ALGORITHMS
(Cross-listed with CS 76101) Advanced algorithms, fast fourier transforms, algorithms on trees and graphs,
rational and polynomial arithmetic, gcd, factoring, numerical and symbolic computational algorithms, Risch integration algorithm, pattern matching. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

**CS 66105 - PARALLEL AND DISTRIBUTED ALGORITHMS**

(Cross-listed with CS 76105) Introduces and evaluates important models of parallel (synchronous and asynchronous) and distributed computation, using basic searching, sorting, graph, matrix, numerical computing and computational geometry algorithms. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

**CS 66110 - COMPUTATIONAL GEOMETRY**

(Cross-listed with CS 76110) Geometric structures are the underlying model of several important applications, including robotics, graphics, CAD/CAM, VLSI layout, wireless networks and information visualization. Computational geometry studies algorithms for geometric problems. Prerequisite: CS 56101; graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

**CS 66120 - EVOLUTIONARY COMPUTATION**

(Cross-listed with CS 76120) Introduction to evolutionary computation techniques for optimization, learning and design. Topics include natural and artificial evolution, chromosome representations, search operators, co-evolution, constraint handling techniques, niching and speciation, classifier systems and theoretical foundations. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

**CS 67101 - ADVANCED COMPUTER GRAPHICS**

(Cross-listed with CS 77101) In-depth study of active research topics in computer graphics. Topics include volume rendering, image-based rendering and modeling, graphics architectures, virtual reality, modeling in computer graphics, non-photorealistic rendering, computer animation and computer games. Prerequisite: Graduate standing.
CS 67301 - SCIENTIFIC VISUALIZATION

(Cross-listed with CS 77301) Discusses the visualization of scientific, engineering and medical data sets. Introduces mechanisms to acquire sampled or computed data and points out methods to transform these data into the visual system. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

CS 69098 - RESEARCH

(Repeatable for credit) Satisfactory/Unsatisfactory (S/U) graded. In Progress (IP) mark permissible. Research or individual investigation. Credits are applied toward degree requirements with approval if grade of "S" is given. Prerequisite: Graduate standing.

1.000 TO 5.000 Credit hours
1.000 TO 5.000 Other hours

Levels: Graduate
Schedule Types: Research

Computer Science Department

CS 69191 - MASTER'S SEMINAR

(Repeatable for credit) Course is Satisfactory/Unsatisfactory (S/U) graded. Seminar for masters students to present and discuss computer science related research and academics. Masters students are required to take at least 2 credit hours for completion of degree and make at least one presentation of project work or research. Only two credits count towards the masters degree. Prerequisite: Computer Science (CS) major within the Master of Arts (MA) or Master of Science (MS) degree.

1.000 TO 2.000 Credit hours
1.000 TO 2.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Computer Science Department

CS 69199 - THESIS I

Thesis student must register for total of 6 hours, 2 to 6 hours in a single semester distributed over several semesters if desired. Prerequisite: Graduate standing.

2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Graduate
**CS 69299 - THESIS II**

Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: CS 69199 and graduate standing.

2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

**CS 69995 - SPECIAL TOPICS IN COMPUTER SCIENCE**

(Repeatable for credit) (Cross-listed with CS 79995) Special topics in computer science. Prerequisite: Graduate standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**CS 70094 - COLLEGE TEACHING OF COMPUTER SCIENCE**

(Repeatable for credit) (Cross-listed with CS 60094) Techniques and problems of college teaching of computer science. Student presentation of computer science papers will be included. Prerequisite: Doctoral standing.

1.000 Credit hours
1.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**CS 73005 - ADVANCED DATABASE SYSTEMS DESIGN**

(Cross-listed with CS 63005) Introduction to a variety of advanced database topics and on-going trends in modern database systems. The course includes advanced issues of object-oriented database, XML, advanced client server architecture and distributed database techniques. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**CS 73015 - DATA MINING TECHNIQUES**

(Cross-listed with CS 63015) Concepts and techniques of data mining. Data mining is a process of discovering
information from a set of large databases. This course takes a database perspective on data mining.

Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

CS 73201 - ADVANCED OPERATING SYSTEMS

(Cross-listed with CS 63201) Introduction to distributed systems, interprocess communication, distributed mutual exclusion, synchronization and deadlock, distributed process management and distributed file systems. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

CS 73301 - PARALLEL AND DISTRIBUTED COMPUTING

(Cross-listed with CS 63301) Overview of parallel and distributed computing; structuring parallel and distributed programs; parallel programming using simd spmd mimd and, associative computing parallel and distributed architecture using existing machines as case studies. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

CS 73304 - CLUSTER COMPUTING

(Cross-listed with CS 63304) This course will investigate clusters of computers as a computing platform, hardware and software tradeoffs for clusters and application performance and programming of clusters. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

CS 73901 - SOFTWARE ENGINEERING METHODOLOGIES

(Cross-listed with CS 63901) Software process models; modeling languages; software process improvement; requirement analysis and elicitation; advanced systems and architectural design; estimation; verification and validation; reuse; and metrics. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours
Computer Science Department

**CS 73902 - SOFTWARE EVOLUTION**

(Cross-listed with CS 63902) Methods and techniques supporting later lifecycle activities, including software testing and maintenance reuse and reverse engineering. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

**CS 74201 - ADVANCED ARTIFICIAL INTELLIGENCE**

Additional topics in AI such as logic programming, advanced problem-solving systems, understanding natural languages, vision, learning, plan generating systems. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

**CS 74301 - PATTERN RECOGNITION PRINCIPLES**

(Cross-listed with CS 64301) Introduction to mathematical pattern recognition, feature selection, distribution-free classification, statistical classification, nonsupervised learning, sequential learning and application. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

**CS 74401 - IMAGE PROCESSING**

(Cross-listed with CS 64401) This course covers digital processing of digital imagery. Digitization of TV imagery, noise removal, image enhancement, edge and texture detection, object recognition and scene analysis. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

**CS 75101 - ADVANCED COMPUTER ARCHITECTURE**
(Cross-listed with CS 65101) System performance measures, processor implementation, pipelining, system interconnection, memory hierarchy interrupts, stack architecture, vector and multiprocessors. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

**CS 75202 - ADVANCED COMMUNICATION NETWORKS**

(Cross-listed with CS 65202) This course covers central problems that confront network designers in high-speed networking such as real-time traffic, congestion control, quality of service (QoS), performance analysis, traffic management and internet routing. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

**CS 75203 - WIRELESS AND MOBILE COMMUNICATION NETWORKS**

(Cross-listed with CS 65203) Examines how wireless systems work and how mobile systems are supported by the underlying network infrastructure. Course covers the architecture and the interactions among different functional units in wireless and mobile systems. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

**CS 75208 - DISTRIBUTED MULTIMEDIA LANGUAGES AND SYSTEMS**

(Cross-listed with CS 65208) MPEG standards, multimedia formats, 3-D object and movement representation, multimedia storage, QoS maintenance, transmission and buffering, multimedia clocks and synchronization, content based indexing, matching and retrieval of 2-D and 3-D objects, XML based distributed multimedia languages, synchronous and reactive languages. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

**CS 75301 - SYSTEM MODELING AND PERFORMANCE EVALUATION**

(Cross-listed with CS 65301) Provides a detailed study of queuing, network models and their application to operating systems, computer time sharing and multi-access systems. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Computer Science Department

CS 76101 - ADVANCED TOPICS IN ALGORITHMS

(Cross-listed with CS 66101) Advanced algorithms, fast Fourier transforms, algorithms on trees and graphs, rational and polynomial arithmetic, GCD, factoring, numerical and symbolic computational algorithms, Risch integration algorithm, pattern matching. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

CS 76105 - PARALLEL AND DISTRIBUTED ALGORITHMS

(Cross-listed with CS 66105) Introduces and evaluates important models of parallel (synchronous and asynchronous) and distributed computation, using basic searching, sorting, graph, matrix, numerical computing and computational geometry algorithms. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

CS 76110 - COMPUTATIONAL GEOMETRY

(Cross-listed with CS 66110) Geometric structures are the underlying model of several important applications, including robotics, graphics, CAD/CAM, VLSI layout, wireless networks and information visualization. Computational geometry studies algorithms for geometric problems. Prerequisite: CS 56101; doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

CS 76120 - EVOLUTIONARY COMPUTATION

(Cross-listed with CS 66120) Introduction to evolutionary computation techniques for optimization, learning and design. Topics include natural and artificial evolution, chromosome representations, search operators, co-evolution, constraint handling techniques, niching and speciation, classifier systems and theoretical foundations. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
CS 77101 - ADVANCED COMPUTER GRAPHICS

(Cross-listed with CS 67101) In-depth study of active research topics in computer graphics. Topics include volume rendering, image-based rendering and modeling, graphics architectures, virtual reality, modeling in computer graphics, non-photorealistic rendering, computer animation and computer games. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

CS 77301 - SCIENTIFIC VISUALIZATION

(Cross-listed with CS 67301) Discusses the visualization of scientific, engineering and medical data sets. Introduces mechanisms to acquire sampled or computed data and points out methods to transform these data into the visual system. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

CS 79995 - SPECIAL TOPICS IN COMPUTER SCIENCE

(Repeatable for credit) (Cross-listed with CS 69995) Special topics in computer science. Prerequisite: Graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

CS 89098 - RESEARCH

(Repeatable for credit) Satisfactory/Unsatisfactory (S/U) graded. In Progress (IP) mark permissible. Research or individual investigation for doctoral students who have not yet passed their candidacy examinations. Prerequisite: Doctoral standing.
1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

CS 89191 - DOCTORAL SEMINAR
(Repeatable for credit) Satisfactory/Unsatisfactory (S/U) graded. In Progress (IP) mark permissible. Seminar for doctoral students to present and discuss computer science related research and academics. Doctoral students are required to take at least 3 credit hours for completion of degree and make at least two presentations of project work or research. Only two credits count towards the doctoral degree. Prerequisite: Computer Science (CS) major within the Doctor of Philosophy (PHD) degree.
1.000 TO 2.000 Credit hours
1.000 TO 2.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Computer Science Department

**CS 89199 - DISSERTATION I**

(Repeatable for credit) Doctoral dissertation, for which registration in at least two semesters is required, first of which will be semester in which dissertation work is begun and continuing until the completion of 30 hours. Prerequisite: Special approval and doctoral standing.
15.000 Credit hours
15.000 Other hours

Levels: Graduate
Schedule Types: Dissertation

Computer Science Department

**CS 89299 - DISSERTATION II**

(Repeatable for credit) Continuing registration required for doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. Prerequisite: CS 89199 and doctoral standing.
15.000 Credit hours
15.000 Other hours

Levels: Graduate
Schedule Types: Dissertation

Computer Science Department

**CS 89991 - RESEARCH SEMINAR IN COMPUTER SCIENCE**

(Repeatable for credit) Research seminar on current research in computer science. Prerequisite: Special approval; doctoral standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Computer Science Department

**CTTE 36014 - EVALUATION PRACTICES IN CAREER TECHNICAL EDUCATION**

Study and construction of evaluation devices for use in laboratory and related technology courses, test construction, standardized and nonstandardized test procedures. This course includes 10 field/clinical hours. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**CTTE 40093 - VARIABLE TOPIC WORKSHOP IN CAREER TECHNICAL EDUCATION**

(Repeatable for credit) (Cross-listed with CTTE 50093 and CTTE 70093) Topics of special interest to students desiring to intensify their knowledge in a particular area of career technical education. Prerequisite: Department permission.

1.000 TO 5.000 Credit hours
1.000 TO 5.000 Other hours

Levels: Undergraduate
Schedule Types: Workshop

Teaching Learning and Curricul Department

**CTTE 45372 - ISSUES IN CAREER TECHNICAL EDUCATION SUBJECTS**

(Cross-listed with CTTE 55372) Exploration of issues and trends unique to specific career technical education subjects. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**CTTE 45377 - CAREER AND TECHNICAL EDUCATION:ADVANCED METHODOLOGIES**

Selection, organization and presentation of subject matter pertaining to specific subjects in career and technical education. Emphasis on methods and techniques through theory and practice. Course includes 30 field/clinical hours. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school/agency before the first day of the semester in which student teaching/ internship will take place. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**CTTE 46001 - ORGANIZATION OF CAREER AND TECHNICAL EDUCATION**

(Cross-listed with CTTE 56001) Study of the principles and subject areas related to career and technical education at middle school,secondary and adult education levels. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
CTTE 46002 - IN-SERVICE TEACHING

(Cross-listed with CTTE 56002) Overview of teaching process in career technical teacher education. Emphasizes techniques of skill development and assessment, includes organizing for instruction, individual behavior, organizational relationships and application steps. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

CTTE 46015 - METHODS OF CAREER AND TECHNICAL EDUCATION

(Cross-listed with CTTE 56015) Organization and management of classroom and laboratory; includes purchasing equipment and supplies, safety instruction planning, establishing policies, maintaining records, and individual and group instructional strategies. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

CTTE 46017 - STUDENT-CENTERED LEADERSHIP IN CAREER TECHNICAL EDUCATION

Study of the role of leadership and youth organizations in Career Technical Education with emphasis on the organization and purpose of student leadership and the role of the advisor related to leadership in career technical education. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

CTTE 46018 - DISADVANTAGED YOUTH IN CAREER TECHNICAL EDUCATION

(Cross-listed with CTTE 56018) Developing an understanding of disadvantaged youth stressing their characteristics as they pertain to career technical education program. This course is restricted to Trade & Industrial majors, students registered in the undergraduate Career-Technical Teacher certificate, of those working on a Career-Based Intervention endorsement. Prerequisite: trade and industrial education (TIED) majors or career-technical teacher education (C205) certificate.
3.000 Credit hours
3.000 Lecture hours
CTTE 46019 - COORDINATION OF CAREER TECHNICAL COOPERATIVE EDUCATION PROGRAMS

(Cross-listed with CTTE 56019) Reviews duties, problems, techniques of home, school and work coordination. Internship site selection, job development, servicing the job station, coordinating classroom and work experience. A study of important linkage to local business/industry and education support agencies for career and technical development. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

CTTE 46020 - CURRICULUM GUIDE: DESIGN AND APPLICATION

Methods and techniques involved in developing and utilizing a curriculum guide in career and technical education subjects. This course includes 15 field/clinical hours. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school/agency before the first day of the semester in which student teaching/internship will take place. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

CTTE 46031 - STUDENT TEACHING IN CAREER TECHNICAL EDUCATION

Provides a 12 week student teaching experience in a career-technical program setting. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school-agency before the first day of the semester in which student teaching internship will take place. Prerequisite: admission to advanced study; and Trade and Industrial Education (TIED) major; and official valid certification of Child Safety Training, approved Basic Life Support and A.L.I.C.E. Training must be presented to the campus office of clinical experience or designated faculty-staff at regional campuses as prerequisite for student teaching. Corequisite: CTTE 49525.

9.000 Credit hours
32.000 Other hours
### CTTE 46095 - SPECIAL TOPICS IN CAREER TECHNICAL EDUCATION

(Repeatable for credit) Specialized offerings in response to emerging or selected program needs in career-technical education. Prerequisite: None.

<table>
<thead>
<tr>
<th>Credit hours</th>
<th>Lecture hours</th>
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<td>1.000 TO 3.000</td>
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</table>

Levels: Undergraduate  
Schedule Types: Lecture  
Teaching Learning and Curricul Department

### CTTE 46096 - INDIVIDUAL INVESTIGATION IN CAREER TECHNICAL EDUCATION

(Repeatable for credit) (Cross-listed with CTTE 56096) An individual investigation into problems and topics in career technical education. The investigation is pursued on an individual basis with an assigned faculty member. Prerequisite: None.

<table>
<thead>
<tr>
<th>Credit hours</th>
<th>Other hours</th>
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<td>1.000 TO 3.000</td>
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</table>

Levels: Undergraduate  
Schedule Types: Individual Investigation  
Teaching Learning and Curricul Department

### CTTE 49525 - INQUIRY INTO PROFESSIONAL PRACTICE

Interdisciplinary inquiry into career/technical teaching as a professional practice in education; emphasis on teacher as disciplined investigator. Final course of four. Combination of themes utilization of teaching learning technologies. Prerequisite: Admission to advanced study.

<table>
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<tr>
<th>Credit hours</th>
<th>Lecture hours</th>
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<tr>
<td>3.000</td>
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</table>

Levels: Undergraduate  
Schedule Types: Lecture  
Teaching Learning and Curricul Department

### CTTE 50093 - VARIABLE TOPIC WORKSHOP IN CAREER TECHNICAL EDUCATION

(Repeatable for credit) (Cross-listed with CTTE 40093 and CTTE 70093) Topics of special interest to students desiring to intensify their knowledge in a particular area or areas of career technical education. Prerequisite: Graduate standing and special approval.

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<thead>
<tr>
<th>Credit hours</th>
<th>Other hours</th>
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<tbody>
<tr>
<td>1.000 TO 5.000</td>
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</table>

Levels: Graduate  
Schedule Types: Workshop  
Teaching Learning and Curricul Department

### CTTE 55372 - ISSUES IN CAREER TECHNICAL EDUCATION SUBJECTS

(Cross-listed with CTTE 45372) Exploration of issues and trends unique to specific career-technical education subjects. Prerequisite: Graduate standing.

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<tr>
<th>Credit hours</th>
<th>3.000</th>
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CTTE 55377 - CAREER AND TECHNICAL EDUCATION: ADVANCED METHODOLOGIES

(Cross-listed with CTTE 45377) Selection, organization and presentation of subject matter pertaining to specific subjects in career and technical education. Emphasis on methods and techniques through theory and practice. Course includes 30 field clinical hours. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

CTTE 56001 - ORGANIZATION OF CAREER AND TECHNICAL EDUCATION

(Cross-listed with CTTE 46001) Study of the principles and subject areas related to career and technical education at middle school, secondary and adult education levels. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

CTTE 56002 - IN-SERVICE TEACHING

(Cross-listed with CTTE 46002) Overview of teaching process in career technical teacher education. Emphasizes techniques of skill development and assessment, includes organizing for instruction, individual behavior, organizational relationships and application steps. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

CTTE 56015 - METHODS OF CAREER AND TECHNICAL EDUCATION

(Cross-listed with CTTE 46015) Organization and management of classroom and laboratory; includes purchasing equipment and supplies, safety instruction planning, establishing policies, maintaining records, and individual and group instructional strategies. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
### CTTE 56017 - STUDENT-CENTERED LEADERSHIP IN CAREER TECHNICAL EDUCATION

Study of the role of leadership and youth organizations in Career Technical Education with emphasis on the organization and purpose of student leadership and the role of the advisor related to leadership in career technical education. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture  
Teaching Learning and Curricul Department

### CTTE 56018 - DISADVANTAGED YOUTH IN CAREER TECHNICAL EDUCATION

(Cross-listed with CTTE 46018) Developing an understanding of disadvantaged youth stressing their characteristics as they pertain to career technical education programs. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture  
Teaching Learning and Curricul Department

### CTTE 56019 - COORDINATION OF CAREER TECHNICAL COOPERATIVE EDUCATION PROGRAMS

(Cross-listed with CTTE 46019) Reviews duties, problems, techniques of home, school and work coordination. Internship site selection, job development, servicing the job station, coordinating classroom and work experience. A study of important linkage to local business/industry and education support agencies for career and technical development. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture  
Teaching Learning and Curricul Department

### CTTE 56020 - CURRICULUM GUIDE: DESIGN AND APPLICATION

(Cross-listed with CTTE 46020) Methods and techniques involved in developing and utilizing a curriculum guide in career and technical education subjects. This course includes 15 field clinical hours. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture  
Teaching Learning and Curricul Department

### CTTE 56031 - STUDENT TEACHING IN CAREER TECHNICAL EDUCATION

Provides a 12 week student teaching experience in a career-technical program setting. Students are required to
complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school-agency before the first day of the semester in which student teaching internship will take place. Prerequisite: special approval; and graduate standing; and major in career and technical teacher education (CTTE); and official valid certification of Child Safety Training, approved Basic Life Support and A.L.I.C.E. Training must be presented to the campus office of clinical experience or designated faculty/staff at regional campuses as prerequisite for student teaching. Corequisite: CTTE 59525.
9.000 Credit hours
32.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Teaching Learning and Curricul Department

CTTE 56095 - SPECIAL TOPICS IN CAREER TECHNICAL EDUCATION

(Repeatable for credit) Specialized offerings in response to emerging or selected program needs in career-technical education. Prerequisite: Graduate standing and special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

CTTE 56096 - INDIVIDUAL INVESTIGATION IN CAREER TECHNICAL EDUCATION

(Repeatable for credit) (Cross-listed with CTTE 46096) An individual investigation into problems and topics in career technical education. The investigation is pursued on an individual basis with an assigned faculty member. Prerequisite: Special approval and graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Teaching Learning and Curricul Department

CTTE 59525 - INQUIRY INTO PROFESSIONAL PRACTICE

(Cross-listed with CTTE 49525) Interdisciplinary inquiry into career/technical teaching as a professional practice in education; emphasis on teacher as disciplined investigator. Final course of four. Combination of themes; utilization of teaching/learning technologies. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

CTTE 60199 - THESIS I

Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester distributed over several semesters if desired. Prerequisite: Graduate standing and special approval.
2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Teaching Learning and Curricul Department

**CTTE 60299 - THESIS II**

Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: CTTE 60199 and graduate standing.

2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Teaching Learning and Curricul Department

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**CTTE 66001 - PRINCIPLES AND PRACTICES IN CAREER TECHNICAL EDUCATION**

Study of principles, current practices and trends relating to modern programs of career technical education and relationships to the total plan of public education. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

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**CTTE 66003 - ANALYSIS OF HUMAN RESOURCE DEVELOPMENT**

Provides analysis of human resource development from global, national state and local perspectives including social economic political and emotional influences. Includes the application of the contemporary workforce to engage in life long learning to keep career and technical skills updated. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

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**CTTE 66004 - PROGRAM EVALUATION IN CAREER TECHNICAL EDUCATION**

Designed to provide the skills and knowledge necessary to evaluate the effectiveness and efficiency of career-technical education curriculum programs personnel. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department
### CTTE 66005 - SPECIAL POPULATIONS IN CAREER TECHNICAL EDUCATION

A study of the special populations student in career technical education programs emphasizing characteristics, curriculum modification, instruction and job placement. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

**Levels:** Graduate  
**Schedule Types:** Lecture  

Teaching Learning and Curricul Department

### CTTE 66095 - SPECIAL TOPICS IN CAREER-TECHNICAL EDUCATION

(Repeatable for credit) Specialized offerings in response to emerging or selected program needs in career-technical education. Prerequisite: Graduate standing.

1.000 TO 3.000 Credit hours  
1.000 TO 3.000 Lecture hours

**Levels:** Graduate  
**Schedule Types:** Lecture  

Teaching Learning and Curricul Department

### CTTE 66096 - INDIVIDUAL INVESTIGATION IN CAREER-TECHNICAL EDUCATION

(Repeatable for credit) (Cross-listed with CTTE 76096) An investigation into problems and topics in career technical education. The investigation is pursued on an individual basis with an assigned faculty member. Prerequisite: Graduate standing and special approval.

1.000 TO 3.000 Credit hours  
1.000 TO 3.000 Other hours

**Levels:** Graduate  
**Schedule Types:** Individual Investigation  

Teaching Learning and Curricul Department

### CTTE 70093 - VARIABLE TOPIC WORKSHOP IN CAREER TECHNICAL EDUCATION

(Repeatable for credit) (Cross-listed with CTTE 40093 and CTTE 50093) Topics of special interest to students desiring to intensify their knowledge in a particular area or areas of career technical education. Prerequisite: Doctoral standing and special approval.

1.000 TO 5.000 Credit hours  
1.000 TO 5.000 Other hours

**Levels:** Graduate  
**Schedule Types:** Workshop  

Teaching Learning and Curricul Department

### CTTE 76095 - SPECIAL TOPICS IN CAREER-TECHNICAL EDUCATION

(Repeatable for credit) Specialized offerings in response to emerging or selected program needs in career-technical education. Prerequisite: Doctoral standing.

1.000 TO 3.000 Credit hours  
1.000 TO 3.000 Lecture hours
CTTE 76096 - INDIVIDUAL INVESTIGATION IN CAREER-TECHNICAL EDUCATION

(Repeatable for credit) (Cross-listed with CTTE 66096) An investigation into problems and topics in career technical education. The investigation is pursued on an individual basis with an assigned faculty member. Prerequisite: Doctoral standing and special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

CTTE 86098 - ADVANCED RESEARCH IN CAREER-TECHNICAL EDUCATION

(Repeatable for credit) Student pursues an individual research project on a specialized career technical education topic with approval and under the direction of an instructor. Prerequisite: Doctoral standing and special approval.
1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

CULT 20091 - PREPROFESSIONAL SEMINAR IN EDUCATIONAL STUDIES

(Repeatable for credit) Introduction to the nature and scope of educational service delivery across settings, and to the social and cultural foundations of educational policies and programs. Open to any university student and to those considering alternative careers in education. Prerequisite: None.
2.000 TO 4.000 Credit hours
2.000 TO 4.000 Other hours

CULT 29535 - EDUCATION IN A DEMOCRATIC SOCIETY

Students utilize readings, explore themes, broadly explore purposes of school in society and what knowledge, dispositions and performances are necessary to be a successful teacher today. Prerequisites: none.
3.000 Credit hours
3.000 Lecture hours
CULT 39539 - INTRODUCTION TO THE PHILOSOPHY OF EDUCATION

An introduction to the philosophical analysis of educational problems focusing on the goals of education and the school's role in achieving these goals. Prerequisite: Junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Foundations Leadership Admin Department

CULT 39595 - SPECIAL TOPICS IN CULTURAL FOUNDATIONS

(Repeatable for credit) Directed reading and/or research of special interest or need to small groups of students in cultural foundations. Planned with and directed by a faculty member. IP grade permissible. Prerequisite: none.
2.000 TO 4.000 Credit hours
2.000 TO 4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Foundations Leadership Admin Department

CULT 39596 - INDIVIDUAL INVESTIGATION IN CULTURAL FOUNDATIONS

(Repeatable for credit) Directed independent reading and/or research of special interest or need in student program. Planned with and directed by a faculty member. Prerequisite: special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Foundations Leadership Admin Department

CULT 40093 - VARIABLE TITLE WORKSHOP IN CULTURAL FOUNDATIONS

(Repeatable for credit) (Cross-listed with CULT 50093 and CULT 70093) Variable topics; designed to respond to specialized needs of various groups within the context of trends issues and problems in the educational foundations disciplines. S u graded. Prerequisite: special approval.
1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Undergraduate
Schedule Types: Workshop

Foundations Leadership Admin Department

CULT 49570 - SOCIAL FOUNDATIONS OF MULTICULTURAL EDUCATION

Explores the history, social context, and issues in multicultural education (formal PK-12) in the U.S. Students
gain an appreciation of the challenges of equalizing opportunity of educational achievement, an understanding that is essential for 21st century educational leadership. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Foundations Leadership Admin Department

CULT 50093 - VARIABLE TITLE WORKSHOP IN CULTURAL FOUNDATIONS

(Repeatable for credit) (Cross-listed with CULT 40093 and CULT 70093) Offered on request of school system. Enrollment limited to teachers, administrators or supervisors who are employed in sponsoring system and who are accepted to the university. Prerequisite: Graduate standing and special approval.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Foundations Leadership Admin Department

CULT 59570 - SOCIAL FOUNDATIONS OF MULTICULTURAL EDUCATION

Explores the history, social context, and issues in multicultural education (formal PK-12) in the U.S. Students gain an appreciation of the challenges of equalizing opportunity of educational achievement, an understanding that is essential for 21st century educational leadership. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Seminar

Foundations Leadership Admin Department

CULT 60030 - SOCIAL CONTEXTS OF EDUCATION: CONTEMPORARY ISSUES AND THEORY

(Slashed with CULT 80030) The course will explore contemporary social contexts of education through the lenses of major sociological perspectives, including seminal theoretical works and emerging contemporary scholarship. Students will become familiar with the uses of classic and current sociological theories in order to understand contemporary educational issues. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Seminar

Foundations Leadership Admin Department

CULT 60050 - HUMANITIES-ORIENTED RESEARCH IN EDUCATION

(Slashed with CULT 80050) Course is designed to give students an understanding of humanities-oriented approaches to research in education. This includes disciplinary approaches to the study of education (philosophy, history, literary theory) as well as humanities oriented theoretical work in the social sciences. Students will develop facility with key concepts as well as approaches to method and research design within these approaches. Prerequisite: graduate standing.
CULT 60199 - THESIS I

Thesis student must register for total of 6 hours, 2 to 6 hours in a single semester distributed over several semesters if desired. Prerequisite: Graduate standing and special approval.
2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Foundations Leadership Admin Department

CULT 60299 - THESIS II

Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: CULT 60199. Graduate standing.
2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Foundations Leadership Admin Department

CULT 65530 - FOUNDATIONS OF EDUCATION AND HUMAN SERVICES

Inquiry into the assumptions and implications of educational policies and practices in education and human service settings through the application of historical, philosophical and sociological perspectives. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Seminar

Foundations Leadership Admin Department

CULT 69510 - CLASSICS IN PHILOSOPHY OF EDUCATION

(Repeatable for a maximum of 6 credit hours) (Slashed with CULT 79510) Philosophical exploration of the relationship between education and society and the dynamics of education through close reading and discussion of a selection of influential philosophical texts. Prerequisite: graduate standing.
3.000 TO 6.000 Credit hours
3.000 TO 6.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Credit Hours</th>
<th>Lecture hours</th>
<th>Levels</th>
<th>Schedule Types</th>
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</thead>
<tbody>
<tr>
<td>CULT 69521</td>
<td>PROFESSIONAL PRACTICE IN A MULTICULTURAL SOCIETY</td>
<td>Interdisciplinary inquiry into issues of pluralism and its influence on professional practice in education and human service settings. Cross-cultural interaction will be analyzed; reflection on developing culturally responsive professional practice. Prerequisite: graduate standing.</td>
<td>3.000</td>
<td>3.000</td>
<td>Graduate</td>
<td>Seminar</td>
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<tr>
<td>CULT 69522</td>
<td>ETHICS IN PROFESSIONAL PRACTICE</td>
<td>An examination of ethics in schooling and other educational settings through foundational study and issue analysis; strong case study and professional application emphasis. Prerequisite: graduate standing.</td>
<td>3.000</td>
<td>3.000</td>
<td>Graduate</td>
<td>Seminar</td>
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<tr>
<td>CULT 69530</td>
<td>MULTICULTURAL THEORIES AND SCHOLARSHIP IN EDUCATION</td>
<td>(Cross-listed with CULT 79530) An investigation of multicultural theories in education, the social sciences and humanities as articulated in the works of major scholars. Approaches to research and scholarship and contemporary issues in public discourse is explored. Prerequisite: graduate standing.</td>
<td>3.000</td>
<td>3.000</td>
<td>Graduate</td>
<td>Seminar</td>
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<tr>
<td>CULT 69560</td>
<td>CONTEMPORARY PHILOSOPHY OF EDUCATION</td>
<td>(Cross-listed with CULT 79560) Explores a range of contemporary philosophical perspectives on the moral and political dimensions of education. Students will be introduced to the philosophical frameworks through which these questions are discussed within the field of philosophy of education and they will have opportunity to engage these debates in the course of carefully structured writing assignments. Prerequisite: graduate standing.</td>
<td>3.000</td>
<td>3.000</td>
<td>Graduate</td>
<td>Seminar</td>
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<tr>
<td>CULT 69564</td>
<td>HISTORY OF AMERICAN EDUCATION</td>
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(Cross-listed with CULT 79564) European origins and American innovations in colonial education, rise of common school, completion of education ladder. Emphasis is on present status and recent developments. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Seminar

Foundations Leadership Admin Department

CULT 69568 - GREAT IDEAS IN EDUCATION

(Cross-listed with CULT 79568) An examination of major influential ideas in education through original sources from Plato to Skinner. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Seminar

Foundations Leadership Admin Department

CULT 69569 - INTERNATIONAL EDUCATION: FOUNDATIONAL ISSUES

(Cross-listed with CULT 79569) An introductory seminar to explore current foundational issues and challenges in education worldwide (nonformal, formal PK-advanced post-secondary education). Students gain an understanding of the socio-political, historical context of education worldwide and implications for local policy formation. An international-comparative approach connects and integrates cross-cultural literature, theoretical and research scholarship, on the impact of world dynamics on education. Students also explore the impact of education on economies and social compacts worldwide, with attention to inequalities or marginalities based on region, social status, ethnicity, race, religion, gender and disability. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Seminar

Foundations Leadership Admin Department

CULT 69570 - MULTICULTURAL EDUCATION: THEORY AND POLICY

(Cross-listed with CULT 79570) Theoretical foundations of cultural pluralism, structural marginalization processes, knowledge construction, equity pedagogy and praxis in intercultural relations, democratic change processes and policy addressing inequities in institutional practices. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Seminar

Foundations Leadership Admin Department

CULT 69571 - GLOBALIZATION AND EDUCATION

(Cross-listed with CULT 79571) A multi-disciplinary exploration of the impact of globalization/localization on the delivery and uses of education and the dynamics of power and resistance in globalized education. Prerequisite:
Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Seminar

Foundations Leadership Admin Department

**CULT 69575 - ANTHROPOLOGY AND EDUCATION**

(Cross-listed with CULT 79575) Students explore the contributions that cultural and social anthropologists have made to the study of education broadly conceived, focusing particularly on studies addressing the interrelationships among education, culture and forms of social inequity. Through engaging in critical readings of classic and contemporary educational ethnographics, students explore the myriad ways in which "culture" has been theoretically conceptualized as well as the implications of those conceptualizations for educational inquiry and practice. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Seminar

Foundations Leadership Admin Department

**CULT 69582 - SOCIAL PERSPECTIVES OF EDUCATION**

(Slashed with CULT 89582) This course examines both classic and contemporary social theories in education. Students will become familiar with different social theories; specifically focusing on strengths and limitations of various theoretical approaches. Students will also analyze the role social theories have had upon educational research, and examine different conceptual issues within various social theoretical traditions. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Seminar

Foundations Leadership Admin Department

**CULT 69591 - SEMINAR IN CULTURAL FOUNDATIONS**

(Repeaatable for credit) (Cross-listed with CULT 89591) Variable topic seminar for advanced study of specialized topics and areas; in cultural foundations; emphasis on theory and research findings as related to educational practice. Prerequisite: graduate standing.
1.000 TO 5.000 Credit hours
1.000 TO 5.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Foundations Leadership Admin Department

**CULT 69592 - ADVANCED PRACTICUM AND INTERNSHIP IN CULTURAL FOUNDATIONS**

(Repeaatable for credit) (Cross-listed with CULT 89592) Supervised program in field setting involving application of theories, principles and methodology in cultural foundations of education; planned with and supervised by
graduate faculty member. Prerequisite: Graduate standing and special approval.

Levels: Graduate
Schedule Types: Practicum or Internship

 Foundations Leadership Admin Department

**CULT 69595 - SPECIAL TOPICS IN CULTURAL FOUNDATIONS**

(Repeatable for credit) (Cross-listed with CULT 89595) Specific topic course offering in response to emerging student or program needs in cultural foundations of education. Prerequisite: graduate standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Seminar

 Foundations Leadership Admin Department

**CULT 69596 - INDIVIDUAL INVESTIGATION IN CULTURAL FOUNDATIONS**

(Repeatable for credit) (Cross-listed with CULT 89596) Students pursue an individual project on a specific topic in cultural foundations of education with approval and under direction of instructor. Prerequisite: Graduate standing and special approval.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

 Foundations Leadership Admin Department

**CULT 69598 - RESEARCH IN CULTURAL FOUNDATIONS**

(Repeatable for credit) (Cross-listed with CULT 89598) Students pursue an individual research project on a specific topic in cultural foundations of education with approval and under direction of instructor. Prerequisite: Graduate standing and special approval.

1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

 Foundations Leadership Admin Department

**CULT 70093 - VARIABLE TOPIC WORKSHOP IN CULTURAL FOUNDATIONS**

(Repeatable for credit) (Cross-listed with CULT 40093 and CULT 50093) Offered on request of school system. Enrollment limited to teachers, administrators or supervisors who are employed in sponsoring system and who are accepted to the university. May be repeated once for total maximum credit of six hours. Prerequisite: doctoral standing and special approval.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Graduate
CULT 79510 - CLASSICS IN PHILOSOPHY OF EDUCATION

(Repeatable for a maximum of 6 credit hours) (Slashed with CULT 69510) Analysis of selected philosophies of education through examination of philosophical problems of education. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Seminar

CULT 79530 - MULTICULTURAL THEORIES AND SCHOLARSHIP IN EDUCATION

(Cross-listed with CULT 69530) An investigation of multicultural theories in education, the social sciences and humanities as articulated in the works of major scholars. Approaches to research and scholarship and contemporary issues in public discourse is explored. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Seminar

CULT 79560 - CONTEMPORARY PHILOSOPHY OF EDUCATION

(Cross-listed with CULT 69560) Explores a range of contemporary philosophical perspectives on the moral and political dimensions of education. Students will be introduced to the philosophical frameworks through which these questions are discussed within the field of philosophy of education and they will have opportunity to engage these debates in the course of carefully structured writing assignments. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Seminar

CULT 79564 - HISTORY OF AMERICAN EDUCATION

(Cross-listed with CULT 69564) European origins and American innovations in colonial education, rise of common school, completion of education ladder. Emphasis is on present status and recent developments. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Seminar
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<th>Course Code</th>
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<th>Credit hours: 3.000</th>
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<tr>
<td>CULT 79568</td>
<td>GREAT IDEAS IN EDUCATION</td>
<td>(Cross-listed with CULT 69568) An examination of major influential ideas in education through original sources from Plato to Skinner. Prerequisite: doctoral standing.</td>
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<tr>
<td>CULT 79569</td>
<td>INTERNATIONAL EDUCATION: FOUNDATIONAL ISSUES</td>
<td>(Cross-listed with CULT 69569) An introductory seminar to explore current foundational issues and challenges in education worldwide (nonformal, formal PK-advanced post-secondary education). Students gain an understanding of the socio-political, historical context of education worldwide and implications for local policy formation. An international-comparative approach connects and integrates cross-cultural literature, theoretical and research scholarship, on the impact of world dynamics on education. Students also explore the impact of education on economies and social compacts worldwide, with attention to inequalities or marginalities based on region, social status, ethnicity, race, religion, gender and disability. Gaining a broad understanding of the place of education in a rapidly changing world is essential for 21st century educational leadership and the formation of constructive policies for the future of both developed and developing countries. Prerequisite: doctoral standing.</td>
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<td>CULT 79570</td>
<td>MULTICULTURAL EDUCATION: THEORY AND POLICY</td>
<td>(Cross-listed with CULT 69570) Theoretical foundations of cultural pluralism, structural marginalization processes, knowledge construction, equity pedagogy and praxis in intercultural relations, democratic change processes and policy addressing inequities in institutional practices. Prerequisite: Doctoral standing.</td>
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<tr>
<td>CULT 79571</td>
<td>GLOBALIZATION AND EDUCATION</td>
<td>(Cross-listed with CULT 69571) A multi-disciplinary exploration of the impact of globalization/localization on the delivery and uses of education and the dynamics of power and resistance in globalized education. Prerequisite: doctoral standing.</td>
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CULT 79575 - ANTHROPOLOGY AND EDUCATION

(Cross-listed with CULT 69575) Students explore the contributions that cultural and social anthropologists have made to the study of education broadly conceived, focusing particularly on studies addressing the interrelationships among education, culture and forms of social inequity. Through engaging in critical readings of classic and contemporary educational ethnographies, students explore the myriad ways in which "culture" had been theoretically conceptualized, as well as the implications of those conceptualizations for educational inquiry and practice. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Seminar

CULT 80030 - SOCIAL CONTEXTS OF EDUCATION: CONTEMPORARY ISSUES AND THEORY

(Slashed with CULT 80030) The course will explore contemporary social contexts of education through the lenses of major sociological perspectives, including seminal theoretical works and emerging contemporary scholarship. Students will become familiar with the uses of classic and current sociological theories in order to understand contemporary educational issues. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Seminar

CULT 80050 - HUMANITIES-ORIENTED RESEARCH IN EDUCATION

(Slashed with CULT 60050) Course is designed to give students an understanding of humanities-oriented approaches to research in education. This includes disciplinary approaches to the study of education (philosophy, history, literary theory) as well as humanities oriented theoretical work in the social sciences. Students will develop facility with key concepts as well as approaches to method and research design within these approaches. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Seminar

CULT 80090 - DOCTORAL RESIDENCY SEMINAR

Advanced doctoral residency seminar for students in all areas of educational foundations. Focus on current and emergent issues research and trends in education in multiple settings. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

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<th>Course Code</th>
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<th>Lecture Hours</th>
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<tr>
<td>CULT 80091</td>
<td>SEMINAR: GREAT ISSUES IN EDUCATION</td>
<td>(Repeatable for credit) Interdisciplinary review of current great issues in education that are catalogs for presentation after discussion with membership of the course. Prerequisite: Open to doctoral students from any field.</td>
<td>1.000 TO 3.000 Credit hours, 1.000 TO 3.000 Other hours</td>
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<td>Graduate</td>
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<td>CULT 80199</td>
<td>DISSERTATION I</td>
<td>(Repeatable for credit) Doctoral dissertation for which registration in at least two semesters is required, first of which will be semester in which dissertation work is begun and continuing until the completion of 30 hours. Prerequisite: Doctoral standing and special approval.</td>
<td>15.000 Credit hours, 15.000 Other hours</td>
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<td>Graduate</td>
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<td>CULT 80299</td>
<td>DISSERTATION II</td>
<td>(Repeatable for credit) Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. Prerequisite: Doctoral standing; CULT 80199.</td>
<td>15.000 Credit hours, 15.000 Other hours</td>
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<td>Graduate</td>
<td>Dissertation</td>
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<tr>
<td>CULT 85535</td>
<td>INTERPROFESSIONAL STUDIES</td>
<td>Comprehensive analysis of issues affecting professional practice in education and human service resource settings. Examination of questions related to interprofessional collaboration on policy, research and practice. Prerequisite: Doctoral standing.</td>
<td>3.000 Credit hours, 3.000 Lecture hours</td>
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<td>CULT 89521</td>
<td>PROFESSIONAL PRACTICE IN A MULTICULTURAL SOCIETY</td>
<td>Interdisciplinary inquiry into issues of pluralism and its influence on professional practice in education and human service settings. Cross-cultural interaction will be analyzed; reflection on developing culturally responsive professional practice. Prerequisite: doctoral standing.</td>
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3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Seminar

Foundations Leadership Admin Department

**CULT 89571 - COMPARATIVE AND INTERNATIONAL EDUCATION**

Comparative analysis of contemporary educational policies and structures in large-and small scale societies throughout the world. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Seminar

Foundations Leadership Admin Department

**CULT 89581 - PROSEMINAR IN CULTURAL FOUNDATIONS**

Doctoral seminar to familiarize Ph.D students with cultural and social foundations of education as a field of study so that they may locate their inquiry within the relevant knowledge base and academic disciplines that comprise the cultural foundations of education. Prerequisite: Doctoral standing

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Seminar

Foundations Leadership Admin Department

**CULT 89582 - SOCIAL PERSPECTIVES OF EDUCATION**

This course examines both classic and contemporary social theories in education. Students will become familiar with different social theories; specifically focusing on strengths and limitations of various theoretical approaches. Students will also analyze the role social theories have had upon educational research, and examine different conceptual issues within various social theoretical traditions. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Seminar

Foundations Leadership Admin Department

**CULT 89591 - SEMINAR IN CULTURAL FOUNDATIONS**

(Repeatable for credit) (Cross-listed with CULT 69591) Variable topic seminar for advanced study of specialized topics and areas in cultural foundations; emphasis on theory and research findings as related to educational practice. Prerequisites: Doctoral standing.

1.000 TO 5.000 Credit hours
1.000 TO 5.000 Other hours

Levels: Graduate
Schedule Types: Seminar
CULT 89592 - ADVANCED PRACTICUM AND INTERNSHIP IN CULTURAL FOUNDATIONS

(Repeatable for credit) (Cross-listed with CULT 69592) Supervised program in field setting involving application of theories, principles and methodology in cultural foundations of education; planned with and supervised by graduate faculty member. Prerequisite: doctoral standing and special approval.
2.000 TO 6.000 Credit hours
6.000 TO 18.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

CULT 89595 - SPECIAL TOPICS IN CULTURAL FOUNDATIONS

(Repeatable for credit) (Cross-listed with CULT 69595) Specific topic course offering in response to emerging student or program needs in cultural foundations of education. Prerequisite: doctoral standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Seminar

CULT 89596 - INDIVIDUAL INVESTIGATION IN CULTURAL FOUNDATIONS

(Repeatable for credit) (Cross-listed with CULT 69596) Students pursue an individual project on a specific topic in cultural foundations of education with approval and under direction of instructor. Prerequisite: doctoral standing and special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

CULT 89598 - RESEARCH IN CULTURAL FOUNDATIONS

(Repeatable for credit) (Cross-listed with CULT 69598) Students pursue an individual research project on a specific topic in cultural foundations of education with approval and under direction of instructor. Prerequisite: doctoral standing and special approval.
1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

DAN 17001 - STUDIO MODERN I
Practice of basic modern dance technique. Open to all university students. Prerequisite: None.
1.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Theatre and Dance Department

**DAN 17002 - STUDIO MODERN DANCE II**

Exploration of modern dance technique foundations and improvisation with emphasis on the movement and performing qualities of modern dance. Open to all university students. Prerequisite: DAN 17001.
1.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Theatre and Dance Department

**DAN 17004 - STUDIO JAZZ I**

Practice of basic jazz techniques. Open to all university students. Prerequisite: None.
1.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Theatre and Dance Department

**DAN 17005 - STUDIO JAZZ II**

Continuation of jazz dance technique foundations with emphasis on more advanced dance combinations. Open to all university students. Prerequisite: DAN 17004.
1.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Theatre and Dance Department

**DAN 17007 - STUDIO TAP I**

Basic tap steps and combinations with varying sound intensities and rhythms. Open to all university students. Prerequisite: None.
1.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Theatre and Dance Department
DAN 17008 - STUDIO TAP II

Continuation of tap dance technique foundations with emphasis on more advanced dance combinations. Prerequisite: DAN 17007.
1.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Theatre and Dance Department

DAN 17009 - STUDIO TAP III

(Repeatable for a maximum of 8 credit hours) Advanced tap dance techniques with emphasis on clarity, speed and performance skills. Prerequisite: DAN 17008.
1.000 Credit hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Theatre and Dance Department

DAN 17010 - STUDIO BALLET I

Introduction to the foundations of ballet placement, vocabulary and movement for the beginner. Open to all university students. Prerequisite: None.
1.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Theatre and Dance Department

DAN 17011 - STUDIO BALLET II

Continuation of ballet technique foundations with emphasis on more advanced dance combinations. Open to all university students. Prerequisite: DAN 17010.
1.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Theatre and Dance Department

DAN 17012 - STUDIO BALLET III

(Repeatable for a maximum of 4 credit hours) This course presents high intermediate ballet techniques for the serious non-major dance student. Students will apply the principles of body alignment to an ever expanding movement vocabulary. Intricate combinations in adagio, petite and grand allegro and turns will be offered. Focus will be on the strength, flexibility and endurance required to master movements at this more advanced level. Prerequisite: DAN 17011.
1.000 Credit hours
2.000 Other hours
### DAN 17013 - STUDIO AFRICAN DANCE I

Designed to acquaint students with basic elements of African dance. Open to all university students. 
**Prerequisite:** None.  
1.000 Credit hours  
3.000 Other hours

### DAN 17016 - STUDIO SWING DANCE I

(Repeatable for a maximum of 2 credit hours) Practice of basic swing dance movements with emphasis on social partnering skills. Open to all students. **Prerequisite:** None.  
1.000 Credit hours  
1.000 Other hours

### DAN 17019 - STUDIO HIP HOP I

(Repeatable for a maximum of 4 credit hours) Introduction to Hip Hop dance including warm-up techniques, movement across the floor and dance combinations. Open to all university students. No previous experience is necessary. **Prerequisite:** none.  
1.000 Credit hours  
2.000 Other hours

### DAN 17020 - STUDIO HIP HOP II

(Repeatable for a maximum of 4 credit hours) Hip Hop II is for students with previous experience in hip hop and will explore in greater depth fundamentals, history, technique and personal style. **Prerequisite:** DAN 17019.  
1.000 Credit hours  
2.000 Other hours

### DAN 17049 - FUNDAMENTALS OF BALLET AND MODERN DANCE
Introduction to intensive exploration of ballet and modern dance technique for nonmajors with special emphasis on alignment, body awareness and movement vocabulary. Prerequisite: DAN 17001 and 17010.

2.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Theatre and Dance Department

**DAN 17050 - INTRODUCTION TO DANCE**

Overview of modern dance as a performing art. Specifically focusing on preparation, basic knowledge and career choices. Prerequisite: Dance major and special approval.

1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Theatre and Dance Department

**DAN 17051 - MODERN DANCE TECHNIQUE I-A**

(Repeatable for credit) Development of skill acquisition in basic technique, understanding and appreciation for the creative nature of dance through exposure to improvisational experiences. Prerequisite: Dance major and special approval.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Theatre and Dance Department

**DAN 17052 - BALLET I-A**

(Repeatable for credit) Ballet techniques: pre-barre; beginning barre and beginning center work. Prerequisite: Dance major and special approval.

2.000 Credit hours
2.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Theatre and Dance Department

**DAN 17053 - PRINCIPLES OF DANCE MECHANICS I**

The study and application of alignment and basic movement principles to dance techniques. Prerequisite: Dance major and special approval. Corequisite: DAN 17051 or 17052.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
Course Attributes:
TAG - Arts/Humanities

**DAN 17151 - MODERN DANCE TECHNIQUE I-B**

(Repeatable for credit) Continued exploration of basic modern dance technique and improvisation begun in DAN 17051. Continued study of dance innovators and their historical significance. Prerequisite: Dance major and DAN 17051 and special approval.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

**DAN 17152 - BALLET I-B**

(Repeatable for a maximum of 8 credit hours) Continuation of ballet techniques studied in DAN 17052. Prerequisite: Dance major and DAN 17052 and special approval.
2.000 Credit hours
2.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

**DAN 27070 - JAZZ STYLES I**

Development of basic jazz dance skills for dance majors and minors. Prerequisite: special approval.
2.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

**DAN 27071 - MODERN DANCE TECHNIQUE II-A**

(Repeatable for a maximum of 12 credit hours) Intermediate modern dance styles emphasizing complex movement phrases. Prerequisite: DAN 17051 and special approval.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

**DAN 27072 - BALLET II-A**

(Repeatable for a maximum of 8 credit hours) Intermediate ballet technique. Prerequisite: Dance major; DAN
DAN 27074 - DANCE COMPOSITION I

(Repeatable for a maximum of 6 credit hours) Movement exploration and improvisation including developing the body as an instrument of expression. Prerequisite: special approval.

Levels: Undergraduate
Schedule Types: Studio

Theatre and Dance Department

DAN 27076 - DANCE AS AN ART FORM

Survey of the various types, styles and functions of dance with emphasis on understanding dance as an art form and an expression of culture. Prerequisite: None.

Levels: Undergraduate
Schedule Types: Lecture

Theatre and Dance Department

Course Attributes:
Diversity Course-Global, Kent Core-Fine Arts, LER-Fine Arts, Trnfr Module-Fine Arts

DAN 27170 - JAZZ STYLES II

Continued development of basic jazz dance skills. Prerequisite: DAN 27070 and special approval.

Levels: Undergraduate
Schedule Types: Studio

Theatre and Dance Department

DAN 27171 - MODERN DANCE TECHNIQUE II-B

(Repeatable for a maximum of 12 credit hours) Continuation of intermediate level dance styles with emphasis on complex movement phrases. Prerequisite: DAN 27071 and special approval.

Levels: Undergraduate
Schedule Types: Studio
**DAN 27172 - BALLET II-B**

(Repeatable for a maximum of 8 credit hours) Continuation of intermediate ballet technique. Prerequisites: DAN 27072 and special approval.

- 2.000 Credit hours
- 3.000 Other hours

Levels: Undergraduate  
Schedule Types: Studio

Theatre and Dance Department

**DAN 28010 - DANCE ACCOMPANIMENT LABORATORY I**

(Course is repeatable for a maximum of 4 credit hours) Students will be introduced to the techniques and strategies of modern dance and ballet technique class accompaniment. Emphasis is placed on supervised student accompaniment and acquiring familiarity with dance class protocols, procedures, and the accompanist-instructor relationship. Course meets concurrently with one of the professional-level modern dance or ballet technique classes offered by the Dance Division. Prerequisite: none.

- 2.000 Credit hours
- 4.000 Lab hours

Levels: Undergraduate  
Schedule Types: Laboratory

Theatre and Dance Department

**DAN 37035 - DANCE COMPOSITION II**

Basic principles of dance composition with attention to design, thematic material, structure, form and small groups. Prerequisite: DAN 27074 and special approval.

- 2.000 Credit hours
- 2.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

Theatre and Dance Department

Course Attributes:
TAG - Arts/Humanities

**DAN 37053 - PRINCIPLES OF DANCE MECHANICS II**

(Repeatable for a maximum of 16 credit hours) Continuation of DAN 17053. Prerequisite: DAN 17053 and special approval.

- 2.000 Credit hours
- 2.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

Theatre and Dance Department
DAN 37057 - DANCE FOR CHILDREN

(Repeatable for a maximum of 6 credit hours) The theory and practice of children's dance in the pre-school, elementary, middle schools, private studio and recreation settings. Prerequisite: Dance or Early Childhood Education major.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Theatre and Dance Department

DAN 37058 - METHODS AND MATERIALS OF DANCE

(Repeatable for a maximum of 6 credit hours) Theory and practice of teaching dance technique from middle school to adults with an emphasis on modern dance. Prerequisite: DAN 27057 and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Theatre and Dance Department

DAN 37067 - BALLET III-A

(Repeatable for a maximum of 8 credit hours) Advanced ballet technique. Prerequisite: DAN 27172 and special approval.
2.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Theatre and Dance Department

DAN 37068 - MODERN DANCE TECHNIQUE III-A

(Repeatable for a maximum of 15 credit hours) Advanced modern dance technique. Prerequisite: DAN 27171 and special approval.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Theatre and Dance Department

DAN 37070 - DANCE COMPOSITION III

(Repeatable for a maximum of 8 credit hours) Development of individual movement style through improvisational studies and movement manipulation exercises of structure and form resulting in a substantial solo modern dance work. Prerequisite: DAN 27174 and special approval.
2.000 Credit hours
2.000 Other hours
DAN 37071 - MOVEMENT NOTATION

Analyzing and recording human movement. The common aspects of movement in all forms of sports, dance and aquatics. Analysis and recording with the labanotation system. Prerequisite: Dance major and special approval.

2.000 Credit hours
2.000 Lecture hours

DAN 37072 - DANCE AND TECHNOLOGY

This course introduces students to new technologies as resources for creative expression, performance and documentation of dance. Students will learn a brief history of screen dance, techniques for archiving dance, shooting and editing video with dance as the subject and approaches to interactive performance. Students will gain a basic understanding of how new media interacts with current practice in dance creation, production, education and research. Prerequisite: Dance (DANC) major or minor; and special approval.

2.000 Credit hours
2.000 Lecture hours

DAN 37167 - BALLET III-B

Continuation of advanced ballet technique. Prerequisite: DAN 37067 and special approval.

2.000 Credit hours
3.000 Other hours

DAN 37168 - MODERN DANCE TECHNIQUE III-B

Continuation of advanced modern dance technique. Prerequisite: DAN 37068 and special approval.

3.000 Credit hours
3.000 Other hours

DAN 37170 - DANCE COMPOSITION IV
Exploration of advanced composition skills in preparation for the B.F.A. senior choreography project and future choreographic endeavors. Prerequisite: DAN 37070 and special approval.

1.000 Credit hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Theatre and Dance Department

**DAN 37192 - DANCE PRACTICUM**

(repeatable for a total of 4 hours) practical experience in cocurriculum dance activities under faculty supervision. Prerequisite: special approval.

1.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship, Studio

Theatre and Dance Department

Course Attributes:
Experiential Learning Requirem

**DAN 37271 - DANCE ENSEMBLE**

Participation in rehearsal, preparation and performance of public dance concerts in an established dance ensemble. Prerequisite: Dance major and special approval.

2.000 Credit hours
2.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Theatre and Dance Department

**DAN 37310 - MUSIC FOR DANCERS**

Students will build theoretical, analytical and performance skills in music specific to the needs of dancers, dance teachers and choreographers. Prerequisite: special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Theatre and Dance Department

**DAN 38001 - APPLIED SKILLS FOR DANCE ACCOMPANIMENT**

(Course is repeatable for a maximum of 8 credit hours) Private applied music instruction in performance skills necessary to accompany a modern dance or ballet class. Emphasis is placed on hand drum and frame drum technique, keyboard repertoire, and keyboard improvisation skills. Prerequisite: DAN 28010.

2.000 Credit hours
1.500 Other hours
**DAN 38010 - DANCE ACCOMPANIMENT LABORATORY II**

(Course is repeatable) Students will receive intermediate and advanced instruction in modern dance or ballet technique class accompaniment. Emphasis will be placed on continued development of accompaniment strategies for specific styles of movement and increasing the students' range of accompaniment repertoire and improvisational vocabulary. Prerequisite: two semesters of DAN 28010 and special approval.

1.000 TO 4.000 Credit hours
2.000 TO 8.000 Other hours

**DAN 47055 - BALLET IV-A**

A continuation of DAN 37167 with increasing clarity and control of movements. Prerequisite: DAN 37167.

2.000 Credit hours
3.000 Other hours

**DAN 47060 - PROFESSIONAL ASPECTS IN DANCE**

Development of pragmatic skills for entrance into professional dance careers. Emphasis on resume writing, preparation for auditions and economic survival. Prerequisite: DAN 27170 and special approval.

2.000 Credit hours
2.000 Other hours

**DAN 47063 - DANCE HISTORY I**

History of dance from antiquity to 1900. Prerequisite: Dance major and approval.

3.000 Credit hours
3.000 Lecture hours

Course Attributes:
TAG - Arts/Humanities
DAN 47070 - JAZZ STYLES III

Jazz style for students with advanced dance technique. Prerequisite: DAN 27170 and special approval.
2.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Theatre and Dance Department

DAN 47095 - SPECIAL TOPICS IN DANCE

(repeatable for a total of 24 hours) offered when resources permit a topic different from existing courses. Topic to be announced when scheduled. Prerequisite: none.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Theatre and Dance Department

DAN 47155 - BALLET IV-B

A continuation of DAN 47055 with increasing clarity and dynamic expression. Prerequisite: DAN 47055 and special approval.
2.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Theatre and Dance Department

DAN 47156 - DANCE PRODUCTION

Study of elements involved in planning and implementing a concert. Experiential work in technical and management components. Prerequisite: Dance major and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Theatre and Dance Department

DAN 47163 - DANCE HISTORY II

History of the development of concert and theatrical dance forms from 1900 to present day. Prerequisite: DAN 47063 and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisites</th>
<th>Credits</th>
<th>Other Hours</th>
<th>Levels</th>
<th>Schedule Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAN 47170</td>
<td>JAZZ STYLES IV</td>
<td>Continuation of DAN 47070. Prerequisite: DAN 47070 and special approval.</td>
<td>2.000 Credit hours</td>
<td></td>
<td></td>
<td>Undergraduate</td>
<td>Studio</td>
</tr>
<tr>
<td>DAN 47174</td>
<td>SENIOR CHOREOGRAPHY PROJECT</td>
<td>Creation of a modern dance work to be performed with full production values</td>
<td>Prerequisite: DAN 37170 and special approval.</td>
<td>1.000</td>
<td></td>
<td>Undergraduate</td>
<td>Studio</td>
</tr>
<tr>
<td>DAN 47175</td>
<td>CAPSTONE PROJECT</td>
<td>The capstone project represents a culminating event for the student. Capstone projects can be taken in the junior or senior year and are identified in consultation with a faculty advisor. Honor students may combine the capstone project with an Honors thesis. Prerequisite: junior standing and special approval.</td>
<td>1.000 TO 3.000 Credit hours</td>
<td></td>
<td></td>
<td>Undergraduate</td>
<td>Senior Project/Honors Thesis</td>
</tr>
<tr>
<td>DAN 47192</td>
<td>INTERNSHIP IN DANCE</td>
<td>Supervised dance apprenticeship in an approved educational setting. Prerequisite: Dance major and special approval.</td>
<td>(Repeatable for credit)</td>
<td>1.000</td>
<td></td>
<td>Undergraduate</td>
<td>Practicum or Internship</td>
</tr>
</tbody>
</table>
Course Attributes:
Experiential Learning Requirem

**DAN 47196 - INDIVIDUAL INVESTIGATION IN DANCE**

(Repeatable for credit) Individual projects for dance majors. Prerequisite: Junior standing and special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Theatre and Dance Department

**DAN 47525 - STUDENT TEACHING IN DANCE**

This experience provides for a full semester of student teaching in the broadest range of multi-age school settings. Prerequisite: Dance major; and admission to student teaching; and DAN 47192; and special approval; and Official valid certification of Child Safety Training, approved Basic Life Support and A.L.I.C.E. Training must be presented to the campus office of clinical experience or designated faculty/staff at Regional campuses as prerequisite for student teaching.
9.000 Credit hours
9.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Theatre and Dance Department

Course Attributes:
Experiential Learning Requirem

**DSCI 10010 - SOCIETY, CULTURE AND THE DIGITAL SCIENCES**

A survey course intended to give a broad understanding of society, culture and the digital sciences. Students understand not only the impact of digital sciences on culture and society, but also the impact of culture and society on the development and adoption of digital sciences. Topics include relationship and identify formation and maintenance, the relationship between digital science and race, gender, culture and globalization. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Digital Sciences Department

**DSCI 10310 - MY STORY ON THE WEB**

A first course in understanding the web's impact on our private and public lives. Introductory course that enables students to establish a web presence and persona by the end of the semester. Through the storytelling initiative and creating these sites, students investigate web site design, storytelling, multimedia, intellectual property, ethical considerations and social media. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours
DSCI 10410 - INFORMATION ETHICS AND SOCIAL RESPONSIBILITY

Investigates ethical and social responsibility issues related to information technology including the application of ethical theories to information technology; potential tensions between ethical and legal norms as well as those between competing ethical values; professional codes of ethics; access and control of intellectual property; issues of privacy including those raised by the US Patriot Act; network security and user protections (e.g. viruses, protecting minors, cyberbullying); and the digital divide, outsourcing and green computing. 
Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

DSCI 13210 - DESIGN PROCESSES AND PRINCIPLES

Introduction to the discipline of design, including general design models and procedures, rational and creative models of design, and design as problem solving. Specific design contexts are introduced including information design, graphics and visual design, architectural design and educational design. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

DSCI 15310 - COMPUTATIONAL THINKING AND PROGRAMMING

Introductory, broad, and hands-on coverage of basic aspects of computational thinking with emphasis on problem solving using the Python programming language. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

DSCI 19995 - SPECIAL TOPICS IN DIGITAL SCIENCES

(Repeatable for credit) Analysis of significant and current issues in digital sciences not covered in regular courses. Offered when opportunities and resources permit; the topic is announced when the course is scheduled. Prerequisite: none.
1.000 TO 4.000 Credit hours
1.000 TO 4.000 Lecture hours
**DSCI 23410 - COGNITION IN TECHNOLOGY**

Introduction to the basics in human cognition as they affect technology and as technology affects human cognition. Addresses designing technologies to fit and enhance cognition, augmenting cognition with technology, and cognitive tools, as well as the impact of technology on various cognitive processes. Leverages both traditional and online course delivery. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

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**DSCI 26010 - TELECOMMUNICATION INFRASTRUCTURE**

Provides an overview of communications infrastructure for public switched telephone networks, wireless networks, and local area networks. Other topics covered include network routing, LAN concepts and technologies, VoIP, and PBX. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

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**DSCI 29995 - SPECIAL TOPICS IN DIGITAL SCIENCES**

(Repeatable for credit) Analysis of significant and current issues in digital sciences not covered in regular courses. Offered when opportunities and resources permit; the topic is announced when the course is scheduled. Prerequisite: none.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

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**DSCI 31010 - ENTERPRISE ARCHITECTURE**

Enterprise architecture facilitates the alignment of IT and IS investment decisions with business goals. Enterprise architecture is increasingly used in the industry as a result of the continued emergence of new technologies and ongoing pressures to reengineer business processes to achieve improved efficiency and greater customer focus. Enterprise architecture identifies the main components of an organization and the ways in which these components work together. The components include performance and strategy, people, business capabilities, applications, technology, knowledge and information, as well as financial and other resources. Prerequisite: sophomore standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture
**DSCI 33310 - HUMAN-COMPUTER INTERACTION**

A survey course intended to provide a broad foundation of HCI principles, concepts, and techniques relevant to multiple digital science concentrations. Focuses on understanding HCI through fundamental design concepts and applying these to a range of interface design problems. Covers the spectrum of a user-centered design process (research, sketching, prototyping, evaluation, etc). Balances a broad conceptual understanding of HCI with detailed interface design issues. Prerequisite: sophomore standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Digital Sciences Department

**DSCI 34410 - DIGITAL INFORMATION MANAGEMENT AND PROCESSING**

Introduces students to the discipline of information management and processing methods and tools that are available to support effective management of information within organizations. Aims to provide a pragmatic foundation of principles, practices and technologies that can be applied within commercial and government organizations to help improve information management. Prerequisite: sophomore standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Digital Sciences Department

**DSCI 39995 - SPECIAL TOPICS IN DIGITAL SCIENCES**

(Repeatable for credit) Analysis of significant and current issues in digital sciences not covered in regular courses. Offered when opportunities and resources permit; the topic is announced when the course is scheduled. Prerequisite: none.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Digital Sciences Department

**DSCI 40910 - CAPSTONE IN DIGITAL SCIENCES**

Provides an integrative experience, bringing together components of the required coursework in the major. Students work in project teams with students from upper-division project courses in programs affiliated with the School of Digital Sciences. Prerequisites: DSCI 41510 and TECH 46411; and MIS 44043 or CS 33007; and senior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Digital Sciences Department
DSCI 41510 - PROJECT MANAGEMENT AND TEAM DYNAMICS

Introduces students to the basic elements of project management as it relates to software development and the corporate environment. Although not formally endorsed by The Project Management Institute, the course aligns with the project management lifecycle approach endorsed in The Project Management Book of Knowledge. Prerequisite: DSCI 15310 or CS 13001 or CS 13012 or MIS 24065; and junior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Digital Sciences Department

Course Attributes:
Writing Intensive Course

DSCI 41610 - DIGITAL SYSTEMS SECURITY

Provides students with an understanding of the techniques, approaches, strategies, and computer security tactics that are used to ensure computer-related assets are protected from potential cyber compromise and are integrated with the business function. This course does not focus on the technical aspects of security (e.g., details of the operating system, data structures, or networks) but instead focuses more on computer security in a business context. Prerequisites: DSCI 15310 or CS 13001 or CS 13012 or MIS 24065; and junior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Digital Sciences Department

DSCI 49910 - EMERGING TECHNOLOGIES IN DIGITAL SCIENCES

(Cross-listed with DSCI 59910) Explores new and emerging technologies in the digital sciences, examining each technology from multiple viewpoints representative of the interdisciplinary nature of the digital sciences. Prerequisite: junior standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Digital Sciences Department

DSCI 49992 - INTERNSHIP IN DIGITAL SCIENCES

(Repeatable for a maximum of 6 credit hours) A credit-bearing work experience with educational outcomes, utilizing and enhancing a student's academic learning in practical occupational situations. The student is expected to complete pre-determined assignments, which may include a weekly journal, final paper, or experience report. Satisfactory/unsatisfactory (S/U) graded. In-progress (IP) mark permissible. Prerequisites: junior standing and special approval.

1.000 TO 6.000 Credit hours
DSCI 49995 - SPECIAL TOPICS IN DIGITAL SCIENCES
(Repeatable for credit) Analysis of significant and current issues in digital sciences not covered in regular courses. Offered when opportunities and resources permit; the topic is announced when the course is scheduled. Prerequisite: none.
1.000 TO 4.000 Credit hours
1.000 TO 4.000 Lecture hours

DSCI 49996 - INDIVIDUAL INVESTIGATION IN DIGITAL SCIENCES
(Repeatable for a maximum of 6 credit hours) Independent study carried out by a student under the supervision of a faculty member. Subject content, objectives, assignments and evaluation methods may vary. Prerequisite: junior standing and special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

DSCI 51510 - PROJECT MANAGEMENT AND TEAM DYNAMICS
This course introduces students to the basic elements of project management as it relates to software development and the corporate environment. Although not formally endorsed by The Project Management Institute (www.PMI.org), the course will align with the project management lifecycle approach endorsed in The Project Management Book of Knowledge. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

DSCI 51610 - DIGITAL SYSTEMS SECURITY
Provides students with an advanced understanding of the techniques, approaches, strategies, and computer security tactics that are used to ensure computer-related assets are protected from potential cyber compromise and are integrated with the business function. This course does not focus on the technical aspects of security (e.g., details of the operating system, data structures, or networks) but instead focuses more on computer security in a business context. Prerequisite: graduate standing.
DSCI 59910 - EMERGING TECHNOLOGIES IN DIGITAL SCIENCES

(Cross-listed with DSCI 49910) Explores new and emerging technologies in the digital sciences, examining each technology from multiple viewpoints representative of the interdisciplinary nature of the digital sciences. Prerequisite: graduate standing.

Levels: Graduate
Schedule Types: Lecture

DSCI 59995 - SPECIAL TOPICS IN DIGITAL SCIENCES

(Repeatable for credit) Analysis of significant and current issues in digital sciences not covered in regular courses. Offered when opportunities and resources permit; the topic is announced when the course is scheduled. Prerequisite: graduate standing.

Levels: Graduate
Schedule Types: Lecture

DSCI 60998 - CAPSTONE PROJECT IN DIGITAL SCIENCES

Provides an integrative experience, bringing together components of the required coursework in the major and concentration. Students perform individual work on a project, research paper, or practicum under the supervision of faculty from programs affiliated with the School of Digital Sciences. Students must have completed 15 credit hours in the Master of Digital Sciences program to enroll in this course. Prerequisite: graduate standing and special approval by Digital Science Graduate Coordinator.

Levels: Graduate
Schedule Types: Master's Project

DSCI 61010 - ENTERPRISE ARCHITECTURE

Facilitates the alignment of IT and IS investment decisions with business goals. Enterprise architecture is increasingly used in industry as a result of the continued emergence of new technologies and ongoing pressures to reengineer business processes to achieve improved efficiency and greater customer focus. Enterprise architecture identifies the main components of an organization and the ways in which these components work together. The components include performance and strategy, people, business capabilities, applications, technology, knowledge and information, as well as financial and other resources. Prerequisite: graduate
DSCI 61310 - ENTERPRISE ARCHITECTURE: ENTERPRISE ARCHITECTURE CENTER OF EXCELLENCE METHODOLOGY

Provides an introduction to the Enterprise Architecture Center of Excellence (EACOE) methodology for enterprise architecture and practical experience using that methodology. Students learn to model a business' current or desired future state using architectural models of goals, processes, materials, roles, locations and events. Implementation models are then developed to show relationships between architectural models, and the models are analyzed to identify move-ahead initiatives that include projects, gaps, overlaps and opportunities. These initiatives are prioritized to move the business to a desired future state. At the conclusion of the course, students have the option of submitting their course enterprise architecture artifacts to EACOE for certification. Prerequisite: graduate standing. Pre/Corequisite: DSCI 61010.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Digital Sciences Department

DSCI 61510 - PROJECT MANAGEMENT LEADERSHIP

This course introduces advanced project management and project management leadership as it relates to software development and the corporate environment. The course focuses on the project management principles of effective planning, communication and motivation throughout the project lifecycle, and one key project management deliverable such as the project management plan. Although not formally endorsed by The Project Management Institute (www.PMI.org), the course will align with the project management lifecycle approach endorsed in The Project Management Book of Knowledge. Prerequisites: DSCI 41510 or DSCI 51510; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Digital Sciences Department

DSCI 62010 - BUSINESS ARCHITECTURE

Introduction to the concept of business architecture as the critical component of enterprise architecture. Students learn how to develop an enterprise business architecture, to apply business architecture principles, methods, and artifacts to organizational initiatives to ensure they are aligned with organizational business goals and performance standards. Students learn how different enterprise architecture frameworks approach the business layer. Prerequisites: DSCI 61010 and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
**DSCI 64010 - DATA ARCHITECTURE**

Introduction to the concept of data and information architecture as a component of enterprise architecture. Students learn how to distinguish types of data, develop conceptual and logical data models, trace and map the use of data types across business capabilities, roles and applications, and prepare an enterprise level data dictionary. Students learn how to work with enterprise data architecture artifacts as they develop an enterprise information architecture blueprint. Prerequisite: DSCI 61010 and graduate standing.

3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Digital Sciences Department

**DSCI 64210 - DATA SCIENCE**

Introduction to the concept of big data and data analytics, including the business challenges of working with big data. Students are introduced to the concepts of both structured and unstructured data. Fundamental concepts include data design and management, database design and management, data driven programming and discovery, and data presentation and use. Data analytics in industry verticals are discussed, including science, intelligence and law enforcement, health, retail and financial services. Prerequisite: graduate standing.

3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Digital Sciences Department

**DSCI 65010 - APPLICATION AND TECHNOLOGY ARCHITECTURE**

Introduction to the concept of application and technology architectures in the context of enterprise architecture. Students learn how to define application and technology architecture principles and standards to support business performance, and to evaluate existing architectures in relation to performance goals. Students learn to work with application and technology artifacts and matrices, prepare a technology dictionary and develop an application architecture blueprint. Prerequisites: DSCI 61010 and graduate standing.

3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Digital Sciences Department

**DSCI 69199 - THESIS I**

(Repeatable for a maximum of 6 credits hours) Thesis students must register for a total of 6 hours and may take 2 to 6 hours per semester distributed over several semesters if desired. Prerequisites: graduate standing and special approval by the Digital Sciences Graduate Coordinator.

2.000 TO 6.000 Credit hours  
2.000 TO 6.000 Other hours

Levels: Graduate  
Schedule Types: Masters Thesis
# Digital Sciences Department

## DSCI 69299 - Thesis II

(Repeatable for credit) Thesis students must continue registration each semester until all degree requirements are met. Prerequisites: DSCI 69199 and graduate standing.

<table>
<thead>
<tr>
<th>Credit hours</th>
<th>Other hours</th>
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</thead>
<tbody>
<tr>
<td>2.000</td>
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</tbody>
</table>

Levels: Graduate  
Schedule Types: Masters Thesis

Digital Sciences Department

## DSCI 69992 - Internship in Digital Sciences

(Repeatable for a maximum of 6 credit hours) A credit-bearing work experience with educational outcomes, utilizing and enhancing a student's academic learning in practical occupational situations. The student is expected to complete pre-determined assignments, which may include a weekly journal, final paper or experience report. No more than 3 credit hours of DSCI 69992 Internship in Digital Sciences may be applied toward approved electives in the Master of Digital Sciences. Prerequisites: graduate standing and special approval. Satisfactory/unsatisfactory (S/U) graded. In-progress (IP) mark permissible. Prerequisites: graduate standing and special approval.

<table>
<thead>
<tr>
<th>Credit hours</th>
<th>Other hours</th>
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<tbody>
<tr>
<td>1.000 TO 3.000</td>
<td>3.000 TO 9.000</td>
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</tbody>
</table>

Levels: Graduate  
Schedule Types: Practicum or Internship

Digital Sciences Department

## DSCI 69995 - Special Topics in Digital Sciences

(Repeatable for credit) Analysis of significant and current issues in digital sciences not covered in regular courses. Offered when opportunities and resources permit; the topic is announced when the course is scheduled. Prerequisite: graduate standing.

<table>
<thead>
<tr>
<th>Credit hours</th>
<th>Lecture hours</th>
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<tbody>
<tr>
<td>1.000 TO 4.000</td>
<td>1.000 TO 4.000</td>
</tr>
</tbody>
</table>

Levels: Graduate  
Schedule Types: Lecture

Digital Sciences Department

## DSCI 69996 - Individual Investigation in Digital Sciences

(Repeatable for credit) Independent study carried out by a student under the supervision of a faculty member. Subject content, objectives, assignments, and evaluation methods may vary. Prerequisites: graduate standing and special approval.

<table>
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<tr>
<th>Credit hours</th>
<th>Other hours</th>
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<tbody>
<tr>
<td>1.000 TO 3.000</td>
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</table>

Levels: Graduate  
Schedule Types: Individual Investigation

Digital Sciences Department
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisites</th>
<th>Credit hours</th>
<th>Lecture hours</th>
</tr>
</thead>
</table>
| ECED 10120  | INTRODUCTION TO EARLY CHILDHOOD SERVICES                         | Orientation to the field of early childhood education: historical and present day programs and services for young children 0-8. Prerequisite: None.                                                          | 2.000 Credit hours  
2.000 Lecture hours                                                                                                  |              |               |
|             |                                                                 |                                                                                                                                                                                                            | Levels: Undergraduate  
Schedule Types: Lecture                                                                                           |              |               |
|             |                                                                 | Teaching Learning and Curricul Department                                                                                                                                                                  |                                                                                                                |              |               |
| ECED 20163  | UNDERSTANDING YOUNG CHILDREN: TYPICAL AND ATYPICAL PATHWAYS      | Growth and development of young children from birth to age eight as it occurs along both typical and atypical pathways. Prerequisites: ECED 10120; and special approval. Coerequisites: ECED 30134 and 30164 and 40145. Pre or Corequisite: SPED 23000; and admission to advanced study. | 3.000 Credit hours  
3.000 Lecture hours                                                                                                 |              |               |
|             |                                                                 |                                                                                                                                                                                                            | Levels: Undergraduate  
Schedule Types: Lecture                                                                                           |              |               |
|             |                                                                 | Teaching Learning and Curricul Department                                                                                                                                                                  |                                                                                                                |              |               |
|             |                                                                 | Course Attributes:                                                                                                                             | TAG - Education                                                                                               |              |               |
| ECED 30123  | LANGUAGE AND LITERACY FOR THE PRESCHOOL CHILD                    | (Equivalent to ECET 22130) An examination of the process of language and literacy development in preschool children. The course focuses on how preschool teachers integrate knowledge of development with early school and family literacy learning. Prerequisite: admission to advanced study. Corequisite: ECED 30142 and ECED 30147 and ECED 40165 and ECED 40192 (ECED Block II). | 3.000 Credit hours  
3.000 Lecture hours                                                                                                 |              |               |
|             |                                                                 |                                                                                                                                                                                                            | Levels: Undergraduate  
Schedule Types: Lecture                                                                                           |              |               |
|             |                                                                 | Teaching Learning and Curricul Department                                                                                                                                                                  |                                                                                                                |              |               |
| ECED 30134  | INTEGRATED EXPRESSIVE ARTS AND SOCIAL STUDIES IN PRESCHOOL       | Young children's development in the expressive arts and social studies; implications for development of the environment, integrated curriculum and teaching methods for preschool children. Prerequisite: admission to advanced study. Corequisites: ECED 20163 and ECED 30164 and ECED 40145 (ECED Block I). | 3.000 Credit hours  
3.000 Lecture hours                                                                                                 |              |               |
|             |                                                                 |                                                                                                                                                                                                            | Levels: Undergraduate  
Schedule Types: Lecture                                                                                           |              |               |
|             |                                                                 | Teaching Learning and Curricul Department                                                                                                                                                                  |                                                                                                                |              |               |
| ECED 30142  | PARTNERSHIPS AND GUIDANCE FOR PRESCHOOL CHILDREN                 |                                                                                                                                                                                                            |                                                                                                                |              |               |
(Equivalent to ECET 21005) Appropriate guidance strategies set the foundation for positive experiences our youngest children in school; patterns learned early often set a foundation for primary school entry. This course addresses the concerns of guidance family partnerships and inclusive schooling with preschool children and their educators. It takes a proactive stance, helping teachers develop a constructive guidance approach. Prerequisite: admission to advanced study. Corequisites: ECED 30123 and ECED 30147 and ECED 40165 and ECED 40192 (ECED Block II).
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**ECED 30144 - INTEGRATED CURRICULUM FOR SOCIAL STUDIES**

Objectives, resources, curriculum development, methods of teaching social studies and expressive arts at kindergarten and primary levels; emphasis on developing integrated social studies curriculum; infusing multiple forms of expressive arts into integrated curriculum and assessment; and engaging professional collaboration with teachers in the field. Prerequisite: ECED 30134 and admission to advanced study. Corequisites: ECED 40142 and ECED 40105 and ECED 40107 and ECED 40123.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**ECED 30147 - EARLY EXPERIENCES IN MATHEMATICS AND SCIENCE**

Instructional psychology and materials for effective teaching of mathematics and science in preschool settings with a theoretical emphasis on cognitive development. Prerequisite: C (2.000) or better in MATH 14001 and 14002 and admission to advanced study. Corequisites: ECED 30123 and ECED 30142 and ECED 40165 and ECED 40192.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**ECED 30164 - PRESCHOOL EDUCATION**

Integrated curriculum utilizing principles of developmentally appropriate practice in settings for children under five. Field experience two mornings a week. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school or agency before the first day of the semester. Prerequisite: admission to advanced standing. Corequisites: ECED 20163 and ECED 30134 and ECED 40145 (ECED Block I).
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Teaching Learning and Curricul Department
ECED 40092 - INTEGRATED FIELD EXPERIENCES

(Repeatable for credit) Participation in experiences offering opportunity to plan and teach reading, language arts, integrated content units and observe students in early childhood classrooms. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned schoolagency before the first day of the semester in which student teaching internship will take place. Prerequisites: admission to advanced study. Corequisites: ECED 40114 and ECED 40126 and ECED 40127 and ECED 40147.
3.000 Credit hours
9.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Teaching Learning and Curricul Department

Course Attributes:
Experiential Learning Requirem

ECED 40093 - VARIABLE TITLE WORKSHOP IN EARLY CHILDHOOD EDUCATION

(Repeatable for credit) (Cross-listed with ECED 50093 and ECED 70093) Topics of special interest to students desiring to intensify their knowledge in particular areas. Presenters include Kent early childhood faculty members and may include experts from outside agencies and other institutions. S u/graded. Prerequisite: Permission.
1.000 TO 5.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Workshop

Teaching Learning and Curricul Department

ECED 40105 - APPROPRIATE PHONICS INSTRUCTION FOR KINDERGARTEN AND PRIMARY CHILDREN

(Cross-listed with ECED 50105) An examination of phonics in early reading and writing development, effective strategies for teaching and assessing phonics appropriate for kindergarten and primary grade children. Prerequisite: ECED 30123 and admission to advanced study. Corequisites: ECED 30144 ECED 40107 and ECED 40123 and ECED 40142 (Block III).
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

ECED 40107 - TEACHING MATHEMATICS: EARLY YEARS I

Instructional psychology and materials for effective teaching of mathematics in grades K-1 with a theoretical emphasis on cognitive development. Prerequisite: ECED 30147 and MATH 14001 and 14002 and admission to advanced study. Corequisites: ECED 30144 and ECED 40105 and ECED 40123 and ECED 40142.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
ECED 40114 - TEACHING SCIENCE IN THE EARLY YEARS

(Cross-listed with ECED 50114) This course investigates engaging young children in inquiry-based processes of science. Emphasis is given to creating developmentally appropriate experiences in accordance to NAEYC guidelines. National and state science standards as well as the college and graduate school of education conceptual framework. Attention is focused on the use of science materials safety planning assessment and incorporating science across the curriculum. Prerequisite: ECED 30147 and admission to advanced study. Corequisites: ECED 40126 and ECED 40127 and ECED 40092 and ECED 40147 (Block IV).

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

ECED 40123 - CRITICAL INQUIRY INTO INTERATED CURRICULUM IN THE PRIMARY YEARS

(Cross-listed with ECED 50123) Theoretical and content background addressing integration of curriculum and global perspectives aligned with the International Baccalaureate Primary Years Programme. Prerequisite: Admission to advanced study. Corequisites: ECED 30144 and ECED 40105 and ECED 40107 and ECED 40142.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

ECED 40125 - INQUIRY INTO PROFESSIONAL PRACTICE

Interdisciplinary inquiry into teaching as a professional practice in ECED; emphasis on teacher as researcher. Utilization of teaching learning technologies. Prerequisite: Admission to advanced study.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

ECED 40126 - DEVELOPMENTAL READING AND WRITING:EARLY YEARS

(Cross-listed with ECED 50126) This course builds on work begun in 40105. It explores how teachers support primary children's literacy development through small group strategic instruction based on formative assessments. Prerequisites: ECED 40105 and admission to advanced study. Corequisites ECED 40114 and ECED 40127 and ECED 40092 and ECED 40147.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
ECED 40127 - DEVELOPING A BALANCED LITERACY PROGRAM

This course expands on the previous three literacy courses to explore how research-based instruction requires a balance of literacy learning formats; an integration with learning in the content areas and is based on assessment of individual children's reading and writing abilities. Prerequisites: ECED 40105 and admission to advanced study. Corequisites: ECED 40114 and ECED 40126 and ECED 40092 and ECED 40147.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

ECED 40142 - HOME-SCHOOL-COMMUNITY-PARTNERSHIPS IN DIVERSE CONTEXTS

(Cross-listed with ECED 50142) Approaches to parent and community involvement in the education and welfare of children are examined, applied, and discussed. Focuses are theories, policies, practices, skills, and knowledges of partnership building in educational settings. An emphasis on differentiation of practices for diverse communities is applied to teaching and learning in the primary grades. Prerequisite: admission to advanced study. Corequisite: ECED 30144 and ECED 40105 and 40107 and 40123.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

ECED 40145 - MUSIC AND RHYTHMS IN PRE-PRIMARY EDUCATION

(Cross-listed with ECED 50145) Music and rhythms for preprimary children. Optional course intended for majors in early childhood education or other persons desiring additional work with preprimary children. Prerequisite: admission to advanced study. Corequisites: ECED 20163 and ECED 30134 and ECED 30164 (ECED Block I).

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

ECED 40147 - TEACHING MATHEMATICS: EARLY YEARS II

Instructional psychology and materials for effective teaching of mathematics in grades K-3 with a theoretical emphasis on cognitive development. Prerequisite: C or better in MATH 14001 and 14002 and admission to advanced study. Corequisites: ECED 40114 and 40126 and 40127 and 40092 (Block IV).

3.000 Credit hours
3.000 Lecture hours
ECED 40151 - GUIDANCE OF YOUNG CHILDREN

Principles and practices of appropriate guidance for young children, intervention strategies, resources and materials for guidance. Prerequisite: admission to advanced study. Corequisites: ECED 40105 and 40107 and 40142 and CULT 29535.

3.000 Credit hours
3.000 Lecture hours

ECED 40165 - INTEGRATED APPLICATION OF PRESCHOOL CURRICULUM

(Equivalent to ECET 22140) Internship in preschool. Advanced integrated preschool curriculum utilizing principles of developmentally appropriate practice focusing on infant toddler and preschool age children. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school-agency before the first day of the semester in which student teaching internship will take place. Prerequisite: ECED 30164. Corequisites: ECED 30123 and ECED 30142 and ECED 30147 and ECED.

3.000 Credit hours
3.000 Lecture hours

ECED 40192 - INTERNSHIP IN PRESCHOOL

(Equivalent to ECET 22150) Internship in preschool settings, full day for fifteen weeks. Prerequisite: ECED 30164 and admission to advanced study; and Official valid certification of Child Safety Training, approved Basic Life Support and A.L.I.C.E. Training must be presented to the campus office of clinical experience or designated faculty/staff at Regional campuses as prerequisite for student teaching. Corequisites: ECED 30123 and ECED 30142 and ECED 30147 and ECED 40165

4.000 TO 6.000 Credit hours
20.000 TO 30.000 Other hours

ECED 40196 - INDIVIDUAL INVESTIGATION IN EARLY CHILDHOOD EDUCATION

(Repeatable for credit) Open to seniors in ECED. Intensive individual study on an early childhood topic selected by student and adviser. Prerequisite: Admission to advanced study and special approval.
### ECED 40292 - INTERNSHIP IN KINDERGARTEN/PRIMARY

(Repeatable for credit) Internship in grades K-3, full day for 15 weeks. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school-agency before the first day of the semester in which student teaching internship will take place. Prerequisite: admission to advanced study; and Official valid certification of Child Safety Training, approved Basic Life Support and A.L.I.C.E. Training must be presented to the campus office of clinical experience or designated faculty/staff at Regional campuses as prerequisite for student teaching. Corequisite: ECED 40125.

1.000 TO 5.000 Credit hours
1.000 TO 5.000 Other hours

#### Levels: Undergraduate

Schedule Types: Individual Investigation

Teaching Learning and Curricul Department

### ECED 50093 - VARIABLE TITLE WORKSHOP IN EARLY CHILDHOOD EDUCATION

(Repeatable for credit) (Cross-listed with ECED 40093 and ECED 70093) Variable topic workshop in early childhood education. Prerequisite: Graduate standing and special approval.

1.000 TO 5.000 Credit hours
1.000 TO 5.000 Other hours

#### Levels: Graduate

Schedule Types: Workshop

Teaching Learning and Curricul Department

### ECED 50105 - APPROPRIATE PHONICS INSTRUCTION FOR KINDERGARTEN AND PRIMARY CHILDREN

An examination of phonics in early reading and writing development, effective strategies for teaching and assessing phonics appropriate for kindergarten and primary grade children. Prerequisite: graduate standing; and early childhood education (ECDE) major; and ECED 60167. Corequisites: ECED 50147, ECED 50114 and ECED 50126.

3.000 Credit hours
3.000 Lecture hours

#### Levels: Graduate

Schedule Types: Lecture

Teaching Learning and Curricul Department

### ECED 50114 - TEACHING SCIENCE IN THE EARLY YEARS

(Cross-listed with ECED 40114) This course investigates engaging young children in inquiry-based processes of
science. Emphasis is given to creating developmentally appropriate experiences in accordance to NAEYC guidelines. National and state science standards as well as the college and graduate school of education conceptual framework. Attention is focused on the use of science materials safety planning assessment and incorporating science across the curriculum. Prerequisite: Graduate standing in the Master of Arts in Teaching (MAT) program.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**ECED 50123 - CRITICAL INQUIRY INTO INTEGRATED CURRICULUM IN THE PRIMARY YEARS**

(Cross-listed with ECED 40123) Theoretical and content background addressing integration of curriculum and global perspectives aligned with the International Baccalaureate Primary Years Programme. Prerequisites: ECED 60113 and 60152; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**ECED 50125 - INQUIRY INTO PROFESSIONAL PRACTICE**

Interdisciplinary inquiry into teaching as a professional practice in ECED; emphasis on teacher as researcher. Utilization of teaching learning technologies. Prerequisite: admission to advanced study and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**ECED 50126 - DEVELOPMENTAL READING AND WRITING: THE EARLY YEARS**

Taken in conjunction with ECED 50105 in the MAT program. It explores how teachers support primary children's literacy development through small and whole group strategic instruction based on formative assessments. Prerequisite: admission to the ECED MAT program. Corequisites: ECED 50105 and 50147 and 50114 and 50126.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**ECED 50142 - HOME, SCHOOL AND COMMUNITY RELATIONS**

(Cross-listed with ECED 40142) Approaches to parent and community involvement in the education and welfare of children. Understanding of role of community agencies and organizations. Prerequisite: Graduate standing.

3.000 Credit hours
ECED 50145 - MUSIC AND RHYTHMS IN PREPRIMARY EDUCATION

(Cross-listed with ECED 40145) Comprehensive coverage of music and rhythms for preprimary child. Intended for early childhood education majors or other persons desiring additional work in music with preprimary children. Prerequisite: Special approval from instructor. Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

ECED 50147 - TEACHING MATHEMATICS: EARLY YEARS

Instructional psychology and materials for effective teaching of mathematics in prekindergarten through grade three with a theoretical emphasis on cognitive development. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

ECED 50153 - ORGANIZATION AND SUPERVISION OF EARLY CHILDHOOD CENTERS

Basic guidelines for establishing and supervising early childhood settings for infants, preschool and school age children. Prerequisite: Grading standing and special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

ECED 60101 - CONSTRUCTIVIST TEACHING IN EARLY CHILDHOOD CLASSROOMS

Theorists and researchers with a constructivist orientation will be examined in relationship to teacher beliefs. The course will focus on constructivist practices emphasizing child sensitive curriculum and teaching practices. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department
**ECED 60102 - DEVELOPING A BALANCED LITERACY PROGRAM**

An examination of own teaching practice focusing on assessment strategies to inform decision making for individual children and evaluation strategies to fine tune a balanced literacy program. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

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**ECED 60110 - TEACHING HUMANITIES: EARLY YEARS**

Looking at Humanities through the lens of a young child’s experience in learning with a focus on visual thinking and expression, music and movement. Prerequisite: admission to advanced study and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

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**ECED 60112 - HUMANITIES FOR CHILDREN**

(Cross-listed with ECED 70112) Relevance of humanities as applied to education of young children. Prerequisite: Graduate standing.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

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**ECED 60113 - PRESCHOOL EDUCATION**

(Cross-listed with ECED 70113) In-depth study of curriculum development in preschool programs. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

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**ECED 60145 - TEACHING SOCIAL STUDIES: EARLY YEARS**

Involves the systematic study of the theories, methods, and materials necessary to successfully teach social studies to diverse populations of pre-Kindergarten and elementary school students growing up in a global society. The course will consider aspects of the history of social studies and theory and research in social education as a background for understanding methods and materials. Prerequisite: graduate standing.

3.000 Credit hours
ECED 60151 - SOCIOMORAL ENVIRONMENT IN EARLY CHILDHOOD EDUCATION

(Cross-listed with ECED 70151) Children's social and moral development will be explored in relationship to the context of primary classrooms. Children's social problem-solving, friendship making, guidance strategies and interventions, building and facilitating classroom communities and promoting caring classrooms will be the focus of this course. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

ECED 60152 - APPLICATION OF SELECTED THEORETICAL PRINCIPLES TO THE DEVELOPMENT OF YOUNG CHILDREN

(Cross-listed with ECED 70152) Examination of theories pertaining to child development which have special relevance in understanding and meeting developmental needs of young children. Application of selected theoretical principles to child development. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

ECED 60158 - RECONCEPTUALIZING EARLY CHILDHOOD CURRICULUM

(Cross-listed with ECED 70158) Course examines postmodern understanding of early childhood education curricula in relationship to teaching (instruction-oriented teaching vs. pedagogy-based teaching). Social, historical, legal, political, international and cultural issues that have affected early childhood education curricula practices will be critically examined. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

ECED 60160 - TYPICAL AND ATYPICAL DEVELOPMENT IN YOUNG CHILDREN

(Cross-listed with SPED 63955) Overview of typical/atypical development pathways age three to grade three: theories of behavior, implications of atypical development on play/learning; development within ecological framework. Prerequisite: Graduate standing and special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department
ECED 60167 - LANGUAGE AND LITERACY: UNDERSTANDING DEVELOPMENT

(Cross-listed with ECED 70167) The development of language in children from birth through age eight with a focus on the process of typical language development and the diversity of multi-cultural language. Topics specifically related to classroom teaching include the assessment of language delays and disorders and strategies for connecting oral language to literacy in preschool. Prerequisite: Graduate standing. Corequisite ECED 60152.

3.000 Credit hours
3.000 Lecture hours

ECED 60199 - THESIS I

Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester distributed over several semesters if desired. Prerequisite: Graduate standing and special approval.

2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

ECED 60299 - THESIS II

Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: ECED 60199. Graduate standing.

2.000 Credit hours
2.000 Other hours

ECED 67291 - SEMINAR IN EARLY CHILDHOOD EDUCATION

(Repeatable for credit) (Cross-listed with ECED 77291) Seminar in early childhood education. Prerequisite: Graduate standing and special approval.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Graduate
Schedule Types: Lecture
Teaching Learning and Curricul Department

Levels: Graduate
Schedule Types: Masters Thesis
Teaching Learning and Curricul Department

Levels: Graduate
Schedule Types: Masters Thesis
Teaching Learning and Curricul Department

Levels: Graduate
Schedule Types: Seminar
Teaching Learning and Curricul Department
(Repeatable for credit) (Cross-listed with ECED 77292) Practicum/internship in early childhood education. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school/agency before the first day of the semester in which student teaching/ internship will take place. Prerequisite: Graduate standing; and Official valid certification of Child Safety Training, approved Basic Life Support and A.L.I.C.E. Training must be presented to the campus office of clinical experience or designated faculty/staff at Regional campuses as prerequisite for student teaching.

1.000 TO 10.000 Credit hours
3.000 TO 30.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Teaching Learning and Curricul Department

(Repeatable for credit) (Cross-listed with ECED 77295) Special topics in early childhood education. Prerequisite: Graduate standing and special approval.

1.000 TO 5.000 Credit hours
1.000 TO 5.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

(Repeatable for credit) Individual investigation in early childhood education. Prerequisite: Graduate standing and permission.

1.000 TO 5.000 Credit hours
1.000 TO 5.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Teaching Learning and Curricul Department

(Repeatable for credit) Research in early childhood education. Prerequisite: Graduate standing and special approval.

1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

Teaching Learning and Curricul Department

(Repeatable for credit) (Cross-listed with ECED 40093 and ECED 50093) Prerequisite: Doctoral standing and special approval.
1.000 TO 5.000 Credit hours
1.000 TO 5.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Teaching Learning and Curricul Department

**ECED 70101 - CONSTRUCTIVIST TEACHING IN EARLY CHILDHOOD CLASSROOMS**

Theorists and researchers with a constructivist orientation will be examined in relationship to teacher beliefs. The course will focus on constructivist practices emphasizing child-sensitive curriculum and teaching practices. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**ECED 70102 - DEVELOPING A BALANCED LITERACY PROGRAM**

An examination of own teaching practice focusing on assessment strategies to inform decision-making for individual children and evaluation strategies to fine tune a balanced literacy program. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**ECED 70113 - PRESCHOOL EDUCATION**

(Cross-listed with ECED 60113) In-depth study of curriculum development in preschool programs. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**ECED 70151 - SOCIOMORAL ENVIRONMENT IN EARLY CHILDHOOD EDUCATION**

(Cross-listed with ECED 60151) Children's social and moral development will be explored in relationship to the context of primary classrooms. Children's social problem-solving, friendship-making, guidance strategies and interventions, building and facilitating classroom communities and promoting caring classrooms will be the focus of this course. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
ECED 70152 - APPLICATION OF SELECTED THEORETICAL PRINCIPLES TO THE DEVELOPMENT OF YOUNG CHILDREN

(Cross-listed with ECED 60152) Examination of theories pertaining to child development which have special relevance in understanding and meeting developmental needs of young children. Application of selected theoretical principles to child development. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

ECED 70158 - RECONCEPTUALIZING EARLY CHILDHOOD CURRICULUM

(Cross-listed with ECED 60158) Course examines postmodern understanding of early childhood education curricula in relationship to teaching (instruction-oriented teaching vs. pedagogy-based teaching). Social, historical, legal, political, international and cultural issues that have affected early childhood education curricula practices will be critically examined. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

ECED 77291 - SEMINAR IN EARLY CHILDHOOD EDUCATION

(Repeatable for credit) (Cross-listed with ECED 67291) Seminar in ECED. Prerequisites: Doctoral standing and special approval.
1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Teaching Learning and Curricul Department

ECED 77292 - PRACTICUM AND INTERNSHIP IN EARLY CHILDHOOD EDUCATION

(Repeatable for credit) (Cross-listed with ECED 67292) Practicum/internship in ECED. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school/agency before the first day of the semester in which student teaching/internship will take place. Prerequisite: Doctoral standing and special approval.
1.000 TO 10.000 Credit hours
3.000 TO 30.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Teaching Learning and Curricul Department
ECED 77295 - SPECIAL TOPICS IN EARLY CHILDHOOD EDUCATION

(Repeatable for credit) (Cross-listed with ECED 67295) Special topics in ECED. Prerequisite: Doctoral standing and special approval.
1.00 TO 5.00 Credit hours
1.00 TO 5.00 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

ECED 80291 - ADVANCED SEMINAR IN EARLY CHILDHOOD EDUCATION

(Repeatable for credit) Advanced seminar in ECED. Prerequisite: Doctoral standing and permission.
1.00 TO 4.00 Credit hours
1.00 TO 4.00 Other hours

Levels: Graduate
Schedule Types: Seminar

Teaching Learning and Curricul Department

ECED 80295 - SPECIAL TOPICS IN EARLY CHILDHOOD EDUCATION

(Repeatable for credit) Special topics in ECED. Prerequisite: Doctoral standing and special approval.
1.00 TO 5.00 Credit hours
1.00 TO 5.00 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

ECED 80298 - RESEARCH IN EARLY CHILDHOOD EDUCATION

(Repeatable for credit) Research in ECED. Prerequisite: Doctoral standing.
1.00 TO 15.00 Credit hours
1.00 TO 15.00 Other hours

Levels: Graduate
Schedule Types: Research

Teaching Learning and Curricul Department

ECET 21005 - PARTNERSHIPS IN CHILD GUIDANCE

(Equivalent to ECED 30142) The course's foundation is the understanding that children are a part of a family, culture and community. Students gain knowledge and skills to implement developmentally appropriate child guidance strategies and learn cross-cultural communication skills. Twelve field experience hours required. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school/agency before the first day of the semester in which student teaching/internship will take place. Prerequisite: ECED 10120 and ECED 20163.
3.00 Credit hours
3.00 Lecture hours
**ECET 21010 - INFANT/TODDLER CURRICULUM AND SERVICES**

Infant/toddler development, environments and curriculum; theoretical perspectives; family involvement; community involvement; community resources, collaboration and advocacy; 38 hours of field experience required. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school/agency before the first day of the semester in which student teaching/internship will take place. Prerequisite: ECED 10120 and 20163.

3.000 Credit hours
3.000 Lecture hours

**ECET 21095 - SPECIAL TOPICS IN EARLY CHILDHOOD EDUCATION TECHNOLOGY**

(Repeatable for credit) Intensive study of significant current issues in the early childhood education field. Prerequisite: Departmental permission.

1.000 TO 3.000 Credit hours
3.000 Lecture hours

**ECET 21096 - INDIVIDUAL INVESTIGATION IN EARLY CHILDHOOD EDUCATION TECHNOLOGY**

(Repeatable for a maximum of 6 credit hours) Analysis and special research in the early childhood education field. Prerequisite: departmental special approval.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

**ECET 22000 - PRESCHOOL CURRICULUM**

Preschoolers' development, environments and curriculum; theoretical perspectives; family involvement; community resources, collaboration and advocacy; 38 hours of field experience required. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school/agency before the first day of the semester in which student teaching/internship will take place. Prerequisite: ECET 21010 and ECED 20163.

3.000 Credit hours
3.000 Lecture hours
### ECET 22130 - EMERGING LITERACY

(Equivalent to ECED 30123) Theoretical and practical issues in acquisition and development of literacy. Developmentally appropriate instructional practices, integration across the curriculum, individual differences and assessment are addressed. Field hours required. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school/agency before the first day of the semester in which student teaching/ internship will take place. Prerequisite: ECED 10120 and 20163.

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### ECET 22140 - STUDENT TEACHING SEMINAR

( Equivalent to ECED 40165) A reflective approach to make student teaching experience more valuable. Students develop and implement developmentally appropriate curriculum and assessment for young children, prepare a professional development plan and develop a professional portfolio. Prerequisite: departmental special approval. Corequisite: ECET 22150.

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### ECET 22192 - STUDENT TEACHING

( Equivalent to ECED 40192) Student spends 180 hours at an approved preschool program under the supervision of an ECET or ECED faculty member or supervising teacher. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned schoolagency before the first day of the semester in which student teaching/internship will take place. Prerequisite: departmental special approval; and official valid certification of Child Safety Training, approved Basic Life Support and A.L.I.C.E. Training must be presented to the campus office of clinical experience or designated faculty or staff at Regional campuses as prerequisite for student teaching. Prerequisite: special approval. Corequisite: ECET 22140.

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ECON 12060 - PERSONAL FINANCE

Examines economic issues and problems of everyday life. Goal is to enable individuals to analyze their personal finances in order to learn how to get the most out of their income, increase income through a better understanding of possible investments, and protect what they have through selecting appropriate insurance. Topics covered include budgeting and financial planning, federal income taxes, insurance, borrowing, and investment principles and strategies. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Economics Department

ECON 22060 - PRINCIPLES OF MICROECONOMICS

Principles and policies affecting prices, including factor incomes, under alternative market structures. Tools developed to examine social problems, including poverty, crime, pollution and international relations. Prerequisite: MATH 00007 or one course from MATH 00023-49999; or ALEKS math assessment score of 45; or MATH ACT 22 or MATH SAT 520.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Economics Department

Course Attributes:
Kent Core-Social Sciences, LER-Social Sciences, TAG - Social/Behavior Sciences, Trnfr Module-Social Sciences

ECON 22061 - PRINCIPLES OF MACROECONOMICS

Principles and policies affecting aggregate production, consumption, investment and government expenditures. Includes role of money, the banking system, inflation, unemployment and economic growth. Prerequisite: ECON 22060.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Economics Department

Course Attributes:
Kent Core-Social Sciences, LER-Social Sciences, TAG - Social/Behavior Sciences, Trnfr Module-Social Sciences

ECON 32025 - MONEY, CREDIT AND BANKING

Organization of our money, credit and banking system principles and problems of monetary policy. Not open to students who have completed ECON 32030. Prerequisite: ECON 22060 and 22061.

3.000 Credit hours
3.000 Lecture hours
ECON 32040 - INTERMEDIATE MICROECONOMIC THEORY AND APPLICATIONS

The study of individual choices under conditions of relative scarcity, and their consequences for prices and the allocation of resources in the economic system. Develops the analytical and theoretical tools pertinent in determining how scarce resources are allocated among competing wants and demonstrates how these tools are used in real world applications. Prerequisite: ECON 22060 and 22061.
3.000 Credit hours
3.000 Lecture hours

ECON 32041 - INTERMEDIATE MACROECONOMIC THEORY AND POLICY

Analysis of how an economy such as the United States operates from an aggregate perspective. The determination for the level of income, employment, inflation, international trade and economic growth is analyzed. Discussion of monetary and fiscal policies. Prerequisite: ECON 22060 and 22061.
3.000 Credit hours
3.000 Lecture hours

ECON 32050 - APPLIED ECONOMETRICS

Application of econometric methods such as regression analysis to a variety of economics questions. Prerequisite: MATH 11012 or MATH 12002; and ECON 22060 and 22061 and MIS 24056.
3.000 Credit hours
3.000 Lecture hours

ECON 32070 - LABOR PROBLEMS

Surveys of the major institutions, features and functioning of the labor market as well as some of its outstanding problems. Does not count toward economics major or minor. Not open to students who have completed ECON 42072. Prerequisite: ECON 22060 and 22061.
3.000 Credit hours
3.000 Lecture hours
ECON 32082 - INTRODUCTION TO MANAGERIAL ECONOMICS

Combines economic theory and quantitative analysis to develop resource-allocation decision-making skills which enable managers to evaluate problems, identify possible solutions and finally implement and monitor the best alternative to accomplish their stated objectives. Covers such topics as supply and demand, consumer theory, production, costs, contracts, game theory, principal-agent problems, and the basic economic models of perfect competition, oligopoly, monopolistic, competition and monopoly. Cannot be taken by economics majors. Not open to students who have completed ECON 32040. Prerequisite: ECON 22060.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

ECON 32083 - THE ECONOMICS OF POVERTY

Nature and causes of poverty in United States. Analysis of impact of poverty upon economy and study of measures both real and potential for alleviating it. Prerequisite: ECON 22060.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Course Attributes:
Diversity Course-Domestic

ECON 32084 - ECONOMICS OF THE ENVIRONMENT

Examines economic theory of environmental and resource economics in a fashion that is understandable by students with varied backgrounds in economics. Emphasis on microeconomic theory and its application to environmental issues. Topics covered include "market failure" and its impact on the environment; cost benefit analysis; and input-output analysis. Designed for those interested in the environment or who may be planning careers in environmental or natural sciences. Prerequisite: ECON 22060.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

ECON 42065 - PROBLEMS OF MONETARY AND FISCAL POLICY

Analysis of objectives, techniques and economic effects of monetary and fiscal policies. Prerequisite: ECON 32041.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
**ECON 42068 - INDUSTRIAL ORGANIZATION AND PUBLIC POLICY**

(Cross-listed with ECON 52068) Theoretical, empirical and critical examination of structure, operation and performance of industrial markets in American economy. Prerequisite: ECON 32040.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Economics Department

**ECON 42072 - ECONOMICS OF LABOR MARKETS**

(Cross-listed with ECON 52072) The economic analysis of the decisions of workers and firms in determination of wages and employment. Topics include labor supply decisions, marginal productivity theory, discrimination, demand for education, effects of trade unions, immigration and growing wage inequality. Prerequisite: ECON 32040.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Economics Department

**ECON 42075 - INTERNATIONAL ECONOMIC RELATIONS**

Principles, problems and policies of international economic relations with extensive references to the United States, Western Europe, Latin America and former communist countries. Covers international aspects of interdependency, cooperation and multinational institutions. Prerequisite: ECON 22060 and 22061.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Economics Department

**ECON 42076 - ECONOMIC DEVELOPMENT**

(Cross-listed with ECON 52076) Analysis of nature of significance of barriers to and future potential for economic development of a nation. Special emphasis on theories and strategic factors pertaining to economic growth. Prerequisite: ECON 22060 and 22061.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Economics Department
ECON 42080 - REGIONAL ECONOMICS

(Cross-listed with ECON 52080) Examines techniques of regional economic analysis to promote understanding of interregional disparities in developed nations and suggests policy alternatives for alleviating problems arising from disparities. Prerequisite: ECON 22060 and 22061.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Economics Department

ECON 42081 - URBAN ECONOMICS

(Cross-listed with ECON 52081) Application of economic principles to urban spatial patterns, economic development and public policy in housing, transportation, pollution, welfare, etc. Prerequisite: ECON 22060 and 22061.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Economics Department

ECON 42085 - PUBLIC FINANCE

(Cross-listed with ECON 52085) Examination of public expenditure and taxation policies, including the theory of public goods, collective decision making, cost-benefit analysis, equity and efficiency aspects of taxation and current government policy issues. Prerequisite: ECON 22060.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Economics Department

ECON 42086 - ECONOMICS OF HEALTH CARE

(Cross-listed with ECON 52086) Overall objective is to use economic analysis to understand and evaluate what has and is happening to the health care profession and current health care policies under consideration. Topics include issues such as Medicare, health care reform, HMOs and increasing costs in health care. Prerequisite: ECON 22060.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Economics Department

ECON 42191 - SENIOR SEMINAR IN ECONOMICS

Advanced investigation of selected topics in economic analysis and issues in economic policy. Prerequisites: ECON 32050 or MATH 40012; and ECON 32040 and 32041.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

Economics Department

Course Attributes:
Writing Intensive Course

**ECON 42291 - VARIABLE CONTENT SEMINAR IN ECONOMICS**

(Repeatable for a maximum of 12 hours) (Cross-listed with ECON 52291) Various special seminars will be announced in the schedule of classes under this course number. Prerequisite: Permission.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

Economics Department

**ECON 42292 - INTERNSHIP IN ECONOMICS**

(Repeatable for credit) Supervised practical experience in economics. May count toward the economics major electives or as a business elective. Satisfactory/unsatisfactory (S/U) graded. In-progress (IP) mark permissible. Prerequisite: Economics (ECON) major; and a minimum cumulative 2.250 GPA; and at least two of the following courses: ECON 32040, ECON 32041 or ECON 32050; and special approval.

3.000 Credit hours
9.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Economics Department

Course Attributes:
Experiential Learning Requirem

**ECON 42293 - VARIABLE TOPIC WORKSHOP IN ECONOMICS**

(Repeated registration permitted when topic varies; repeatable for a total of 18 hours) various special workshops will be announced in the schedule of classes under this course number. Prerequisite: Permission.

1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Undergraduate
Schedule Types: Workshop

Economics Department

**ECON 42295 - SPECIAL TOPICS IN ECONOMICS**

(Repeatable for a maximum of 9 credit hours) (Cross-listed with ECON 52295) Various special topics will be announced in the schedule of classes under this course number. Prerequisite: special approval.

3.000 Credit hours
ECON 42296 - INDIVIDUAL INVESTIGATION IN ECONOMICS

(Repeatable for credit) Independent study done under the supervision of a faculty member. Written approval of supervising faculty member and department chair required prior to registration. Prerequisite: Senior economics major; special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

ECON 42298 - RESEARCH IN ECONOMICS

(Repeatable for credit) Research project done under the supervision of a faculty member. Written approval of supervising faculty member and department chair required prior to registration. Prerequisite: Senior economics major; special approval.
1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

ECON 42299 - SENIOR PROJECT

(Repeatable for credit) Thesis or independent study project done under the supervision of a faculty member. Written approval of supervising faculty member and department chair required prior to registration. Prerequisite: Senior economics major; special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

ECON 52065 - PROBLEMS OF MONETARY AND FISCAL POLICY

Analysis of objectives, techniques and economic effects of monetary and fiscal policies. Prerequisite: ECON 32041 or ECON 62021; and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
<table>
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<tr>
<th>Course Code</th>
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<th>Description</th>
<th>Credits</th>
<th>Lecture Hours</th>
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</thead>
<tbody>
<tr>
<td>ECON 52068</td>
<td><strong>INDUSTRIAL ORGANIZATION AND PUBLIC POLICY</strong></td>
<td>Theoretical, empirical and critical examination of structure, operation and performance of industrial markets in American economy. Prerequisite: Graduate standing.</td>
<td>3.000</td>
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<tr>
<td>ECON 52072</td>
<td><strong>ECONOMICS OF LABOR MARKETS</strong></td>
<td>The economic analysis of the decisions of workers and firms in determination of wages and employment. Topics include labor supply decisions, marginal productivity theory, discrimination, demand for education, effects of trade unions, immigration and growing wage inequality. Prerequisite: ECON 32040; graduate standing; for students that did not attend Kent State University for their undergraduate degree, please contact department for approval.</td>
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<td>3.000</td>
</tr>
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<td>ECON 52076</td>
<td><strong>ECONOMIC DEVELOPMENT</strong></td>
<td>Analysis of nature and significance of barriers to and future potential for economic development of a nation. Special emphasis on theories and strategic factors pertaining to economic growth. Prerequisite: Graduate standing.</td>
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<td>ECON 52080</td>
<td><strong>REGIONAL ECONOMICS</strong></td>
<td>Examines techniques of regional economic analysis to promote understanding of interregional disparities in developed nations and suggests policy alternatives for alleviating problems arising from disparities. Prerequisite: Graduate standing.</td>
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ECON 52081 - URBAN ECONOMICS

(Cross-listed with ECON 42081) Application of economic principles to urban spatial patterns, economic development, and public policy in housing, transportation, pollution, welfare, etc. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Economics Department

ECON 52085 - PUBLIC FINANCE

(Cross-listed with ECON 42085) Examination of public expenditure and taxation policies including the theory of public goods, collective decision making, cost-benefit analysis, equity and efficiency aspects of taxation and current government policy issues. Prerequisite: ECON22060; graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Economics Department

ECON 52086 - ECONOMICS OF HEALTH CARE

(Cross-listed with ECON 42086) Overall objective is to use economic analysis to understand and evaluate what has and is happening to the health care profession and current health care policies under consideration. Topics include issues such as Medicare, health care reform, HMO's and increasing costs in health care. Prerequisite: Graduate standing and ECON 62022.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Economics Department

ECON 52291 - VARIABLE CONTENT SEMINAR IN ECONOMICS

(Repeatable for a maximum of 12 credit hours) (Cross-listed with ECON 42291) Various special seminars will be announced in the schedule of classes under this course number. Prerequisite: Special approval and graduate standing.
1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Economics Department

ECON 52293 - VARIABLE TOPIC WORKSHOP IN ECONOMICS

(Repeatable for a maximum of 18 credit hours) Various special workshops will be announced in the schedule of
classes under this course number. Prerequisite: Special approval and graduate standing.
1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Economics Department

**ECON 52295 - SPECIAL TOPICS IN ECONOMICS**

(Repeatable for a maximum of 9 credit hours) (Cross-listed with ECON 42295) Various special topics will be announced in the schedule of classes under this course number. Prerequisite: Special approval and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Economics Department

**ECON 62010 - SURVEY OF ECONOMICS**

Survey of basic economic concepts and methods of analysis of both micro- and macroeconomics. Emphasis is placed on the use and relevance of economic concepts and tools in business decision-making. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Economics Department

**ECON 62015 - ECONOMICS OF INFORMATION**

Introduction to microeconomic theory and decision-making and its applications to the information economy. Overview of the economics of information. Consumer behavior and production theory; the demand for information; information as a factor of production; information costs and pricing. Case studies in the information industry. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Economics Department

**ECON 62021 - BUSINESS CONDITIONS ANALYSIS AND PUBLIC POLICY**

(Cross-listed with BAD 72021) Analysis of forces determining economic growth, employment, inflation and international competitiveness with emphasis on understanding the business cycle and government stabilization policies. Prerequisite: MIS 64005 (may be taken concurrently). Graduate standing.
3.000 Credit hours
3.000 Lecture hours
ECON 62022 - MANAGERIAL ECONOMICS

(Cross-listed with BAD 72022) Uses economic theory and quantitative methodologies to develop decision-making skills which enable managers of local, national and multinational companies to evaluate problems and allocate resources efficiently. Prerequisite: MIS 64005; and MATH 11012 or MATH 12002 or ECON 62010; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Economics Department

ECON 62050 - MICROECONOMIC THEORY I

(Cross-listed with BAD 72050) Comprehensive analysis of methodology of economics, consumer behavior production and costs the firm, markets and welfare economics. Prerequisite: ECON 62022. (It would be useful if the student had some facility in integral and differential calculus.) Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Economics Department

ECON 62051 - MACROECONOMIC THEORY I

(Cross-listed with BAD 72051) Analysis of the determination of the level of income, employment inflation economic growth consumption investment money demand and supply the international sector and economic policy are discussed. Prerequisite: ECON 62021; ECON 62022; graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Economics Department

ECON 62054 - ECONOMETRICS I

(Cross-listed with BAD 72054) Introduction to problems and methods of the empirical estimation of economic relationships. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

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<tr>
<td>ECON 62055</td>
<td>ECONOMETRICS II</td>
<td>Covers generalized linear regression, mixed estimation, simultaneous equation systems, their identification and estimation by single equation and systems estimation. Prerequisite: ECON 62054 and graduate standing.</td>
<td>3.000 Credit hours 3.000 Lecture hours</td>
<td>3.000</td>
<td>Lecture</td>
</tr>
<tr>
<td>ECON 62056</td>
<td>TIME SERIES ANALYSIS</td>
<td>Covers various linear and non-linear time series models, market risk and value at risk (VAR). Students will gain hands on-experience with all models learned in the course. This course uses advanced analytical software and hardware on the financial engineering trading floor. Prerequisite: Special approval of instructor and graduate standing.</td>
<td>3.000 Credit hours 3.000 Lecture hours</td>
<td>3.000</td>
<td>Lecture</td>
</tr>
<tr>
<td>ECON 62061</td>
<td>MONETARY THEORY AND POLICY</td>
<td>A study of the nature and definition of money, its relationship to prices, output, employment, and interest rates and problems related to the conduct of monetary policy. Prerequisite: ECON 62021; graduate standing.</td>
<td>3.000 Credit hours 3.000 Lecture hours</td>
<td>3.000</td>
<td>Lecture</td>
</tr>
<tr>
<td>ECON 62072</td>
<td>ECONOMICS OF LABOR MARKETS</td>
<td>The economic analysis of the decisions of workers and firms in determination of wages and employment. Topics include labor supply decisions, marginal productivity theory, discrimination, demand for education, effects of trade unions, immigration and wage inequality. Prerequisites: ECON 32040 or ECON 62022; and ECON 62054 or MIS 84023; and graduate standing.</td>
<td>3.000 Credit hours 3.000 Lecture hours</td>
<td>3.000</td>
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<tr>
<td>ECON 62075</td>
<td>INTERNATIONAL TRADE</td>
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(Cross-listed with BAD 72075) Study of modern international trade theory and policy, including free trade areas, international trade organizations, current issues in international trade and the effect of international trade on domestic policy. Prerequisite: ECON 62021 and ECON 62022; graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Economics Department

**ECON 62076 - INTERNATIONAL FINANCE**

(Cross-listed with BAD 72076) Study of the international monetary relations between nations, including the determination of exchange rates, managed exchange rate policies, balance of payments crises, optimum currency areas, and international capital flows. Prerequisite: ECON 62021; graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Economics Department

**ECON 62077 - ECONOMIC PROBLEMS OF DEVELOPING AREAS**

In-depth analysis of selected topics and issues in development economics. Prerequisite: ECON 52076. Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Economics Department

**ECON 62092 - INTERNSHIP IN ECONOMICS**

(Repeatable for credit) Supervised practical experience in economics. Students must have a minimum 3.000 GPA in the economics major within the MAE degree and completed 4 courses from the MAE. Prerequisite: Admitted to the Master of Arts in Economics program; special approval.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Economics Department

**ECON 62095 - SPECIAL TOPICS IN ECONOMICS**

(Repeatable 3 times for credit) Various special topics will be announced in the Schedule of Classes under this course number. Prerequisite: special approval and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
**ECON 62096 - INDEPENDENT STUDY**

(Repeatable for credit) Independent study on a particular project or sequence of subjects. Maximum of 6 semester hours of work may be earned in independent study although no more than 3 hours in any one semester. Prerequisite: Special approval and graduate standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Economics Department

**ECON 62098 - RESEARCH**

(Repeatable for credit) Research for master's students. May apply toward degree requirements if approved in advance by department. Prerequisite: Graduate standing.

1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

Economics Department

**ECON 62180 - REGIONAL ECONOMICS**

Examines techniques of regional economic analysis with the object of promoting understanding of interregional disparities in developed nations and policies for alleviating problems arising from disparities. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Economics Department

**ECON 62199 - THESIS I**

Thesis students must register for total of 6 hours, 2 to 6 hours in a single semester, distributed over several semesters if desired. Prerequisite: Special approval of adviser and graduate standing.

2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Economics Department

**ECON 62299 - THESIS II**
Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: ECON 62199 and graduate standing.

2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Economics Department

**ECON 64004 - QUANTITATIVE METHODS IN BUSINESS ADMINISTRATION I**

(Cross-listed with BAD 74004) Introduction to fundamentals of matrix algebra, differential calculus and linear programming. Both algebraic and transcendental functions are included in discussion. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Economics Department

**ECON 82024 - SEMINAR IN APPLIED ECONOMIC ANALYSIS**

Discussion and analysis of selected current economic problems confronting the economy and the business sector. Emphasis will be on applied analysis. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Seminar

Economics Department

**ECON 82072 - ECONOMICS OF LABOR MARKETS**

The economic analysis of the decisions of workers and firms in determination of wages and employment. Topics include labor supply decisions, marginal productivity theory, discrimination, demand for education, effects of trade unions, immigration and wage inequality. Prerequisites: ECON 32040 or ECON 62022; and ECON 62054 or BAD 84023; and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Economics Department

**EDAD 40093 - VARIABLE TITLE WORKSHOP IN EDAD**

(Repeatable for credit) (Cross-listed with EDAD 50093 and EDAD 70093) Prerequisite: None.

1.000 TO 5.000 Credit hours
1.000 TO 5.000 Other hours

Levels: Undergraduate
Schedule Types: Workshop
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>EDAD 50093</td>
<td>VARIABLE TITLE WORKSHOP IN EDUCATIONAL ADMINISTRATION</td>
<td>(Repeatable for credit) (Cross-listed with EDAD 40093 and EDAD 70093) Variable title workshop in educational administration. Prerequisite: Graduate standing. 1.000 TO 5.000 Credit hours 1.000 TO 5.000 Other hours</td>
<td>Graduate</td>
<td>Workshop</td>
</tr>
<tr>
<td>EDAD 60199</td>
<td>THESIS I</td>
<td>Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester distributed over several semesters if desired. Prerequisite: Graduate standing. 2.000 TO 6.000 Credit hours 2.000 TO 6.000 Other hours</td>
<td>Graduate</td>
<td>Masters Thesis</td>
</tr>
<tr>
<td>EDAD 60299</td>
<td>THESIS II</td>
<td>Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: EDAD 60199. Graduate standing. 2.000 Credit hours 2.000 Other hours</td>
<td>Graduate</td>
<td>Masters Thesis</td>
</tr>
<tr>
<td>EDAD 66492</td>
<td>INTERNSHIP IN EDUCATIONAL ADMINISTRATION</td>
<td>(Repeatable for a maximum of 6 credit hours) (Cross-listed with EDAD 76492) A field-based internship utilizing an inquiry-based learning model, requiring projects as designated by the program area faculty. Specific topics are outlined and shared at meetings prior to beginning internship. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school-agency before the first day of the semester in which student teaching internship will take place. Prerequisite: Graduate standing. 3.000 TO 6.000 Credit hours 10.000 TO 20.000 Other hours</td>
<td>Graduate</td>
<td>Practicum or Internship</td>
</tr>
<tr>
<td>EDAD 66515</td>
<td>FACILITIES PLANNING AND ADMINISTRATION</td>
<td></td>
<td>Graduate</td>
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</tbody>
</table>
(Cross-listed with EDAD 76515) Overview of facilities planning and administration, including architectural/construction management, the educational program, restoration and maintenance. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

EDAD 66517 - ADMINISTRATION AND SUPERVISION OF SPECIAL EDUCATION

(Cross-listed with EDAD 76517) Administration of educational programs for exceptional children: improvement of teacher competencies; function of special education supervisors; and special education operations at a local, state and national level. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

EDAD 66518 - LAW AND SPECIAL EDUCATION

(Cross-listed with EDAD 76518) Constitutional, statutory and case law involving handicapped infants and students; special education teachers and administrators and parents are studied. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

EDAD 66520 - SCHOOL LAW FOR TEACHERS AND PRINCIPALS

(Cross-listed with EDAD 76520) Selected principles of constitutional, statutory case and common law affecting the administration of schools generally and Ohio schools specifically. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

EDAD 66522 - PUBLIC SCHOOL FINANCE AND ECONOMICS

(Cross-listed with EDAD 76522) Analysis of national, state and local problems of collection custody and expenditure of public school funds. Prerequisite: EDAD 66526 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
EDAD 66525 - THE EDUCATIONAL PRINCIPALSHIP
(Cross-listed with EDAD 76525) Organizing and administering elementary, middle level and secondary schools. Prerequisite: EDAD 6/76526; 16 hrs of Ed Admin; graduate standing.
3.000 Credit hours
3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture

EDAD 66526 - FUNDAMENTALS OF EDUCATIONAL ADMINISTRATION
(Cross-listed with EDAD 76526) Examines theory and practice essential for administration. Skills and understanding are developed in theory goal setting staff development. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture

EDAD 66527 - SCHOOL FINANCE FOR BUILDING ADMINISTRATORS
(Cross-listed with EDAD 76527) Identification of the responsibilities of the school building administrator related to all financial operations in the school building; included are the budget process and development, student accounts, the purchase order process and fund raising and school groups. This course is a requirement for the principal license and an elective course in EDAD. Prerequisite: Major in Educational Administration - K-12 Leadership (EAKL), Higher Education and Student Personnel (EAHE) or Educational Administration-Higher Education (EDHE) and graduate standing.
3.000 Credit hours
3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture

EDAD 66529 - LEADING FOR SOCIAL JUSTICE
(Cross-listed with EDAD 76529) Centers on investigating a broad research agenda on leading for social justice within educational leadership. Provides a context for candidates to establish strong connections between what it means to lead and the primary concerns for learning and equity, which are associated with increased performance and effectiveness for American education. Candidates engage in concepts such as equity audits, border culture, hegemony, moral transformation and other concepts aligned with leading 21st century schools. Such concepts encourage school leaders to reconsider the influence of wider social, political, cultural and economic contexts in creating transformative and revolutionary schools. Prerequisite: graduate standing.
3.000 Credit hours
2.000 Lecture hours
1.000 Other hours


**EDAD 66531 - INSTRUCTIONAL LEADERSHIP**

(Cross-listed with EDAD 76531) Focuses on the administrative role pertaining to the leadership, management, and evaluation of quality and effective school classroom instruction. Building administrators are responsible for providing the resource for effective instruction, which result in student learning. The key to effective instruction at any level requires a solid grounding in curriculum theory and design. Designed to provide the tools that administrators need to oversee the development, production, monitoring and evaluation of instructional methods and strategies. Prerequisite: graduate standing.

3.000 Credit hours
2.000 Lecture hours
1.000 Other hours

**EDAD 66533 - CENTRAL OFFICE ADMINISTRATION: CURRICULUM AND PUPIL SERVICES**

(Cross-listed with EDAD 76533) Analyzes roles and responsibilities of central office personnel with an emphasis on curriculum, pupil, and support services as impacted by current educational policy, and practice and focused on impacting the achievement of all students. Prerequisite: graduate standing.

3.000 Credit hours
1.750 Lecture hours
1.250 Other hours

**EDAD 66534 - THE SUPERINTENDENCY**

(Cross-listed with EDAD 76534) Focuses on major responsibilities of board of education and superintendent. Prerequisite: EDAD 6/76526. Graduate standing.

3.000 Credit hours
3.000 Lecture hours

**EDAD 66536 - THE ADMINISTRATOR'S ROLE IN CURRICULUM DEVELOPMENT**

(Cross-listed with EDAD 76536) Focusing on the administrative role pertaining to the development, management and evaluation of a quality and effective district school classroom curriculum. Prerequisites: major in Educational Administration-K-12 Leadership (EAKL), Higher Education and Student Personnel (EAHE) or Educational Administration-Higher Education (EDHE) and graduate standing.

3.000 Credit hours
3.000 Lecture hours
EDAD 66538 - ADMINISTRATION OF SCHOOL CULTURE, POLITICS AND REFORMS

Focuses on administrative roles in assessing, leading, developing and reforming school culture. Centers on building and district administrators, who are responsible for providing the cultural frameworks and context of school culture through politics and reform efforts. The key to effective school reform requires a solid understanding of micropolitics as well as policy and practice at a state and national level. Designed to provide educational leaders with tools to assess school and district-wide cultural practices and norms as well as the skill sets to disrupt and change them. Prerequisite: graduate standing.

3.000 Credit hours
1.750 Lecture hours
1.250 Other hours

EDAD 66540 - WOMEN IN LEADERSHIP

(Cross-listed with EDAD 76540) An interactive study of women's development and its effect on their dispositions toward leadership. Provides theoretical contract to traditional management theory. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

EDAD 66542 - PRINCIPLES AND TECHNIQUES OF SUPERVISION

(Cross-listed with EDAD 76542) Principles and techniques needed by administrative specialists and supervisors and given. Research findings include changing human relations, group processes, communications, observations and conferencing skills. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

EDAD 66544 - COMMUNITY RELATIONS AND COMMUNICATION SKILLS

(Cross-listed with EDAD 76544) Centers on encouraging school leaders to consider the way in which children's learning is influenced by behaviors and perspectives of family members, school personnel and members of the larger community. Educators and school leaders have much to gain by deepening their understanding of how students learn from their family and cultural backgrounds, which fosters more inclusive school practices. Candidates investigate the influence of such collaborations and their role in upholding the ethical responsibility to promote children's welfare. Prerequisite: graduate standing.

3.000 Credit hours
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Schedule Types</th>
<th>Level</th>
<th>Department</th>
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<tbody>
<tr>
<td>EDAD 66591</td>
<td><strong>SEMINAR IN EDUCATIONAL ADMINISTRATION</strong></td>
<td>1.000 TO 4.000 Credit hours</td>
<td>Seminar</td>
<td>Graduate</td>
<td>Foundations Leadership Admin Department</td>
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<tr>
<td>EDAD 66595</td>
<td><strong>SPECIAL TOPICS IN EDUCATIONAL ADMINISTRATION</strong></td>
<td>1.000 TO 3.000 Credit hours</td>
<td>Lecture</td>
<td>Graduate</td>
<td>Foundations Leadership Admin Department</td>
</tr>
<tr>
<td>EDAD 66596</td>
<td><strong>INDIVIDUAL INVESTIGATION IN EDUCATIONAL ADMINISTRATION</strong></td>
<td>2.000 TO 4.000 Credit hours</td>
<td>Individual Investigation</td>
<td>Graduate</td>
<td>Foundations Leadership Admin Department</td>
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<td>EDAD 66598</td>
<td><strong>RESEARCH IN EDUCATIONAL ADMINISTRATION</strong></td>
<td>2.000 TO 8.000 Credit hours</td>
<td>Research</td>
<td>Graduate</td>
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<tr>
<td>EDAD 66602</td>
<td><strong>TECHNOLOGY LEADERSHIP IN EDUCATION</strong></td>
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</tbody>
</table>
(Cross-listed with EDAD 76602) Prepares educational administrators to be leaders in the advancement of the appropriate integration of technology. Current and prospective administrators increase their understanding of how technology can be used as a tools for teaching, learning, assessment, management, planning and communications. The development and implementations of vision for educational technology is addressed, as well as social and ethical issues. Prerequisite: graduate standing.

3.000 Credit hours
2.250 Lecture hours
0.750 Other hours

Levels: Graduate
Schedule Types: Field Experience, Lecture

Foundations Leadership Admin Department

EDAD 66747 - PERSONNEL

(Cross-listed with EDAD 76747) Administration of education staff at building and central office levels; scope and depth of supervisory responsibilities and development of evaluation techniques. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

EDAD 66750 - COACHING AND MENTORING FOR TEACHER LEADERS

Focuses on developing the knowledge, skills, and dispositions necessary for teacher leaders to provide high levels of effective coaching and mentoring for improving teaching practices and learning for all students. Specific approaches related to mentoring, coaching and peer assistance will be examined and practiced. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

EDAD 66751 - INSTRUCTIONAL LEADERSHIP FOR TEACHER LEADERS

This course provides the tools that teacher leaders need to engage in the development, production, monitoring and evaluation of instructional methods and strategies. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

EDAD 70093 - VARIABLE TITLE WORKSHOP IN EDUCATIONAL ADMINISTRATION

(Repeatable for credit) (Cross-listed with EDAD 40093 and EDAD 50093) Variable title workshop in EDAD. Prerequisite: Doctoral standing.
EDAD 76492 - INTERNSHIP IN EDUCATIONAL ADMINISTRATION

(Repeatable for a maximum of 6 credit hours) (Cross-listed with EDAD 76492) A field-based internship utilizing an inquiry-based learning model, requiring projects as designated by the program area faculty. Specific topics are outlined and shared at meetings prior to beginning internship. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school-agency before the first day of the semester in which student teaching internship will take place. Prerequisite: Doctoral standing.

3.000 TO 6.000 Credit hours
10.000 TO 20.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Foundations Leadership Admin Department

EDAD 76515 - FACILITIES PLANNING AND ADMINISTRATION

(Cross-listed with EDAD 66515) Overview of facilities planning and administration, including architectural/construction management, the educational program, restoration and maintenance. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

EDAD 76517 - ADMINISTRATION AND SUPERVISION OF SPECIAL EDUCATION

(Cross-listed with EDAD 66517) Administration of educational programs for exceptional children: improvement of teacher competencies; function of special education supervisors; and special education operations at a local, state, and national level. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

EDAD 76518 - LAW AND SPECIAL EDUCATION

(Cross-listed with EDAD 66518) Constitutional, statutory and case law involving handicapped infants and students, special education teachers and administrators, and parents are studied. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours
EDAD 76520 - SCHOOL LAW FOR TEACHERS AND PRINCIPALS
(Cross-listed with EDAD 66520) Selected principles of constitutional, statutory, case and common law affecting the administration of schools generally and Ohio schools specifically. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

EDAD 76522 - PUBLIC SCHOOL FINANCE AND ECONOMICS
(Cross-listed with EDAD 66522) Analysis of national, state and local problems of collection custody and expenditure of public school funds. Prerequisite: EDAD 76526 and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

EDAD 76525 - THE EDUCATIONAL PRINCIPALSHIP
(Cross-listed with EDAD 66525) Organizing and administering elementary, middle level and secondary schools. Prerequisite: EDAD 6/76526; 16 hrs of EDAD; doctoral standing.
3.000 Credit hours
3.000 Lecture hours

EDAD 76526 - FUNDAMENTALS OF EDUCATIONAL ADMINISTRATION
(Cross-listed with EDAD 66526) Examines theory and practice essential for administration. Skills and understanding are developed in theory goal setting staff development. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

EDAD 76527 - SCHOOL FINANCE FOR BUILDING ADMINISTRATORS
Identification of the responsibilities of the school building administrator related to all financial operations in the school building; included are the budget process and development, student accounts, the purchase order process, and fund raising and school groups. This course is a requirement for the principal license. Prerequisites: major in Educational Administration - K-12 (EAKL), Higher Education and Student Personnel (EAHE) or Educational Administration-Higher Education (EDHE) and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**EDAD 76529 - LEADING FOR SOCIAL JUSTICE**

(Cross-listed with EDAD 66529) Centers on investigating a broad research agenda on leading for social justice within educational leadership. Provides a context for candidates to establish strong connections between what it means to lead and the primary concerns for learning and equity, which are associated with increased performance and effectiveness for American education. Candidates engage in concepts such as equity audits, border culture, hegemony, moral transformation and other concepts aligned with leading 21st century schools. Such concepts encourage school leaders to reconsider the influence of wider social, political, cultural and economic contexts in creating transformative and revolutionary schools. Prerequisite: doctoral standing.

3.000 Credit hours
2.000 Lecture hours
1.000 Other hours

Levels: Graduate
Schedule Types: Field Experience, Lecture

Foundations Leadership Admin Department

**EDAD 76531 - INSTRUCTIONAL LEADERSHIP**

(Cross-listed with EDAD 66531) Focuses on the administrative role pertaining to the leadership, management, and evaluation of quality and effective school classroom instruction. Building administrators are responsible for providing the resource for effective instruction, which result in student learning. The key to effective instruction at any level requires a solid grounding in curriculum theory and design. Designed to provide the tools that administrators need to oversee the development, production, monitoring and evaluation of instructional methods and strategies. Prerequisite: doctoral standing.

3.000 Credit hours
2.000 Lecture hours
1.000 Other hours

Levels: Graduate
Schedule Types: Field Experience, Lecture

Foundations Leadership Admin Department

**EDAD 76533 - CENTRAL OFFICE ADMINISTRATION**

(Cross-listed with EDAD 66533) Analyzes roles and responsibilities of central office personnel with an emphasis on curriculum, pupil, and support services as impacted by current educational policy, and practice and focused on impacting the achievement of all students. Prerequisite: doctoral standing.

3.000 Credit hours
1.750 Lecture hours
1.250 Other hours

Levels: Graduate
EDAD 76534 - THE SUPERINTENDENCY

(Cross-listed with EDAD 66534) Focuses on major responsibilities of board of education and superintendent. Prerequisite: EDAD 6/76526. Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

EDAD 76536 - THE ADMINISTRATOR’S ROLE IN CURRICULUM DEVELOPMENT

(Cross-listed with EDAD 66536) Focusing on the administrative role pertaining to the development, management and evaluation of a quality and effective district/school/classroom curriculum. Prerequisite: Admission to an EDAD degree program or special approval from the instructor; doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

EDAD 76538 - ADMINISTRATION OF SCHOOL CULTURE, POLITICS AND REFORM

Focuses on administrative roles in assessing, leading, developing and reforming school culture. Centers on building and district administrators, who are responsible for providing the cultural frameworks and context of school culture through politics and reform efforts. The key to effective school reform requires a solid understanding of micropolitics as well as policy and practice at a state and national level. Designed to provide educational leaders with tools to assess school and district-wide cultural practices and norms as well as the skill sets to disrupt and change them. Prerequisite: doctoral standing.
3.000 Credit hours
1.750 Lecture hours
1.250 Other hours

Levels: Graduate
Schedule Types: Field Experience, Lecture

EDAD 76540 - WOMEN IN LEADERSHIP

(Cross-listed with EDAD 66540) An interactive study of women's development and its effect on their dispositions toward leadership. Provides theoretical contract to traditional management theory. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
EDAD 76542 - PRINCIPLES AND TECHNIQUES OF SUPERVISION

(Cross-listed with EDAD 66542) Principles and techniques needed by administrative specialists and supervisors are given. Research findings include changing human relations, group processes, communications, observations and conferencing skills. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

EDAD 76544 - COMMUNITY RELATIONS AND COMMUNICATION SKILLS

(Cross-listed with EDAD 66544) Centers on encouraging school leaders to consider the way in which children's learning is influenced by behaviors and perspectives of family members, school personnel and members of the larger community. Educators and school leaders have much to gain by deepening their understanding of how students learn from their family and cultural backgrounds, which fosters more inclusive school practices. Candidates investigate the influence of such collaborations and their role in upholding the ethical responsibility to promote children's welfare. Prerequisite: doctoral standing.

3.000 Credit hours
1.750 Lecture hours
1.250 Other hours

Levels: Graduate
Schedule Types: Field Experience, Lecture

EDAD 76595 - SPECIAL TOPICS IN EDUCATIONAL ADMINISTRATION

(Repeatable for credit) (Cross-listed with EDAD 66595) Specialized offerings in response to emerging or selected program needs. Prerequisite: Doctoral standing.

1.000 TO 3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

EDAD 76596 - INDIVIDUAL INVESTIGATION IN EDUCATIONAL ADMINISTRATION

(Repeatable for credit) (Cross-listed with EDAD 66596) Projects as assigned. Prerequisite: Doctoral standing and special approval.

2.000 TO 4.000 Credit hours
2.000 TO 4.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Foundations Leadership Admin Department
EDAD 76602 - TECHNOLOGY LEADERSHIP IN EDUCATION

(Cross-listed with EDAD 66602) Prepares educational administrators to be leaders in the advancement of the appropriate integration of technology. Current and prospective administrators increase their understanding of how technology can be used as a tools for teaching, learning, assessment, management, planning and communications. The development and implementations of vision for educational technology is addressed, as well as social and ethical issues. Prerequisite: doctoral standing.

3.000 Credit hours
2.250 Lecture hours
0.750 Other hours

Levels: Graduate
Schedule Types: Field Experience, Lecture

Foundations Leadership Admin Department

EDAD 76747 - PERSONNEL

(Cross-listed with EDAD 66747) Administration of education staff at building and central office levels; scope and depth of supervisory responsibilities and development of evaluation techniques. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

EDAD 80080 - DISSERTATION PREPARATION SEMINAR

Gain an in-depth understanding of the dissertation-writing process. Complete a dissertation proposal. Prerequisite: Doctoral standing and special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

EDAD 80199 - DISSERTATION I

(Repeatable for credit)Doctoral dissertation for which registration in at least two semesters is required, first of which will be semester in which dissertation work is begun and continuing until the completion of 30 hours. Prerequisite: Doctoral standing.

15.000 Credit hours
15.000 Other hours

Levels: Graduate
Schedule Types: Dissertation

Foundations Leadership Admin Department

EDAD 80299 - DISSERTATION II

(Repeatable for credit)Continuing registration required of doctoral students who have completed the initial 30
hours of dissertation and continuing until all degree requirements are met. Prerequisite: EDAD 80199. Doctoral standing.
15.000 Credit hours
15.000 Other hours

Levels: Graduate
Schedule Types: Dissertation

Foundations Leadership Admin Department

**EDAD 86591 - SEMINAR IN EDUCATIONAL ADMINISTRATION**

(Repeatable for credit) Seminar in EDAD. Prerequisites: Doctoral standing and permission.
1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Foundations Leadership Admin Department

**EDAD 86598 - RESEARCH IN EDUCATIONAL ADMINISTRATION**

(Repeatable for credit) Projects as assigned. Prerequisite: Doctoral standing and special approval.
2.000 TO 8.000 Credit hours
8.000 Other hours

Levels: Graduate
Schedule Types: Research

Foundations Leadership Admin Department

**EDST 40095 - SPECIAL TOPICS IN EDUCATIONAL STUDIES**

(Course is repeatable) Selected topics in Educational Studies dependent upon interest. Prerequisite: none.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**EDST 40096 - INDIVIDUAL INVESTIGATION IN EDUCATIONAL STUDIES PROGRAM**

(Course is repeatable) Independent study completed under the supervision of a faculty member. Written approval of supervising faculty member required prior to registration. Prerequisite: special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Foundations Leadership Admin Department

**EDST 44003 - SEMINAR IN EDUCATIONAL STUDIES**
Directed discussion applying concepts from previous educational coursework and internships or prior work experience. Prerequisite: senior standing.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

Foundations Leadership Admin Department

EDST 44004 - RESEARCH AND WRITINGS IN EDUCATIONAL STUDIES

This course presents and integrates the role of professionals in the Education, Health and Human Services fields as they attempt to meet the needs of individuals in diverse environments. Prerequisites: senior standing and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Foundations Leadership Admin Department

Course Attributes:
Writing Intensive Course

EDST 44092 - PRACTICUM IN EDUCATIONAL STUDIES

(Course is repeatable for a maximum of 12 credit hours) Placement in a work site congruent with student's career aspirations. Prerequisites: Educational Studies (EDST) majors; and senior standing; and special approval.
1.000 TO 12.000 Credit hours
1.000 TO 12.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Foundations Leadership Admin Department

Course Attributes:
Experiential Learning Requirem

EDUC 49526 - STUDENT TEACHING IN HEALTH AND PHYSICAL EDUCATION

Full time student teaching which includes a balanced experience in elementary and secondary health and physical education. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school-agency before the first day of the semester in which student teaching internship will take place. Official valid certification of Child Safety Training, approved Basic Life Support and A.L.I.C.E. Training must be presented to the campus office of clinical experience or designated faculty-staff at Regional campuses as prerequisite for student teaching. Prerequisite: ITEC 19525 and EPSY 29525; and Official valid certification of Child Safety Training, approved Basic Life Support and A.L.I.C.E. Training must be presented to the campus office of clinical experience or designated faculty/staff at Regional campuses as prerequisite for student teaching. Corequisite: PEP 49525 and HED 49525.
10.000 Credit hours
10.000 Other hours
EERT 10192 - OVERHEAD LINE TECHNOLOGY PRACTICUM I

Practical application of electrical overhead line worker job duties in a setting under direct supervision of First Energy Personnel. Prior to enrollment, students must be accepted into the First Energy Power Systems Institute (PSI). Prerequisite: Special approval. Corequisite: EERT 12000.

5.000 Credit hours
15.000 Other hours

EERT 10292 - OVERHEAD LINE TECHNOLOGY II PRACTICUM

Supervised practical application of electrical overhead line worker duties including the use of ladders, rescue operations, and transformers under the supervision of FirstEnergy personnel. Prerequisites: EERT 10192; and special approval.

5.000 Credit hours
15.000 Other hours

EERT 12000 - ELECTRIC CIRCUITS I

Direct current circuit analysis involving current and voltage, resistance, energy and power, Ohm's law, series and parallel networks. Mesh and nodal analysis, network theorems and DC instruments. Corequisite: MATH 11010.

4.000 Credit hours
3.000 Lecture hours
2.000 Lab hours
### EERT 12001 - ELECTRIC CIRCUITS II

Analysis of capacitive, inductance and magnetic circuits and transients in R-L-C combinations. AC network analysis: mesh and nodal, phasor algebra, power factor, resonance. Prerequisite: EERT 12000. Corequisite: MATH 11012 or 19002.

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<th>Lab hours</th>
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Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab

Regional College Department

Course Attributes:  
TAG - Engineering Technology

### EERT 12005 - ELECTRICAL/ELECTRONIC DRAWING

Electrical/electronic drawing techniques using computer-aided design emphasizing schematic, block and wiring diagrams. Either printed, circuit or power layout is covered as needed. Prerequisite: None.

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Levels: Undergraduate  
Schedule Types: Lecture

Regional College Department

### EERT 12010 - INTRODUCTION TO ELECTRONICS

Semiconductor theory. Properties and application of PN junctions and bipolar junction transistors, amplifiers, field effect transistors (FET) amplifiers, JFET and MOSFET biasing and their use in simple circuits. Prerequisite: EERT 12000.

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</table>

Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab

Regional College Department

Course Attributes:  
TAG - Engineering Technology

### EERT 20192 - OVERHEAD LINE TECHNOLOGY III PRACTICUM

Supervised practical applications of electrical line worker job duties under the supervision of FirstEnergy personnel. Emphasis on URD equipment, grounding distribution circuits and working with energized three phase circuits. Prerequisites: EERT 10292; and special approval.

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<th>Credit hours</th>
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Levels: Undergraduate  
Schedule Types: Practicum or Internship

Regional College Department
Course Attributes:
Experiential Learning Requirem

**EERT 20292 - OVERHEAD LINE TECHNOLOGY PRACTICUM IV**

Supervised practical application of electrical overhead line worker job duties under the direct supervision of FirstEnergy personnel. Emphasis on line equipment, hot line tools, and transmission. Prerequisites: EERT 20192; and special approval.

5.000 Credit hours
15.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Regional College Department

Course Attributes:
Experiential Learning Requirem

**EERT 21010 - ENGINEERING AND PROFESSIONAL ETHICS**

Application of codes of ethics in the engineering and technology profession reflective of social and moral responsibilities to the public and accountability in engineering practice. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**EERT 21096 - INDIVIDUAL INVESTIGATION IN ELECTRICAL/ENGINEERING TECHNOLOGY**

(Repeable for credit) Independent, in depth research of an electrical electronic engineering technology topic supervised and coordinated by an engineering technology faculty member. Prerequisite: Permission.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Regional College Department

**EERT 22000 - ELECTRICITY/ELECTRONICS WITH APPLICATIONS**

Basic electronics theory and fundamental concepts of electrical/electronic and digital circuits with applications in the various fields of engineering. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department
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<th>Course Code</th>
<th>Course Title</th>
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<th>Credits</th>
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<tr>
<td>EERT 22002</td>
<td>INDUSTRIAL CONTROLS</td>
<td>Introduction to control of AC and DC machinery by electromechanical and solid state devices. Study of circuits, troubleshooting methods and logic systems. Prerequisite: EERT 12010 or EERT 22000; and special approval.</td>
<td>3.000 Credit hours 3.000 Lecture hours</td>
<td>Undergraduate</td>
<td>Lecture</td>
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<tr>
<td>EERT 22003</td>
<td>TECHNICAL COMPUTING</td>
<td>An introduction to digital computer systems, flowchart techniques, programming using a scientific high-level language with applications. Number system conversions, binary codes, error detection and correction. Boolean algebra. Corequisite: MATH 11010.</td>
<td>3.000 Credit hours 3.000 Lecture hours</td>
<td>Undergraduate</td>
<td>Lecture</td>
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<tr>
<td>EERT 22004</td>
<td>DIGITAL SYSTEMS</td>
<td>Modern integrated digital logic families. Analysis and design of digital circuits such as gates, multivibrators, comparators, counters, registers including interface, control memory and computer circuits. Programmable logic controllers and integrated circuit technologies. Prerequisite: EERT 22003.</td>
<td>4.000 Credit hours 3.000 Lecture hours 2.000 Lab hours</td>
<td>Undergraduate</td>
<td>Combined Lecture and Lab</td>
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<td>EERT 22005</td>
<td>ELECTRONIC INSTRUMENTATION</td>
<td>Understanding of automation control and process characteristics. Application of various type of measurement devices &amp; control equipments. Use of modern simulation software for process control and troubleshooting. Prerequisite: EERT 12010.</td>
<td>3.000 Credit hours 2.000 Lecture hours 2.000 Lab hours</td>
<td>Undergraduate</td>
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<td>EERT 22006</td>
<td>ELECTRICAL MACHINES</td>
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Introduction to transformer action, losses and efficiency. Fundamentals of DC and AC motors and generators and three phase systems. Prerequisite: EERT 12001.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**EERT 22007 - INDUSTRIAL MOTOR CONTROL AND APPLICATION**

Application and use of DC, single and polyphase electric motors and industrial control systems. Construction, troubleshooting and operation of starting systems is emphasized. Prerequisite: EERT 22000.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Regional College Department

**EERT 22011 - ELECTRONIC SYSTEMS**

Continuation of EERT 12010. Frequency effects, Miller's Theorem, decibel notation and negative feedback, Oscillators, Op-amps, circuits and applications, Thyristors and electronically regulated power supplies. Prerequisite: EERT 12010.
2.000 Credit hours
1.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Regional College Department

Course Attributes:
TAG - Engineering Technology

**EERT 22014 - MICROPROCESSORS AND ROBOTICS**

An introduction to microprocessor system fundamentals, software and hardware, architecture and instruction set, with applications to robot systems motor control, speech and sensor programming. Prerequisite: EERT 22003 or 22004.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Regional College Department

Course Attributes:
TAG - Engineering Technology
**EERT 22015 - ROBOTICS AND ADVANCED MICROSYSTEMS**

An advanced course in microprocessor software and hardware. Input/output devices and interfacing with applications to robotics. Troubleshooting and design of microprocessor controlled systems. Prerequisite: EERT 22014.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**EERT 22016 - PRODUCTIVITY SOFTWARE FOR INDUSTRY**

(Repeatable for a maximum of 3 credit hours) Introduces students to the use of computers for word processing, spreadsheets and database management applications. Students receive hands-on training on the use of the software applicable to engineering problems using hands-on formats. Prerequisite: none.

1.000 Credit hours
1.000 Lab hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**EERT 22018 - PC/NETWORK ENGINEERING AND TROUBLESHOOTING**

Covers the service, maintenance, upgrade and optimization of personal computers. Specification, installation and maintenance of local area networks is covered. Students learn communication protocols and network architecture. Two lectures and two labs. Prerequisite: none.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Regional College Department

**EERT 22095 - SPECIAL TOPICS IN ELECTRICAL/ELECTRONIC AND RELATED ENGINEERING TECHNOLOGIES**

(Repeatable for credit) Special topics in electrical/electronic engineering technology. Prerequisite: Permission.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**EERT 23000 - SENSORS**

A study of sensors, transducers, relays, solenoids, servomotors, actuators, lasers, LEDs, photonic and temperature sensors and electronic devices in electromechanical control. Prerequisite: Sophomore standing.
EERT 32005 - INSTRUMENTATION

Introduction to modern instrument techniques, includes signal to noise enhancement, active filters, phase locked loops, lock-in-amplifiers, box car integrators, averages and correlator. Prerequisite: EERT 12010.

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Regional College Department

EHS 50196 - INDIVIDUAL INVESTIGATION IN ENVIRONMENTAL HEALTH SCIENCES

(repeatable for maximum 6 credits) Individual graduate investigation or research in areas related to environmental health sciences. Prerequisite: graduate standing and special approval.

Levels: Graduate
Schedule Types: Individual Investigation

Biostats/Enviro Health/Epidem Department

EHS 52018 - ENVIRONMENTAL HEALTH CONCEPTS IN PUBLIC HEALTH

Provides a comprehensive overview of the core topics in environmental health as related to public health. Prerequisite: graduate standing.

Levels: Graduate
Schedule Types: Lecture

Biostats/Enviro Health/Epidem Department

EHS 53009 - EMERGING ENVIRONMENTAL HEALTH ISSUES AND RESPONSE

Provides an overview of emerging environmental health issues that will impact the public's health. Prerequisite: graduate standing.

Levels: Graduate
Schedule Types: Lecture

Biostats/Enviro Health/Epidem Department
**EHS 53012 - OCCUPATIONAL SAFETY AND HEALTH**

Survey of major concepts and issues relating health and safety in the workplace. Emphasis is on the application of public health principles and decision-making practices used by various worker populations for the prevention of injury and disease on the job. This course will cover protective equipment, hazardous conditions, environmental toxins, risk assessment, prevention science approaches and workplace health promotion.  
Prerequisites: graduate standing.  
3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Biostats/Enviro Health/Epidem Department

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**EHS 60191 - VARIABLE CONTENT SEMINAR IN ENVIRONMENTAL HEALTH SCIENCES**

(Repeatable for a maximum of 6 credit hours) Seminar on current and important topics in environmental health sciences. Subject matter varies depending on the topic. Prerequisites: Graduate standing.  
1.000 TO 3.000 Credit hours  
1.000 TO 3.000 Other hours

Levels: Graduate  
Schedule Types: Seminar

Biostats/Enviro Health/Epidem Department

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**EHS 60192 - PRACTICUM EXPERIENCE IN ENVIRONMENTAL HEALTH SCIENCES**

Observational and participation in public health activities of a public health agency, hospital or other approved organization. The student completes the field experience with joint supervision from the university and approved organization or agency. Prerequisite: graduate standing and special approval.  
6.000 Credit hours  
20.000 Other hours

Levels: Graduate  
Schedule Types: Practicum or Internship

Biostats/Enviro Health/Epidem Department

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**EHS 60195 - SPECIAL TOPICS IN ENVIRONMENTAL HEALTH SCIENCES**

(Repeatable for a maximum of 6 credit hours) Special topics to sample new offerings on topics in environmental health sciences. Prerequisites: Graduate standing.  
1.000 TO 3.000 Credit hours  
1.000 TO 3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Biostats/Enviro Health/Epidem Department

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**EHS 63010 - APPLIED RISK ASSESSMENT**

Introduces the student to environmental and occupational hazards, assessing the risks associated with hazard exposure. Standard principles of risk assessment are emphasized including methods of hazard identification and
regulation, quantitative exposure measurement, dose and toxicity relationships and risk management. Analysis of public policy regulatory guidance and health advisory watchdog recommendations are evaluated.
Prerequisites: EPI 52017 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biostats/Enviro Health/Epidem Department

**EHS 63011 - APPLICATION OF RISK ANALYSIS IN ENVIRONMENTAL HEALTH**

Students are introduced to methods in risk analysis that are applied by U.S. federal, state, and local agencies in their assessment of chemical toxicants. Linkages between risk assessment, risk management, and risk communication will be studied as components of this process, along with issues and controversies in the analysis of environmental health risks. Prerequisites: EPI 52017 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biostats/Enviro Health/Epidem Department

**EMBA 67021 - BUSINESS CONDITIONS ANALYSIS AND FORECASTING-EMBA**

Presentation and analysis of the factors that determine real Gross National Product, employment and unemployment, and inflation, with emphasis on application and forecasting. Prerequisite: graduate standing.
2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Business Administration Department

**EMBA 67022 - MANAGERIAL ECONOMICS-EMBA**

Analysis of managerial decision-making within the economic environment with emphasis on the firm’s economic decisions under different market and business conditions. Prerequisite: graduate standing.
2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Business Administration Department

**EMBA 67031 - FINANCIAL ACCOUNTING-EMBA**

(Cross-listed with EMBA 77031) Study of basic principles, concepts and financial reporting for external users and the impact this will have on executive decisions. Prerequisite: graduate standing.
2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
### EMBA 67032 - ACCOUNTING INFORMATION FOR EXECUTIVES-EMBA

(Cross-listed with EMBA 77032) Study of managerial decision-making through planning and control techniques. Major emphasis will be on profit planning, responsibility accounting, cost behavior patterns and application of accounting data to basic planning and control decisions. Prerequisite: graduate standing.

- 2.000 Credit hours
- 2.000 Lecture hours

| Levels: Graduate |
| Schedule Types: Lecture |

Business Administration Department

### EMBA 67040 - OPERATIONS MANAGEMENT-EMBA

(Cross-listed with EMBA 77040) This course is designed for executives who have minimal experience with the production or operations phase of business. In this course they will develop skill in defining operating problems, in identifying alternative solutions and selecting the most viable solution. Prerequisite: graduate standing.

- 2.000 Credit hours
- 2.000 Lecture hours

| Levels: Graduate |
| Schedule Types: Lecture |

Business Administration Department

### EMBA 67041 - APPLIED STATISTICAL ANALYSIS-EMBA

(Cross-listed with EMBA 77041) An analysis of univariate and multivariate statistical models and the use of these models to solve practical problems. A comparison of classical and neoclassical statistical approaches is also conducted. Prerequisite: graduate standing.

- 2.000 Credit hours
- 2.000 Lecture hours

| Levels: Graduate |
| Schedule Types: Lecture |

Business Administration Department

### EMBA 67042 - MANAGEMENT INFORMATION SYSTEMS-EMBA

(Cross-listed with EMBA 77042) Synthesis of computer/information technology organization behavior and functional aspects of business to enhance decision-making and strategic planning skills of the manager. Prerequisite: graduate standing.

- 2.000 Credit hours
- 2.000 Lecture hours

| Levels: Graduate |
| Schedule Types: Lecture |

Business Administration Department
**EMBA 67043 - DYNAMICS OF LEADERSHIP FOR EXECUTIVES-EMBA**

(Cross-listed with EMBA 77043) Leadership skills including: team development, conflict resolution, negotiation, communications and project development. These skills along with ethical considerations are developed to enhance business decision making. Prerequisite: graduate standing.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Business Administration Department

**EMBA 67051 - MARKETING MANAGEMENT-EMBA**

(Cross-listed with EMBA 77051) The various elements comprising marketing strategy are studied as components of integrated programs directed toward industrial and consumer markets. Prerequisite: graduate standing.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Business Administration Department

**EMBA 67058 - MARKETING STRATEGY AND PLANNING-EMBA**

(Cross-listed with EMBA 77058) Focuses on integration of marketing planning into the strategic planning process. Deals mostly with marketing strategy at the level of senior management rather than operations. Prerequisite: graduate standing.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Business Administration Department

**EMBA 67061 - FINANCIAL PLANNING AND STRATEGY-EMBA**

(Cross-listed with EMBA 77061) Problems and approaches to financial decision-making in business enterprises: controlling the allocation of funds among both current and fixed assets, assessing financial needs, and planning the mix and methods of financing. Prerequisite: graduate standing.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Business Administration Department

**EMBA 67062 - MONEY AND CAPITAL MARKETS-EMBA**

(Cross-listed with EMBA 77062) Analysis and evaluation of the structure, functions and characteristics of domestic and international money and capital markets as the financing mechanism for business and non
EMBA 67070 - ORGANIZATIONAL ANALYSIS AND DESIGN-EMBA

(Cross-listed with EMBA 77070) The course is concerned with the development of both theoretical and practical concepts related to complex work organizations. Prerequisite: graduate standing.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Business Administration Department

EMBA 67071 - HUMAN RESOURCE MANAGEMENT-EMBA

(Cross-listed with EMBA 77071) The course will deal with some of the major areas of interest to the management of human resources. Special emphasis will be placed on areas of staff planning, such as job analysis and selection. Prerequisite: graduate standing.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Business Administration Department

EMBA 67082 - LEGAL AND SOCIAL IMPACT ON MANAGERIAL DECISION-MAKING-EMBA

(Cross-listed with EMBA 77082) Managerial decision-making is examined in terms of the real and potential impacts of the legal, political and social environment of business. Prerequisite: graduate standing.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Business Administration Department

EMBA 67085 - EXECUTIVE POLICIES AND PLANNING-EMBA

(Cross-listed with EMBA 77085) The course concentrates on the determination of corporate strategy in the business firm and its implementation through appropriate organizational arrangements and procedures. Prerequisite: graduate standing.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
### EMBA 67090 - APPLIED RESEARCH DESIGN-EMBA

(Cross-listed with EMBA 77090) Introduction to research design in management. The course deals with the applications of the scientific method to solving organizational problems with a decision making context.
Prerequisite: graduate standing.
1.000 Credit hours
1.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

### EMBA 67091 - SEMINAR IN EXECUTIVE SKILLS DEVELOPMENT-EMBA

(Repeatable for credit) (Cross-listed with EMBA 77091) A series of seminars developing managerial skills such as communications, leadership teamwork project and time management etc. Offered primarily in first year of program. Prerequisite: graduate standing.
1.000 OR 2.000 Credit hours
1.000 OR 2.000 Other hours

Levels: Graduate
Schedule Types: Seminar

### EMBA 67096 - APPLIED RESEARCH PROJECT-EMBA

(Repeatable for credit) A research project based on an applied business or economic problem will be conducted under the direct supervision of a participating faculty member in the EMBA program. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

### EMBA 67191 - SEMINAR IN CURRENT ISSUES FOR EXECUTIVE DEVELOPMENT-EMBA

(Repeatable for credit) (Cross-listed with EMBA 77191) A series of seminars on current managerial, technological or economic problems facing the executive in today’s society. Emphasis on global issues. Prerequisite: graduate standing.
1.000 OR 2.000 Credit hours
1.000 OR 2.000 Other hours

Levels: Graduate
Schedule Types: Seminar

### EMBA 67291 - EMBA RESIDENCY SEMINAR
EMBA 77091 - SEMINAR IN EXECUTIVE SKILLS DEVELOPMENT-EMBA

(Repeatable for credit) (Cross-listed with EMBA 67091) A series of seminars developing managerial skills such as communications, leadership, teamwork, project and time management, etc. Offered primarily in first year of program. Prerequisite: doctoral standing.
1.000 OR 2.000 Credit hours
1.000 OR 2.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Business Administration Department

EMBA 77096 - APPLIED RESEARCH PROJECT-EMBA

(Repeatable for credit) A research project based on an applied business or economic problem will be conducted under the direct supervision of a participating faculty member in the EMBA program. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Business Administration Department

EMBA 77191 - SEMINAR IN CURRENT ISSUES FOR EXECUTIVE DEVELOPMENT-EMBA

(Repeatable for credit) (Cross-listed with EMBA 67191) A series of seminars on current managerial, technological or economic problems facing the executive in today's society. Emphasis on global issues. Prerequisite: doctoral standing.
1.000 OR 2.000 Credit hours
1.000 OR 2.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Business Administration Department

EMBA 77291 - EMBA RESIDENCY SEMINAR

(Repeatable for credit) (Cross-listed with EMBA 67291) A two-to-four-day intensive introduction to basic concepts and integration of EMBA program content. Emphasis on group analysis and/or simulation. Prerequisite: doctoral standing.
1.000 OR 2.000 Credit hours
1.000 OR 2.000 Other hours
ENG 01001 - INTRODUCTION TO COLLEGE WRITING-STRETCH

Introduces the instruction and experiences necessary for students to acquire college-level literacy, with an emphasis on reading and writing college level texts. Course does not count toward graduation. All Kent Campus students begin the College Writing sequence with 11011. Prerequisite: ACT English score 1-17; or SAT writing score 200-420; or COMPASS writing score of 0-68.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

ENG 02001 - ESL WRITING LEVEL I

Introduction to the writing process. Review of basic syntactic and morphological patterns and sentence and paragraph organization. Support of vocabulary development. Students are placed in appropriate course based on test score. Course does not count toward graduation. Prerequisite: none, placement and registration done by the department.

2.000 Credit hours
2.330 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

Course Attributes:
Tuition-English as Second Lang

ENG 02002 - ESL WRITING LEVEL II

Introduction to basic knowledge of sentence structure and development of ability to write with more sentence variety. Practice of standard paragraph format. Course does not count toward graduation. Prerequisite: none, placement and registration done by the department.

2.000 Credit hours
2.330 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

Course Attributes:
Tuition-English as Second Lang

ENG 02003 - ESL WRITING LEVEL III

Review and practice of writing narrative and descriptive paragraphs. Analysis and self-correction; support of vocabulary expansion and practice of syntax of statements in paragraphs through relevant topics. Course does
Development of narrative, descriptive and explanatory paragraphs into essays; practice of prewriting activities. Support of vocabulary expansion and focus on transitioning from simple to complex sentences in paragraphs. Course does not count toward graduation. Prerequisite: none, placement and registration done by the department.

2.000 Credit hours
2.330 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department
Course Attributes:
Tuition-English as Second Lang

ENG 02005 - ESL WRITING LEVEL V

Introduction to the purpose, format and structure of an essay. Practice of narrative and explanatory essays. Course does not count toward graduation. Prerequisite: none, placement and registration done by the department.

2.000 Credit hours
2.330 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department
Course Attributes:
Tuition-English as Second Lang

ENG 02006 - ESL WRITING LEVEL VI

Review and practice of the purpose, format and structure of an essay. Focus on response essays; practice of parallel constructions, quotations, and the use of outside sources. Course does not count toward graduation. Prerequisite: none, placement and registration done by the department.

2.000 Credit hours
2.330 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department
ENG 02007 - ESL WRITING LEVEL VII

Review of formatting and structuring essays. Practice of explanatory essays; focus on outlining, summarizing and citations; review of selected text-type specific grammatical features. Course does not count toward graduation. Prerequisite: none, placement and registration done by the department.

2.000 Credit hours
2.330 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

Course Attributes:
Tuition-English as Second Lang

ENG 02101 - ESL READING LEVEL I

Introduction to basic reading strategies such as recognizing and differentiating between main and supporting ideas; skimming and scanning and making inferences. Support of vocabulary development. Students will be placed in the appropriate course based on test score. Course does not count toward graduation. Prerequisite: none, placement and registration done by the department.

2.000 Credit hours
2.330 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

Course Attributes:
Tuition-English as Second Lang

ENG 02102 - ESL READING LEVEL II

Practice in basic reading strategies and development. Support of vocabulary development. Course does not count toward graduation. Prerequisite: none, placement and registration done by the department.

2.000 Credit hours
2.330 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

Course Attributes:
Tuition-English as Second Lang

ENG 02103 - ESL READING LEVEL III

Practice in reading strategies such as recognizing and differentiating between main and supporting ideas of paragraphs and entire texts; skimming and scanning and making inferences. Support of vocabulary development. Course does not count toward graduation. Prerequisites: none, placement and registration done by the department.
ENG 02104 - ESL READING LEVEL IV

Practice of reading and summarizing strategies; skimming and scanning texts; support of vocabulary development. Course does not count toward graduation. Prerequisites: none, placement and registration done by the department.

2.000 Credit hours
2.330 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

Course Attributes:
Tuition-English as Second Lang

ENG 02105 - ESL READING LEVEL V

Practice of reading strategies; skimming and scanning; focus on inferences from background information and culturally specific references. Support of vocabulary development. Course does not count toward graduation. Prerequisites: none, placement and registration done by the department.

2.000 Credit hours
2.330 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

Course Attributes:
Tuition-English as Second Lang

ENG 02106 - ESL READING LEVEL VI

Practice of reading strategies; skimming and scanning texts; inferences in non-explicit contexts using background information. Culturally specific references and cultural schemata. Support of vocabulary development; strengthening awareness of word-formation. Course does not count toward graduation. Prerequisites: none, placement and registration done by the department.

2.000 Credit hours
2.330 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department
**ENG 02107 - ESL READING LEVEL VII**

Practice identifying communicative functions of texts; reading strategies such as recognizing and differentiating between main and supporting ideas; skimming and scanning. Support of vocabulary development. Course does not count toward graduation. Prerequisite: none, placement and registration done by the department.

2.000 Credit hours  
2.330 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

English Department

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**ENG 02201 - ESL LISTENING LEVEL I**

Practice in basic listening strategies, including listening for detail and gist, key words, names, formal and informal forms of address, greetings and conversation endings, acceptance and refusals, etc. Students are placed in the appropriate course based on test scores. Course does not count toward graduation. Prerequisite: none, placement and registration done by the department.

2.000 Credit hours  
2.330 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

English Department

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**ENG 02202 - ESL LISTENING LEVEL II**

Practice in basic listening strategies, including listening for detail and gist, key words, locations, numbers, acceptances and refusals, opinions, etc. as appropriate to level. Course does not count toward graduation. Prerequisites: none, placement and registration done by the department.

2.000 Credit hours  
2.330 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

English Department

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**ENG 02203 - ESL LISTENING LEVEL III**

Practice in listening strategies through predicting, using background knowledge and contextual information in order to listen for detail and gist, key words, connecting themes; comparing and summarizing as well as note-taking as appropriate to level. Course does not count toward graduation. Prerequisites: none, placement and
enrollment done by the department.
2.000 Credit hours
2.330 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

Course Attributes:
Tuition-English as Second Lang

**ENG 02204 - ESL LISTENING LEVEL IV**

Practice in listening strategies through predicting, using background knowledge and contextual information in order to listen for detail and gist, key words, emphasis, stance and speaker's feelings; comparing and summarizing as well as note-taking as appropriate to level. Course does not count toward graduation. Prerequisites: none, placement and registration done by the department.
2.000 Credit hours
2.330 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

Course Attributes:
Tuition-English as Second Lang

**ENG 02205 - ESL LISTENING LEVEL V**

Practice in listening strategies through predicting, using background knowledge and contextual information in order to listen for detail and gist, key words; comparing and summarizing as well as note-taking as appropriate to level. Course does not count toward graduation. Prerequisites: none, placement and registration done by the department.
2.000 Credit hours
2.330 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

Course Attributes:
Tuition-English as Second Lang

**ENG 02206 - ESL LISTENING LEVEL VI**

Practice in listening strategies through predicting, using background knowledge and contextual information; focus on detail and gist, key words, and meanings from stress, rhythm and intonation. Includes colloquial English. Course does not count toward graduation. Prerequisites: none, placement and registration done by the department.
2.000 Credit hours
2.330 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
**ENG 02207 - ESL LISTENING LEVEL VII**

Practice in listening strategies through predicting, using background knowledge and contextual information; focus on detail and gist, key words, stance and speaker's feelings; comparing and summarizing as well as note-taking as appropriate to level. Course does not count toward graduation. Prerequisites: none, placement and registration done by the department.

2.000 Credit hours
2.330 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

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**ENG 02301 - ESL SPEAKING LEVEL I**

Development of basic speaking skills while processing verbal and nonverbal information in both formal and informal contexts. Focus on fluency building using simple sentences. Support of vocabulary building when receiving and producing oral messages. Students are enrolled in the appropriate course based on test score. Course does not count toward graduation. Prerequisite: none, placement and registration done by the department.

1.000 Credit hours
1.400 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

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**ENG 02302 - ESL SPEAKING LEVEL II**

Practice of basic speaking skills while processing verbal and nonverbal information in both formal and informal contexts. Focus on fluency building using simple sentences. Support of vocabulary building when receiving and producing oral messages as appropriate to level. Course does not count toward graduation. Prerequisites: none, placement and registration done by the department.

1.000 Credit hours
1.400 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
ENG 02303 - ESL SPEAKING LEVEL III
Practices basic speaking skills while processing verbal and nonverbal information in both formal and informal contexts. Focus on fluency building using more complex sentences. Support of vocabulary building when receiving and producing oral messages as appropriate to level. Prerequisites: none, placement and registration done by the department.
1.000 Credit hours
1.400 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

Course Attributes:
Tuition-English as Second Lang

ENG 02304 - ESL SPEAKING LEVEL IV
Practice of speaking skills while processing verbal and nonverbal information in both formal and informal contexts. Focus on fluency building using more complex sentences. Support of vocabulary building when receiving and producing oral messages as appropriate to level. Course does not count toward graduation. Prerequisites: none, placement and registration done by the department.
1.000 Credit hours
1.400 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

Course Attributes:
Tuition-English as Second Lang

ENG 02305 - ESL SPEAKING LEVEL V
Practice of speaking skills while processing verbal and nonverbal information in both formal and informal contexts. Focus on fluency building using more complex sentences and improvement in accuracy. Support of vocabulary building when receiving and producing oral messages as appropriate to level. Course does not count toward graduation. Prerequisites: none, placement and registration done by the department.
1.000 Credit hours
1.400 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

Course Attributes:
Tuition-English as Second Lang

ENG 02306 - ESL SPEAKING LEVEL VI
Practice of speaking skills while processing verbal and nonverbal information in both formal and informal contexts. Focus on fluency building using more complex sentences and improvement in accuracy. Support of vocabulary building when receiving and producing oral messages as appropriate to level. Course does not count toward graduation. Prerequisites: none, placement and registration done by the department.
1.000 Credit hours
ENG 02307 - ESL SPEAKING LEVEL VII
Practice of speaking skills while processing verbal and nonverbal information in both formal and informal contexts. Focus on fluency building using more complex sentences and improvement in accuracy. Support of vocabulary building when receiving and producing oral messages as appropriate to level. Course does not count toward graduation. Prerequisites: none, placement and registration done by the department.
1.000 Credit hours
1.400 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

Course Attributes:
Tuition-English as Second Lang

ENG 02401 - ESL GRAMMAR LEVEL I
Introduction to word classes, especially verbs (including regular and irregular forms, tense and aspect, imperative), statement and question syntax, positive and negative clauses. Students are placed in appropriate course based on test score. Course does not count toward graduation. Prerequisite: none, placement and registration done by the department.
2.000 Credit hours
2.330 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

Course Attributes:
Tuition-English as Second Lang

ENG 02402 - ESL GRAMMAR LEVEL II
Application of word classes, especially verbs (including tense and aspect), modal verbs, gerunds and infinitives, nouns (count and non-count), adjectives and adverbs (comparison), statement and question syntax, positive and negative clauses. Course does not count toward graduation. Prerequisites: none, placement and registration done by the department.
2.000 Credit hours
2.330 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department
**ENG 02403 - ESL Grammar Level III**

Application of word classes, especially verbs and phrasal verbs (tense and aspect), present and future modal verbs, nouns, and pronouns as well as statement and question syntax, positive and negative clauses at appropriate level. Course does not count toward graduation. Prerequisites: none, placement and registration done by the department.

2.000 Credit hours
2.330 Lecture hours

**Levels:** Undergraduate
**Schedule Types:** Lecture

**English Department**

Course Attributes:
Tuition-English as Second Lang

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**ENG 02404 - ESL Grammar Level IV**

Application of word classes, especially verbs and phrasal verbs (tense and aspect), gerunds and infinitives, nouns, articles, adjectives, adverbs, statement and question syntax, positive and negative clauses at appropriate level. Course does not count toward graduation. Prerequisites: none, placement and registration done by the department.

2.000 Credit hours
2.330 Lecture hours

**Levels:** Undergraduate
**Schedule Types:** Lecture

**English Department**

Course Attributes:
Tuition-English as Second Lang

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**ENG 02405 - ESL Grammar Level V**

Application of word classes, especially verbs (tense and aspect), causal and phrasal verb syntax, verbal nouns, conjoiners as well as statement and question syntax, positive and negative clauses, and question tags as appropriate to level. Course does not count toward graduation. Prerequisites: none, placement and registration done by the department.

2.000 Credit hours
2.330 Lecture hours

**Levels:** Undergraduate
**Schedule Types:** Lecture

**English Department**

Course Attributes:
Tuition-English as Second Lang

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**ENG 02406 - ESL Grammar Level VI**

Application of verb tenses and aspects, modality, passive voice as well as clause structures and functions (noun
clauses, adjective clauses) as appropriate to level. Course does not count toward graduation. Prerequisites: none, placement and registration done by the department.

2.000 Credit hours
2.330 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

Course Attributes:
Tuition: English as Second Lang

**ENG 02407 - ESL GRAMMAR LEVEL VII**

Application of verb tenses and aspects, passive voice, modal verbs, noun phrases, subject-verb agreement, clause structures and functions (interrogative clauses, noun clauses, adjective clauses) as appropriate to level. Course does not count toward graduation. Prerequisites: none, placement and registration done by the department.

2.000 Credit hours
2.330 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

Course Attributes:
Tuition: English as Second Lang

**ENG 02500 - ESL PRONUNCIATION**

(Repeatable for a maximum of 2 credit hours) Study of English pronunciation with practice in segmental and suprasegmental features (sounds, sound combinations, syllables, stress, rhythm, and intonation). Students are placed in the appropriate course based on test score. Course does not count toward graduation. Prerequisite: none, placement and registration done by the department.

1.000 Credit hours
1.400 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

Course Attributes:
Tuition: English as Second Lang

**ENG 11002 - COLLEGE WRITING I-STRETCH**

Continues the instruction and practice necessary to write for college, with emphasis on the reading, thinking, writing and technological skills necessary for writing college level texts. Completion of this course is the same as ENG 11011. All Kent Campus students begin the College Writing sequence with ENG 11011. Prerequisite: grade of C (2.000) or better in ENG 01001 and special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
ENG 11011 - COLLEGE WRITING I

The study and practice of academic writing, including an introduction to rhetorical principles, the writing process, critical reading, research, and technology. All Kent campus students begin the College Writing sequence with ENG 11011. Prerequisites: ACT English score of 18-25; or SAT writing score of 430-590; or Compass writing score of 69-94

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

ENG 12002 - ESL WRITING LEVEL II

Introduction to basic knowledge of sentence structure and development of ability to write with more sentence variety. Practice of standard paragraph format. Course does not count toward graduation. Prerequisite: none, placement and registration done by the department.

2.000 Credit hours
5.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

ENG 12008 - ESL WRITING LEVEL VIII

Review and practice of formatting and structuring essays depending on varying content and audience. Focus on persuasive and response essays; practice of outlining, summarizing and citation; review of selected text-type specific grammatical features. Prerequisite: none, placement and registration done by the department.

2.000 Credit hours
2.330 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

ENG 12009 - ESL WRITING LEVEL IX

Review and practice of formatting and structuring essays for academic vs. non-academic purposes. Practice of paraphrasing, summarizing and citation; review of selected text-type specific grammatical features.
ENGL 12010 - ESL WRITING LEVEL X

Review and practice of formatting and structuring essays for academic vs. non-academic purposes. Practice with cause and effect, compare and contrast and argumentation. Practice of paraphrasing, summarizing and citation and review of selected text-type specific grammatical features. Prerequisites: none, placement and registration done by the department.

2.000 Credit hours
2.330 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

Course Attributes:
Tuition-English as Second Lang

ENGL 12095 - SPECIAL TOPICS IN ESL

(Repeatable twice) Overview of skills related to a special topic in second language learning. Prerequisite: none, placement and registration done by the department.

1.000 TO 2.000 Credit hours
1.400 TO 2.330 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

Course Attributes:
Tuition-English as Second Lang

ENGL 12108 - ESL READING LEVEL VIII

Practice identifying communicative functions of texts; practice reading strategies. Support of vocabulary development and extensive reading. Prerequisites: none, placement and registration done by the department.

2.000 Credit hours
2.330 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

Course Attributes:
<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisites</th>
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<th>Levels</th>
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<th>English Department</th>
<th>Course Attributes</th>
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<tr>
<td>ENG 12109</td>
<td>ESL READING LEVEL IX</td>
<td>Identifying communicative functions of texts; reading strategies; skimming and scanning. Support of vocabulary development and extensive reading. Prerequisites: none, placement and registration done by the department.</td>
<td>2.000 Credit hours 2.330 Lecture hours</td>
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<td>Undergraduate</td>
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<td>English Department</td>
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<tr>
<td>ENG 12110</td>
<td>ESL READING LEVEL X</td>
<td>Practice with communicative functions of texts; strategies for academic reading. Support of vocabulary development and extensive reading. Prerequisites: none, placement and registration done by the department.</td>
<td>2.000 Credit hours 2.330 Lecture hours</td>
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<td>Undergraduate</td>
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<td>English Department</td>
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<tr>
<td>ENG 12208</td>
<td>ESL LISTENING LEVEL VIII</td>
<td>Practice in listening strategies through predicting, using background knowledge and contextual information; focus on detail and gist, key words, stance and speaker's feelings; comparing and summarizing as well as note-taking and meanings from stress, rhythm and intonation as appropriate to level. Prerequisites: none, placement and registration done by the department.</td>
<td>2.000 Credit hours 2.330 Lecture hours</td>
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<td>Undergraduate</td>
<td>Lecture</td>
<td>English Department</td>
<td>Tuition-English as Second Lang</td>
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<tr>
<td>ENG 12209</td>
<td>ESL LISTENING LEVEL IX</td>
<td>Practice in listening strategies through predicting, using background knowledge and contextual information; focus on detail and gist, key words, stance and schemata. Emphasis on listening for academic purposes; practice in note-taking. Prerequisites: none, placement and registration done by the department.</td>
<td>2.000 Credit hours 2.330 Lecture hours</td>
<td></td>
<td></td>
<td>Undergraduate</td>
<td>Lecture</td>
<td>English Department</td>
<td>Tuition-English as Second Lang</td>
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</tbody>
</table>
ENG 12210 - ESL LISTENING LEVEL X

Practice in listening strategies through predicting, using background knowledge and contextual information; focus on detail and gist, key words, stance and schemata. Emphasis on listening for academic purposes; practice in note-taking. Prerequisites: none, placement and registration done by the department.

2.000 Credit hours
2.330 Lecture hours

ENG 12308 - ESL SPEAKING LEVEL VIII

Practice of speaking skills while processing verbal and nonverbal information in both formal and informal contexts. Focus on natural fluency and accuracy as well as pragmatic appropriateness. Support of vocabulary building when receiving and producing oral messages as appropriate to level. Prerequisites: none, placement and registration done by the department.

1.000 Credit hours
1.400 Lecture hours

ENG 12309 - ESL SPEAKING LEVEL IX

Practice of speaking skills while processing verbal and nonverbal information in both formal and informal contexts. Focus on natural fluency and accuracy as well as pragmatic appropriateness. Support of vocabulary building when receiving and producing oral messages as appropriate to level. Prerequisites: none, placement and registration done by the department.

1.000 Credit hours
1.400 Lecture hours
ENG 12310 - ESL SPEAKING LEVEL X

Practice of speaking skills while processing verbal and nonverbal information in both formal and informal contexts. Focus on natural fluency and accuracy as well as pragmatic appropriateness. Support of vocabulary building when receiving and producing oral messages as appropriate to level. Prerequisites: none, placement and registration done by the department.
1.000 Credit hours
1.400 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

Course Attributes:
Tuition-English as Second Lang

ENG 12408 - ESL GRAMMAR LEVEL VIII

Application of verb tenses and aspects, passive voice, modal verbs, gerunds and infinitives, coordinating conjunctions as well as clause structures and functions (noun clauses, adjective clauses, adverbial clauses) as appropriate to level. Prerequisites: none, placement and registration done by the department.
2.000 Credit hours
2.330 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

Course Attributes:
Tuition-English as Second Lang

ENG 12409 - ESL GRAMMAR LEVEL IX

Application of verb tenses and aspects, passive voice, nominals, interrogative syntax as well as clause structures and functions (dependent vs. independent clauses; reducing dependent clauses; conditional clauses) as appropriate to level. Prerequisites: none, placement and registration done by the department.
2.000 Credit hours
2.330 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

Course Attributes:
Tuition-English as Second Lang

ENG 12410 - ESL GRAMMAR LEVEL X

Application of verb tenses and aspects, passive voice, nominals, adverbials, interrogative syntax as well as clause structures and functions (dependent vs. independent clauses; clause reductions; conditional clauses) as appropriate to level. Prerequisites: none, placement and registration done by the department.
2.000 Credit hours
2.330 Lecture hours
ENG 12507 - ESL DEBATE

(Repeatable for a maximum of 2 credit hours) Practice of skills for persuasive speaking, making effective arguments, and active listening. Engagement in formal and informal debates and presentations. Must score level 7 or higher on test. Prerequisite: none, placement and registration done by the department.
1.000 Credit hours
1.400 Lecture hours

ENG 12508 - ESL PUBLIC SPEAKING

(Repeatable for a maximum of 2 credit hours) Preparation for continued academic study and professional advancement, including effective techniques for speaking in public. Design and analysis of speeches and presentations. Must score level 8 or higher on proficiency test. Prerequisite: none, placement and registration done by the department.
1.000 Credit hours
1.400 Lecture hours

ENG 12605 - ESL AMERICAN CULTURE I

Overview of basic American values and beliefs related to history, immigration, diversity, and geography. Must have a level 5 or higher score on proficiency test. Prerequisite: none, placement and registration done by the department.
2.000 Credit hours
2.330 Lecture hours
ENG 12606 - ESL AMERICAN CULTURE II

Overview of basic American values and beliefs related to education, holidays, government and politics, the criminal justice system, America in the 21st century, et cetera. Must score level 6 or higher on proficiency test. Prerequisite: none, placement and registration done by the department.

2.000 Credit hours
2.330 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

Course Attributes:
Tuition-English as Second Lang

ENG 12707 - ESL BUSINESS ENGLISH I

Overview of business communication, business writing strategies, and computer skills in the workplace. Must score level 7 or higher on proficiency test. Prerequisite: special approval.

2.000 Credit hours
5.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

Course Attributes:
Tuition-English as Second Lang

ENG 12708 - ESL BUSINESS ENGLISH II

Development of oral and written business communication skills. Prerequisite: minimum grade of C- (1.700) in ENG 12707; and special approval.

2.000 Credit hours
5.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

Course Attributes:
Tuition-English as Second Lang

ENG 20002 - INTRODUCTION TO TECHNICAL WRITING

Introduction to communication practices within technical communities. Planning, drafting, revising and editing. Process descriptions, object descriptions, instructional texts, technical correspondence, problem reports, critical reflection. Prerequisite: ENG 11011 or HONR 10197.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
**ENG 20021 - INTRODUCTION TO CREATIVE WRITING**

Practice in various forms of creative writing with some emphasis on student interests and on sources of creativity. Prerequisite: ENG 11011 or 11002 or HONR 10197 or ACT combined English/Writing score of 26 or higher or SAT Writing score of 600 or higher.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

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**ENG 21001 - INTRODUCTION TO ETHNIC LITERATURE OF THE UNITED STATES**

Study of selected ethnic American writers; may include works by African, Asian, Hispanic, Jewish, Native Americans and other groups. Prerequisite: ENG 11011 or 11002 or HONR 10197 or ACT combined English/Writing score of 26 or higher or SAT Writing score of 600 or higher.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

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**Course Attributes:**  
Diversity Course-Domestic

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**ENG 21002 - INTRODUCTION TO WOMEN'S LITERATURE**

Introduction to works by women writing in English, and to literary and gender issues they raise. Prerequisite: ENG 11011 or 11002 or HONR 10197 or ACT combined English/Writing score of 26 or higher or SAT Writing score of 600 or higher.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

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**ENG 21003 - INTRODUCTION TO LGBT LITERATURE**

Introduction to lesbian, gay, bisexual and transgendered literature in English and to issues of gender, sexuality and culture raised by this literature. Prerequisite: ENG 11011 or 11002 or HONR 10197 or ACT combined English/Writing score of 26 or higher or SAT Writing score of 600 or higher.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

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ENG 21011 - COLLEGE WRITING II
Continuation of college-level writing instruction with emphasis on research and inquiry, culminating in a lengthy written and/or multi-modal project. Prerequisites: ENG 11011 or ENG 11002 or HONR 10197 with a grade of C- (1.700) or above; or ACT English score 26 and above; or SAT Writing score of 600 and above.
3.000 Credit hours
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture

ENG 21054 - INTRODUCTION TO SHAKESPEARE
Study of representative plays and poems in the context of Shakespeare's age, his language and his cultural influence. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture

ENG 22071 - GREAT BOOKS TO 1700
Great works of world literature read in English, from ancient world to 1700, covering a wide range of ethnic and national voices, genres and traditions. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture

ENG 22072 - GREAT BOOKS SINCE 1700
Great works of world literature read in English, from 1700 to today, covering a wide range of ethnic and national voices, genres and traditions. Prerequisite: none.
3.000 Credit hours
ENG 22073 - MAJOR MODERN WRITERS: BRITISH AND UNITED STATES

Introduction to British and U.S. writers of the 20th and 21st centuries; study of their works in their literary and cultural contexts. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

Course Attributes:
Kent Core-Humanities, LER-Humanities, Trnfr Module-Humanities

ENG 24001 - INTRODUCTION TO LITERARY STUDY

Introduction to techniques for reading and writing about literature, with emphasis on reading strategies for prose, poetry and drama. Literary terms, composition of interpretive essays, and literary research is also studied. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

ENG 25001 - LITERATURE IN ENGLISH I

British literature written before 1800 studied within a broad historical context. Comprehensive introduction to knowledge and skills that serve as a foundation for further study in literature. Pre/corequisite: ENG 11011 or ENG 11002 or HONR 10197; or English ACT score of 26; or English SAT score of 600.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

Course Attributes:
TAG - Arts/Humanities

ENG 25002 - LITERATURE IN ENGLISH II

British literature written since 1800 studied within a broad historical context. Comprehensive introduction to
knowledge and skills that serve as a foundation for further study in literature. Prerequisite: ENG 11011 or 11002 or HONR 10197 with minimum C- grade; or ACT combined English/Writing score of 26; or SAT Writing score of 600.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

Course Attributes:
TAG - Arts/Humanities

ENG 25004 - LITERATURE IN THE UNITED STATES I

U.S. literature from the colonial period until 1865 studies within a broad historical context. Comprehensive introduction to knowledge and skills that serve as a foundation for further study in literature. Prerequisite: ENG 11011 or ENG 11002 or HONR 10197; or English ACT score of 26; or English SAT score of 600.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

Course Attributes:
TAG - Arts/Humanities

ENG 25005 - LITERATURE IN THE UNITED STATES II

U.S. literature from 1865 to the present studied within a broad historical context. Comprehensive introduction to knowledge and skills that serve as a foundation for further study in literature. Prerequisite: ENG 11011 or ENG 11002 or HONR 10197; or English ACT score of 26; or English SAT score of 600.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

Course Attributes:
TAG - Arts/Humanities

ENG 26001 - POPULAR FORMS OF LITERATURE

Introduction to popular forms of literature such as the western, the detective story, science fiction, fantasy, the war story and others. Prerequisite: ENG 11011 or 11002 or HONR 10197 or ACT combined English/Writing score of 26 or higher or SAT Writing score of 600 or higher.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
ENG 26095 - SOPHOMORE SPECIAL TOPICS

(Repeatable for credit) In-depth study of a particular writer, theme or literary movement, such as literature and film, gothic novels. Prerequisite: ENG 11011 or 11002 or HONR 10197 or ACT combined English/Writing score of 26 or higher or SAT Writing score of 600 or higher.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

ENG 30001 - ENGLISH STUDIES

Writing about and reading in a variety of texts and critical modes as an introduction to critical thinking and writing. Emphasis on the application of principles and methods of literary study to selected texts. Prerequisite: ENG 21011 or HONR 10297.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Course Attributes:
Writing Intensive Course

ENG 30050 - WRITING AND RHETORIC IN A DIGITAL AGE

Writing course with a focus on learning and using a variety of tools available within contemporary digital composing environments. Prerequisites: ENG 21011 or HONR 10297.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

ENG 30051 - WRITING, RHETORIC AND NEW MEDIA

Rhetorical principles for multimodal writing to produce rhetorically effective professional, scholarly, personal, and civic texts that integrate some blend of written word, visuals, images, audio and video. Prerequisite: ENG 21011 or HONR 10297.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
ENG 30061 - WRITING IN BUSINESS
Introduces students to writing practices in business settings, helping students to understand several of the ways that business writing differs from academic writing. Students learn practical skills related to addressing audience expectations relative to the purpose of the message, applying appropriate formats to business documents, integrating graphics commonly used in business documents, and using principles of rhetoric to convey a message effectively and concisely. Prerequisites: ENG 21011 and COMM 15000 and BUS 10123; and special approval. Corequisite: BUS 30061.
2.000 Credit hours
2.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture

ENG 30062 - PRINCIPLES OF TECHNICAL WRITING
Introduces theoretical principles of technical communication. Extensive practice in the use, evaluation and production of complex technical documents including research reports/research proposals. Emphasis on oral, written and electronic communication. Prerequisite: 21011 and junior standing.
3.000 Credit hours
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture

ENG 30063 - PROFESSIONAL WRITING
Practice norms and strategies of effective workplace communication. Prerequisites: ENG 21011 or HONR 10297 with a minimum grade of C- (1.700); and junior standing.
3.000 Credit hours
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture

Course Attributes:
TAG - Business

ENG 30064 - ARGUMENTATIVE PROSE WRITING
Practice in writing argumentative essays, with emphasis on discussion of student work. Prerequisite: ENG 21011 or HONR 10297.
3.000 Credit hours
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture

ENG 30065 - EXPOSITORY PROSE WRITING
Practice in prose composition with emphasis on exposition and discussion of student work. Prerequisite: ENG 21011 or HONR 10297.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**English Department**

### ENG 30066 - WRITING IN THE PUBLIC SPHERE

Writing course focusing on a multimodal service-learning project collaborating with peer and community partners in an online, hybrid or face-to-face delivery system. Prerequisite: grade of C- (1.700) in ENG 21011 or ENG 10002 or HONR 10297.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

Course Attributes:
Experiential Learning Requirem

### ENG 30067 - FICTION WRITING I

Instruction and practice in writing fiction with specific models and discussions of student work on a weekly basis. Prerequisite: ENG 20021.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

### ENG 30068 - FICTION WRITING II

Continued instruction and practice in writing of fiction with specific models and discussion of student work on a weekly basis. Prerequisite: ENG 30067.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

### ENG 30069 - POETRY WRITING I

Instruction in and practice of writing poetry with specific models and discussion of student work on a weekly basis. Prerequisite: ENG 20021.
3.000 Credit hours
3.000 Lecture hours
ENG 30070 - POETRY WRITING II

Continued practice in writing of poetry with specific models and discussion of student work on a weekly basis. Prerequisite: ENG 30069.
3.000 Credit hours
3.000 Lecture hours

ENG 30071 - CREATIVE NONFICTION

Instruction and practice in writing creative nonfiction with specific models and discussions of student work on a weekly basis. Prerequisite: ENG 21011 or HONR 10297.
3.000 Credit hours
3.000 Lecture hours

ENG 30072 - EDITING AND PUBLISHING: FICTION AND NONFICTION

Provides students with an overview of the editing and publishing industry. Provides practice, instruction, and feedback on document editing and book production and publishing. Prerequisites: ENG 21011 or HONR 10297.
3.000 Credit hours
3.000 Lecture hours

ENG 30095 - JUNIOR SPECIAL TOPICS

(Repeatable for credit) An opportunity to focus on important issues in literature, writing, criticism or cultural studies. Prerequisite: Junior standing.
3.000 Credit hours
3.000 Lecture hours

ENG 31001 - FUNDAMENTAL ENGLISH GRAMMAR

Study of grammatical structures and matters of usage and style in edited U.S. English. Prerequisite: none.
ENG 31002 - HISTORY OF THE ENGLISH LANGUAGE

Study of the development of the English language from the Indo-European period to the present. Prerequisite: none.

Levels: Undergraduate
Schedule Types: Lecture

ENG 31003 - LINGUISTICS

Survey of language study including linguistic tools of analysis such as phonetics, morphology and syntax, and selected topics in applied linguistics. Prerequisite: none.

Levels: Undergraduate
Schedule Types: Lecture

ENG 31004 - LEXICOLOGY/LEXICOGRAPHY

In-depth study of the lexicon in language use and the reasons for its expansion and continuous change. Study of tools in lexicography and analysis of the role of lexicography in language education. Prerequisite: ENG 31003.

Levels: Undergraduate
Schedule Types: Lecture

ENG 31005 - CHILD SECOND LANGUAGE ACQUISITION

Explores theory, research and teaching/learning applications of second language acquisition in children. Prerequisite: none.
**ENG 31006 - WORLD ENGLISHES**

Explores English varieties in the context of world languages, examining language politics with a focus on first/second language education and literacy in an electronic age. Prerequisite: ENG 21011 or HONR 10297.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

Course Attributes:
Diversity Course-Global, Writing Intensive Course

**ENG 31007 - TESL PEDAGOGY**

Theoretical bases, approaches, techniques of second language pedagogy at the elementary and secondary levels. Inquiry into ESLI methods, materials and lesson planning. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

**ENG 31008 - GRAMMAR FOR TEACHING ENGLISH AS A SECOND LANGUAGE/TEACHING ENGLISH AS A FOREIGN LANGUAGE**

Introduces students to grammars of spoken and written English and pedagogical grammar. Topics include parts of speech, tense and aspect, clause and phrase types, grammar in genre and pedagogical applications relevant to the English as a second/foreign language profession. Prerequisite: ENG 31001.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

**ENG 31095 - SPECIAL TOPICS IN LINGUISTICS**

(Repeatable for credit) Study of specific topics in linguistics such as sociolinguistics, phonetics and phonology or bi- and multi-lingualism. Prerequisite: ENG 21011 or HONR 10297.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

**ENG 32001 - CHILDREN'S LITERATURE**

Survey of children's literature from Mother Goose rhymes and picture books through modern realistic fiction.
Prerequisite: ENG 11011 or 11002 or HONR 10197 or ACT combined English/Writing score of 26 or higher or SAT Writing score of 600 or higher.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

ENG 32002 - LITERATURE FOR YOUNG ADULTS

Study of literature appropriate to young adults. Prerequisite: ENG 11011 or 11002 or HONR 10197 or ACT combined English/Writing score of 26 or higher or SAT Writing score of 600 or higher.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

ENG 33001 - U.S. LITERATURE TO 1865

U.S. literary themes, genres and authors studied in their historical and cultural contexts. Selections from the Colonial period through the Civil War. Prerequisite: ENG 21011 or HONR 10297.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

ENG 33002 - U.S. LITERATURE FROM 1865 TO 1945

U.S. literary themes, genres and authors studied in their historical and cultural contexts. Selections from the close of the Civil War through World War II. Prerequisite: ENG 21011 or HONR 10297.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

ENG 33003 - U.S. LITERATURE FROM 1945 TO PRESENT

U.S. literary themes, genres and authors studied in their historical and cultural contexts. Selections from the close of World War II to the present. Prerequisite: ENG 21011 or HONR 10297.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department
ENG 33010 - AFRICAN-AMERICAN LITERATURE TO 1900

(Cross-listed with PAS 32001) Study of African-American literature from its beginning to 1900, including such writers as Wheatley, J. Hammon, Terry, B. Hammon, Jones, Marrant, Allen, Hall, Walker, Truth, Garnet, Douglass, Delany, Harper, Stewart, Turner, Jacobs, Keckley, Brown, Wilson, Griggs, Chesnutt and Dunbar. Prerequisite: ENG 21011 or HONR 10297.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

ENG 33012 - MODERN AFRICAN-AMERICAN LITERATURE

(Cross-listed with PAS 32002) Study of African-American literature from the early twentieth century to the present. The authors include Toomer, Hughes, Larsen, Wright, Baldwin, Hansberry, Jones, Lorde, Walker, Morrison, Mosley, Youngblood and Carter. Prerequisite: ENG 21011 or HONR 10297.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

ENG 33013 - PAN-AFRICAN WOMEN'S LITERATURE

(Cross-listed with PAS 37100) Introduces students to literary works by African and Caribbean women. Prerequisite: ENG 11011.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

Course Attributes:
Diversity Course-Global

ENG 33014 - AFRICAN-AMERICAN WOMEN'S LITERATURE

(Cross-listed with PAS 37200) Introduces students to literary works by African-American women. Prerequisite: ENG 11011.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

ENG 33015 - AFRICAN LITERATURES
(Cross-listed with PAS 32050) Examines works of major 20th-century African, African American and Caribbean writers and intellectuals. Authors include Niane, Achebe, Emecheta, Prince, Hurston, Hughes, Cesaire, Senghor, Soyinka and many others. Prerequisite: ENG 11011 or HONR 10197.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

Course Attributes:
Diversity Course-Global

**ENG 34001 - MEDIEVAL LITERATURE**

Medieval literary themes, genres, and authors studied in their historical and cultural contexts. Selections from Anglo-Saxon and Middle English literature. Prerequisite: ENG 21011 or HONR 10297.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

**ENG 34002 - BRITISH LITERATURE, 1500-1660**

British literary themes, genres and authors studied in their historical and cultural contexts. Selections from Renaissance and Reformation literature through the English Civil War. Prerequisite: ENG 21011 or HONR 10297.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

**ENG 34003 - BRITISH LITERATURE, 1660-1800**

British literary themes, genres and authors studied in their historical and cultural contexts. Selections from Restoration, Augustan and early Romantic literature. Prerequisite: ENG 21011 or HONR 10297.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

**ENG 34004 - BRITISH LITERATURE, 1800-1900**

British literary themes, genres and authors studied in their historical and cultural contexts. Selections from Romantic and Victorian literature. Prerequisite: ENG 21011 or HONR 10297.

3.000 Credit hours
ENG 34005 - BRITISH AND IRISH LITERATURE, 1900-PRESENT

British and irish literary themes, genres and authors studied in their historical and cultural contexts. Selections from modern and post modern literature. Prerequisite: ENG 21011 or HONR 10297.

Levels: Undergraduate
Schedule Types: Lecture

English Department

ENG 34011 - WORLD LITERATURE IN ENGLISH

An examination of selected writings in English by postcolonial authors from Africa, Asia, the Caribbean and other parts of the world. Prerequisite: ENG 21011 or HONR 10297.

Levels: Undergraduate
Schedule Types: Lecture

Course Attributes:
Diversity Course-Global

ENG 34021 - WOMEN'S LITERATURE

Critical and theoretical consideration of gender issues concerning British and U.S. women writers studied in their historical and cultural contexts. Prerequisite: ENG 21011 or HONR 10297.

Levels: Undergraduate
Schedule Types: Lecture

Course Attributes:
Diversity Course-Domestic

ENG 34031 - SHORT STORY

Critical analysis of short stories written by important world authors. Selections include stories originally written in English and stories translated into English. Prerequisite: ENG 21011 or HONR 10297.

Levels: Undergraduate
**ENG 34041 - FAIRY TALES**

Study of classic fairy tales by Perrault, Grimms, Andersen and others as fundamental texts of Western culture worthy of literary criticism. Prerequisites: ENG 21011 or HONR 10297.

3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

English Department

**ENG 34055 - SHAKESPEARE**

Study of plays representing Shakespeare's entire career, including Henry IV parts I and II, The Merchant of Venice, Measure for Measure, Hamlet, Othello and The Tempest. Prerequisite: ENG 21011 or HONR 10297.

3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

English Department

**ENG 34065 - CHAUCER**

Close study of Chaucer's Canterbury Tales, with some attention to courtly poems and/or selected lyrics. Prerequisite: ENG 21011 or HONR 10297.

3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

English Department

**ENG 34095 - SPECIAL TOPICS: MAJOR AUTHOR STUDIES**

(Repeatable for credit when topics varies) Intensive study of one or more authors from the English-speaking world. Prerequisite: ENG 21011 or HONR 10297.

3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

English Department

**ENG 35101 - LITERATURE AND OTHER DISCIPLINES**

Study of literature in relation to, or from the standpoint of, another discipline such as psychoanalysis, psychology, religion, theology, music and painting. Prerequisite: ENG 21011 or HONR 10297.
ENG 35201 - THE BIBLE AS LITERATURE

Study of Bible as a great book subject to literary criticism and as a main document of Western culture. Old and New Testaments read. Prerequisite: ENG 21011 or HONR 10297.

 Levels: Undergraduate
 Schedule Types: Lecture

English Department

ENG 35301 - LGBT: CRITICAL PERSPECTIVES

Study of theory, language and other aspects of lesbian, gay, bisexual and transgendered literature and culture. Prerequisite: ENG 21011 or HONR 10297.

 Levels: Undergraduate
 Schedule Types: Lecture

English Department

Course Attributes:
Diversity Course-Domestic

ENG 36001 - APPLIED LITERARY CRITICISM

Advanced, reading-intensive course in the reading and interpretation of literary scholarship, with emphasis on published scholarly analysis. Primary and secondary texts vary, depending on the specialization of the instructor. Prerequisite: ENG 21011 or HONR 10297; and junior standing.

 Levels: Undergraduate
 Schedule Types: Lecture

English Department

ENG 37001 - CLASSICAL RHETORIC

Ancient approaches to rhetoric studied in their historical and cultural contexts. Selections from Greek and Roman thinkers such as the Sophists, Plato, Aristotle, Cicero and Quintilian. Prerequisite: ENG 21011 or HONR 10297.

 Levels: Undergraduate
**ENG 37101 - CRITICAL RHETORICAL STUDIES OF TEXTS IN CONTEXT**

Students learn critical analytic methods and apply them to written texts, examining the rhetorical function of their linguistic elements and their relationship to rhetorical contexts. Prerequisite: ENG 21011 or HONR 10297.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**ENG 38001 - CRITICAL THEORY AND READING**

Introduction to major interpretive paradigms in literary studies, from American New Criticism to the present, with emphasis on strategies for analyzing poetry, drama and narrative fiction. Prerequisite: ENG 21011 or HONR 10297; and ENG 24001.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**ENG 38895 - SPECIAL TOPICS IN WRITING**

(Repeatable for credit) Special topics course with an emphasis on writing. Topics include: Editing and Publishing; Grammar and Editing, and others. Course may be repeated with different content. Prerequisite: ENG 21011 or HONR 10297.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**ENG 39095 - SPECIAL TOPICS IN LITERARY HISTORY**

(Repeatable for credit when topics varies) Study of selected literary histories such as the travel narrative, the fairy tale, the detective story, and postcolonial literature. Prerequisite: ENG 21011 or HONR 10297.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**ENG 39195 - SPECIAL TOPICS IN DRAMA**
Study of selected topics, themes, or periods in drama such as Gender Construction, Obsession, or Medieval Drama. Prerequisite: ENG 21011 or HONR 10297.

Levels: Undergraduate
Schedule Types: Lecture

English Department

ENG 39295 - SPECIAL TOPICS IN POETRY

(Repeatable for credit when topic varies) Study of selected topics in poetry such as poetic form, historical and cultural contexts, and artistic movements. Prerequisite: ENG 21011 or HONR 10297.

Levels: Undergraduate
Schedule Types: Lecture

English Department

ENG 39395 - SPECIAL TOPICS IN FICTION

(Repeatable for credit when topic varies) Study of selected topics in fiction such as the autobiographical novel, the novella and the short story. Prerequisite: ENG 21011 or HONR 10297.

Levels: Undergraduate
Schedule Types: Lecture

English Department

ENG 39495 - SPECIAL TOPICS IN COMPARATIVE LITERATURE

(Repeatable for credit when topic varies) Study of selected topics in comparative literature such as movements and genres in world literature, the interrelationships of the arts. Prerequisite: ENG 21011 or HONR 10297

Levels: Undergraduate
Schedule Types: Lecture

English Department

ENG 39595 - SPECIAL TOPICS IN LITERARY CRITICISM

(Repeatable for credit when topic varies) Study of selected topics in literary criticism such as reader response criticism, psychoanalytic methodologies or Marxist approaches. Prerequisite: ENG 21011 or HONR 10297.

Levels: Undergraduate
Schedule Types: Lecture

English Department
ENG 39695 - SPECIAL TOPICS IN ETHNIC LITERATURE OF THE UNITED STATES

(Repeatable for credit when topic varies) Study of selected topics in ethnic literature such as the literature of one ethnic group, race and ethnicity in U.S. culture. Prerequisite: ENG 21011 or HONR 10297.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

ENG 39795 - SPECIAL TOPICS IN WOMEN'S LITERATURE

(Repeatable for credit when topic varies) Study of selected topics in women's literature organized around literary, historical and theoretical issues. Prerequisite: ENG 21011 or HONR 10297.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

ENG 39895 - SPECIAL TOPICS IN RHETORIC, COMPOSITION AND WRITING

(Repeatable for credit when topic varies) Study of selected topics in rhetoric, composition, and writing such as historical and contemporary studies of political and professional discourse. Course may be repeated with different content. Prerequisite: ENG 21011 or HONR 10297.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

ENG 39995 - SPECIAL TOPICS CULTURAL STUDIES

(Repeatable for credit when topic varies) Study of selected topics in cultural studies organized around a particular mode or methodology of cultural analysis. Prerequisite: ENG 21011 or HONR 10297.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

English Department

ENG 40099 - WRITING PORTFOLIO

Directed practice in constructing a portfolio of original writing, which may be creative, expository, technical, or preprofessional in nature. Restricted to students in the writing minor. Prerequisite: junior standing and writing minor.
2.000 Credit hours
ENG 41001 - SOCIOLINGUISTICS IN SCHOOLING

Examines the interactions between society and language. Explores pedagogical implications of language variation. Prerequisite: ENG 21011 or HONR 10297.

Levels: Undergraduate
Schedule Types: Senior Project/Honors Thesis

English Department

ENG 41002 - COMPUTERS IN L2 TEACHING

(Cross-listed with MCLS40654+MCLS50654) Designed for teachers of language and culture, this course explores the availability of technology, its implementation in the classroom and its integration with second language skills. Prerequisite: none.

Levels: Undergraduate
Schedule Types: Lecture

English Department

ENG 41009 - STUDENT TEACHING

(Slashed with ENG 41009) Full-time student teaching over 13 weeks in English as a Second Language in grades P-12. Background check by the Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) required to be presented to authorized personnel at the assigned school-agency before the first day of Student Teaching. Prerequisites: ITEC 19525; and EPSY 29525; and CULT 29535; and official valid certification of Child Safety Training, approved Basic Life Support and A.L.I.C.E. Training presented to the campus office of clinical experience; and special approval. Corequisite: ENG 41525.

Levels: Undergraduate
Schedule Types: Practicum or Internship

English Department

Course Attributes:
Experiential Learning Requirem

ENG 41092 - ESL/EFL PRACTICUM IN INTENSIVE ENGLISH PROGRAMS

(Repeatable for credit) Provides opportunities for students to observe, assist, and or teach English as a second
or foreign language in the ESL Center, including 70 field-clinical hours. Participating classes are Monday through Friday. Prerequisite: ENG 31007.

| Levels: Undergraduate |
| Schedule Types: Lecture, Practicum or Internship |

**English Department**

Course Attributes:
Experiential Learning Requirem

### ENG 41093 - VARIABLE TITLE WORKSHOP IN ENGLISH

(Repeatable for credit) An opportunity to focus on concerns of the discipline and on new developments in writing, criticism, literature and career opportunities. Prerequisite: Junior standing.

| 1.000 TO 6.000 Credit hours |
| 1.000 TO 6.000 Other hours |

| Levels: Undergraduate |
| Schedule Types: Workshop |

**English Department**

Course Attributes:
Experiential Learning Requirem

### ENG 41094 - COLLEGE TEACHING ASSISTANT

(Repeatable for maximum 6 credit hours) An opportunity to assist in the development and delivery of a college course in English. Expectations may include group and class leadership, selection of materials, development of classroom inquiry techniques, and multimedia support. Prerequisite: senior standing and special approval.

| 1.000 TO 3.000 Credit hours |
| 1.000 TO 3.000 Other hours |

| Levels: Undergraduate |
| Schedule Types: Field Experience, Practicum or Internship |

**English Department**

Course Attributes:
Experiential Learning Requirem

### ENG 41096 - INDIVIDUAL INVESTIGATION

(Repeatable for credit) Open to advanced undergraduate students in English. Only 3 hours of individual investigation count toward the English major. Prerequisite: Special approval of instructor and department and junior standing.

| 1.000 TO 3.000 Credit hours |
| 1.000 TO 3.000 Other hours |

| Levels: Undergraduate |
| Schedule Types: Individual Investigation |

**English Department**

### ENG 41098 - GUIDED RESEARCH IN ENGLISH
(Repeatable for a maximum of 6 credit hours) Independent student research with faculty guidance.
Prerequisites: junior standing and special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Research

English Department

Course Attributes:
Experiential Learning Requirem

ENG 41192 - ESL/EFL PRACTICUM IN A P-12 SETTING

(Repeatable for credit) Provides students seeking educational licensure opportunities to observe, assist, and or teach English as a second or foreign language in P-12 schools, including 70 field-clinical hours. Students must complete the Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit results to authorized personnel at the assigned school-agency before the first day of Practicum. Pre- or corequisite: ENG 31007.
3.000 Credit hours
2.000 Lecture hours
5.000 Other hours

Levels: Undergraduate
Schedule Types: Lecture, Practicum or Internship

English Department

Course Attributes:
Experiential Learning Requirem

ENG 41198 - RESEARCH ASSISTANT IN ENGLISH

(Repeatable for a maximum of 6 credit hours) An opportunity to assist a faculty member on faculty initiated research in criticism and literary analysis, rhetoric and composition, or applied language acquisition and teaching. Prerequisites: junior standing and special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Research

English Department

Course Attributes:
Experiential Learning Requirem

ENG 41292 - TEACHING ENGLISH AS A FOREIGN LANGUAGE PRACTICUM

(Repeatable for a maximum of 6 credit hours) Students observe, participate and teach in a number of school contexts in Dresden, Germany, from primary to secondary, community education and/or higher education. Expands TESL pedagogy by giving students authentic practice in the foreign language context. Pre/corequisite: ENG 31007.
3.000 OR 6.000 Credit hours
3.000 OR 6.000 Other hours

Undergraduate
ENG 41525 - INQUIRY INTO PROFESSIONAL PRACTICE

Preparation for student teaching of ESL, grades K-12. Prerequisite: ITEC 19525 and EPSY 29525 and CULT 29535. Corequisite ENG 41009.
3.000 Credit hours
3.000 Lecture hours

ENG 42092 - WRITING INTERNSHIP

(Repeatable for a maximum of 6 credit hours) Guided internship in professional writing, editing, or publishing. Possible placements include the KSU Press, Institute for Bibliography and Editing, and WICK Poetry Center. Prerequisites: junior standing and special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

ENG 42192 - SERVICE LEARNING IN ENGLISH STUDIES

(Repeatable for maximum 6 credit hours) Provides guided opportunities for completing service learning related to English Studies. Service placements meet a community need and provide practice in such areas as writing, editing, publishing, teaching, and tutoring. Prerequisites: junior standing and special approval.
3.000 Credit hours
3.000 Other hours

ENG 43092 - TEACHING POETRY IN THE SCHOOLS

(Repeatable for maximum 6 credit hours) Exploration of various approaches to teaching poetry writing, poetry appreciation, and poetry performance in school contexts. Study of creative writing as a means of developing literacy and promoting human growth. Prerequisites: junior standing and special approval.
ENG 49091 - SENIOR SEMINAR
(Repeatable for credit) Intensive study of a special topic in English studies. Students complete a long writing project during the semester. Prerequisite: ENG 38001 and English (ENG) major.

ENG 49095 - SENIOR SPECIAL TOPICS
(Repeatable for credit) Intensive study of topics that will vary each semester. Prerequisite: senior standing.

ENG 51002 - COMPUTERS IN SECOND LANGUAGE TEACHING
(Cross-listed with MCLS 40654+MCLS 50654) Designed for teachers of language and culture, this course explores the availability of technology, its implementation in the classroom and its integration with second language skills. Prerequisite: Graduate standing.

ENG 51009 - STUDENT TEACHING
(Slashed with ENG 41009) Full-time student teaching over 13 weeks in English as a Second Language in grades P-12. Background check by the Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) required to be presented to authorized personnel at the assigned school-agency before the first day of Student Teaching. Prerequisites: Official valid certification of Child Safety Training, approved Basic Life Support and A.L.I.C.E. Training presented to the campus office of clinical experience; graduate standing;
and special approval.
9.000 Credit hours
27.733 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

English Department

**ENG 61000 - INTRODUCTION TO RESEARCH AND PEDAGOGY IN CRITICAL READING**

Introduction to contemporary methods of literary and cultural criticism and to the profession of teaching English in college. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

English Department

**ENG 61094 - INTRODUCTION TO RESEARCH IN THE TEACHING OF COLLEGE WRITING**

(Repeatable for credit) Using the Kent program as an example, the focus will be on teaching composition, literature and language along with the needed planning and evaluation. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

English Department

**ENG 62291 - SEMINAR: BRITISH LITERATURE 1800 TO PRESENT**

(Repeatable for credit) (Cross-listed with ENG 72291) In-depth treatment of various topics from the Romantic and Victorian periods and the 20th century. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

English Department

**ENG 63001 - METHODOLOGY OF TESL**

(Cross-listed with ENG 73001) The theory and methodology of teaching English as a second language. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

English Department
**ENG 63033 - THEORIES IN SECOND LANGUAGE ACQUISITION**

(Cross-listed with ENG 73033 + MCLS 60661) This course surveys the major theoretical approaches to language acquisition, concentrating on second language acquisition and the relationship between acquisition/learning research and second language teaching approaches. Prerequisite: Graduate standing.

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Levels: Graduate  
Schedule Types: Lecture  

English Department

**ENG 63034 - LITERATE PRACTICES AND SOCIOLINGUISTICS**

(Cross-listed with ENG 73034) Discussion of sociolinguistic approaches to understanding literacy, language in workplaces and classrooms and societal multilingualism. Survey of trends in sociolinguistic thought and method. Prerequisite: Graduate standing.

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Levels: Graduate  
Schedule Types: Lecture  

English Department

**ENG 63037 - THE PRAGMATICS OF CONVERSATION**

(Cross-listed with MCLS 60621) Theories of pragmatics, conversational structure and strategies with practical applications for teaching conversation strategies to foreign second language learners. Prerequisite: Graduate standing.

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Levels: Graduate  
Schedule Types: Lecture  

English Department

**ENG 63038 - TEACHING LITERATURE AND CULTURE**

(Cross-listed with MCLS 60622) Students will explore theories of literature and culture teaching as well as strategies for teaching literature and culture. Prerequisite: Graduate standing.

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Levels: Graduate  
Schedule Types: Lecture  

English Department

**ENG 63039 - SECOND LANGUAGE CURRICULUM AND TESTING**

(Cross-listed with MCLS 60663) Students will study second language curriculum and testing design and current issues, including oral proficiency testing. Prerequisite: Graduate standing.

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ENG 63040 - LINGUISTICS FOR THE LANGUAGE PROFESSIONS

(Cross-listed with MCLS 60601) Students will be introduced to basic linguistic issues and how these relate to the language professions. Course focuses on functional principles, especially on options to express textual, interpersonal and ideational/experiential meaning. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

English Department

ENG 63041 - DESCRIPTIVE GRAMMAR OF ENGLISH

This course provides a description of English syntax and morphology. Presentation of material will be through rules and exposure to grammatical forms in meaningful contexts. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

English Department

ENG 63043 - SECOND LANGUAGE WRITING

(Cross-listed with MCLS 60665) Theory and practice in teaching second language writing. Topics will include current and historic approaches to second language writing, approaches to tutoring international students in writing centers, teacher and peer response, error correction, and technology in second language writing instruction. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

English Department

ENG 63044 - SECOND LANGUAGE READING

(Cross-listed with MCLS 60664) Addresses a wide variety of topics related to second language reading, including theoretical perspectives, the process of learning to read, models of how reading happens, comprehension, fluency, discourse structures, strategy use, and vocabulary acquisition. Teaching issues related to second language reading will also be addressed directly, namely assessment and curriculum building. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
**ENG 63045 - ENGLISH FOR SPECIFIC PURPOSES**

Examination of academic, workplace, and vocational language in the design of second language instructional materials and curriculum. Discourse domains from medical to agricultural to business are analyzed through applied linguistic tools. Curriculum and instructional materials are studied and designed. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

**ENG 63047 - HERITAGE LANGUAGES AND SECOND LANGUAGE LEARNING**

(Cross-listed with MCLS 60624) Theory and practice in language education of heritage language speakers. Ethnic, minority, ancestral, and community languages and language practices will be explored with implications for second and additional language learning in English, foreign language, bilingual education. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Seminar

**ENG 63098 - SECOND LANGUAGE RESEARCH METHODS**

(Cross-listed with MCLS 60698) Students learn how second language research influences their teaching practices by studying research texts and recent journal articles and conducting a research project. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Research

**ENG 63391 - SEMINAR: LINGUISTICS**

(Repeatable for credit) (Cross-listed with ENG 73391) In-depth treatment of various topics from modern linguistics, including phonology, morphology and various generative grammars. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

English Department
ENG 64070 - WRITING POETRY

(Cross-listed with ENG 74070) Advanced workshop in creative writing. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

English Department

ENG 64071 - WRITING FICTION

(Cross-listed with ENG 74071) Advanced workshop in the writing of fiction. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

English Department

ENG 65012 - READING AND INTERPRETING RESEARCH ON WRITING

(Cross-listed with ENG 75012) Course focuses on how to read critically and interpret published research by examining the principle means through which "knowledge" is constructed in writing research. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

English Department

ENG 65022 - RHETORICAL THEORY: GREEK AND ROMAN

(Cross-listed with ENG 75022) Course examines classical Greek and Roman rhetorical traditions and, to a lesser extent, their reappearance in contemporary rhetorical theories and composition pedagogies. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

English Department

ENG 65023 - RHETORICAL THEORY: 18TH, 19TH AND 20TH CENTURIES

(Cross-listed with ENG 75023) Course surveys 18th-, 19th- and 20th-century developments in rhetorical theory and their influences on contemporary pedagogical and theoretical practices. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours
ENGLISH DEPARTMENT

ENG 65027 - ROLE OF COMPOSITION

(Cross-listed with ENG 75027) (Repeatable for maximum 6 credit hours) Study of composition's contributions to writing studies such as writing pedagogy/theory, writing technologies, assessment, process research, WAC, program administration, rhetoric and cultural studies. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Other hours

ENG 65035 - LINGUISTICS FOR RHETORICIANS

(Cross-listed with ENG 75035) (Repeatable for maximum 6 credit hours) Provides an introduction to linguistic theories, concepts and tools relevant to the teaching and researching of various dimensions of written texts. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Other hours

ENG 65044 - RESEARCH DESIGN

(Cross-listed with ENG 75044) (Repeatable for maximum 6 credit hours) Introduces students to a range of research methodologies through theoretical scholarship and guided practice, culminating in a pilot research project. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Other hours

ENG 65051 - LITERACY: FUNCTIONS, PRACTICES AND HISTORY

(Cross-listed with ENG 75051) Introduces students to a range of research methodologies through theoretical scholarship and guided practice, culminating in a pilot research project. Prerequisite: graduate standing. Course surveys and critically evaluates historical and contemporary studies of literacy in terms of three dominant metaphors ("adaptation," "power," "grace") those studies employ. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours
**ENG 65052 - WRITING ACTIVITY AS SOCIAL PRACTICE**

(Cross-listed with ENG 75052) Through Vygotskian-based activity theory and contemporary theories of practice, course explores the rhetorical bases and implications of studying literacy and writing as embedded activity. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

English Department

**ENG 65053 - WRITING TECHNOLOGIES**

(Cross-listed with ENG 75053) Course critically examines theoretical and pedagogical claims concerning writing technologies and begins identifying the conceptual components of a grounded theory for technology-enhanced literacy learning. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

English Department

**ENG 66002 - BRITISH AND IRISH LITERATURE FROM THE EARLY ROMANTICS ONWARD**

(Cross-listed with ENG 76002) Broad, synchronic study of the literature identified with a single period in literary history embracing various genres and relating the literature to other cultural phenomena of the time. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

English Department

**ENG 66051 - SHAKESPEARE**

(Cross-listed with ENG 76051) Close reading of selected plays and poems by Shakespeare with some emphasis on critical and interpretative problems. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

English Department

**ENG 66101 - LITERATURE OF THE UNITED STATES THROUGH THE CIVIL WAR**

(Cross-listed with ENG 76101) Broad, synchronic study of U.S. literature identified with a single period in literary history embracing various genres and relating the literature to other cultural phenomena of the time.
Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

English Department

ENG 66103 - ETHNIC LITERATURE OF THE UNITED STATES
(Cross-listed with ENG 76103) An examination of selected fiction and theory by ethnic american authors, or of literary representations of special topics relating to ethnic and racial identity. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

English Department

ENG 66104 - AFRICAN-AMERICAN LITERATURE
(Cross-listed with ENG 76104) An examination of selected african-american fiction and theory, or of a special topic relating to literary representations of african american culture identity or history. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

English Department

ENG 66302 - POST-COLONIAL LITERATURE IN ENGLISH
(Cross-listed with ENG 76302) An examination of selected fiction and theory in English by post-colonial authors from India, Africa, South Africa, the Caribbean and elsewhere. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

English Department

ENG 66401 - LITERARY MOVEMENTS
(Cross-listed with ENG 76401) An examination of one particular movement in literary history via its writers, artists, benefactors, thinkers, political demagogues, and critics. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

English Department
ENG 66501 - NARRATIVE LITERATURE

(Cross-listed with ENG 76501) Close readings of selected novels, short stories, biographies, autobiographies, life writing, journals, and other forms of narrative and verse by British, American, and other writers in English from one or more periods in literary history. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture

English Department

ENG 66502 - DRAMATIC LITERATURE

(Cross-listed with ENG 76502) Close reading of selected plays and other dramatic forms by writers of Britain, Ireland, and the United States from one or more periods in literary history. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture

English Department

ENG 66592 - PRACTICUM IN TUTORING WRITING

(Repeatable for credit) Practical training and experience in tutoring composition. Prerequisite: Graduate standing.
1.000 Credit hours
1.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture, Practicum or Internship

English Department

ENG 66595 - SPECIAL TOPICS: AUTHORS AND AUTHORSHIP

(Repeatable for credit) (Cross-listed with ENG 76595) Research-based study of problems in the theory or practice of authorship. Typical courses include "The Creative Process," "Authors and Printers," "Faulkner in Hollywood." Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture

English Department

ENG 66706 - METHODS IN THE STUDY OF LITERATURE

(Cross-listed with ENG 76706) Analytical reading and interpretation of published research and criticism, its assumptions, trends, controversies; course will identify and contextualize present opportunities for research in...
field. Required for Ph.D.s specializing in Division II. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

English Department

**ENG 66791 - SEMINAR: BRITISH AND IRISH LITERATURE**

(Repeatable for credit) (Cross-listed with ENG 76791) In-depth treatment of various topics from Old English literature, Beowulf, Middle English literature and Chaucer. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

English Department

**ENG 66891 - SEMINAR: LITERATURE OF THE UNITED STATES**

(Repeatable for credit) (Cross-listed with ENG 76891) This course will examine the construction of American identities. Writers typically discussed are Howells, Dreiser, Cahan, Anderson, Fitzgerald, Dos Passos, Wright, Baldwin, Bellow, Ikada, Jen and others. Content varies. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

English Department

**ENG 66895 - SPECIAL TOPICS**

(Repeatable for credit) (Cross-listed with ENG 76895) Study of selected special topics in literature. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

English Department

**ENG 66991 - SEMINAR: GENRE**

(Repeatable for credit) (Cross-listed with ENG 76991) In-depth examination of one or more kinds of texts focusing on how forms are defined historically and analytically, with special attention to current approaches. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 67101</td>
<td>FEMINIST THEORY AND CRITICISM</td>
<td>(Cross-listed with ENG 77101) Study of key issues and concepts in feminist theory and criticism, including the nature, causes and effects (political, social and psychological) of certain types of representation of women and discourse practices employed by women. Prerequisite: Graduate standing. 3.000 Credit hours 3.000 Lecture hours</td>
</tr>
<tr>
<td>ENG 67103</td>
<td>PSYCHOANALYTIC THEORY AND CRITICISM</td>
<td>(Repeatable for credit) (Cross-listed with ENG 77103) Study of important issues and concepts in psychoanalytic theory and criticism. Prerequisite: Graduate standing. 3.000 Credit hours 3.000 Lecture hours</td>
</tr>
<tr>
<td>ENG 67104</td>
<td>SOCIAL AND CULTURAL THEORY AND CRITICISM</td>
<td>(Repeatable for credit) (Cross-listed with ENG 77104) Study of important issues and concepts in Marxist, new historicist, ethnic, post-colonialist and other modes of social/cultural theory and criticism. Prerequisite: Graduate standing. 3.000 Credit hours 3.000 Lecture hours</td>
</tr>
<tr>
<td>ENG 67591</td>
<td>SEMINAR: THEORY AND CRITICISM</td>
<td>(Repeatable for credit when topic varies) (Cross-listed with ENG 77591) In-depth study of important topics in contemporary theory and criticism. Prerequisite: Graduate standing. 3.000 Credit hours 3.000 Other hours</td>
</tr>
<tr>
<td>ENG 67691</td>
<td>SEMINAR: SCHOLARLY EDITING</td>
<td>(Repeatable for credit when topic varies) (Cross-listed with ENG 77691) In-depth treatment of various topics from modern scholarly editing. Prerequisite: Graduate standing.</td>
</tr>
</tbody>
</table>
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

English Department

**ENG 68093 - VARIABLE TITLE WORKSHOP IN ENGLISH**

(Repeatable for a maximum 8 credit hours) (Cross-listed with ENG 78093) Designed to focus on concerns of the profession/discipline to bring secondary teachers up to date on new developments in the field. Maximum for degree credit is 4 hours. Prerequisite: Graduate standing.
2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Workshop

English Department

**ENG 68096 - INDIVIDUAL INVESTIGATION**

(Repeatable for credit) (Cross-listed with ENG 78096) Intensive study of selected writer or special topic. Prerequisite: Graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

English Department

**ENG 68098 - RESEARCH**

(Repeatable for credit) Research for master's level graduate students. Credits earned may be applied toward meeting degree requirements if the department approves. Prerequisite: Special approval and graduate standing.
1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

English Department

**ENG 68392 - PRACTICUM IN TEACHING COLLEGE ENGLISH**

(Repeatable for credit) (Cross-listed with ENG 78392) Practical training and experience in teaching beginning composition courses. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

English Department
ENG 68492 - PRACTICUM IN TEACHING INTERNATIONAL STUDENTS

(Repeatable for credit) Practical training and experience in teaching English to international students. Field placement in the ESL Center or in P-12 schools. Prerequisite: Graduate standing. Pre or co-requisite: ENG 63001.

3.000 Credit hours
3.000 Lecture hours
6.000 Other hours

Levels: Graduate
Schedule Types: Lecture, Practicum or Internship

English Department

ENG 69199 - THESIS I

Thesis students must register for a total of 6 semester hours, 2 to 6 in a single semester distributed over several semesters if desired. Prerequisite: Special approval and graduate standing.

2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

English Department

ENG 69299 - THESIS II

Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: ENG 69199 and graduate standing.

2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

English Department

ENG 72291 - SEMINAR: BRITISH LITERATURE 1800 TO PRESENT

(Repeatable for credit) (Cross-listed with ENG 62291) In-depth treatment of various topics from the Romantic and Victorian periods and the 20th century. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

English Department

ENG 73001 - METHODOLOGY OF TESL

(Cross-listed with ENG 63001) The theory and methodology of teaching English as a second language. Prerequisite: Doctoral standing.

3.000 Credit hours
ENG 73033 - THEORIES IN SECOND LANGUAGE ACQUISITION

(Cross-listed with ENG 63033 + MCLS 60661) This course surveys the major theoretical approaches to language acquisition concentrating on second language acquisition and the relationship between acquisition learning research and second language teaching approaches. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

English Department

ENG 73034 - LITERATE PRACTICES AND SOCIOLINGUISTICS

(Cross-listed with ENG 63034) Discussion of sociolinguistic approaches to understanding literacy, language in workplaces and classrooms and societal multilingualism. Survey of trends in sociolinguistic thought and method. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

English Department

ENG 73391 - SEMINAR: LINGUISTICS

(Repeatable for credit) (Cross-listed with ENG 63391) In-depth treatment of various topics from modern linguistics, including phonology, morphology and various generative grammars. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

English Department

ENG 74070 - WRITING POETRY

(Cross-listed with ENG 64070) Advanced workshop in creative writing. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

English Department
ENG 74071 - WRITING FICTION

(Cross-listed with ENG 64071) Advanced workshop in the writing of fiction. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

English Department

ENG 75012 - READING AND INTERPRETING RESEARCH ON WRITING

(Cross-listed with ENG 65012) Course focuses on how to read critically and interpret published research by examining the principle means through which "knowledge" is constructed in writing research. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

English Department

ENG 75022 - RHETORICAL THEORY: GREEK AND ROMAN

(Cross-listed with ENG 65022) Course examines classical Greek and Roman rhetorical traditions and, to a lesser extent, their reappearance in contemporary rhetorical theories and composition pedagogies. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

English Department

ENG 75023 - RHETORICAL THEORY: 18TH, 19TH AND 20TH CENTURIES

(Cross-listed with ENG 65023) Course surveys 18th-, 19th- and 20th-century developments in rhetorical theory and their influences on contemporary pedagogical and theoretical practices. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

English Department

ENG 75027 - ROLE OF COMPOSITION

(Cross-listed with ENG 65027) (Repeatable for maximum 6 credit hours) Study of composition's contributions to writing studies such as writing pedagogy/theory, writing technologies, assessment, process research, WAC, program administration, rhetoric and cultural studies. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Other hours
ENG 75035 - LINGUISTICS FOR RHETORICIANS

(Cross-listed with ENG 65035) (Repeatable for maximum 6 credit hours) Provides an introduction to linguistic theories, concepts and tools relevant to the teaching and researching of various dimensions of written texts. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

ENG 75044 - RESEARCH DESIGN

(Cross-listed with ENG 65044) (Repeatable for maximum 6 credit hours) Introduces students to a range of research methodologies through theoretical scholarship and guided practice, culminating in a pilot research project. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

ENG 75051 - LITERACY: FUNCTIONS, PRACTICES AND HISTORY

(Cross-listed with ENG 65051) Introduces students to a range of research methodologies through theoretical scholarship and guided practice, culminating in a pilot research project. Prerequisite: graduate standing. Course surveys and critically evaluates historical and contemporary studies of literacy in terms of three dominant metaphors ("adaptation," "power," "grace") those studies employ. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

ENG 75052 - WRITING ACTIVITY AS SOCIAL PRACTICE

(Cross-listed with ENG 65052) Through Vygotskian-based activity theory and contemporary theories of practice, course explores the rhetorical bases and implications of studying literacy and writing as embedded activity. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
ENG 75053 - WRITING TECHNOLOGIES

(Cross-listed with ENG 65053) Course critically examines theoretical and pedagogical claims concerning writing technologies and begins identifying the conceptual components of a grounded theory for technology-enhanced literacy learning. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

ENG 76002 - BRITISH AND IRISH LITERATURE FROM THE EARLY ROMANTICS ONWARD

(Cross-listed with ENG 66002) Broad, synchronic study of the literature identified with a single period in literary history embracing various genres and relating the literature to other cultural phenomena of the time. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

ENG 76051 - SHAKESPEARE

(Cross-listed with ENG 66051) Close reading of selected plays and poems by Shakespeare with some emphasis on critical and interpretative problems. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

ENG 76101 - LITERATURE OF THE UNITED STATES THROUGH THE CIVIL WAR

(Cross-listed with ENG 66101) Broad, synchronic study of U.S. literature identified with a single period in literary history embracing various genres and relating the literature to other cultural phenomena of the time. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

ENG 76103 - ETHNIC LITERATURE OF THE UNITED STATES

(Cross-listed with ENG 66103) An examination of selected fiction and theory by ethnic American authors, or of
ENG 76104 - AFRICAN-AMERICAN LITERATURE

(Cross-listed with ENG 66104) An examination of selected African-American fiction and theory, or of a special topic relating to literary representations of African-American culture, identity or history. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

English Department

ENG 76302 - POST-COLONIAL LITERATURE IN ENGLISH

(Cross-listed with ENG 66302) An examination of selected fiction and theory in English by post-colonial authors from India, Africa, South Africa, the Caribbean and elsewhere. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

English Department

ENG 76401 - LITERARY MOVEMENTS

(Cross-listed with ENG 66401) An examination of one particular movement in literary history via its writers, artists, benefactors, thinkers, political demagogues and critics. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

English Department

ENG 76501 - NARRATIVE LITERATURE

(Cross-listed with ENG 66501) Close readings of selected novels, short stories, biographies, autobiographies, life writing, journals, and other forms of narrative and verse by British, American and other writers in English, from one or more periods in literary history. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
## ENG 76502 - DRAMATIC LITERATURE

(Cross-listed with ENG 66502) Close reading of selected plays and other dramatic forms by writers of Britain, Ireland and the United States, from one or more periods in literary history. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

## ENG 76592 - PRACTICUM IN TUTORING WRITING

(Repeatable for credit) Practical training and experience in tutoring composition. Prerequisite: Doctoral standing.

1.000 Credit hours
1.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture, Practicum or Internship

## ENG 76595 - SPECIAL TOPICS: AUTHORS AND AUTHORSHIP

(Repeatable for credit) (Cross-listed with ENG 66595) Research-based study of problems in the theory or practice of authorship. Typical courses include "the creative process", "authors and printers", "Faulkner in Hollywood". Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

## ENG 76706 - METHODS IN THE STUDY OF LITERATURE

(Cross-listed with ENG 66706) Analytical reading and interpretation of published research and criticism, its assumptions, trends, controversies; course will identify and contextualize present opportunities for research in field. Required for Ph.D.s specializing in Division II. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

## ENG 76791 - SEMINAR: BRITISH AND IRISH LITERATURE

(Repeatable for credit) (Cross-listed with ENG 66791) In-depth treatment of various topics from old English literature, Beowulf, Middle English literature, and Chaucer. Prerequisite: Doctoral standing.
ENG 76891 - SEMINAR: LITERATURE OF THE UNITED STATES

(Repeatable for credit) (Cross-listed with ENG 66891) This course will examine the construction of American identities. Writers typically discussed are Howells, Dreiser, Cahan, Anderson, Fitzgerald, Dos Passos, Wright, Baldwin, Bellow, Ikada, Jen and others. Content varies. Prerequisite: Doctoral standing.

Levels: Graduate
Schedule Types: Seminar

English Department

ENG 76895 - SPECIAL TOPICS

(Repeatable for credit) (Cross-listed with ENG 66895) Study of selected special topics in literature. Prerequisite: Doctoral standing.

Levels: Graduate
Schedule Types: Lecture

English Department

ENG 76991 - SEMINAR: GENRE

(Repeatable for credit) (Cross-listed with ENG 66991) In-depth examination of one or more kinds of texts focusing on how forms are defined historically and analytically, with special attention to current approaches. Prerequisite: Doctoral standing.

Levels: Graduate
Schedule Types: Seminar

English Department

ENG 77101 - FEMINIST THEORY AND CRITICISM

(Cross-listed with ENG 67101) Study of key issues and concepts in feminist theory and criticism, including the nature, causes and effects (political, social and psychological) of certain types of representation of women and discourse practices employed by women. Prerequisite: Doctoral standing.

Levels: Graduate
Schedule Types: Lecture
**ENG 77103 - PSYCHOANALYTIC THEORY AND CRITICISM**

(Repeatable for credit) (Cross-listed with ENG 67103) Study of important issues and concepts in psychoanalytic theory and criticism. Prerequisite: Doctoral standing.

3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

**ENG 77104 - SOCIAL AND CULTURAL THEORY AND CRITICISM**

(Repeatable for credit) (Cross-listed with ENG 67104) Study of important issues and concepts in Marxist, new historicist, ethnic, post-colonialist and other modes of social cultural theory and criticism. Prerequisite: Doctoral standing.

3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

**ENG 77591 - SEMINAR: THEORY AND CRITICISM**

(Repeatable for credit) (Cross-listed with ENG 67591) In-depth study of important topics in contemporary theory and criticism. Prerequisite: Doctoral standing.

3.000 Credit hours  
3.000 Other hours

Levels: Graduate  
Schedule Types: Seminar

**ENG 77691 - SEMINAR: SCHOLARLY EDITING**

(Repeatable for credit when topic varies) (Cross-listed with ENG 67691) In-depth treatment of various topics from modern scholarly editing. Prerequisite: Doctoral standing.

3.000 Credit hours  
3.000 Other hours

Levels: Graduate  
Schedule Types: Seminar

**ENG 78093 - VARIABLE TITLE WORKSHOP IN ENGLISH**

(Repeatable for a maximum of 8 credit hours) (Cross-listed with ENG 68093) Designed to focus on concerns of the profession/discipline to bring secondary teachers up to date on new developments in the field. Maximum for degree credit is 4 hours. Prerequisite: Doctoral standing.
ENG 78096 - INDIVIDUAL INVESTIGATION

(Repeatable for credit) (Cross-listed with ENG 68096) Intensive study of selected writer or special topic. Prerequisite: Doctoral standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

English Department

ENG 78392 - PRACTICUM IN TEACHING COLLEGE ENGLISH

(Repeatable for credit) (Cross-listed with ENG 68392) Practical training and experience in teaching beginning composition courses. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

English Department

ENG 85024 - DOMAIN RHETORICS AND THE CONSTRUCTION OF KNOWLEDGE

(Repeatable twice for credit) Course examines disciplinarity and knowledge production as historically and socially situated practices and how they are realized through linguistic, rhetorical and material processes and systems. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

English Department

ENG 85025 - THEORIES AND SYSTEMS OF WRITING AND REPRESENTATION

Course examines the history and use of scripts and other means of constructing shared meaning and the attendant contemporary issues concerning writing and representation. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

English Department
ENG 85033 - THE RHETORICAL NATURE AND FUNCTION OF EXTENDED DISCOURSE

Examines discourse as a rhetorical and socio-political practice that extends beyond the temporal and material boundaries of individual texts by considering how discursive practice is embedded within, sustains, and modifies other social, cultural, and political practices. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

English Department

ENG 85041 - FIELD RESEARCH METHODS IN WRITING

Course focuses on qualitative methods for conducting field research in writing within communities of practice and particular contexts and for analyzing and interpreting data. Prerequisite: 9 doctoral hours of ENG 75011 and ENG 75012 and ENG 75022 and ENG 75023 and ENG 73034 and ENG 75051 and ENG 75052 and ENG 75053 and ENG 75057. Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

English Department

ENG 85042 - DISCOURSE ANALYSIS

Explores various approaches to discourse analysis (e.g., critical discourse analysis, narrative theory, systemic functional linguistics) and teaches students how to use them to conduct linguistic analyses of discourse. We will examine discourse in terms of the key functions language serves as a form of social action: to represent the world, to invoke and create social relationships, interactions, and identities, and to organize utterances into meaningful discursive events and products. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

English Department

ENG 85054 - STUDIES IN LITERACY AND COMMUNITY

Course expands on ENG 6/75052 by examining in more detail how literacy is embedded in the activities and practices of academic, civic and professional communities. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

English Department

ENG 85055 - THE NATURE AND RELATIONSHIP OF ACADEMIC AND NONACADEMIC LITERACY
Course explores the relationship between academic and non-academic literacy, focusing on relationships pertaining to the school-to-work transitions that students make. Prerequisite: Special approval and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

English Department

**ENG 85056 - INTRODUCTION TO THE STUDY OF WRITING ASSESSMENT: RESEARCH, THEORY AND PRACTICE**

Provides students with an introduction to the theory, research, and practice of writing assessment outside the classroom, as it is informed through the study of the literatures of college writing assessment and educational measurement. In addition to acquiring a basic understanding of measurement principles like reliability and validity for assessing student writing, students can complete projects of their own design for their own institutions. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

English Department

**ENG 85057 - RHETORICAL METHODS**

Focuses on methodological practices associated with rhetorical theory and considers the epistemological and ontological underpinnings of these theories' methodologies. The class investigates how these theories know and what they deem worth knowing. The course is designed around several significant approaches to analysis, both classical and contemporary. This orientation is intended to offer background and prompt students to apply those rhetorical methodologies in their own work. Prerequisite: Minimum six credit hours from ENG 75012, ENG 75022, and 75023; and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

English Department

**ENG 85060 - DIRECTED READINGS IN WRITING AND RHETORIC**

Topics covered will vary according to the needs of students demonstrating deficiency in qualifying exams and/or requiring additional work before undertaking a dissertation project. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

English Department

**ENG 88098 - RESEARCH DOCTORAL**
(Repeatable for credit) Research or individual investigation for doctoral students who have not yet passed candidacy examination. Credits earned may be applied toward degree if department approves. Prerequisite: Special approval of the graduate chairman and doctoral standing.
1.00 TO 15.00 Credit hours
1.00 TO 15.00 Other hours

Levels: Graduate
Schedule Types: Research

English Department

**ENG 89199 - DISSERTATION I**

(Repeatable for credit) Doctoral dissertation, for which registration in two semesters is required first of which will be the semester in which dissertation work is begun and continuing until completion of 30 hours. Prerequisite: Doctoral standing.
15.00 Credit hours
15.00 Other hours

Levels: Graduate
Schedule Types: Dissertation

English Department

**ENG 89299 - DISSERTATION II**

(Repeatable for credit) Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. Prerequisite: ENG 88199 and doctoral standing.
15.00 Credit hours
15.00 Other hours

Levels: Graduate
Schedule Types: Dissertation

English Department

**ENOL 14600 - INTRODUCTION TO ENOLOGY**

Targets people who became interested in home winemaking with possibilities to grow into the small business opportunity, as well as cellar employees interested in winemaking career. During this course, students build proper basic understanding of winemaking which alleviates common home winemaker’s errors. Prerequisite: None.
3.00 Credit hours
3.00 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**ENOL 14800 - WINERY SANITATION**

The basic science and technology of winery sanitation that includes an introduction to wine microbiology. Covers all methods used for winery sanitation including premises, tanks, pumps, filters, oak barrels and sampling equipment, including but not limited to chemical agents, reagents and thermal treatments leading to sterile bottling. Environmental issues and compliance are also addressed. Prerequisite: ENOL 14600.
ENOL 16000 - WINERY EQUIPMENT OPERATION

Covers process technologies and process systems used in modern commercial wineries. Overview of winemaking systems, including work place safety, cleaning and sanitation procedures, winemaking equipment and materials, tanks, barrels and barrel alternatives, filtration systems and bottling equipment. Also touches upon on chillers and electrical needs. Prerequisite: ENOL 14600.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

ENOL 21000 - INTRODUCTION TO WINE MICROORGANISMS

Introduction to the basic principles of wine microbiology and the variety of microorganisms frequently encountered in the wine making process. Yeasts, bacteria and molds play vital roles in the production of wine, both beneficial and harmful. Students become familiar with the morphology, reproduction and sensory attributes of wine microorganisms in order to understand their influence on winemaking and to be able to manage them effectively. Prerequisite: ENOL 14600.

3.000 Credit hours
2.500 Lecture hours
1.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Regional College Department

ENOL 24600 - INTERMEDIATE ENOLOGY - HARVEST AND CRUSH

Focused on advanced science and technology concepts of winemaking as it relates to pre-harvest, fruit harvest, and procedures involved in juice and must preparation. Builds on the fundamentals taught in Introduction to Enology, Molecular Principles of Grape and Wine, and Wine Microbiology. Prerequisite: ENOL 14600.

2.000 Credit hours
1.500 Lecture hours
1.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Regional College Department

ENOL 24700 - INTERMEDIATE ENOLOGY - POSTHARVEST

Focused on advanced science and technology concepts of winemaking as it relates to post harvest procedures involved in stabilization, clarification, fining, and bottling. Builds on the fundamentals taught in Introduction to Enology, Molecular Principles of Grape and Wine, Wine Microbiology, Wine and Must Analysis, and Intermediate
Enology Harvest and Crush. Prerequisites: ENOL 14600 and ENOL 24600.

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Regional College Department

**ENOL 25792 - FALL WINE PRODUCTION FIELD WORK**

Principles of grape juice and wine analysis and the reasons for use of each analysis. Analyses of a practical and useful nature are chosen for the laboratory exercises demonstrating various chemical, physical and biochemical methods. Students participate in workshops and hands-on experiences at participating wineries. Prerequisite: ENOL 14600; and ENOL 14800; and ENOL 16000. Corequisite: ENOL 24600.

Levels: Undergraduate
Schedule Types: Field Experience, Lecture

Regional College Department

Course Attributes:
Experiential Learning Requirem

**ENOL 25992 - CELLAR OPERATIONS FIELD WORK**

Provide students initiated in the field of enology with actual and practical exposure to the technology of wine making as is performed during the passive vineyard periods associated with winter and spring. Students are expected to improve their understanding of the methods and science involved by on-site participation in each of the various activities associated with finished wine production. Course serves as actual practical exposure and may qualify as experience for those seeking employment in commercial enology. Prerequisite: ENOL 25792.

Levels: Undergraduate
Schedule Types: Field Experience, Lecture

Regional College Department

Course Attributes:
Experiential Learning Requirem

**ENOL 26600 - SENSORY EVALUATION**

Intended for those individuals who need to develop an understanding of the principles of sensory evaluation used in commercial wine making. It also benefits wine enthusiasts interested in reaching advanced levels of appreciation, as well wine producers, wine merchants and enologists, who by the nature of their profession need to discern flavors and establish tasting benchmarks. Students practice sensory analysis at home and in workshops to further their sensory evaluation skills and techniques. Prerequisite: ENOL 14600.

Levels: Undergraduate
Schedule Types: Field Experience, Lecture

Regional College Department

Course Attributes:
Experiential Learning Requirem
ENOL 26800 - WINE AND MUST ANALYSIS

Principles of grape juice and wine analysis and the reasons for use of each analysis. Analyses of a practical and useful nature are chosen for the laboratory exercises demonstrating various chemical, physical and biochemical methods. Students participate in workshops and hands-on experiences at participating wineries. Prerequisite: ENOL 14600.

3.000 Credit hours
2.500 Lecture hours
1.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

ENTR 27056 - INTRODUCTION TO ENTREPRENEURSHIP

The study of the entrepreneurial process from conception to birth of a new venture. This includes attributes of successful entrepreneurs, opportunity recognition, innovation, venture screening, risk assessment, risk tolerance, identification of resources and business planning to learn how to turn opportunities into viable business. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

ENTR 27192 - BEGINNING PRACTICUM

(Repeatable for a maximum of 4 credit hours) This course offers the student a chance to explore the operations within an entrepreneurial venture through a real life consulting project. Students will work on a defined project for a small business or startup. Faculty and staff of the Center for Entrepreneurship and Business Innovation (CEBI) will be responsible for pairing students with projects. The time commitment for this course is approximately 50 hours per credit hour. Prerequisite: minimum C (2.000) grade in ENTR 27056.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

ENTR 27466 - SPEAKER SERIES IN ENTREPRENEURSHIP

Explores entrepreneurship based upon the experiences of a broad range of entrepreneurs. During the semester, at least eight entrepreneurs will share their paths in establishing a successful enterprise, including some of the obstacles and missteps they made along the way. This course is also offered in an online format. Prerequisite:
ENTR 37040 - ENTREPRENEURIAL TOOLS

Provides an overview of the analytical, communication, and decision-making skills that students will need to succeed in subsequent coursework and as an entrepreneur. Topics include strategic analysis, financial analysis, case analysis, decision-making, and persuasive communications. Incorporates professional development skills and opportunities. Prerequisites: entrepreneurship (ENTR) major or minor; and minimum C grade in ENTR 27056; and minimum cumulative 2.25 GPA.

Levels: Undergraduate
Schedule Types: Lecture

ENTR 37045 - SALES IN THE ENTREPRENEURIAL VENTURE

Selling and the management of the sales force in the entrepreneurial environment. Special focus is given to enhancing students' selling skills and background in developing an effective sales force for an entrepreneurial organization. Prerequisites: ENTR 27056; and minimum cumulative GPA of 2.25; and entrepreneurship (ENTR) major or minor.

Levels: Undergraduate
Schedule Types: Lecture

ENTR 37065 - ENTREPRENEURIAL FINANCE

Students are introduced to the key elements of finances in an entrepreneurial environment. The course is a mix of strategy and operating considerations for early stage businesses. Concepts that are taught include sources of capital, the economic ecosystem, core and adjacency strategies, strategy pivots, customer value creation and switching costs, pricing models, operating costs, cash flow planning, revenue forecasts and financial projections, private and public company analysis, and franchise evaluation. At the end of the course students should be able to think critically about business and make critical strategic evaluations during the course of a business lifecycle. Prerequisites: ACCT 23020; and ECON 22060; and ENTR 27056; and minimum cumulative GPA of 2.25; and entrepreneurship (ENTR) major or minor.

Levels: Undergraduate
Schedule Types: Lecture

ENTR 37075 - ENTREPRENEURIAL MARKETING
Application of marketing concepts to entrepreneurial situations. Emphasis is given to market segmentation and analysis, product and service positioning and market-oriented firm development. Prerequisites: ENTR 27056; and minimum cumulative GPA of 2.25; and entrepreneurship (ENTR) major or minor.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Marketing and Entrepreneurship Department

**ENTR 37080 - NEW VENTURE CREATION**

The process of formulating, planning and implementing a new venture. Apply the skills learned in the functional areas toward the goal of starting a business. Exposure to detailed descriptions of "how to" embark on a new venture in a logical manner. Prerequisites: ENTR 27056; and ENTR 37040 with a minimum C grade; and ENTR 37065 or FIN 36053; entrepreneurship (ENTR) major or minor; and minimum GPA of 2.25; minimum C grade in ENG 21011, COMM 15000 and MATH 11010.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Marketing and Entrepreneurship Department

Course Attributes:
Writing Intensive Course

**ENTR 37192 - ADVANCED PRACTICUM**

(Repeatable for a total of 4 credit hours) This course offers the student a chance to explore and apply their organizational leadership, teamwork, communication, critical thinking and problem solving skills in an entrepreneurial setting by providing a real life consulting experience. In this practicum, students will be responsible for defining and managing their projects, working with clients lined up through the faculty member and the Center for Entrepreneurship and Business Innovation. The time commitment for this course is approximately 50 hours per credit hour Prerequisites: ENTR 27056 and ENTR 37075; and a minimum C (2.000) grade in ENTR 37040; and minimum cumulative GPA of 2.25; and entrepreneurship (ENTR) major or minor.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Marketing and Entrepreneurship Department

Course Attributes:
Experiential Learning Requirem

**ENTR 37195 - SPECIAL TOPICS IN ENTREPRENEURSHIP I**

(Repeatable for credit) Special topics course offered on an irregular basis; different topics and faculty involved each time the course is offered. Prerequisite: ENTR 27056 and minimum cumulative GPA of 2.25.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Lecture hours

Levels: Undergraduate
Marketing and Entrepreneurship Department

**ENTR 45096 - INDIVIDUAL INVESTIGATION IN ENTREPRENEURSHIP**

(Repeatable for credit) Independent investigation of appropriate problem undertaken by a senior entrepreneurship major. Prerequisite: special approval.

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Levels: Undergraduate
Schedule Types: Individual Investigation

Marketing and Entrepreneurship Department

**ENTR 47045 - ENTREPRENEURIAL LEADERSHIP**

Application of business start-up and leadership concepts to entrepreneurial situations. Emphasis is given to mentoring and coaching students in ENTR 27065 or ENTR 27075. Prerequisites: ENTR 27075 with a grade of B (3.0) or better; and entrepreneurship (ENTR) major.

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Levels: Undergraduate
Schedule Types: Lecture

Marketing and Entrepreneurship Department

**ENTR 47047 - STRATEGIC DILEMMAS IN ENTREPRENEURSHIP**

Examines early challenges with strategic consequences faced by the entrepreneur. The topics covered include the timing of entrepreneurial entry, the type of entry (startup vs. franchise vs. acquisition), family business dilemmas, division of roles in a new venture, equity split, hiring dilemmas, investor dilemmas, exit choices and other dilemmas that have long-term consequences for entrepreneurs, their ventures, as well as for co-founders, employees, investors, and potential acquirers. The course heavily relies on case studies as a primary means of dilemma analysis. Prerequisites: a minimum C (2.000) grade in ENTR 27056; junior or senior standing; and entrepreneurship (ENTR) major or minor; and minimum cumulative 2.25 GPA.

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Levels: Undergraduate
Schedule Types: Lecture

Marketing and Entrepreneurship Department

**ENTR 47048 - ENTREPRENEURIAL EXPERIENCE I**

First of a two-course sequence designed to immerse entrepreneurship majors into the dynamics of starting and running a business through the creation of their own venture. Students in this course will utilize a plan they developed in New Venture Creation, ENTR 37080, or create a new business plan. Activities may include identifying market needs, researching financial viability of the business venture to meet that need, marshaling the resources to launch a business, and launching the business. Prerequisites: entrepreneurship (ENTR) major; and minimum cumulative 2.25 GPA; and ENTR 37080; and minimum C grade in ENG 21011, COMM 15000 and MATH 11010.

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ENTR 47049 - ENTREPRENEURIAL EXPERIENCE II

Second of a two-course sequence designed to immerse entrepreneurship majors into the dynamics of starting and running a business through the creation of their own venture. Activities include growing the business started during Entrepreneurial Experience I, meeting all operational requirements of the business, evaluating the business, and determining whether to continue the business or shut it down upon completion of the course. Prerequisite: ENTR 47048; and entrepreneurship (ENTR) major and minor; and minimum cumulative 2.25 GPA.

3.000 Credit hours
3.000 Lab hours

ENTR 47091 - SEMINAR IN ENTREPRENEURSHIP

(Repeatable for credit) Current topics in entrepreneurship. Entrepreneurship majors will not receive credit for this course. Prerequisites: ENTR 27056; student in the College of Business Administration; and junior or senior standing. Not open to entrepreneurship (ENTR) majors.

3.000 Credit hours
3.000 Other hours

ENTR 47092 - ENTREPRENEURIAL EXECUTIVE APPRENTICESHIP I

First of a two-course sequence designed to immerse entrepreneurship majors into the dynamics of starting and running a business. Students in this course will work with a regional entrepreneur on his or her start-up. Students will be involved in activities which may range from market assessment, needs analysis, financial viability analysis, marketing activities for growth and expansions, franchising opportunity assessment, strategic planning, operations management, activities related to funding or other duties or responsibilities associated with the startup and growth of a new venture. Faculty and staff of the Center for Entrepreneurship and Business Innovation (CEBI) will be responsible for pairing students with regional entrepreneurs. Prerequisite: ENTR 37080; entrepreneurship (ENTR) major; and cumulative 2.250 GPA; and minimum C grade in ENG 21001, COMM 15000 and MATH 11010.

3.000 Credit hours
1.000 Lecture hours
1.000 Lab hours
3.000 Other hours
ENTR 47192 - ENTREPRENEURIAL EXECUTIVE APPRENTICESHIP II

Second of a two-course sequence designed to immerse entrepreneurship majors into the dynamics of starting and running a business. Students in this course will work with a regional entrepreneur on his or her start-up. Students will be involved in activities which may range from market assessment, needs analysis, financial viability analysis, marketing activities for growth and expansions, franchising opportunity assessment, strategic planning, operations management, activities related to funding or other duties or responsibilities associated with the startup and growth of a new venture. Faculty and staff of the Center for Entrepreneurship and Business Innovation (CEBI) will be responsible for pairing students with regional entrepreneurs. Prerequisites: ENTR 47092 or ENTR 47048.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Marketing and Entrepreneurship Department

Course Attributes:
Experiential Learning Requirem

ENTR 47195 - SPECIAL TOPICS IN ENTREPRENEURSHIP II

(Repeatable for credit)Special topics course offered on an irregular basis; different topics and faculty involved each time the course is offered. Prerequisite: ENTR 27056; and minimum cumulative GPA of 2.25.
1.000 TO 4.000 Credit hours
1.000 TO 4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Marketing and Entrepreneurship Department

ENTR 47292 - ENTREPRENEURIAL INTERNSHIP

(Repeatable for a total of 6 credit hours) Preparation of research report concurrent with on-the-job experience with cooperating business or other organization. Prerequisites: minimum cumulative GPA of 2.25; and entrepreneurship (ENTR) major; and special approval.
1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Marketing and Entrepreneurship Department

Course Attributes:
Experiential Learning Requirem

ENTR 65051 - TECHNOLOGY COMMERCIALIZATION

This course is designed to teach students how to evaluate opportunities for technology commercialization and how to apply the steps required in order take a technological innovation to the marketplace. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Marketing and Entrepreneurship Department

**EPI 50196 - INDIVIDUAL INVESTIGATION IN EPIDEMIOLOGY**

(repeatable for maximum 6 credits) Individual graduate investigation or research in areas related to epidemiology. Prerequisite: graduate standing and special approval.

1.000 TO 3.000 Credit hours

Levels: Graduate
Schedule Types: Individual Investigation

Biostats/Enviro Health/Epidem Department

**EPI 52017 - FUNDAMENTALS OF PUBLIC HEALTH EPIDEMIOLOGY**

(Slashed with EPI 72017) Introduces principles, methods, and application of epidemiology. Covers the history of epidemiology, concepts of disease causation and prevention, measures of disease frequency and excessive risk, epidemiologic study designs, causal inference, outbreak investigation and screening. Provides experience with calculation of rate standardization, measures of disease frequency, association, and impact, and sensitivity and specificity of screening tests. Highlights applications of epidemiology to understanding of disease etiology, transmission, pathogenesis, and prevention, evaluation and public policy development. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biostats/Enviro Health/Epidem Department

**EPI 52028 - METHODS OF EVIDENCE BASED PUBLIC HEALTH**

Explores tools and techniques used to quantitatively determine the effectiveness of public health interventions in the social sciences. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biostats/Enviro Health/Epidem Department

**EPI 60191 - VARIABLE CONTENT SEMINAR IN EPIDEMIOLOGY**

(Repeatable for credit) (Cross-listed with EPI 80191) Seminar on current and important topics in epidemiology. Subject matter varies depending on the topic. Prerequisites: Graduate standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Seminar
EPI 60192 - PRACTICUM EXPERIENCE IN EPIDEMIOLOGY
Observational and participation in public health activities of a public health agency, hospital or other approved organization. The student completes the field experience with joint supervision from the university and approved organization or agency. Prerequisites: graduate standing and special approval.
6.000 Credit hours
20.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

EPI 60195 - SPECIAL TOPICS IN EPIDEMIOLOGY
(Repeatable for a maximum 6 credit hours) (Cross-listed with EPI 80195) Special topics to sample new offerings on topics in epidemiology. Prerequisites: Graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

EPI 63014 - EPIDEMIOLOGY OF CHRONIC DISEASES
With a life course approach to chronic disease epidemiology, this course focuses on cardiovascular, respiratory, cerebrovascular diseases and cancer. Health and disease are addressed from a multicausal perspective which includes individual behaviors, psychosocial issues, and sociodemographic, biological, and physiological factors. Time points for prevention and intervention are identified. Prerequisite: EPI 52017 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

EPI 63015 - EPIDEMIOLOGY OF INFECTIOUS DISEASES
Surveys the history, principles, methods and practice of infectious disease epidemiology, by (1) defining and understanding infectious disease epidemiology surveys, (2) collecting and measuring surveillance data, (3) interpreting epidemiology data and (4) predicting evidence-based outcomes. Primarily a course in epidemiology. Students learn some infectious disease microbiology as well. Prerequisites: EPI 52017 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
EPI 63016 - PRINCIPLES OF EPIDEMIOLOGIC RESEARCH

Builds on the fundamental epidemiology course to explore deeper the concepts and methods in epidemiologic research. Reviews the measures of disease frequency, association and impact, and epidemiologic reasoning and causal inference, and covers methods and techniques for designing, implementing, analyzing, and interpreting various epidemiologic study designs. Discusses advantages and limitations of various study designs and explores threats to validity, precision, and generalizability of epidemiologic studies. Prerequisites: BST 52019 and EPI 52017; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biostats/Enviro Health/Epidem Department

EPI 63017 - EPIDEMIOLOGICAL ANALYSIS

(Cross-listed with EPI 83017) Provides practical instruction in the analysis and interpretation of data from various epidemiologic study designs including cross-sectional, case-control and cohort studies. Reviews statistical concepts and epidemiologic studies designs, outlines a strategy for data analysis and reviews relevant methodologic issues and applies stratified analysis methods and multivariable regression models to the studies. Develops an understanding of the underlying principles and assumptions, practical application, and correct interpretation of the epidemiologic results. Provides hands on experience on the application of epidemiologic analysis methods and presentation of the results. Prerequisites: BST 52019; and EPI 52017 and 63016; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biostats/Enviro Health/Epidem Department

EPI 63034 - LONGITUDINAL DATA ANALYSIS

(Cross-listed with EPI 73034) Statistical techniques for analyzing longitudinal, or repeated measures, data. Focuses primarily on application of the various statistical models covered, with direct application illustrated using standard statistical software. Topics covered include univariate and multivariate analysis of variance for repeated measures, mixed-effects models (HLM or multilevel models), covariance pattern models, generalized estimating equations (GEE), mixed-effects logistic regression models and missing data in longitudinal studies. Prerequisites: BST 52019 and 63014; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biostats/Enviro Health/Epidem Department

EPI 72017 - FUNDAMENTALS OF PUBLIC HEALTH EPIDEMIOLOGY

(Slashed with EPI 52017) Introduces principles, methods, and application of epidemiology. Covers the history of epidemiology, concepts of disease causation and prevention, measures of disease frequency and excessive risk, epidemiologic study designs, causal inference, outbreak investigation and screening. Provides experience with calculation of rate standardization, measures of disease frequency, association, and impact, and sensitivity and specificity of screening tests. Highlights applications of epidemiology to understanding of disease etiology, transmission, pathogenesis, and prevention, evaluation and public policy development. Prerequisite: graduate
standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biostats/Enviro Health/Epidem Department

**EPI 72028 - METHODS OF EVIDENCE BASED PUBLIC HEALTH**

Explores tools and techniques used to quantitatively determine the effectiveness of public health interventions in the social sciences. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biostats/Enviro Health/Epidem Department

**EPI 73024 - EMERGING ISSUES IN CHRONIC DISEASE EPIDEMIOLOGY**

Covers emerging chronic disease issues on a global level and students understand the life course approach to chronic disease epidemiology. Putative factors and infectious agents are examined as causes of chronic disease and chronic syndromes. Issues related to screening and surveillance will be understood. Students appreciate issues pertaining to study design, modeling, and data analysis in life course epidemiology of chronic disease. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biostats/Enviro Health/Epidem Department

**EPI 73025 - EMERGING ISSUES IN INFECTIOUS DESEASE EPIDEMIOLOGY**

Investigates global emerging and reemerging infectious diseases. Students evaluate root causes of infectious disease emergence and predict outcomes. Data from primary literature is used to predict alternate outcomes. Specific disease models are used to evaluate and compare prevention, treatment and eradication strategies. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biostats/Enviro Health/Epidem Department

**EPI 73026 - DESIGN AND IMPLEMENTATION OF HEALTH SURVEYS**

Covers survey design, variable construction, survey administration and data collection methods, variable coding and manipulation, and data analysis. Students will understand sampling methods, and sample size. Large health surveys are discussed. Students gain practical experience through design and implementation of a health survey which can be used to facilitate dissertation research or a publication. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biostats/Enviro Health/Epidem Department

**EPI 73027 - BIOLOGICAL BASIS OF PUBLIC HEALTH**

Integrates the sciences of biology and molecular biology into the principles and practice of public health. Implicit in this course are learning objectives that establish the ecology of infectious disease, the impact of vaccines in disease prevention, and the role of environmental toxins on human health and disease. Additionally, students propose policy, regulations and legislation designed to protect human health within the realm of personalized medicine. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biostats/Enviro Health/Epidem Department

**EPI 73029 - PUBLIC HEALTH SURVEILLANCE SYSTEMS**

Introduces students to surveillance systems of both infectious and non-infectious diseases as well as intentional and non-intentional injury. Students are exposed to the theory and practice of surveillance illustrated with examples existing systems from around the world. Culminates in a project where the student creates and evaluates a surveillance system of their own design. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biostats/Enviro Health/Epidem Department

**EPI 73033 - ENVIRONMENTAL EPIDEMIOLOGY**

Comprehensive course on concepts in environmental epidemiology and statistical methods in environmental epidemiology including causal inference models. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biostats/Enviro Health/Epidem Department

**EPI 73034 - LONGITUDINAL DATA ANALYSIS**

(Cross-listed with EPI 63034) Statistical techniques for analyzing longitudinal, or repeated measures, data. Focuses primarily on application of the various statistical models covered, with direct application illustrated using standard statistical software. Topics covered include univariate and multivariate analysis of variance for repeated measures, mixed-effects models (HLM or multilevel models), covariance pattern models, generalized estimating equations (GEE), mixed-effects logistic regression models and missing data in longitudinal studies. Prerequisite: doctoral standing.

3.000 Credit hours
EPI 80191 - VARIABLE CONTENT SEMINAR IN EPIDEMIOLOGY

(Repeatable for a maximum of 6 credit hours) (Cross-listed with EPI 60191) Seminar on current and important topics in epidemiology. Subject matter varies depending on the topic. Prerequisites: Doctoral standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

EPI 80195 - SPECIAL TOPICS IN EPIDEMIOLOGY

(Repeatable for a maximum of 6 credit hours) (Cross-listed with EPI 60195) Special topics to sample new offerings on topics in epidemiology. Prerequisites: Doctoral standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

EPI 80198 - DIRECTED RESEARCH IN EPIDEMIOLOGY

(Repeatable for credit) Directed research or individual investigation for doctoral students in Epidemiology concentration. Satisfactory/unsatisfactory (S/U) graded; in-progress (IP) mark permissible. Prerequisite: doctoral standing and special approval from department.
1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

EPI 80199 - DISSERTATION I

(Repeatable for credit) Registration for two semesters required, first semester dissertation work begins and continues until completion of Dissertation II and 30 hours of total dissertation work. Prerequisites: doctoral standing and special approval.
15.000 Credit hours
15.000 Other hours
EPI 80299 - DISSERTATION II

(Repeatable for credit) Second course of dissertation sequence completing requirement of with 30 total hours of dissertation work. Prerequisites: EPI 80199; and doctoral standing; and special approval.

15.000 Credit hours
15.000 Other hours

Levels: Graduate
Schedule Types: Dissertation

Biostats/Enviro Health/Epidem Department

EPI 83017 - EPIDEMIOLOGICAL ANALYSIS

(Cross-listed with EPI 63017) Provides practical instruction in the analysis and interpretation of data from various epidemiologic study designs including cross-sectional, case-control and cohort studies. Reviews statistical concepts and epidemiologic studies designs, outlines a strategy for data analysis and reviews relevant methodologic issues and applies stratified analysis methods and multivariable regression models to the studies. Develops an understanding of the underlying principles and assumptions, practical application, and correct interpretation of the epidemiologic results. Provides hands-on experience on the application of epidemiologic analysis methods and presentation of the results. Prerequisites: EPI 63016; and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Biostats/Enviro Health/Epidem Department

EPSY 29525 - EDUCATIONAL PSYCHOLOGY

Examines major theories of human development and learning, motivation, instructional strategies, assessment; similarities and differences in learners. The role of factors in the students' learning and development is considered. Participation in the Educational Psychology research participant pool or an alternative research assignment is required. Prerequisites: CULT 29535.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

Course Attributes:
TAG - Education

EPSY 49525 - RELATIONAL LEARNING IN EDUCATION

(Repeatable for credit) Seminar focuses on national and international relational learning approaches to education. Current literature on relational learning is critiques. Professional identity is supported through engages learning opportunities in per mentoring experiences and faculty-let research. Course may be repeated for maximum 9 credit hours. Prerequisite: special approval.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar
EPSY 50093 - VARIABLE TITLE WORKSHOP IN EDUCATIONAL PSYCHOLOGY

(Repeatable for a maximum of 6 credit hours) (Cross-listed with EPSY 70093) Offered on request of school system. Enrollment limited to teachers, administrators or supervisors who are employed in sponsoring system and who are accepted to the university. Prerequisite: Graduate standing and special approval.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Graduate
Schedule Types: Workshop

EPSY 60199 - THESIS I

Thesis student must register for total of 6 hours, 2 to 6 hours in a single semester distributed over several semesters if desired. Prerequisite: Graduate standing and special approval.

2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

EPSY 60299 - THESIS II

Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: EPSY 60199 and graduate standing.

2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

EPSY 65520 - CHILD AND ADOLESCENT DEVELOPMENT

(Cross-listed with EPSY 75520) Dimensions of human development and learning, causal factors and research findings which carry implications for educators in various settings; focusing on birth through adolescence. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

EPSY 65521 - ADULT DEVELOPMENT

(Cross-listed with EPSY 75521) Essential dimensions of human development and learning, the causal factors and the research findings which carry implications for educators in various settings; focusing on early through
late adulthood. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**EPSY 65523 - LIFE SPAN DEVELOPMENT**

(Cross-listed with EPSY 75523) Orientation to human development across life span from conception to death; emphasis on pluralistic determinants of individual growth within changing environmental contexts. Implications for educational and human service practices are emphasized. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**EPSY 65524 - LEARNING THEORIES**

(Cross-listed with EPSY 75524) Theories of learning with special emphasis on application to professional practice. A critical examination of research on human learning processes. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**EPSY 65529 - EDUCATIONAL MOTIVATION**

Provides students with the opportunity to explore, analyze and evaluate literature related to theories of motivation. Content is grounded in theories but each of the theories has clear classroom application. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**EPSY 68901 - PSYCHOLOGICAL FOUNDATIONS OF EDUCATION**

(Cross-listed with EPSY 78901) Overview of human development, particularly adolescence, and implications for educational policy and programming, generally and specifically for secondary schools. Prerequisite: Admission to the M.A.T. program and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
### EPSY 68905 - EDUCATIONAL PSYCHOLOGY

(Cross-listed with EPSY 78905) Analysis and critique of major learning theories, state-of-the-art development in theory, research and application to educational practice in selected disciplines. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

### EPSY 69091 - SEMINAR IN LEARNING AND DEVELOPMENT

(Repeatable for credit)Variable topic seminar for advanced study of specialized topics and areas; in learning and development; emphasis on theory and research findings as related to educational practice. Prerequisite: Graduate standing.

1.000 TO 5.000 Credit hours
1.000 TO 5.000 Other hours

Levels: Graduate
Schedule Types: Seminar

### EPSY 69092 - ADVANCED PRACTICUM AND INTERNSHIP

Supervised program in field setting involving application of theories, principles, and methodology in learning and development; planned with and supervised by graduate faculty member. Prerequisite: Graduate standing and special approval.

1.000 TO 6.000 Credit hours
3.333 TO 20.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

### EPSY 69095 - SPECIAL TOPICS IN LEARNING AND DEVELOPMENT

(Repeatable for credit)Specific topic course offering in response to emerging student or program needs in learning and development. Prerequisite: Graduate standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

### EPSY 69096 - INDIVIDUAL INVESTIGATION IN LEARNING AND DEVELOPMENT

(Repeatable for credit)Students pursue an individual project on a specific topic in learning and development
with approval and under direction of instructor. Prerequisite: Graduate standing and special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Lifespan Dev and Educ Sciences Department

**EPSY 69098 - RESEARCH IN LEARNING AND DEVELOPMENT**

(Repeatable for credit) Students pursue an individual research project on a specific topic in learning and development with approval and under direction of instructor. Prerequisite: Graduate standing and special approval.
1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

Lifespan Dev and Educ Sciences Department

**EPSY 70093 - VARIABLE TOPIC WORKSHOP IN EDUCATIONAL PSYCHOLOGY**

(Repeatable once for a maximum of 6 credit hours) (Cross-listed with EPSY 50093) Offered on request of school system. Enrollment limited to teachers, administrators or supervisors who are employed in sponsoring system and who are accepted to the university. Prerequisite: doctoral standing and special approval.
1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Lifespan Dev and Educ Sciences Department

**EPSY 70094 - COLLEGE TEACHING**

(Repeatable for credit) (Cross-listed with SPED 70094 and SPSY 70094) Discusses major aspects of teaching in higher education, including such topics as students' philosophy of teaching, principles of adult learning, instructional strategies, students' assessment and others. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**EPSY 75520 - CHILD AND ADOLESCENT DEVELOPMENT**

(Cross-listed with EPSY 65520) Dimensions of human development and learning, causal factors and research findings which carry implications for educators in various settings; focusing on birth through adolescence. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
EPSY 75521 - ADULT DEVELOPMENT

(Cross-listed with EPSY 65521) Essential dimensions of human development and learning, the causal factors and the research findings which carry implications for educators in various settings; focusing on early through late adulthood. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

EPSY 75523 - LIFE SPAN DEVELOPMENT

(Cross-listed with EPSY 65523) Orientation to human development across life span from conception to death; emphasis on pluralistic determinants of individual growth within changing environmental contexts. Implications for educational and human service practices are emphasized. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

EPSY 75524 - LEARNING THEORIES

(Cross-listed with EPSY 65524) Theories of learning with special emphasis on application to professional practice. A critical examination of research on human learning processes. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

EPSY 75529 - EDUCATIONAL MOTIVATION

Provides students with the opportunity to explore, analyze and evaluate literature related to theories of motivation. Content is grounded in theories but each of the theories has clear classroom application. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

EPSY 78901 - PSYCHOLOGICAL FOUNDATIONS OF EDUCATION
Overview of human development and its implications for educational policy and programming for schools. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**EPSY 78905 - EDUCATIONAL PSYCHOLOGY**

(Cross-listed with EPSY 68905) Analysis and critique of major learning theories, state-of-the-art development in theory, research and application to educational practice in selected disciplines. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**EPSY 80090 - DOCTORAL RESIDENCY SEMINAR**

Advanced doctoral residency seminar for students in all areas of educational foundations. Focus on current and emergent issues research and trends in education in multiple settings. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Lifespan Dev and Educ Sciences Department

**EPSY 80199 - DISSERTATION I**

(Repeatable for credit) Doctoral dissertation for which registration in at least two semesters is required, first of which will be semester in which dissertation work is begun and continuing until the completion of 30 hours. Prerequisite: Doctoral standing and special approval.
15.000 Credit hours
15.000 Other hours

Levels: Graduate
Schedule Types: Dissertation

Lifespan Dev and Educ Sciences Department

**EPSY 80299 - DISSERTATION II**

(Repeatable for credit) Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. Prerequisite: Doctoral standing; EPSY 80199.
15.000 Credit hours
15.000 Other hours

Levels: Graduate
**EPSY 87450 - PSYCHOLOGICAL PRINCIPLES OF EDUCATION**

Provides an exploration of educational psychology as the study of learning and teaching, in particular the mental representations and processes involved in the acquisition, storage, retrieval and use of knowledge in educational settings. Discusses how research and theory in educational psychology can be applied to real world classroom problems. Students are also required to develop a research project, which utilizes technology to test psychological theories about learning and instruction. Prerequisite: doctoral standing. Corequisite: ITEC 87450. 3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**EPSY 89091 - SEMINAR IN LEARNING AND DEVELOPMENT**

(Repeatable for credit)Variable topic seminar for advanced study of specialized topics and areas; in learning and development; emphasis on theory and research findings as related to educational practice. Prerequisite: doctoral standing. 1.000 TO 5.000 Credit hours
1.000 TO 5.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Lifespan Dev and Educ Sciences Department

**EPSY 89092 - ADVANCED PRACTICUM AND INTERNSHIP**

Supervised program in field setting involving application of theories, principles, and methodology in learning and development; planned with and supervised by graduate faculty member. Prerequisite: doctoral standing. 1.000 TO 6.000 Credit hours
3.333 TO 20.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Lifespan Dev and Educ Sciences Department

**EPSY 89095 - SPECIAL TOPICS IN LEARNING AND DEVELOPMENT**

(Repeatable for credit)Specific topic course offering in response to emerging student or program needs in learning and development. Prerequisite: doctoral standing. 1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

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<td>EPSY 89096</td>
<td>INDIVIDUAL INVESTIGATION IN LEARNING AND DEVELOPMENT</td>
<td>(Repeatable for credit) Students pursue an individual project on a specific topic in learning and development with approval and under direction of instructor. Prerequisite: doctoral standing and special approval.</td>
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<td>EPSY 89098</td>
<td>RESEARCH IN LEARNING AND DEVELOPMENT</td>
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<td>EVAL 45610</td>
<td>CLASSROOM ASSESSMENT</td>
<td>(Cross-listed with EVAL 55610 and EVAL 75610) Instruction on contemporary and classic theories and issues in classroom assessment. Students learn about the purposes and strengths of informal and formal, traditional and alternative approaches to classroom assessment. Students examine both selected response assessments and constructed response assessments, develop assessment frameworks, identify alternative models of assessments, evaluate best practices in classroom assessment, and discuss respective advantages and disadvantages of multiple kinds of assessments. Prerequisite: none.</td>
<td>3.000</td>
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<td>EVAL 50093</td>
<td>VARIABLE TOPIC WORKSHOP EVALUATION AND MEASUREMENT</td>
<td>(Repeatable once for a maximum of 6 credit hours) (Cross-listed with EVAL 70093) Offered on request of school system. Enrollment limited to teachers, administrators or supervisors who are employed in sponsoring system and who are accepted to the university. Prerequisite: Graduate standing and special approval.</td>
<td>1.000 TO 4.000</td>
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<tr>
<td>EVAL 55610</td>
<td>CLASSROOM ASSESSMENT</td>
<td>(Cross-listed with EVAL 45610 and EVAL 75610) Instruction on contemporary and classic theories on and issues in classroom assessment. Students learn about the contemporary and classic theories and issues in classroom assessment. Students examine both selected response assessments and constructed response assessments, develop assessment frameworks, identify alternative models of assessments, evaluate best practices in classroom assessment, and discuss respective advantages and disadvantages of multiple kinds of assessments. Prerequisite: none.</td>
<td>3.000</td>
<td></td>
<td>Undergraduate</td>
<td>Lecture</td>
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in classroom assessment. Students will learn about the purposes and strengths of informal and formal, traditional and alternative approaches to classroom assessment. Students will examine both selected response assessments and constructed response assessments, develop assessment frameworks, identify alternative models of assessments, evaluate best practices in classroom assessment, and discuss respective advantages and disadvantages of multiple kinds of assessments. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**EVAL 60199 - THESIS I**

Thesis student must register for total of 6 hours, 2 to 6 hours in a single semester distributed over several semesters if desired. Prerequisite: graduate standing and special approval.

2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Foundations Leadership Admin Department

**EVAL 60299 - THESIS II**

Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: EDPF 60199 and graduate standing.

2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Foundations Leadership Admin Department

**EVAL 65510 - STATISTICS I FOR EDUCATIONAL SERVICES**

(Cross-listed with EVAL 75510) Introduction to descriptive and inferential statistics used in educational services research: univariate and bivariate techniques (correlations and simple regression); hypothesis testing; non-parametric techniques. Ordinarily taken in graduate course sequence. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**EVAL 65511 - RESEARCH IN EDUCATIONAL SERVICES**

Introduction to purposes and practice of qualitative and quantitative research related to educational services. Emphasis on elements of doing research and using products of research to support and enhance practice. Authentic examples used as illustration. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours
EVAL 68710 - CLASSICAL TEST THEORY

(Cross-listed with EVAL 78710) Students develop an understanding of ideas and procedures related to classical test theory sufficient for test development and meaningful interpretation of results from standardized tests and other assessments. Prerequisite: Graduate standing; EVAL 65510.

3.000 Credit hours
3.000 Lecture hours

EVAL 68711 - MODERN TEST THEORY: ITEM RESPONSE THEORY

(Cross-listed with EVAL 78711) The primary objective of the course is to provide students with knowledge and skills necessary to use item response theory methods and to organize, manipulate, analyze and interpret data from IRT applications. Some of the popular IRT computer programs are introduced. Prerequisite: graduate standing; and EVAL 65510.

3.000 Credit hours
3.000 Lecture hours

EVAL 68713 - MULTIVARIATE ANALYSIS IN EDUCATIONAL RESEARCH

(Cross-listed with EVAL 78713) Objectives are to enable students to select and use multivariate methods appropriately, to develop knowledge and skills necessary to conduct multivariate analyses using various statistical packages (SPSS, SAS) and to develop knowledge and skills necessary for interpreting results of multivariate analysis. Prerequisite: graduate standing; and EVAL 65510.

3.000 Credit hours
3.000 Lecture hours

EVAL 68714 - FACTOR ANALYSIS IN EDUCATIONAL RESEARCH

(Cross-listed with EVAL 78714) This course develops the ability of students to conceptualize and apply the logic and techniques of factor analysis. The focus is on both exploratory and confirmatory procedures. Prerequisite: graduate standing; and EVAL 65510.

3.000 Credit hours
3.000 Lecture hours
EVAL 68715 - SURVEY DESIGN AND APPLIED RESEARCH IN EDUCATION

Designed to be an introduction to survey design including the use of online survey applications data collection and will focus on applied quantitative research using SPSS. Open to any graduate students with appropriate prerequisite courses and an interest in applied quantitative research. The project-based course has two major components: survey construction and applied research. Students will perform tasks typically requested of data analysts, institutional researchers, and program evaluators including but not limited to SPSS data management, data transformations, descriptive and inferential analysis, and interpretation of results. Prerequisites: EVAL 65510; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

EVAL 68791 - SEMINAR IN EVALUATION AND MEASUREMENT

(Repeatable for credit)Variable topic seminar for advance study of specialized topics and areas in evaluation and measurement; emphasis on theory and research findings as related to educational practice. Prerequisite: graduate standing and special approval.

1.000 TO 5.000 Credit hours
1.000 TO 5.000 Other hours

Levels: Graduate
Schedule Types: Seminar

EVAL 68795 - SPECIAL TOPICS IN EVALUATION AND MEASUREMENT

(Repeatable for credit)Specific topic course offering in response to emerging student or program needs in evaluation and measurement. Prerequisite: graduate standing and special approval.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

EVAL 68796 - INDIVIDUAL INVESTIGATION IN EVALUATION AND MEASUREMENT

(Repeatable for credit)Specific topic course offering in response to emerging student or program needs in evaluation and measurement. Prerequisite: doctoral standing and special approval.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Foundations Leadership Admin Department
### EVAL 68798 - RESEARCH IN EVALUATION AND MEASUREMENT

(Repeatable for credit) Students pursue an individual research project on a specific topic in evaluation and measurement with approval and under direction of instructor. Prerequisite: graduate standing and special approval.

1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

Foundations Leadership Admin Department

### EVAL 68806 - HIGHER EDUCATION DATA AND INSTITUTIONAL RESEARCH

(Slashed with EVAL 78806) This course is designed to be an overview of institutional research function and practice, introducing students to the purpose and history of IR, IR terminology and metrics, and IR application to a variety of university areas. The target audiences for this course are: 1) students with an evaluation and measurement background who are interested in applying their skills in a higher education context and 2) students from a higher education and or student affairs background who are looking to better understand higher education data and the applied research that occurs within an institution. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

### EVAL 68807 - PROGRAM EVALUATION

Study of principles and techniques of evaluation and measurement, and utilization of evidence to improve teaching, learning and implementation programs. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

### EVAL 70093 - VARIABLE TOPIC WORKSHOP IN EVALUATION AND MEASUREMENT

(Repeatable for credit) (Cross-listed with EVAL 50093) Offered on request of school system. Enrollment limited to teachers, administrators or supervisors who are employed in sponsoring system and who are accepted to the university. Prerequisite: Doctoral standing and special approval.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Foundations Leadership Admin Department

### EVAL 75510 - STATISTICS I FOR EDUCATIONAL SERVICES
(Cross-listed with EVAL 65510) Introduction to descriptive and inferential statistics used in educational services research: univariate and bivariate techniques (correlations and simple regression); hypothesis testing; non-parametric techniques. Ordinarily taken in graduate course sequence. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**EVAL 75610 - CLASSROOM ASSESSMENT**

(Cross-listed with EVAL 45610 and EVAL 65610) Instruction on contemporary and classic theories and issues in classroom assessment. Students will learn about the purposes and strengths of informal and formal, traditional and alternative approaches to classroom assessment. Students will examine both selected response assessments and constructed response assessments, develop assessment frameworks, identify alternative models of assessments, evaluate best practices in classroom assessment, and discuss respective advantages and disadvantages of multiple kinds of assessments. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**EVAL 78710 - CLASSICAL TEST THEORY**

(Cross-listed with EVAL 68710) Students develop an understanding of ideas and procedures related to classical test theory sufficient for test development and meaningful interpretation of results from standardized tests and other assessments. Prerequisite: doctoral standing; and EVAL 65510.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**EVAL 78711 - MODERN TEST THEORY: ITEM RESPONSE THEORY**

(Cross-listed with EVAL 68711) The primary objective of the course is to provide students with knowledge and skills necessary to use item response theory methods and to organize, manipulate, analyze and interpret data from IRT applications. Some of the popular IRT computer programs are introduced. Prerequisite: doctoral standing; and EVAL 75510.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**EVAL 78713 - MULTIVARIATE ANALYSIS IN EDUCATIONAL RESEARCH**

(Cross-listed with EVAL 68713) Objectives are to enable students to select and use multivariate methods
appropriately, to develop knowledge and skills necessary to conduct multivariate analyses using various statistical packages (SPSS, SAS) and to develop knowledge and skills necessary for interpreting results of multivariate analysis. Prerequisite: doctoral standing; and EVAL 75510.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**EVAL 78714 - FACTOR ANALYSIS IN EDUCATIONAL RESEARCH**

(Cross-listed with EVAL 68714) This course develops the ability of students to conceptualize and apply the logic and techniques of factor analysis. The focus is on both exploratory and confirmatory procedures. Prerequisite: doctoral standing; EVAL 75510.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**EVAL 78715 - SURVEY DESIGN AND APPLIED RESEARCH IN EDUCATION**

Designed to be an introduction to survey design including the use of online survey applications data collection and will focus on applied quantitative research using SPSS. Open to any graduate students with appropriate prerequisite courses and an interest in applied quantitative research. The project-based course has two major components: survey construction and applied research. Students will perform tasks typically requested of data analysts, institutional researchers, and program evaluators including but not limited to SPSS data management, data transformations, descriptive and inferential analysis, and interpretation of results. Prerequisites: EVAL 65510 or EVAL 75510; and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**EVAL 78716 - EDUCATIONAL STATISTICS II**

Major types of methods used to investigate relationships between two or more variables are introduced; includes various analysis of variance designs analysis of covariance and multiple correlations. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**EVAL 78728 - EDUCATIONAL STATISTICS III**

Advanced univariate and introductory multivariate techniques in education research: including analyses of
variance and covariance, multiregression and causal modeling, factor analysis, and canonical correlation. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**EVAL 78806 - HIGHER EDUCATION DATA AND INSTITUTIONAL RESEARCH**

(Slashed with EVAL 68806) This course is designed to be an overview of institutional research function and practice, introducing students to the purpose and history of IR, IR terminology and metrics, and IR application to a variety of university areas. The target audiences for this course are: 1) students with an evaluation and measurement background who are interested in applying their skills in a higher education context and 2) students from a higher education and or student affairs background who are looking to better understand higher education data and the applied research that occurs within an institution. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**EVAL 78807 - PROGRAM EVALUATION**

Study of principles and techniques of evaluation and measurement, and utilization of evidence to improve teaching, learning and implementation programs. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**EVAL 78898 - COMPARATIVE RESEARCH DESIGN**

(Repeatable for credit) The course develops the ability of the student to conceptualize the design elements of educational research and to write results of studies. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Research

Foundations Leadership Admin Department

**EVAL 80090 - DOCTORAL RESIDENCY SEMINAR**

Advanced doctoral residency seminar for students in all areas of educational foundations. Focus on current and emergent issues research and trends in education in multiple settings. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Other hours
EVAL 80199 - DISSERTATION I

(Repeatable for credit) Doctoral dissertation for which registration in at least two semesters is required, first of which will be semester in which dissertation work is begun and continuing until the completion of 30 hours. Prerequisite: Doctoral standing and special approval.
15.000 Credit hours
15.000 Other hours

EVAL 80299 - DISSERTATION II

(Repeatable for credit) Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. Prerequisite: Doctoral standing; EVAL 80199.
15.000 Credit hours
15.000 Other hours

EVAL 85515 - QUANTITATIVE RESEARCH DESIGNS AND APPLICATION IN EDUCATIONAL SERVICES

Quantitative research design and application in educational services research. Spiral presentation of methodological principles within a variety of theoretical frameworks and procedures. Strong focus on computer aided applications to practical problems. Prerequisite: EVAL 65510 or 75510; and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

EVAL 85516 - QUALITATIVE RESEARCH DESIGNS AND APPLICATION IN EDUCATIONAL SERVICES

Introduction to theory and practice of qualitative research methods and field studies in educational services. Examination of a variety of strategies including observation, document analysis and interviewing. Ordinarily taken early in doctoral course sequence. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours
EVAL 85517 - ADVANCED QUANTITATIVE RESEARCH IN EDUCATIONAL SERVICES

Advanced quantitative research design and application in educational services. Statistical packages of instructional strategies with methodological principles focus, theoretical models and practical application of experimental and multivariate research design. Prerequisite: EVAL 85515 and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

EVAL 85518 - ADVANCED QUALITATIVE RESEARCH IN EDUCATIONAL SERVICES

Utilizes qualitative data in educational services. Applications in qualitative methodology (video techniques) and protocol analysis are applied and evaluated. Generate findings; develop applications to theory; reliability and validity considerations. Prerequisite: EVAL 85516 and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

EVAL 88791 - SEMINAR: EVALUATION AND MEASUREMENT

(Repeatable for credit)Variable topic seminar for advance study of specialized topics and areas in evaluation and measurement; emphasis on theory and research findings as related to educational practice. Prerequisite: doctoral standing and special approval.

1.000 TO 5.000 Credit hours
1.000 TO 5.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Foundations Leadership Admin Department

EVAL 88795 - SPECIAL TOPICS: EVALUATION AND MEASUREMENT

(Repeatable for credit)Specific topic course offering in response to emerging student or program needs in evaluation and measurement. Prerequisite: graduate standing and special approval.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

EVAL 88796 - INDIVIDUAL INVESTIGATION IN EVALUATION AND MEASUREMENT

(Repeatable for credit)Specific topic course offering in response to emerging student or program needs in evaluation and measurement. Prerequisite: doctoral standing and special approval.

1.000 TO 3.000 Credit hours
EVAL 88798 - RESEARCH IN EVALUATION AND MEASUREMENT

(Repeatable for credit) Students pursue an individual research project on a specific topic in evaluation and measurement of education with approval and under direction of instructor. Prerequisite: doctoral standing and special approval.
1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

EVHS 10001 - ENVIRONMENTAL TECHNOLOGY I

Survey course in environmental technology, including health and safety, history, environmental compliance and related issues. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

EVHS 10004 - TOXICOLOGY

Examination of the terminology and classification of poisons that affect humans. Includes poison sources, modes of exposure, health effects and control measures. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

EVHS 10010 - INDUSTRIAL HYGIENE I

In-depth study of safety methods and procedures with lab for identifying, monitoring, handling, containing and disposing of hazardous substances and hazardous conditions in the workplace. Prerequisite: EVHS 10004.
4.000 Credit hours
4.000 Lecture hours
**EVHS 20001 - ENVIRONMENTAL LAW**

Emphasize civil, criminal and tort liability issues; procedural and constitutional requirements; and administrative codes, rules and regulations for fire, health, safety and environmental hazards. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**EVHS 20004 - ENVIRONMENTAL HEALTH AND SAFETY I**

Examination of hazards assessment including organizational, environmental and disaster planning; health and safety inspection and reporting criteria; and first aid procedures. Prerequisite: EVHS 10001.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**EVHS 20008 - ENVIRONMENTAL SAFETY ADMINISTRATION**

Organization and operation of environmental safety unit; relationships with business governmental and community entities involved in environmental safety and hazards control. Prerequisite: EVHS 10010.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**EVHS 20092 - ENVIRONMENTAL TECHNOLOGY INTERNSHIP I**

(Repeatable for credit) This on- or off campus experience gives students an opportunity to apply learned concepts in the classroom to practical environmental technology situations. Prerequisite: EVHS 20008.

3.000 Credit hours
21.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Regional College Department

Course Attributes:
Experiential Learning Requirem

**EVHS 21010 - INDUSTRIAL HYGIENE II**

Emphasis is placed on methodologies of gas, vapor, and aerosol sampling; including instrumentation function and calibration. Measurement and evaluation of physical hazards including noise, heat stress, lighting and radiation hazards. Includes a major emphasis upon the types of problems and calculations likely to be found in general industry. Laboratory exercises and use of a case study to explore the methods of sampling.
Prerequisites: BSCI 10120; and CHEM 10052; and EVHS 10010.

4.000 Credit hours
3.000 Lecture hours
1.000 Lab hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**EVHS 21092 - ENVIRONMENTAL TECHNOLOGY INTERNSHIP II**

(Repeatable for credit) This on-or off-campus experience gives students an opportunity to apply learned concepts in the classroom to practical environmental technology situations. Prerequisite: EVHS 20092 and special approval.

3.000 Credit hours
21.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Regional College Department

Course Attributes:
Experiential Learning Requirem

**EVHS 22095 - SPECIAL TOPICS IN ENVIRONMENTAL HEALTH AND SAFETY**

(Repeatable for a total of 6 hours) Specialized instruction oriented primarily to application of current technology developed for the field of environmental technology. Course is repeatable as the specific topics will vary.

Prerequisite: special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**EVHS 22096 - INDIVIDUAL INVESTIGATION IN ENVIRONMENTAL HEALTH AND SAFETY**

(Repeatable for credit) Independent research of environmental technology topic supervised by an environmental technology faculty member. Prerequisite: special approval.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Regional College Department

**EVHS 30002 - ENVIRONMENTAL ISSUES II**

Current topics in environmental technology including climate change and alternate energy sources. Prerequisite: EVHS 10001.

3.000 Credit hours
3.000 Lecture hours
EVHS 30020 - HAZARDOUS WASTE OPERATIONS AND EMERGENCY RESPONSE
Study of hazardous waste operations and emergency response to release of hazardous materials in compliance with EPA and OSHA regulations (29CRF 1910.120). Prerequisite: None.
4.000 Credit hours
4.000 Lecture hours

EVHS 40006 - FIRE PREVENTION AND CONTROL
Conditions and properties conductive for combustible states and hazards; techniques and procedures for fire extinguishing and control; preventative strategies; fire codes and alarm systems. Prerequisite: EVHS 10001.
3.000 Credit hours
3.000 Lecture hours

EXPH 50612 - EXERCISE LEADERSHIP FOR THE OLDER ADULT
(Cross-listed with EXSC 40612) Designed to provide the students with a knowledge base in exercise leadership in the senior population and includes special populations. Students participate in the leading supervision and evaluation of the participant within the exercise program. They also assist in the collection of functional fitness data. Prerequisite: Graduate standing.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

EXPH 51000 - EXERCISE IMPLEMENTATION: AN EXERCISE INTERVENTION PROGRAM
(Repeatable for credit) Students will participate in leading, supervising and developing plans for individuals who want to reduce cardiovascular risk factors through structured exercise. Prerequisite: EXPH 55080 and graduate standing.
1.000 TO 3.000 Credit hours
3.000 TO 9.000 Lab hours
**EXPH 53093 - VARIABLE TITLE WORKSHOP IN EXERCISE SCIENCE AND EXERCISE PHYSIOLOGY**

(Repeatable for credit) (Cross-listed with EXSC 43093) Workshop in exercise science or physiology, topics vary. Prerequisites: graduate standing
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Health Sciences Department

**EXPH 55065 - EXERCISE TESTING**

(Cross-listed with EXSC 45065) Lecture and laboratory experiences dealing with the administration and interpretation of exercise tests. Prerequisite: graduate standing.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Health Sciences Department

**EXPH 55070 - ELECTROCARDIOGRAPHY FOR THE EXERCISE PHYSIOLOGIST**

(Cross-listed with EXSC 45070) Designed to provide students with the knowledge base in electrocardiography. Students work on interpreting the 12-lead electrocardiogram with clinical case studies to enhance the knowledge base of the exercise specialist. Prerequisite: Graduate standing and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

**EXPH 55080 - PHYSIOLOGY OF EXERCISE**

(Cross-listed with EXSC 45080) Physiological bases of muscular activity with special attention to general effects of exercise on body function. Laboratory included. Prerequisite: Graduate standing.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Health Sciences Department

**EXPH 60610 - PHYSIOLOGY OF AGING: IMPLICATIONS FOR HUMAN BEHAVIOR**

(Cross-listed with EXPH 70610) Examine physiological changes which accompany advancing age. Special attention is paid to the effect of these changes on sensory motor and cognitive behavior. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

EXPH 63050 - RESEARCH PROCESS IN ATHLETIC TRAINING AND EXERCISE PHYSIOLOGY

(Cross-listed with EXPH 73050) The research process and statistical concepts applied to athletic training and exercise physiology. Prerequisite: graduate standing.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Health Sciences Department

EXPH 63051 - QUANTITATIVE AND RESEARCH METHODS IN ATHLETIC TRAINING AND EXERCISE PHYSIOLOGY

(Cross-listed with EXPH 73051) Research design and statistical methods applied to exercise, physiology and athletic training. Prerequisite: EXPH 63050 and graduate standing.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Health Sciences Department

EXPH 63052 - ADVANCED RESEARCH DESIGN AND STATISTICS IN EXERCISE PHYSIOLOGY

(Cross-listed with EXPH 73052) Advanced topics in research design and statistical analysis with computer applications in exercise physiology. Prerequisites: EXPH 63051 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

EXPH 63095 - RESEARCH SEMINAR

(Repeatable for credit) (Cross-listed with ATTR 63095 and ATTR 73095 and EXPH 73095 and SRM 63095 and SRM 73095) Presentation and discussion of research by faculty and students. A total of 2 credits may be applied toward degree requirements. Prerequisite: Graduate standing.
1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Seminar
EXPH 63096 - INDIVIDUAL INVESTIGATION IN EXERCISE PHYSIOLOGY

(Repeatable for a maximum of 6 credit hours) (Cross-listed with EXPH 73096) Independent study completed under the supervision of a faculty member. Written approval of supervising faculty member and School Director required prior to registration. Prerequisites: graduate standing and special approval.

1.000 TO 3.000 Credit hours

Levels: Graduate
Schedule Types: Individual Investigation

EXPH 63098 - RESEARCH

(Repeatable for credit) (Cross-listed with ATTR 63098 and SRM 63098 and EXPH 83098) Research or individual investigation. Prerequisite: Graduate standing.

1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

EXPH 63193 - VARIABLE TITLE WORKSHOP IN EXERCISE PHYSIOLOGY

(Repeatable for credit) Workshop in exercise physiology; topics vary. Maximum 4 hours applied to the degree. Prerequisites: graduate standing

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Workshop

EXPH 63195 - SPECIAL TOPICS IN EXERCISE PHYSIOLOGY

(Repeatable for credit) (Cross-listed with EXPH 73195) Selected and varied topics of relevance in exercise physiology. Prerequisites: graduate standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

EXPH 63199 - THESIS I

(Cross-listed with ATTR 63199 and SRM 63199) Thesis students must register for a total of 6 hours, 2 to 6 hours in a semester distributed over several semesters if desired. Prerequisite: Graduate standing.

2.000 TO 6.000 Credit hours
EXPH 63299 - THESIS II

(Cross-listed with ATTR 63299 and SRM 63299) Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: EXPH 63199 and graduate standing.

2.000 Credit hours
2.000 Other hours

EXPH 65075 - MUSCLE FUNCTION AND EXERCISE

(Cross-listed with EXPH 75075) Characteristics of skeletal muscle related to contraction during exercise, strength, elasticity, fatigue, and training. Electromyograph analysis of muscle function emphasized. Prerequisites: graduate standing.

3.000 Credit hours
3.000 Lecture hours

EXPH 65076 - ENVIRONMENTAL STRESS AND EXERCISE

(Cross-listed with EXPH 75076) Effects of heat, cold, pressure, pollution and psychological stress upon physiological responses to exercise. Lecture and laboratory. Prerequisites: graduate standing.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

EXPH 65080 - PHYSIOLOGICAL BASIS OF EXERCISE AND SPORT

(Cross-listed with EXPH 75080) Application of physiological concepts to human performance. Includes role of testing, training strength and endurance, nutritional considerations, environmental influences and adapted exercise programs. Prerequisite: graduate standing.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours
EXPH 65081 - ENERGY METABOLISM AND BODY COMPOSITION

(Cross-listed with EXPH 75081) Measurement of metabolic response to exercise. Topics include ergometry, spirometry, energy expenditure, body composition, and performance correlates of strength, power, and endurance. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

EXPH 65082 - CARDIO-RESPIRATORY FUNCTION

(Cross-listed with EXPH 75082) Measurement of the cardiovascular-respiratory response to exercise. Includes resting spirometry, lung function during exercise, electrocardiography, blood pressure, PWC testing, and exercise prescription. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

EXPH 65083 - EXERCISE ENERGY METABOLISM

(Cross-listed with EXPH 75083) Energy transformations during exercise. Emphasis on controlling mechanisms that regulate the anabolic and catabolic responses to both acute and chronic exercise. Prerequisites: graduate standing.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

EXPH 65084 - CARDIOVASCULAR-RESPIRATORY DYNAMICS DURING EXERCISE

(Cross-listed with EXPH 75084) Responses of the cardiovascular and respiratory systems to exercise. Use of noninvasive methods to measure cardio-respiratory function emphasized. Lecture and laboratory. Prerequisites: graduate standing.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab
EXPH 65086 - NEUROBIOLOGY OF MOVEMENT AND EXERCISE

(Cross-listed with EXPH 75086) Provide students with knowledge to understand the role of the muscular and nervous systems in human movement and exercise. Motor disorders and rehabilitation techniques will also be discussed. Lecture and laboratory. Prerequisites: graduate standing.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Health Sciences Department

EXPH 65192 - INTERNSHIP IN EXERCISE PHYSIOLOGY

(Repeatable for a maximum of 8 credit hours) (Cross-listed with EXPH 75192) Field experience in exercise physiology programs and testing in Kent State University adult fitness program or cooperating agencies. Prerequisites: graduate standing and special approval.

1.000 TO 6.000 Credit hours
3.000 TO 18.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Health Sciences Department

EXPH 70610 - PHYSIOLOGY OF AGING: IMPLICATIONS FOR HUMAN BEHAVIOR

(Cross-listed with EXPH 60610) Examine physiological changes which accompany advancing age. Special attention is paid to the effect of these changes on sensory motor and cognitive behavior. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

EXPH 73050 - RESEARCH PROCESSES IN ATHLETIC TRAINING AND EXERCISE PHYSIOLOGY

(Cross-listed with EXPH 63050) The research process and statistical concepts applied to athletic training and exercise physiology. Prerequisites: doctoral standing.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Health Sciences Department

EXPH 73051 - QUANTITATIVE AND RESEARCH METHODS IN ATHLETIC TRAINING AND EXERCISE PHYSIOLOGY

(Cross-listed with EXPH 63051) Research design and statistical methods applied to exercise physiology and
athletic training. Prerequisites: EXPH 73050 and doctoral standing.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Health Sciences Department

**EXPH 73052 - ADVANCED RESEARCH DESIGN AND STATISTICS IN EXERCISE PHYSIOLOGY**

(Cross-listed with EXPH 63052) Advanced topics in research design and statistical analysis with computer applications in exercise physiology. Prerequisites: EXPH 63051 or EXPH 73051 and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

**EXPH 73095 - RESEARCH SEMINAR**

(Repeatable for credit) (Cross-listed with ATT 63095 and ATT 73095 and EXPH 63095 and SRM 63095 and SRM 73095) Presentation and discussion of research by faculty and students. A total of 2 credits may be applied toward degree requirements. Prerequisite: Doctoral standing.
1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Health Sciences Department

**EXPH 73096 - INDIVIDUAL INVESTIGATION IN EXERCISE PHYSIOLOGY**

(Repeatable for a maximum of 6 credit hours) (Cross-listed with EXPH 63096) Independent student completed under the supervision of a faculty member. Written approval of supervising faculty member and School Director required prior to registration. Prerequisites: doctoral standing and special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Health Sciences Department

**EXPH 73195 - SPECIAL TOPICS IN EXERCISE PHYSIOLOGY**

(Repeatable for a maximum of 6 credit hours) (Cross-listed with EXPH 63195) Selected an varied topics of relevance in exercise physiology. Prerequisite: doctoral standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
EXPH 75075 - MUSCLE FUNCTION AND EXERCISE

(Cross-listed with EXPH 65075) Characteristics of skeletal muscle related to contraction during exercise, strength, elasticity, fatigue and training. Electromyograph analysis of muscle function emphasized. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

EXPH 75076 - ENVIRONMENTAL STRESS AND EXERCISE

(Cross-listed with EXPH 65076) Effects of heat, cold, pressure, pollution and psychological stress upon physiological responses to exercise. Lecture and laboratory. Prerequisite: doctoral standing.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

EXPH 75080 - PHYSIOLOGICAL BASIS OF EXERCISE AND SPORT

(Cross-listed with EXPH 65080) Application of physiological concepts to human performance. Includes role of testing, training, strength and endurance, nutritional considerations, environmental influences, and adapted exercise programs. Prerequisite: doctoral standing.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

EXPH 75081 - ENERGY METABOLISM AND BODY COMPOSITION

(Cross-listed with EXPH 65081) Measurement of metabolic response to exercise. Topics include ergometry, spirometry, energy expenditure, body composition and performance correlates of strength, power and endurance. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
EXPH 75082 - CARDIO-RESPIRATORY FUNCTION

(Cross-listed with EXPH 65082) Measurement of the cardiovascular-respiratory response to exercise. Includes resting spirometry, lung function during exercise, electrocardiography, blood pressure, PWC testing and exercise prescription. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

EXPH 75083 - EXERCISE ENERGY METABOLISM

(Cross-listed with EXPH 65083) Energy transformations during exercise. Emphasis on controlling mechanisms that regulate the anabolic and catabolic responses to both acute and chronic exercise. Prerequisite: doctoral standing.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Health Sciences Department

EXPH 75084 - CARDIOVASCULAR-RESPIRATORY DYNAMICS DURING EXERCISE

(Cross-listed with EXPH 65084) Responses of the cardiovascular and respiratory systems to exercise. Use of noninvasive methods to measure cardio-respiratory function emphasized. Lecture and laboratory. Prerequisite: doctoral standing.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Health Sciences Department

EXPH 75086 - NEUROBIOLOGY OF EXERCISE AND MOVEMENT

(Cross-listed with EXPH 65086) Provides students with knowledge to understand the role of the muscular and nervous systems in human movement and exercise. Motor disorders and rehabilitation techniques will also be discussed. Lecture and laboratory. Prerequisite: graduate standing.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Health Sciences Department

EXPH 75192 - INTERNSHIP IN EXERCISE PHYSIOLOGY
Field experience in exercise physiology programs and testing in KSU adult fitness program or cooperating agencies. Prerequisites: doctoral standing and special approval.

1.00 TO 6.000 Credit hours
3.00 TO 18.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

**EXPH 83098 - RESEARCH**

(Repeatable for credit) Research for doctoral students. Prerequisite: special approval and doctoral standing.

1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

Health Sciences Department

**EXPH 83199 - DISSERTATION I**

(Repeatable for credit) Doctoral dissertation, for which registration in at least two semesters is required, first of which will be semester in which dissertation work is begun and continuing until the completion of 30 hours. Prerequisite: Special approval and doctoral standing.

15.000 Credit hours
15.000 Other hours

Levels: Graduate
Schedule Types: Dissertation

Health Sciences Department

**EXPH 83299 - DISSERTATION II**

(Repeatable for credit) Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. Prerequisite: EXPH 83199 and doctoral standing.

15.000 Credit hours
15.000 Other hours

Levels: Graduate
Schedule Types: Dissertation

Health Sciences Department

**EXSC 15010 - INTRODUCTION TO EXERCISE SCIENCE**

Introduction to the discipline of exercise science, including the history of the field, current position stands of the American College of Sports Medicine, the responsibilities and roles of the exercise physiologist and the current trends in exercise science. Prerequisite: none.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
EXSC 23093 - VARIABLE TITLE WORKSHOP IN EXERCISE SCIENCE

(Repeatable for credit) Workshop to develop mastery and application of knowledge and skills that address issues in exercise science; topics vary. Satisfactory/unsatisfactory (S/U) graded. Prerequisite: none.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Workshop

EXSC 25057 - HUMAN ANATOMY AND PHYSIOLOGY I

(Cross-listed with ATTR 25057) Comprehensive examination of anatomy and physiology related to the organization of the body and basic cell and tissue types. Specific structure and function of the muscular, skeletal, cardiovascular, nervous and respiratory systems are addressed. Prerequisite: none.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

EXSC 25058 - HUMAN ANATOMY AND PHYSIOLOGY II

(Cross-listed with ATTR 25058) Comprehensive examination of anatomy and physiology related to the human body under rest and exercise conditions. Specific structure and function of the metabolic, endocrine, lymphatic, digestive, urinary and reproductive systems are addressed. Advanced coverage of neurological, cardiovascular and respiratory systems are also addressed. Prerequisite: ATTR 25057 or EXSC 25057 or BSCI 11010.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

EXSC 35022 - EXERCISE LEADERSHIP

Designed to provide the students with the knowledge base in exercise leadership. Topic areas and competencies using a variety of techniques in leading and demonstrating safe and effective methods of applying the fundamental principles of exercise science. The exercise leader will demonstrate all forms of group exercise, flexibility and balance training. Prerequisite: none.
EXSC 35023 - PROFESSIONAL CERTIFICATE PREPARATION

Introductory course in personal training. Covers basic exercise science, fitness evaluation risk management, health appraisal, safety and legal issues for the personal trainer. Prepares the student to take the national certification examination for personal training. Prerequisites: EXSC 25057 or ATTR 25057 or BSCI 11010; and EXSC 25058 or ATTR 25058 or BSCI 11020 or BSCI 20020.

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Health Sciences Department

EXSC 35054 - BIOMECHANICS

(Cross-listed with ATTR 35054) Anatomical and mechanical bases of human movement. Emphasis is placed on tools and techniques for motion analysis, mechanical concepts, forces and performance analysis. Lecture and laboratory. Prerequisite: ATTR 25057 or EXSC 25057 or BSCI 11010.

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Health Sciences Department

EXSC 35068 - STATISTICS FOR EXERCISE SCIENTIST

Measurement and statistics applied to physical education and exercise/sport sciences; laboratory experiences in statistics test construction and administration and evaluation. Prerequisite: None.

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Health Sciences Department

EXSC 35075 - EXERCISE PROGRAMMING

Problems and issues in developing exercise programs in institutional and commercial settings. Prerequisite: ATTR 25057 or EXSC 25057 or BSCI 11010; and ATTR 25058 or EXSC 25058 or BSCI 11020 or BSCI 20020.

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Health Sciences Department
EXSC 40612 - EXERCISE LEADERSHIP FOR THE OLDER ADULT

(Cross-listed with EXPH 50612) Designed to provide students with a knowledge base in exercise leadership in the older adult population, including special populations. Students participate in the leading, supervision and evaluation of participants within the exercise program. The also assist in the collection of functional fitness data. Prerequisite: none.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Health Sciences Department

EXSC 41000 - EXERCISE IMPLEMENTATION: AN EXERCISE INTERVENTION PROGRAM

(Repeatable for credit) Students will participate in leading, supervising and developing plans for individuals who want to reduce cardiovascular risk factors through structured exercise. Prerequisite: EXSC 45080.

1.000 TO 3.000 Credit hours
3.000 TO 9.000 Other hours

Levels: Undergraduate
Schedule Types: Laboratory

Health Sciences Department

EXSC 43093 - VARIABLE TITLED WORKSHOP IN EXERCISE SCIENCE AND EXERCISE PHYSIOLOGY

(Repeatable for credit) (Cross-listed with EXPH 53093) Workshop in exercise science, topics vary. Prerequisites: none.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Workshop

Health Sciences Department

EXSC 43098 - RESEARCH IN EXERCISE SCIENCE

(Repeatable for a maximum of 12 credit hours) Research project completed under the supervision of a faculty member. Written approval of supervising faculty member and School Director required prior to registration. Prerequisite: special approval.

1.000 TO 3.000 Credit hours
3.000 TO 9.000 Other hours

Levels: Undergraduate
Schedule Types: Research
EXSC 45065 - EXERCISE TESTING

(Cross-listed with EXPH 55065) Lecture and laboratory experiences dealing with the administration and interpretation of exercise tests. Prerequisites: ATTR 25057 or EXSC 25057 or BSCI 11010; and ATTR 25058 or EXSC 25058 or BSCI 11020 or BSCI 20020.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

EXSC 45070 - ELECTROCARDIOGRAPHY FOR THE EXERCISE PHYSIOLOGIST

(Cross-listed with EXPH 55070) Designed to provide students with the knowledge base in electrocardiography. Students work on interpreting the 12-lead electrocardiogram with clinical case studies to enhance the knowledge base of the exercise specialist. Prerequisite: ATTR 25057 or EXSC 25057 or BSCI 11010; and ATTR 25058 or EXSC 25058 or BSCI 11020 or BSCI 20020.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

EXSC 45080 - PHYSIOLOGY OF EXERCISE

(Cross-listed with EXPH 55080) Response of the human to acute and chronic exercise with emphasis on the underlying physiological mechanisms. Prerequisite: ATTR 25057 or EXSC 25057 or BSCI 11010; and ATTR 25058 or EXSC 25058 or BSCI 11020 or BSCI 20020.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

EXSC 45096 - INDIVIDUAL INVESTIGATION IN EXERCISE SCIENCE

(Repeatable for a maximum of 6 credit hours) Independent study completed under the supervision of a faculty member. Written approval of supervising faculty member and school director required prior to registration. Prerequisite: special approval.

1.000 TO 3.000 Credit hours
3.000 TO 9.000 Other hours
**EXSC 45480 - INTERNSHIP SEMINAR IN EXERCISE SCIENCE**

Overview of the internship possibilities that are available for the exercise science major. The American College of Sports Medicine (ACSM) certification workshops and the scope of the practice for the exercises specialist is discussed in detail. Prerequisite: special approval.

1.000 Credit hours
1.000 Lecture hours

**EXSC 45481 - SEMINAR IN EXERCISE PHYSIOLOGY**

Provides an overview of the research possibilities available for the exercise science major. The Institutional Review Board, research methodology and the risks and benefits of research in the area of exercise science are discussed in detail. Prerequisite: special approval.

1.000 Credit hours
1.000 Lecture hours

**EXSC 45492 - INTERNSHIP IN PHYSICAL FITNESS AND CARDIAC REHABILITATION**

(Repeatable for a maximum of 8 credit hours) Supervised experience providing practical experience in administration and operation of programs in physical fitness, health enhancement and/or cardiac rehabilitation. 45 clock hours per credit hour. Prerequisite: special approval.

1.000 TO 8.000 Credit hours
3.000 TO 24.000 Other hours

**EXSC 46095 - SPECIAL TOPICS IN EXERCISE SCIENCE**

(Repeatable for credit) Selected topics in exercise science dependent upon interest. Prerequisites: none.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours
Health Sciences Department

FDM 10010 - FASHION FUNDAMENTALS
Introduction to the global fashion industry. Analysis of the business of fashion how it is conceived marketed and sold. Overview of important resources, companies and personnel who impact the industry. Prerequisite: fashion design (FD), fashion merchandising (FM) or pre-fashion design and merchandising (PFDM) major.
3.000 Credit hours
3.000 Lecture hours

Fashion Design and Merch Department

FDM 10020 - FASHION VISUALS
The study of fashion information, research sources, color theory, two-and three-dimensional design and visual presentation formats as they apply to the fashion industry. Prerequisite: fashion design (FD) or fashion merchandising (FM) major.
3.000 Credit hours
1.000 Lecture hours
4.000 Lab hours

Fashion Design and Merch Department

FDM 10023 - FASHION VISUALS
The study of fashion information, research sources, color theory, two-and three-dimensional design and visual presentation formats as they apply to the fashion industry. Prerequisite: fashion design (FD) or fashion merchandising (FM) major. Corequisite: FDM 10024.
1.000 Credit hours
1.000 Lecture hours

Fashion Design and Merch Department

FDM 10024 - FASHION VISUALS LABORATORY
Laboratory applications in the study of fashion information, research sources, color theory, two-and three-dimensional design and visual presentation formats as they apply to the fashion industry. Prerequisite: fashion design (FD) or fashion merchandising (FM) major. Corequisite: FDM 10023.
2.000 Credit hours
1.000 Lecture hours
2.000 Lab hours

Fashion Design and Merch Department
FDM 10030 - FASHION FABRICS I

Study of fabrics, focusing on differentiating between fibers, fabric construction and fabric names. The student will study fabric properties and how they relate to fabric end usage. Prerequisite: fashion design or fashion merchandising major.

3.000 Credit hours
5.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

FDM 10033 - FASHION FABRICS

Study of fabrics, focusing on differentiating between fibers, fabric construction, and fabric names. The student will study fabric properties and how they relate to fabric end usage. Prerequisite: fashion design (FD) or fashion merchandising (FM) major. Corequisite: FDM 10034.

1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

FDM 10034 - FASHION FABRICS LABORATORY

Laboratory applications in the study of fabrics, focusing on differentiating between fibers, fabric construction, and fabric names. The student will study fabric properties and how they relate to fabric end usage. Prerequisite: fashion design (FD) or fashion merchandising (FM) major. Corequisite: FDM 10033.

2.000 Credit hours
1.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

FDM 10050 - INTRODUCTION TO FASHION TECHNOLOGY

Introduces students to the fundamental concepts, procedures and techniques used in digital imaging software and information database software. A survey of current and emerging technologies used in fashion design, merchandising and production contexts is presented, discussed and applied. Prerequisite: fashion design (FD) or fashion merchandising (FM) major.

3.000 Credit hours
1.000 Lecture hours
4.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab
FDM 10053 - INTRODUCTION TO FASHION TECHNOLOGY

Introduces students to the fundamental concepts, procedures, and techniques used in digital imaging software and information database software. A survey of current and emerging technologies used in fashion design, merchandising and production contexts is presented. Prerequisite: fashion design (FD) or fashion merchandising (FM) major. Co-requisite: FDM 10054

1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Fashion Design and Merch Department

FDM 10054 - INTRODUCTION TO FASHION TECHNOLOGY LABORATORY

Laboratory applications of fundamental concepts, procedures, and techniques used in digital imaging software and information database software. A survey of current and emerging technologies used in fashion design, merchandising, and production contexts is presented and applied. Prerequisite: fashion design (FD) or fashion merchandising (FM) major. Corequisite: FDM 10053.

2.000 Credit hours
1.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Fashion Design and Merch Department

FDM 10140 - FOUNDATIONS OF FASHION DRAWING

Introduction to fashion drawing. Concentration on communicating through drawing the fashion figures and technical flats, accurate garment proportion and construction. Prerequisite: Fashion design major.

3.000 Credit hours
5.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Fashion Design and Merch Department

FDM 15043 - WORKROOM TECHNIQUES I

Introduction to basic construction skills using apparel workroom methods and industrial sewing equipment. Prerequisite: fashion design (FD) major.

2.000 Credit hours
4.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Fashion Design and Merch Department

FDM 15044 - WORKROOM TECHNIQUES II

Continued study of basic construction skills using apparel workroom methods and industrial sewing equipment.
Introduction to garment fit and alterations. Prerequisite: FDM 15043.

2.000 Credit hours
4.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Fashion Design and Merch Department

**FDM 15055 - BASICS OF APPAREL CONSTRUCTION**

Introduction to sewing techniques and application processes using industrial sewing machines and other related equipment in basic garment construction. Development of fundamental patternmaking skills. Prerequisite: fashion design (FD) major.

3.000 Credit hours
6.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Fashion Design and Merch Department

**FDM 20013 - HISTORY OF COSTUME**

Chronological study and research of historic costume from the origin of clothing through the French revolutionary era, 19th and 20th century designers, and the influence on contemporary fashion. Prerequisite: HIST 11050 or HIST 11051 or ARTH 22006 or ARTH 22007.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Fashion Design and Merch Department

**FDM 20020 - FASHION MERCHANDISING PRESENTATIONS**

Study of fashion information, research sources and visual presentation formats used in the fashion industry. Prerequisite: FDM 10010 and fashion merchandising major.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Fashion Design and Merch Department

**FDM 20030 - FASHION APPAREL ANALYSIS**

Analysis and evaluation of fashion apparel; quality standards of ready-to-wear apparel and factors that influence the aesthetic and functional performance of the end product. Prerequisite: FDM 10030 or FDM 10033 and FDM 10034; and fashion merchandising (FM) major.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
Fashion Design and Merch Department

**FDM 20040 - FASHION FABRICS II**
Continued study of fabrics, focusing on analyzing fabrics in detail. Also included will be the study of laces, trims, high performance fabrics and current events in the textile industry, including legislation. Prerequisite: FDM 10030 and fashion design (FD) major.
3.000 Credit hours
5.000 Other hours
Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

**FDM 20050 - FASHION TECHNOLOGY APPLICATIONS**
A continuation of content related to technology within the fashion industry. Pattern manipulation, basic technical packages, garment measuring specs, print design and computerized fashion illustration is addressed with the use of industry-specific and off-the-shelf software packages. Prerequisite: FDM 10050 or FDM 10053 and FDM 10054.
3.000 Credit hours
6.000 Other hours
Levels: Undergraduate
Schedule Types: Studio

**FDM 20121 - FASHION DRAWING I**
Advanced study of design illustration techniques as applied to the fashion figure through the use of live model drawing. Concentration on fabric rendering and drape as illustrated on the fashion figure. Introduction to technical flats used for illustrating garment construction. Prerequisite: FDM 10020 or FDM 10023 and FDM 10024; and FDM 10140.
3.000 Credit hours
6.000 Lab hours
Levels: Undergraduate
Schedule Types: Laboratory

**FDM 20122 - FASHION DRAWING II**
Continued study of fashion illustration techniques through the use of Croquis books and figure layouts. Introduction to different design markets and research and how illustration reflects different markets. Instruction on stylizing according to market. Prerequisite: FDM 20121.
3.000 Credit hours
6.000 Lab hours
Levels: Undergraduate
Schedule Types: Laboratory
FDM 20131 - TECHNICAL FASHION DRAWING I

Advanced study of design illustration techniques used to communicate design ideas as applied to technical fashion drawings. Concentration on fabric rendering and drape through the development and use of Croquis to show loose flats. Prerequisite: FDM 10140 and FDM 10020. Corequisite: FDM 20141.
3.000 Credit hours
6.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Fashion Design and Merch Department

FDM 20132 - TECHNICAL FASHION DRAWING II

Continued study of technical fashion illustration techniques through the use of Adobe Illustrator, line plans and Croquis books for research. Introduction to design markets, research and presentations to buyers. Use of drawing software for technical flats and construction details. Prerequisite: FDM 20131. Corequisite: FDM 20142.
3.000 Credit hours
6.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Fashion Design and Merch Department

FDM 20153 - FLAT PATTERN

Development of basic muslins and slopers. Patternmaking principles of dart manipulation and added fullness. Construction techniques for bodice, skirt, sleeve, collar, and pant variations. Prerequisites: FDM 10030 or FDM 10033 and FDM 10034; and FDM 15055.
3.000 Credit hours
6.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Fashion Design and Merch Department

FDM 20154 - DRAPING

Development of basic garment shapes using draping techniques. Emphasis placed on torso development, contouring principles and design development on the form. Construction techniques for boned bodice garments and using knit and bias cut fabrics. Prerequisites: FDM 10030 or FDM 10033 and FDM 10034; and FDM 15055.
3.000 Credit hours
6.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Fashion Design and Merch Department

FDM 20155 - MACHINE KNITTING-SINGLE BED

Basic machine knitting techniques for fashion applications on flat-bed knitting machines. Development and analysis of fully fashioned knit garments. Prerequisite: fashion design (FD) major.
FDM 20263 - FASHION RETAIL INDUSTRY

Study of retail organizations and structures within the fashion industry. Analysis of supervision organization and operations management of fashion retail institutions. Prerequisite: FDM 10010; and fashion design (FD) or fashion merchandising (FM) major.
3.000 Credit hours
3.000 Lecture hours

FDM 25011 - FASHION BRANDING

An overview of branding in the fashion industry. Analysis of strategies for creating (brand awareness), maintaining (brand management) and enhancing the strength (brand asset management) of fashion brands. Class members work individual an as part of a group. Prerequisites: FDM 10010; and fashion merchandising major.
3.000 Credit hours
3.000 Lecture hours

FDM 30013 - FASHION AND POP CULTURE

An examination of the relationship between different types of design and popular culture in America and Europe in the 20th and 21st centuries. Prerequisite: ARTH 220006 or ARTH 22007 or HIST 11050 or HIST 11051.
3.000 Credit hours
3.000 Lecture hours

FDM 30050 - FASHION TECHNOLOGY: COMPUTER INTEGRATED TEXTILE DESIGN

The use of Computer Integrated Design tools to produce textile prints, wovens and knits for professional presentation scenarios. Prerequisite: FDM 10050 or FDM 10053 and FDM 10054.
3.000 Credit hours
5.000 Other hours
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisites</th>
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<tbody>
<tr>
<td>FDM 30083</td>
<td>PROFESSIONAL SEMINAR</td>
<td>Professional development strategies for fashion and related careers. Emphasis is on verbal and written communication skills. Prerequisite: FDM 20030 and fashion merchandising (FM) major and junior or senior standing.</td>
<td>3.000 Credit hours 3.000 Lecture hours</td>
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<td>Undergraduate</td>
<td>Lecture</td>
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<tr>
<td>FDM 30121</td>
<td>FASHION DESIGN I</td>
<td>Study of the fashion industry, seasons and markets. Research and theoretical development of a fashion line/collection. Continued development of drawing, rendering and technical drawing skills. Prerequisite: FDM 20122. Corequisite: FDM 30141.</td>
<td>3.000 Credit hours 6.000 Lab hours</td>
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<td>Undergraduate</td>
<td>Laboratory</td>
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<tr>
<td>FDM 30122</td>
<td>FASHION DESIGN II</td>
<td>Research and theoretical development of fashion lines for specialized markets. Continued development of drawing and rendering skills. Prerequisite: FDM 30121. Corequisite: FDM 30142.</td>
<td>3.000 Credit hours 6.000 Lab hours</td>
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<td>Undergraduate</td>
<td>Laboratory</td>
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<tr>
<td>FDM 30123</td>
<td>CAD FOR FASHION APPLICATIONS</td>
<td>The use of CAD to produce technical drawings, sketches, color stories and textile prints for design and merchandising presentations. Prerequisite: Fashion design and merchandising (FDM) major and junior standing.</td>
<td>3.000 Credit hours 3.000 Lecture hours</td>
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<td>Undergraduate</td>
<td>Lecture</td>
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<tr>
<td>FDM 30124</td>
<td>APPAREL MANUFACTURING PROCESSES</td>
<td>Students learn seam/stitch classifications, costing, sourcing and lab testing quality assurance. Assembly-line</td>
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and modular manufacturing are discussed. Prerequisite: FDM 20040 and 20132 and 20142.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Fashion Design and Merch Department

**FDM 30131 - TECHNICAL FASHION DESIGN I**

Introduction to computerized product data management systems. Creating technical packets with detailed drawings and assembly instructions. Measuring garment prototypes for quality assessment. Prerequisite: FDM 20132 and 20142.

3.000 Credit hours
6.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Fashion Design and Merch Department

**FDM 30132 - APPAREL CONSTRUCTION FOR SPECIALTY MARKETS**

Construction details specific to a market are researched, discussed and duplicated. Only one specialty market covered each class. Markets vary by class. Prerequisite: FDM 20142.

1.000 Credit hours
1.500 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Fashion Design and Merch Department

**FDM 30141 - FASHION STUDIO I**

Advanced patternmaking and construction techniques are used to create complex garments as well as gain experience using fabrics and techniques new to students. Instruction on appropriate seams and finishes for: wools, knits, sheer and silky fabrics. Introduction to technical flats used for illustrating garment construction. Prerequisite: FDM 20142. Corequisite: FDM 30121.

3.000 Credit hours
6.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Fashion Design and Merch Department

**FDM 30142 - FASHION STUDIO II**

Advanced draping, patternmaking and construction techniques are used to create original garments designed in Fashion Design II. Prerequisite: FDM 30141. Corequisite: FDM 30122.

3.000 Credit hours
6.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory
FDM 30151 - ADVANCED PATTERNMAKING

Flat pattern assignments for advanced, complex garments. Suits, outerwear, cutsew knits will all be covered. Students will make patterns by traditional methods as well as by computer. Prerequisite: FDM 20153 and FDM 20154.

3.000 Credit hours
6.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Fashion Design and Merch Department

FDM 30152 - APPAREL PROTOTYPE PRODUCTION AND ANALYSIS

Production of sample garments for a variety of apparel markets focusing on analysis of fit. Menswear, childrenswear, missy, petites and plus size markets are covered. Woven and knit classifications are produced. Prerequisite: FDM 20142.

3.000 Credit hours
6.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Fashion Design and Merch Department

FDM 30153 - MACHINE KNITTING

Learn basic machine knitting techniques and create a sample book. Learn how knits are constructed in the industry. Create two garments based on research and using a theme as inspiration. Prerequisite: FDM 10030 and fashion design (FD) major.

2.000 Credit hours
4.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Fashion Design and Merch Department

FDM 30154 - MACHINE KNITTING-DOUBLE BED

Knitting techniques on a double-bed knitting machine, full-fashioned knit and construction techniques, and creation of a knit sample book. Students create two garments based on research and knowledge gained from the sample book. Prerequisite: fashion design (FD) major.

3.000 Credit hours
5.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Fashion Design and Merch Department

FDM 30155 - KNITWEAR DESIGN
Focus is on the design development of knitwear, learning about how to recognize and communicate knit design through graphs and stitch notation as well as what yarns, fibers and machines are appropriate. The students in this class also design knitwear collections. Prerequisite: fashion design (FD) major.

3.000 Credit hours
5.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Fashion Design and Merch Department

**FDM 30161 - FASHION DESIGN STUDIO I**

Open fashion studio concept to support the creative process of croquis sketching and construction in the production of design work. Students explore markets, selling seasons, and specific construction techniques; and they further develop fashion design process approaches. Prerequisite: FDM 20122 and FDM 20153 and FDM 20154; and special approval.
6.000 Credit hours
12.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Fashion Design and Merch Department

**FDM 30162 - FASHION DESIGN STUDIO II**

A continuation of the open fashion studio concept to support the entire creative process to produce design work. Students explore fashion markets, selling seasons, and specific construction techniques; and they further develop fashion design process approaches. Prerequisite: FDM 30161 or FDM 30171 or FDM 30181; and special approval.
6.000 Credit hours
12.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Fashion Design and Merch Department

**FDM 30171 - FLORENCE FASHION DESIGN STUDIO I**

Open fashion studio concept to support the creative process of croquis sketching and construction in the production of design work. Students explore markets, selling seasons, and specific construction techniques; and they further develop fashion design process approaches. European markets and travel are incorporated. Prerequisites: FDM 20122 and FDM 20153 and FDM 20154; and special approval.
6.000 Credit hours
12.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Fashion Design and Merch Department

**FDM 30172 - FLORENCE FASHION DESIGN STUDIO II**

Continuation of the open fashion studio concept to support the entire creative process to produce design work. Students will explore fashion markets, selling seasons, and specific construction techniques; and they will
further develop fashion design process approaches. Content specific to the European design experience. Prerequisite: FDM 30161 or FDM 30171 or FDM 30181; and special approval.
6.000 Credit hours
12.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Fashion Design and Merch Department

**FDM 30181 - NEW YORK CITY FASHION DESIGN STUDIO I**

Open fashion studio concept to support the creative process of croquis sketching and construction in the production of design work. Students explore markets, selling seasons, and specific construction techniques; and they further develop fashion design process approaches. New York City markets and design-specific experiences are incorporated. Prerequisites: FDM 20122 and FDM 20153 and FDM 20154; and special approval.
6.000 Credit hours
12.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Fashion Design and Merch Department

**FDM 30182 - NEW YORK CITY DESIGN STUDIO II**

Continuation of the open fashion studio concept to support the entire creative process to produce design work. Students explore fashion markets, selling seasons, and specific construction techniques; and they further develop fashion design process approaches. Content specific to the New York City fashion design experience. Prerequisite: FDM 30161 or 30171 or 30181; and special approval.
6.000 Credit hours
12.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Fashion Design and Merch Department

**FDM 30213 - FASHION MARKETING**

Examination of fashion producers/retailers’ roles in marketing communications. Analysis of consumer motivation to develop sales strategies in relationship to marketing strategies. Prerequisite: FDM 20020; and MKTG 25010.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Fashion Design and Merch Department

**FDM 30260 - PRODUCT DEVELOPMENT IN THE FASHION INDUSTRY**

Researching, planning, developing and presenting a fashion product line for a identified target market with regard to prices, styling and timing. Prerequisite: FDM 20030 and fashion merchandising (FM) major.
3.000 Credit hours
3.000 Lecture hours
Fashion Design and Merch Department

**FDM 30262 - FASHION MERCHANDISE PLANNING AND BUYING**

Study of market sources, fashion buying techniques, assortment planning and allocation and quantitative calculations needed in the fashion industry. Prerequisite: FDM 20263; and MATH 11009 or MATH 11010 or MATH 11012 or MATH 10041.

3.000 Credit hours
3.000 Lecture hours

Fashion Design and Merch Department

**FDM 35010 - CONTEMPORARY FASHION DESIGNERS**

Examine and analyze international fashion design and designers of the 20th and 21st centuries. Focuses on the history, development and present context of fashion. Students assemble a portfolio of fashion designers studied to include their biographies, clippings of their work and design inspirations. Prerequisites: FDM 20013.

3.000 Credit hours
3.000 Lecture hours

Fashion Design and Merch Department

Course Attributes:
Writing Intensive Course

**FDM 35011 - FASHION FORECASTING**

Identifying trends to develop fashion forecasts. Interrelationships of forecasting promotion, public relations, and the fashion media will be explored. Prerequisite: FDM 25011.

3.000 Credit hours
3.000 Lecture hours

Fashion Design and Merch Department

**FDM 35012 - SUSTAINABILITY IN FASHION**

Analysis and development of design process thinking through the lens of sustainability and socially responsibility in fashion. Readings, documentaries and lectures are discussed in class. Interdisciplinary teams create a product that supports sustainable fashion futures. Prerequisite: none.

3.000 Credit hours
0.800 Lecture hours
4.200 Lab hours

Fashion Design and Merch Department

Schedule Types: Combined Lecture and Lab
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Credits</th>
<th>Hours</th>
<th>Prerequisite</th>
<th>Levels</th>
<th>Schedule Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDM 35013</td>
<td>FASHION ACCESSORIES</td>
<td>The merchandising, promotion and sales of accessories. Materials production and resources are examined by category. Prerequisite: none.</td>
<td>3.000</td>
<td>3.000</td>
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<td>Undergraduate</td>
<td>Lecture</td>
</tr>
<tr>
<td>FDM 35063</td>
<td>VISUAL MERCHANDISING AND DISPLAY</td>
<td>Theory and practice of merchandise presentation for the purpose of promotion and sales. Prerequisite: fashion merchandising (FM) major.</td>
<td>3.000</td>
<td>4.000</td>
<td>1.000 Lecture hours</td>
<td>Undergraduate</td>
<td>Laboratory, Lecture</td>
</tr>
<tr>
<td>FDM 35070</td>
<td>THE LUXURY MARKET</td>
<td>Purpose is to learn, understand, and perceive the luxury market and its parameters. Students gain an understanding of the marketing power of luxury brands and the organization of a luxury products company.</td>
<td>3.000</td>
<td>3.000</td>
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<td>Undergraduate</td>
<td>Lecture</td>
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<tr>
<td>FDM 35080</td>
<td>FASHION IN THE MEDIA</td>
<td>Analysis of key fashion magazines and in-depth examination of how they are created. Students learn the fundamentals of different forms of communication and the contributions editors, writers, stylists and photographers make toward the finished product. Exploration of how various media interrelate and contribute to the fashion industry is included. Different forms of writing, editing and interviewing as well as the roles of photography, design and styling are examined. Online outlets, television commentary, fashion advertising and Public Relations are discussed. Prerequisite: none.</td>
<td>3.000</td>
<td>3.000</td>
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<td>Undergraduate</td>
<td>Lecture</td>
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FDM 35121 - FASHION MODEL DRAWING

In-depth study of fashion model drawing and the illustration techniques associated with realistic and stylized depictions of the fashion form. A live fashion model will be part of each class in timed poses with instructor demonstrations and in-class drawing assignments. Prerequisite: FDM 20122; and special approval.

3.000 Credit hours
6.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Fashion Design and Merch Department

FDM 35122 - ADVANCED FASHION ILLUSTRATION TECHNIQUES

Focused approach to advanced fashion illustration techniques beyond the required Drawing I and II. Covers a wide variety of illustration mediums and tools, such as gouache, marker, ink and pastels, deepening skill sets and visual literacy through demonstrations and practice-based assignments. Prerequisite: FDM 20122; and special approval.

3.000 Credit hours
6.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Fashion Design and Merch Department

FDM 35260 - MERCHANDISING FOR HOME FURNISHINGS

Introduction to the various retail classifications of home furnishing merchandise to include furniture, floor coverings, window treatments, household linens, table tops, housewares and decorative accessories. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Fashion Design and Merch Department

FDM 35270 - COMPUTER APPLICATIONS IN RETAILING

The application and use of the microcomputer to solve problems in assortment planning, merchandise management, trading area and site analysis, store planning, planogramming and media planning. Prerequisite: FDM 20263; and MATH 10041 or MATH 11009 or MATH 11010 or MATH 11012.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Fashion Design and Merch Department

FDM 35280 - FASHION ENTREPRENEURSHIP

In-depth study of entrepreneurship concepts as applied to manufacturers and retailers of apparel including product development, accounting and control merchandising and buying operation and management advertising.
and promotion. Prerequisite: junior or senior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Fashion Design and Merch Department

FDM 35900 - FLORENCE FASHION STUDY ORIENTATION

Overview of Florence fashion program, the city of Florence, living and traveling in Europe as a study abroad student. Includes assistance for obtaining required documents. Students must enroll in Florence fashion program to receive credit. Satisfactory/unsatisfactory (S/U) graded. Prerequisite: 2.5 cumulative GPA; and special approval.
1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Fashion Design and Merch Department

FDM 35901 - ITALIAN FASHION AND CULTURE

Evolution of the fashion industry in post World War II Italy. Study of the creators, design and production processes creating one of the most successful unions of commercial product and cultural expression world-wide. Prerequisite: FDM 35900.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Fashion Design and Merch Department

FDM 35902 - EUROPEAN FASHION MARKETING

Building on the information acquired in the European Fashion Marketing Seminar lectures and visits, student complete a series of assignments designed to simulate the type of work that a merchandising professional may be asked to complete. Corequisite: FDM 35903.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Fashion Design and Merch Department

FDM 35903 - EUROPEAN FASHION MARKETING SEMINAR

Taken concurrently with European Fashion Marketing and uses a European city as an extended classroom, combining various field trips to directional shopping districts, fashion houses and fashion magazines. Only taught in European settings. Corequisite: FDM 35902.
3.000 Credit hours
3.000 Lecture hours
2.000 Lab hours
FDM 35904 - EUROPEAN FASHION DESIGN

Taken concurrently with European Fashion Design Seminar and is designed to introduce couture techniques and enhance techniques of those who possess a basic to advance knowledge of sewing. Only taught in European settings. Corequisite: FDM 35905.

3.000 Credit hours
3.000 Lecture hours
2.000 Lab hours

FDM 35905 - EUROPEAN FASHION DESIGN SEMINAR

Taken concurrently with European Fashion Design and uses a European city as an extended classroom, combining various field trips to directional shopping districts, fashion houses and fashion magazines. Corequisite: FDM 35904.

3.000 Credit hours
3.000 Lecture hours
2.000 Lab hours

FDM 40050 - FASHION TECHNOLOGY:TECHSTYLELAB

Explores the historical and contemporary links between fashion and technology. Garments, artists, designers, institutions and projects relevant to technological explorations within the fashion context is discussed. Research and experiments conducted with the Fashion School's TechStyleLAB. Students acquire fundamental research skills for fashion technology and develop their own web presence. Prerequisite: FDM 10050 or FDM 10053 and FDM 10054.

3.000 Credit hours
5.000 Other hours

FDM 40099 - SENIOR FASHION DESIGN THESIS I

Senior fashion design thesis collection is created focused on the specialties of each student. This collection is finalized, analyzed and presented in Senior Thesis II. Students engage in a formalized critical development and review process with established external fashion designers. Prerequisites: BFA fashion design (FD) majors; and FDM 30162 or FDM 30172 or FDM 30182.

6.000 Credit hours
12.000 Other hours
### FDM 40121 - FASHION PORTFOLIO I

Develop a professional design portfolio which will emphasize in-depth individual investigation of specific apparel markets, target customers and seasons, displaying various illustrative techniques. Croquis books, technical packets and line plans will be used. Prerequisite: FDM 30162 or FDM 30172 or FDM 30182.

3.000 Credit hours  
6.000 Lab hours

### FDM 40122 - FASHION PORTFOLIO II

Continued development of design portfolio which emphasizes students strengths in design and presentation. Continued progress in croquis books and development of seasonal line plans. Prerequisite: FDM 40121.

3.000 Credit hours  
6.000 Lab hours

### FDM 40131 - TECHNICAL FASHION DESIGN II

Continued study of the fashion industry markets and garment construction and finishes appropriate to market through technical packets. Continued study of industry software used for technical design, tracking samples and logging information. Development of a 'class collection' simulating the fashion industry through the production, communication and creation of all design information inclusive of costing, samples of all technical packets. Prerequisite: FDM 30131. Corequisite: FDM 40151.

3.000 Credit hours  
6.000 Lab hours

### FDM 40132 - TECHNICAL FASHION DESIGN III

Develop a portfolio which emphasizes investigation of specific apparel markets through finishes and fabrications. Portfolios will reflect concentrated classifications and will include technical packs and computerized flat drawings. Prerequisite: FDM 40131. Corequisite: FDM 40152.

3.000 Credit hours  
6.000 Lab hours
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisites</th>
<th>Credits</th>
<th>Lab Hours</th>
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<tbody>
<tr>
<td>FDM 40141</td>
<td>FASHION STUDIO III</td>
<td>Development of pattern work, specification sheets and muslins for original line. Faculty and external professional critiques. Prerequisite: FDM 30162 or FDM 30172 or FDM 30182.</td>
<td>3.000 Credit hours 6.000 Lab hours</td>
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<tr>
<td>FDM 40142</td>
<td>FASHION STUDIO IV</td>
<td>Construction and completion of garments for original line. Faculty and external professional critiques. Prerequisite: FDM 40121 and 40141. Corequisite: FDM 40122.</td>
<td>3.000 Credit hours 6.000 Lab hours</td>
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<tr>
<td>FDM 40151</td>
<td>TECHNICAL DESIGN STUDIO I</td>
<td>Class collaborates on one collection by dividing into student teams based on classification (woven bottoms, knit tops, etc.). Patterns and muslins are created. Faculty and external professional critiques. Prerequisite: FDM 30131 and FDM 30132 and FDM 30124 and FDM 30151 and FDM 30152. Corequisite: FDM 40131.</td>
<td>3.000 Credit hours 6.000 Lab hours</td>
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<tr>
<td>FDM 40152</td>
<td>TECHNICAL DESIGN STUDIO II</td>
<td>Continued work on collaborative collections. Student teams work on different classifications. The prototypes are produced in final fabrics. Faculty and external professional critiques. Prerequisite: FDM 40151. Corequisite: FDM 40132.</td>
<td>2.000 Credit hours 4.000 Lab hours</td>
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<tr>
<td>FDM 40199</td>
<td>SENIOR FASHION DESIGN THESIS II</td>
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Continuation of Senior Fashion Design Thesis I. Finalize senior thesis project; critical review and reflection on outcome in a short analysis. The final thesis submission will be displayed through a juried venue. Prerequisite: FDM 40099.

3.000 Credit hours
6.000 Other hours

Levels: Undergraduate
Schedule Types: Senior Project/Honors Thesis

Fashion Design and Merch Department

Course Attributes:
Experiential Learning Requirem

FDM 40270 - FASHION MARKETING

Examination of fashion producers' and retailers' roles in fashion marketing research. Analysis of consumer motivation through research to develop sales strategies in relationship to marketing strategies. Prerequisites: FDM 35011; and MATH 10041; and MKTG 25010.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Fashion Design and Merch Department

FDM 40291 - SEMINAR IN FASHION MERCHANDISING

(Repeatable for credit) Captsone course in Fashion Merchandising. Builds and expands on all merchandising-related coursework with the goal of integrating content and applying it to real-life scenarios through critical thinking and analysis. A coherent portfolio demonstrating student efficacy with overall program content is completed. Prerequisite: FDM 30260 and FDM 30262 and FDM 35011 and FDM 35270.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

Fashion Design and Merch Department

Course Attributes:
Writing Intensive Course

FDM 45011 - FASHION FORECASTING

Identifying trends to develop fashion forecasts. Interrelationships of forecasting promotion public relations and the media. Prerequisite: FDM 30213.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Fashion Design and Merch Department
FDM 45012 - TEXTILES AND APPAREL IN THE GLOBAL ECONOMY

Global perspective on the production and marketing of textiles and apparel; historical geographic and economic factors that influence the world trade in soft goods. Prerequisite: FDM 30262 and 35270.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Fashion Design and Merch Department

FDM 45035 - HISTORIC TEXTILES

Identification and analysis of textile fabrics as the reflection of culture from ancient times to present. Prerequisites: fashion design (FD) or fashion merchandising (FM) major.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Fashion Design and Merch Department

FDM 45045 - COLLABORATIVE FASHION PRODUCTION

Exploration of product production process from concept to a marketable product. Utilizes introductory pattern making, sewing skills, and project management to create fashion apparel products. Prerequisite: Fashion Design (FD) or Fashion Merchandising (FM) major and special approval.
3.000 Credit hours
6.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Fashion Design and Merch Department

FDM 45092 - INTERNSHIP IN FASHION DESIGN AND MERCHANDISING

(Repeatable for credit) Supervised practical experience in the fashion industry. Eligibility requirements available from the school of fashion design and merchandising field studies coordinator. Prerequisite: FDM 30083 and junior standing and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture, Practicum or Internship

Fashion Design and Merch Department

Course Attributes:
Experiential Learning Requirem

FDM 45093 - VARIABLE TITLE WORKSHOP-FASHION DESIGN AND MARKETING

(Repeatable for a total of 6 hours) Special fee actual cost basis. Prerequisite: special approval.
1.000 TO 3.000 Credit hours
### FDM 45095 - SPECIAL TOPICS

(Repeatable for credit) Variable content relevant to the field of fashion. Prerequisite: Permission.

- 1.000 TO 3.000 Credit hours
- 1.000 TO 3.000 Lecture hours

**Levels:** Undergraduate  
**Schedule Types:** Workshop

Fashion Design and Merch Department

### FDM 45096 - INDIVIDUAL INVESTIGATION

(Repeatable for credit) Individual investigation of topic above the level available through coursework. Requires submission of and approval of project proposal prior to registration. Prerequisite: Permission.

- 1.000 TO 3.000 Credit hours
- 1.000 TO 3.000 Other hours

**Levels:** Undergraduate  
**Schedule Types:** Lecture

Fashion Design and Merch Department

### FDM 45192 - INTERNSHIP IN FASHION MERCHANDISING

Supervised practical experience in the fashion industry. Eligibility requirements available from the School of Fashion Design and Merchandising field studies coordinator. Prerequisites: FDM 30083 and 30262; fashion merchandising (FM) major; and special approval for internship site.

- 3.000 Credit hours
- 3.000 Other hours

**Levels:** Undergraduate  
**Schedule Types:** Practicum or Internship

Fashion Design and Merch Department

**Course Attributes:** Experiential Learning Requirem

### FDM 45212 - FASHION SHOW PRODUCTIONS

Analyses of fashion show formats are considered for promotion purposes. Production planning, organization and physical requirements are studied. Class produces a fashion show. Prerequisite: None.

- 3.000 Credit hours
- 3.000 Lecture hours

**Levels:** Undergraduate  
**Schedule Types:** Lecture

Fashion Design and Merch Department
FDM 45292 - INTERNSHIP IN FASHION DESIGN

Supervised practical experience in the fashion industry. Eligibility requirements available from the School of Fashion Design and Merchandising field studies coordinator. Prerequisite: FDM 20122, FDM 20153 and FDM 20154; fashion design (FD) major; and special approval for internship site.
3.000 Credit hours
9.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Fashion Design and Merch Department

Course Attributes:
Experiential Learning Requirem

FDM 45392 - FIELD EXPERIENCE: FASHION STUDY TOUR

(Repeatable for credit)Visit to domestic or foreign fashion markets, including design and fabric houses or showrooms, retail stores, buying offices and other areas of the fashion industry. Prerequisites: special approval and fashion design (FD) or fashion merchandising (FM) major.
1.000 TO 3.000 Credit hours
12.000 TO 36.000 Other hours

Levels: Undergraduate
Schedule Types: Field Experience

Fashion Design and Merch Department

Course Attributes:
Experiential Learning Requirem

FDM 45492 - FIELD EXPERIENCE STUDY TOUR FOR NYC STUDIO STUDENTS

(Repeatable for credit)Visit to the New York fashion market including design and fabric houses or showrooms, retail stores, buying offices and other areas of the fashion industry. Prerequisite: Special approval and fashion design or fashion merchandising major.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Field Experience

Fashion Design and Merch Department

Course Attributes:
Experiential Learning Requirem

FDM 45592 - FIELD EXPERIENCE EUROPEAN FASHION STUDY TOUR FOR FLORENCE STUDENTS

(Repeatable for credit)Visit to European fashion markets including design and fabric houses or showrooms, retail stores, buying offices and other areas of the fashion industry. Prerequisite: Special approval and fashion design or fashion merchandising major.
3.000 Credit hours
3.000 Other hours
### FDM 50050 - TECHSTYLELAB: DIGITAL DESIGN AND NEW MEDIA IN FASHION

Exploration of the intersection of New Media and Fashion. Includes research into analog design methods and digital systems of production and the supply chain management. Topics include various research and design topics such as mass-customization, co-creation, material ecology, digital craft and future craft practices.

Prerequisites: graduate standing or by permission of department.

- 3.000 Credit hours
- 1.000 Lecture hours
- 3.000 Lab hours

### FDM 50092 - FASHION INDUSTRY PRACTICUM

(Course is repeatable for a maximum of 6 credit hours) Practicum is an off-campus progressive process involving a number of specific guided experiences with a fashion agency or company. This course is intended to bridge the gap between the theoretical and abstract learning gained in the classroom with real-world concrete applications. Students will be required to produce a substantial report on an innovation. One credit hour is awarded for a minimum of seven clock hours per week. Prerequisite: FDM 60030; and graduate standing; and special approval from graduate supervisory committee.

- 1.000 TO 6.000 Credit hours
- 1.000 TO 6.000 Other hours

### FDM 50093 - WORKSHOPS IN FASHION

(Course is repeatable) MFASH students will be encouraged to take advantage of courses that focus on professional renewal or mastery and application of knowledge and skills that address a range of problems or issues related to fashion practice. The workshops will be offered at our NYC, Florence, and Kent campuses.

Prerequisite: graduate standing.

- 1.000 TO 3.000 Credit hours
- 1.000 TO 3.000 Other hours

### FDM 50161 - ADVANCED FASHION DESIGN STUDIO

(Course is repeatable for a maximum of 6 credit hours) Studio investigation of complex formal and spatial constructs in apparel design, resulting in a body of work examined by exhibition. Examinable material includes
written and visual documentation, which is then retained as the archival record of the research. Students will research and explore new techniques in the development of design concepts. These designs will go through stages of review from testing to final project. Prerequisites: FDM 60030; and graduate standing and special approval from graduate supervisory committee.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Studio

Fashion Design and Merch Department

FDM 50300 - ADVANCED FASHION INDUSTRY PRACTICE

This course is centered in empirical research as both a practice and a process. Students will engage in research methodologies employed in case studies and reflect on how findings are produced and interpreted. Informed by this analysis, students will pursue their own fashion case-studies in which they research and interpret fashion practices. Students will engage in research such as observation, interviews, and onsite visits, and position their own findings in relation to suitable scholarly discourse. The aim of the course is to challenge students to advance their research and analytical skills, to cross disciplinary boundaries, and to develop new and original perspectives from which to form their own thesis topic. Prerequisite: graduate standing and special approval by department.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Fashion Design and Merch Department

FDM 53010 - FASHION EXHIBITION DESIGN AND CURATORIAL PERSPECTIVES

Practical introduction to the study and exhibition of textile and fashion artifacts. Survey of material culture studies, significant theoretical models, different approaches to exhibition practice, influential exhibitions and the viewer experience particular to fashion design and textiles. Students will select objects and apply knowledge of research methods and interpretations. They will design their own fashion or textiles focused exhibition by creating label copy, a catalogue, and a floor plan. Final projects will include consideration to budgets, conservation requirements, loan procedures, and public programming. Interdisciplinary approaches are encouraged. Prerequisite: graduate standing; and special approval of department.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Fashion Design and Merch Department

FDM 55010 - CONCEPTS OF SUSTAINABLE FASHION

This course will discuss and examine the most current approaches to sustainability in fashion. The different facets, benefits or shortcomings of each approach will be analyzed with an eye to researching viable solutions to future practices in manufacturing, material selection, design and business. Course embeds practice-based approaches to sustainable development. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
FDM 55035 - HISTORIC TEXTILES

Identification and analysis of textile fabrics as the reflection of culture from ancient times to present. Prerequisite: graduate standing. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

FDM 55095 - SPECIAL TOPICS

(Repeatable for a maximum of 6 credit hours) Variable content relevant to the field of fashion. Prerequisite: graduate standing and special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

FDM 55096 - INDIVIDUAL INVESTIGATION

(Repeatable for a maximum of 3 credit hours) Individual investigation of topic above the level available through coursework. Requires submission of and approval of project proposal prior to registration. Prerequisite: graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

FDM 60010 - THEORIES IN FASHION

Focuses on the meaning, context and intent of fashion design to contemporary society. Examination of seminal theories and constructs that inform our understanding of the phenomenon of fashion. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

FDM 60020 - FASHION DESIGN MANAGEMENT

In-depth study of the relationship between creativity and efficiency in fashion design. Provides insight into how
project managers can nurture innovation in an organizational context. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Fashion Design and Merch Department

FDM 60030 - FORMS OF INQUIRY IN FASHION

Research proposals, their development and importance. Functions and purposes of research proposals; components of proposals and their relevance; ethical implications of human subjects and research implementation and dissemination; implementation of quality writing and selected styles and formats; planning and documenting the research process. Prerequisite: graduate standing and special approval by Fashion Designing and Merchandising graduate committee.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Fashion Design and Merch Department

FDM 60040 - FASHION: A UNIFYING LENS

Capstone graduate seminar designed to make connections, synthesize, and develop mastery of field. Students will gain insight and overall understanding of fashion to include: “a unifying lens focused on creating, and investigating the individual and collective phenomena of products and services that are related to the appearance, style, identity and behavior of consumers within a visual culture.” Students will participate in informed critical discussion, written, and visual work, guided by interaction with multiple faculty and concluded with a final paper and presentation that expands knowledge in the field. Prerequisite: FDM 60010; and graduate standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Fashion Design and Merch Department

FDM 60098 - RESEARCH PROJECT IN FASHION DESIGN AND MERCHANDISING

(Repeatable for credit) Research experience with an individual faculty member designed to strengthen student's ability to synthesize different phases and methods of research. Students work closely with faculty to determine the specific nature, scope and design of the research experience. Prerequisites: FDM 60010 and FDM 60030; and graduate standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Research

Fashion Design and Merch Department

FDM 60199 - MASTER OF FASHION THESIS I
(Repeatable for credit) Thesis students must register for a maximum of 6 credits, 2 to 6 credits in a single semester, distributed over several semesters if desired. Prerequisite: graduate standing and special approval from graduate supervisory committee.

2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Fashion Design and Merch Department

FDM 60299 - MASTER OF FASHION THESIS II

(Course is repeatable) Continuing registration required of master's students who have completed the initial 6 hours of thesis and continuing until all degree requirements are met. Prerequisite: FDM 60199; graduate standing and special approval.

1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Fashion Design and Merch Department

FESA 31000 - FIRE AND EMERGENCY SERVICES ADMINISTRATION

Designed to be a progressive primer for students who want more knowledge about fire and emergency services administration. Demonstrates the importance of the following skills necessary to manage and lead a fire and emergency services department through the challenges and changes of the 21st century: Persuasion and influence, accountable budgeting, anticipation of challenges and the need for change, and using specific management tools for analyzing and solving problems. Focuses on how the leadership of a fire and emergency services department develops internal and external cooperation to create a coordinated approach to achieving the department's mission. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

FESA 31003 - ANALYTICAL APPROACH TO PUBLIC FIRE PROTECTION

Examines the tools and techniques of rational decision making in Fire and Emergency Services agencies including data collection, statistics, probability, decision analysis, utility modeling, resource allocation, and cost-benefit analysis. Prerequisite: none.

4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

FESA 31006 - COMMUNITY RISK REDUCTION FOR THE FIRE AND EMERGENCY SERVICES

Provides a theoretical framework for the understanding of the ethical, sociological, organizational, political, and
legal components of community risk reduction, and a methodology for the development of a comprehensive community risk reduction plan. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**FESA 31009 - FIRE PREVENTION, ORGANIZATION AND MANAGEMENT**

Examine the factors that shape fire risk and the tools for fire prevention, including risk reduction education, codes and standards, inspection and plans review, fire investigation, research, master planning, various types of influences and strategies. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**FESA 31011 - POLITICAL AND LEGAL FOUNDATIONS FOR FIRE PROTECTION**

Examines the legal aspects of the fire service and the political and social impacts of legal issues. Includes a review of the American legal system and in-depth coverage of legal and political issues involving employment and personnel matters, administrative and operation matters, planning and code enforcement, and legislative and political processes with regard to the fire service. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**FESA 31013 - PERSONNEL MANAGEMENT FOR THE FIRE AND EMERGENCY SERVICES**

Examines relationships and issues in personnel administration and human resource development within the context of fire related organizations, including personnel management, organizational development, productivity, recruitment and selection, performance management systems, discipline, and collective bargaining. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**FESA 41000 - FIRE PROTECTION STRUCTURES AND SYSTEMS**

Examines the underlying principles involved in structural fire protection systems, building furnishings, and fire protection systems including water based fire suppression systems, fire alarm and detection systems, special hazard suppression systems, and smoke management systems. Prerequisite: none.

3.000 Credit hours
FESA 41002 - FIRE DYNAMICS

Examines fire dynamics within the context of fire fighting and its applications to fire situations. Topic include: chemistry, physical processes and fluid dynamics, fire and combustion, explosions, ignition and flame spread, flames and fire plumes, pre and post flashover compartment fires, smoke movement, fire suppression, fire dynamics applications to building codes and large loss fires, special hazards, and fire modeling and trends in fire dynamics. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

FESA 41004 - FIRE INVESTIGATION AND ANALYSIS

Examines the technical, investigative, legal, and social aspects of arson, including principles of incendiary fire analysis and detection, environmental and psychological factors of arson, legal considerations, intervention, and mitigation strategies. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

FESA 41006 - DISASTER PLANNING AND CONTROL

Examines concepts and principles of community risk assessment, planning, and response to fires, natural and man made disasters, including NIMS ICS, mutual aid and automatic response, training and preparedness, communications, civil disturbances, earthquake preparedness, and disaster mitigation and recovery. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

FESA 41008 - FIRE RELATED HUMAN BEHAVIOR

Provide students with knowledge of what is known about how humans respond to fire and how the knowledge has been integrated into life safety systems design and development. Examine current and past research on human behavior, systems models, life safety education and building design to determine interactions of these areas in emergency situations. Students will develop an understanding of a best practice building life safety system as one that combines knowledge in the areas of psychology and sociology joined with engineering and education to provide the best possible outcomes in terms of human survivability in an emergency. Prerequisite:
FESA 41010 - MANAGERIAL ISSUES IN HAZARDOUS MATERIALS

Current issues in management of a department wide hazardous materials program. Includes issues that are pertinent to officers and managers in public safety departments, including regulations and requirements for hazardous materials preparedness, response, storage, transportation, handling and use, and the emergency response to terrorism threat or incident. Subjects covered include state, local and federal emergency response planning, personnel and training, and operational considerations such as determining strategic goals and tactical objectives. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

FESA 41016 - APPLICATIONS OF FIRE RESEARCH

Examines the basic principles of research and methodology for analyzing current fire related research. Provides a frame work for conducting and evaluating independent research in the following areas: fire dynamics, fire test standards and codes, fire safety, fire modeling, structural fire safety, life safety, firefighter health and safety, automatic detection and suppression, transportation fire hazards, risk analysis and loss control, fire service applied research and new trends in fire related research. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

FIN 26074 - LEGAL ENVIRONMENT OF BUSINESS

(Equivalent to BMRT 21000) Coverage of the nature, structure and significance of the legal and regulatory areas which confront business, with special emphasis on business ethics environmental and international issues. Prerequisite: sophomore standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Finance Department

Course Attributes:
TAG - Business

FIN 36040 - ME AND MY MONEY
Provides non-business majors with a practical overview of the essential aspects of personal finance necessary to function in today's complex economy. No credit toward B.B.A. degree. Prerequisite: none

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Finance Department

**FIN 36053 - BUSINESS FINANCE**

Analysis of financial decisions in business enterprise and interface of firm with capital markets. Prerequisite: cumulative 2.500 GPA; and ACCT 23020 or ACTT 11000; and ECON 22060 or HONR 21197; and ECON 22061.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Finance Department

**FIN 36054 - INTERMEDIATE BUSINESS FINANCE**

Treatment of uncertainty in business financial analysis. Overview of investment markets, financial institutions and international financial environment. Prerequisite: cumulative 2.500 GPA; and Finance (FIN) major or minor; and minimum C (2.000) grade in FIN 36053, ENG 21011, COMM 15000 and MATH 11010.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Finance Department

**FIN 36058 - THE FINANCIAL SYSTEM**

Analysis of financial markets and institutions emphasizing current issues, regulatory aspects and management concerns. Prerequisite: cumulative 2.500 GPA; and Finance (FIN) major or minor; and minimum C (2.000) grade in FIN 36053, ENG 21011, COMM 15000 and MATH 11010.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Finance Department

**FIN 36059 - INVESTMENTS**

Discussion of factors determining value of investment securities with attention to economic, regulatory and global influences. Either this course or FIN 36063 but not both can count as an elective in a College of Business Administration program. Prerequisite: cumulative 2.500 GPA; and Finance (FIN) major or minor; and a minimum C (2.000) grade in FIN 36053, ENG 21011, COMM 15000 and MATH 11010.

3.000 Credit hours
3.000 Lecture hours
FIN 36063 - INDIVIDUAL INVESTMENT FINANCIAL STRATEGIES

Examination of personal financial and investment strategies, and the impact of individual choices, with the goal of increasing personal financial literacy and future individual well-being. Provides a foundational understanding for making informed personal financial decisions. Does not fulfill a requirement leading to a Finance (FIN) major or minor. Prerequisite: cumulative 2.500 GPA; and junior status.

3.000 Credit hours
3.000 Lecture hours

FIN 36072 - LAW OF COMMERCIAL TRANSACTIONS

Introduction to real and personal property, commercial paper, agency law, business organizations, bankruptcy, secured transactions and other related areas of business law. Primarily for accounting majors. Prerequisite: cumulative 2.500 GPA; and FIN 26074 or BMRT 21000; not open to finance (FIN) majors.

3.000 Credit hours
3.000 Lecture hours

FIN 36081 - PRINCIPLES OF INSURANCE

Examination of insurance industry, its regulatory environment and insurance contracts. Life and health insurance as well as property and liability insurance are covered. Prerequisite: cumulative 2.500 GPA; and Finance (FIN) major or minor; and ECON 22060 and ECON 22061.

3.000 Credit hours
3.000 Lecture hours

FIN 36085 - FINANCIAL MODELING

Provides students explicit experience with financial modeling. Business problems are systematically designed and solved using computerized spreadsheets. Prerequisites: FIN 36054; and MIS 24053; and 2.500 cumulative GPA.

3.000 Credit hours
3.000 Lecture hours
## FIN 46054 - FINANCIAL RISK MANAGEMENT

Understanding techniques and financial tools used in managing financial risk. Analysis of contracts (options, forwards, futures) undertaken in the context of financial regulation and ethical practices within the financial marketplace. Prerequisite: cumulative 2.500 GPA; and Finance (FIN) major or minor; and FIN 36053.

3.000 Credit hours  
3.000 Lecture hours  

Levels: Undergraduate  
Schedule Types: Lecture  

## FIN 46055 - OPTIONS AND FUTURES MARKETS

Comprehensive analysis of options and futures markets and their role in the financial system. Valuation methods, advanced hedging, arbitration techniques and the regulatory environment. Prerequisite: cumulative 2.500 GPA; and Finance (FIN) major and FIN 36059.

3.000 Credit hours  
3.000 Lecture hours  

Levels: Undergraduate  
Schedule Types: Lecture  

## FIN 46059 - FINANCIAL POLICY

Capstone course in finance with emphasis on financial policies and strategic financial decision making with respect to both short-term and long-term financial management problems. Prerequisite: cumulative 2.500 GPA; and Finance (FIN) major and FIN 36054 and MIS 24056.

3.000 Credit hours  
3.000 Lecture hours  

Levels: Undergraduate  
Schedule Types: Lecture  

Course Attributes:  
Experiential Learning Requirem, Writing Intensive Course  

## FIN 46064 - INTERNATIONAL BUSINESS FINANCE

Management of the finance function of an international company, including foreign exchange exposure management, foreign investment, short term and long term capital management, and international accounting and taxation. Prerequisite: cumulative 2.500 GPA; and Finance (FIN) major or minor; and FIN 36053 and FIN 36054; and senior standing.

3.000 Credit hours  
3.000 Lecture hours  

Levels: Undergraduate  
Schedule Types: Lecture  

Finance Department
FIN 46067 - PORTFOLIO ANALYSIS

Principles, methods, techniques of portfolio analysis. Emphasis on determination of portfolio risks and returns. Political, ethical, global forces affecting asset returns and risks are evaluated. Prerequisite: cumulative 2.500 GPA; and Finance (FIN) major and FIN 36059.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Finance Department

FIN 46068 - FINANCIAL MANAGEMENT OF COMMERCIAL BANKS

Financial management techniques applied to commercial banks. Focus on management of liquidity, investment and loan portfolios and capital structure. Prerequisite: cumulative 2.500 GPA; and Finance (FIN) major or minor; and FIN 36058 and FIN 36054.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Finance Department

FIN 46096 - INDIVIDUAL INVESTIGATION IN FINANCE

(Repeatable for credit) Opportunity for research in problem areas of interest in field of finance. Agreement of faculty member in the department must be secured prior to registering for course. Prerequisite: cumulative 2.500 GPA; and Finance (FIN) major and special approval.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Finance Department

FIN 46192 - INTERNSHIP IN FINANCE

(Repeatable for credit) An internship for finance majors interested in obtaining career-relevant experience. Students and employers must satisfy criteria established by the department. Students are responsible for securing employment. Prerequisite: FIN 36054, and cumulative 2.500 GPA; and Finance (FIN) major and special approval.

3.000 Credit hours
9.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Finance Department

Course Attributes:
Experiential Learning Requirem
FIN 46295 - FINANCE SPECIAL TOPICS

(Repeatable for credit) Deal with special topics in finance. New subjects not covered in other existing courses. Prerequisites: Finance (FIN) major and minimum 2.500 cumulative GPA and FIN 36053 and senior standing. 3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Finance Department

FIN 66050 - THE LEGAL AND ETHICAL ENVIRONMENT OF MANAGEMENT DECISIONS

This course examines the impact that various laws and regulations as well as ethical considerations in society exert on the business managerial decision-making process. Prerequisite: graduate standing. 3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Finance Department

FIN 66061 - FINANCIAL MANAGEMENT I

(Cross-listed with FIN 66061) Study of financial decision-making processes within a firm. Emphasis on applications and strategic planning in investment, financing, dividend and working capital decisions. Prerequisite: ACCT 63037 and 63038; ECON 62021; and graduate standing. 3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Finance Department

FIN 66062 - FINANCIAL MANAGEMENT II

(Cross-listed with FIN 76062) Advanced treatment of financial topics with focus on current issues of strategic importance. Case and project intensive. Prerequisite: FIN 66061 or 76061; and graduate standing. 3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Finance Department

FIN 66063 - FINANCIAL MARKETS AND INSTITUTIONS

(Cross-listed with FIN 76063) Study of money and capital markets and institutions and their managerial and environmental problems, including regulation and supervision by government. Prerequisite: FIN 66061 or 76061; and graduate standing. 3.000 Credit hours
3.000 Lecture hours
FIN 66064 - INTERNATIONAL FINANCIAL MANAGEMENT

(Cross-listed with FIN 76064) Problems facing financial management of multinational firms including environmental problems, organizing for optimal results, sources and uses of funds, accounting, tax and control problems. Prerequisite: FIN 66061 or 76061; and graduate standing.
3.000 Credit hours
3.000 Lecture hours

FIN 66066 - ADVANCED SECURITY AND INVESTMENT THEORY

(Cross-listed with FIN 76066) Integrated investment analysis with portfolio analysis and management. Coverage of the leading portfolio and capital asset models. Prerequisite: FIN 66061 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

FIN 66069 - REAL ESTATE

A study of real estate valuation, financing, investment and brokerage. Emphasis is in both theoretical and pragmatic terms with regard to land use and development. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

FIN 66075 - LEGAL ASPECTS OF FINANCIAL ENGINEERING

Coverage of the legal, regulatory and compliance aspects of derivative use and the current legal standing of derivatives and regulatory issues associated with derivatives. Issues of risk measurement and risk transparency of derivatives markets and disclosure issues are covered. Prerequisite: FIN 66080 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

FIN 66080 - DERIVATIVES I
An introduction to the theory and practice of pricing and hedging of derivative securities. Coverage of equity and index, foreign currency, commodity and interest-rate derivatives. Basic mathematical concepts and the institutional structure of derivative markets discussed. This course uses advanced trading and analytical software and hardware on the financial engineering trading floor. Prerequisite: Graduate standing. Corequisite: BAD 66061.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

FIN 66081 - DERIVATIVES II

(Cross-listed with FIN 76081) Coverage of exotic options, discrete and continuous pricing models, and pricing techniques. Develops the economic foundations of the theory of derivatives and a mathematical toolkit to analyze standard instruments and 'dissect' exotic ones. This course uses advanced trading and analytical software and hardware on the financial engineering trading floor. Prerequisite: FIN 66080 and BAD 66061 and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

FIN 66084 - FINANCIAL ENGINEERING

(Cross-listed with FIN 76084) Coverage of VaR, hedging techniques, synthetic assets and volatility trading are covered. Risk management and risk control models are covered. Surveys, standard approaches to measuring and modeling financial risk from the risk manager perspective. This course uses advanced trading and analytical software and hardware on the financial engineering trading floor. Prerequisite: FIN 66080 and BAD 66061 and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

FIN 66085 - FIXED INCOME MARKETS

(Cross-listed with FIN 76085) Provides a quantitative approach to fixed income instrument use. Covers the mathematics of bond pricing, term structure analysis and pricing of credit risk. Trees and Monte Carlo methods of valuation are presented. This course uses advanced trading and analytical software and hardware on the financial engineering trading floor. Prerequisite: FIN 66080 and BAD 66061 and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
FIN 76061 - FINANCIAL MANAGEMENT I

(Cross-listed with FIN 76061) Study of financial decision-making processes within a firm. Emphasis on applications and strategic planning in investment, financing, dividend and working capital decisions. Prerequisite: ACCT 63037 and 63038; ECON 62021; and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Finance Department

FIN 76062 - FINANCIAL MANAGEMENT II

(Cross-listed with FIN 66062) Advanced treatment of financial topics with focus on current issues of strategic importance. Case and project intensive. Prerequisite: FIN 66061 or 76061; and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Finance Department

FIN 76063 - FINANCIAL MARKETS AND INSTITUTIONS

(Cross-listed with FIN 66063) Advanced treatment of financial topics with focus on current issues of strategic importance. Case and project intensive. Prerequisite: FIN 66061 or 76061; and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Finance Department

FIN 76064 - INTERNATIONAL FINANCIAL MANAGEMENT

(Cross-listed with FIN 66064) Problems facing financial management of multinational firms including environmental problems, organizing for optimal results, sources and uses of funds, accounting, tax and control problems. Prerequisite: FIN 66061 or 76061; and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Finance Department

FIN 76066 - ADVANCED SECURITY AND INVESTMENT THEORY

(Cross-listed with FIN 66066) Integrated investment analysis with portfolio analysis and management. Coverage of the leading portfolio and capital asset models. Prerequisite: FIN 66061 or 76061; and doctoral standing.
3.000 Credit hours
3.000 Lecture hours
**FIN 76081 - DERIVATIVES II**

(Cross-listed with FIN 66081) Coverage of exotic options, discrete and continuous pricing models, and pricing techniques. Develops the economic foundations of the theory of derivatives and a mathematical toolkit to analyze standard instruments and 'dissect' exotic ones. This course uses advanced trading and analytical software and hardware on the financial engineering trading floor. Prerequisite: FIN 66080 and BAD 66061 and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Finance Department

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**FIN 76084 - FINANCIAL ENGINEERING**

(Cross-listed with FIN 66084) Coverage of VaR, hedging techniques, synthetic assets and volatility trading are covered. Risk management and risk control models are covered. Surveys, standard approaches to measuring and modelling financial risk from the risk manager perspective. This course uses advanced trading and analytical software and hardware on the financial engineering trading floor. Prerequisite: FIN 66080 and BAD 66061 and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Finance Department

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**FIN 86061 - THEORIES OF FINANCIAL DECISION-MAKING**

Object is to discuss how individuals and firms allocate resources through time. Basic emphasis on optimal investment decisions under conditions of certainty and uncertainty. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Finance Department

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**FIN 86062 - THEORY OF CORPORATE FINANCE**

A study of the theory and empirical evidence from a global perspective regarding corporate financial management. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
FIN 86064 - INTERNATIONAL FINANCIAL MARKETS, INSTITUTIONS AND MANAGEMENT

This course presents an intense examination of the major global issues and underlying theories concerning the financial management of international business firms and the financial markets and institutions which facilitate such operations. Reading assignments will consist of the leading journal articles in this area. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

FIN 86066 - INVESTMENT THEORY

A study of the theory and empirical evidence from a global perspective regarding investment analysis, valuation and portfolio selection. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

FIN 86098 - RESEARCH IN FINANCE

(Repeatable for credit) Research area of current interest. This structured course is designed to enable the doctoral candidate to complete an acceptable dissertation proposal in the field of finance. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Research

FR 13201 - ELEMENTARY FRENCH I

An introduction to the French language in the context of Francophone cultures. Prerequisite: None.
4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

FR 13202 - ELEMENTARY FRENCH II

A continuation of the introduction to the French language in the context of Francophone cultures. Prerequisite:
FR 13201.
4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

FR 23201 - INTERMEDIATE FRENCH I
Continued development of speaking, listening, reading and writing skills using a variety of cultural materials. Prerequisite: FR 13202.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

FR 23202 - INTERMEDIATE FRENCH II
Continuation of FR 23201. Prerequisite: FR 23201.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

FR 33095 - SELECTED TOPICS IN FRENCH
(Repeatable for a maximum of 9 credit hours) Topic to be announced in the schedule of classes. Prerequisite: FR 33211.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

FR 33211 - FRENCH CONVERSATION
A course designed to enhance students' oral proficiency through instruction in facilitating conversation and the discussion of culture-based texts. Prerequisite: FR 23202.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department
FR 33212 - FRENCH COMPOSITION

A course designed to develop writing and reading skills, and in particular to prepare students to read and write about French literature. Prerequisite: FR 23202; and special approval. Corequisite: FR 33214
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

FR 33214 - FRENCH COMPOSITION EXTENDED

Designed to develop writing and reading skills, and in particular to prepare students to read and write about French literature. Prerequisite: FR 23202 and special approval. Corequisite: FR 33212
2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

FR 33215 - FRENCH PHONETICS AND DICTION

Study of sounds of French language and their relation to spelling; application of international phonetic alphabet to French. Study augmented by recordings. Prerequisite: FR 33211.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

FR 33231 - TRANSLATION PRACTICE:FRENCH

Translation practice with French texts using principles and techniques learned in the lecture class. To be taken concurrently with TRST 30230. Corequisite: TRST 30230.
1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

FR 33240 - CONVERSATION FOR BUSINESS AND SPECIAL PURPOSES:FRENCH

Introduction to the special vocabulary of business and other special subject areas; introduces the concept of language for special purposes and emphasizes the use of special vocabulary in conversations in business and other settings. Prerequisite: FR 33211.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
FR 33335 - INTRODUCTION TO FRENCH THEATRE
Evolution of French dramatic literature from the middle ages to the present. Readings of representative works with lectures analyses. In French. Prerequisite: FR 33212.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department
Course Attributes:
Experiential Learning Requirem, Writing Intensive Course

FR 33336 - INTRODUCTION TO FRENCH POETRY
Evolution of French poetry from the middle ages to the present. Readings of representative works with lectures analyses. In French. Prerequisite: FR 33212.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department
Course Attributes:
Experiential Learning Requirem, Writing Intensive Course

FR 33337 - INTRODUCTION TO THE FRENCH NOVEL
Evolution of French novel from 17th century to present. Readings of representative major works lectures analyses. In French. Prerequisite: FR 33212.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department
Course Attributes:
Experiential Learning Requirem, Writing Intensive Course

FR 33421 - FRENCH CIVILIZATION
A survey of French history and culture from its beginnings to World War II. Taught in French. Prerequisite: FR 33212.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
### FR 43091 - FRENCH SEMINAR

(Repeatable for credit) (Cross-listed with FR 53091) Topic to be announced. Prerequisite: One course from FR 33335 or FR 33336 or FR 33337.

3.000 Credit hours

3.000 Other hours

Levels: Undergraduate

Schedule Types: Seminar

Modern-Classical Lang Studies Department

### FR 43093 - VARIABLE TITLE WORKSHOP IN FRENCH

(Repeatable for credit) Workshops individually designed to provide instruction and training in specific areas of French studies. Prerequisite: special approval.

1.000 TO 6.000 Credit hours

1.000 TO 6.000 Other hours

Levels: Undergraduate

Schedule Types: Workshop

Modern-Classical Lang Studies Department

### FR 43096 - INDIVIDUAL INVESTIGATION

(Repeatable for a maximum of 6 credit hours) Allows the advanced, serious student to carry out research study project on French literature, language or culture. Prior approval of supervising faculty members department required. Prerequisite: Special approval.

1.000 TO 3.000 Credit hours

1.000 TO 3.000 Other hours

Levels: Undergraduate

Schedule Types: Individual Investigation

Modern-Classical Lang Studies Department

### FR 43213 - FRENCH COMPOSITION-ADVANCED

(Cross-listed with FR 53213) French stylistics developed by analyses of literary extracts and practice in written expression. Prerequisite: FR 33335 or FR 33336 or FR 33337 or FR 33421.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Modern-Classical Lang Studies Department

### FR 43216 - CONTEMPORARY FRENCH CULTURE

(Cross-listed with FR 53216) A study of selected sociological, political, cultural or economic issues in the
contemporary Francophone world. Prerequisite: FR 33421 and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**FR 43230 - ADVANCED TRANSLATION PRACTICE: FRENCH**

Theory and practice course that discusses translation theory and emphasizes French-to-English translation of selected texts in business, technology, medicine and law. Prerequisite: FR 33231.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

Course Attributes:
Writing Intensive Course

**FR 43240 - BUSINESS AND SPECIAL TEXTS: FRENCH**

Survey of the typical text types of business in the French culture and language. Practice sessions focus on reading and understanding specialized texts and on the translation and composition of selected special texts in French. Prerequisite: FR 33212.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

Course Attributes:
Experiential Learning Requirem

**FR 43368 - THE TWENTIETH-CENTURY FRENCH NOVEL**

Studies of selected 20th century French novels, with detailed study of the novel of one or several major writers or movements. Prerequisite: 6 semester hours from the 33330-level.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**FR 43369 - TWENTIETH-CENTURY FRENCH POETRY**

(Cross-listed with FR 53369) A study of selected poetry of Apollinaire, Breton, Mansour, Eluard, Michaux, Char, Reverdy, Ponge, Guillévic, Jabe, Bonnefoy, Dupin, Albiach and others. Emphasis is placed on the relationship between poetry and the visual arts in the 20th century. Prerequisite: 6 semester hours from the FR 33330-
FR 43370 - THE TWENTIETH CENTURY FRENCH THEATRE

(Cross-listed with FR 53370) Studies in French drama since 1900. Prerequisite: 6 semester hours from the 33330-level.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

FR 53091 - FRENCH SEMINAR

(Repeatable for credit) (Cross-listed with FR 43091) Topic to be announced. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Modern-Classical Lang Studies Department

FR 53213 - FRENCH COMPOSITION-ADVANCED

French stylistics developed through analyses of literary extracts and practice in written expression. Prerequisite: Graduate standing and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

FR 53216 - CONTEMPORARY FRENCH CULTURE

(Cross-listed with FR 43216) A study of selected sociological, political, cultural or economic issues in the contemporary Francophone world. Prerequisite: Graduate standing and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department
**FR 53368 - 20TH-CENTURY FRENCH NOVEL**

Study of selected 20th-century French novels, with emphasis on one or several major writers or movements. Prerequisite: 6 hours from 33330-level and graduate standing.

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Levels: Graduate  
Schedule Types: Lecture  
Modern-Classical Lang Studies Department

**FR 53369 - 20TH-CENTURY FRENCH POETRY**

(Cross-listed with FR 43369) A study of selected poetry of Apollinaire, Breton, Mansour, Eluard, Michaux, Char, Reverdy, Ponge, Guillevic, Jabes, Bonnefoy, Dupin, Alpiach and others. Emphasis is placed on the relationship between poetry and the visual arts in the 20th century. Prerequisite: Graduate standing.

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Levels: Graduate  
Schedule Types: Lecture  
Modern-Classical Lang Studies Department

**FR 53370 - 20TH-CENTURY FRENCH THEATRE**

(Cross-listed with FR 43370) Studies in French drama since 1900. Prerequisite: 6 hours from 33330-level and graduate standing.

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Levels: Graduate  
Schedule Types: Lecture  
Modern-Classical Lang Studies Department

**FR 63010 - THE PRACTICE OF FRENCH TRANSLATION**

Students apply linguistic and communication science concepts to case studies of language mediation. Prerequisite: Graduate standing. Corequisite: TRST 60010.

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Levels: Graduate  
Schedule Types: Lecture  
Modern-Classical Lang Studies Department

**FR 63093 - VARIABLE TITLE WORKSHOP IN FRENCH**

(Repeatable for credit) Workshops individually designed to provide instruction and training in specific areas of French studies. Prerequisite: Special approval and graduate standing.

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Levels: Graduate
FR 63098 - RESEARCH

(Repeatable for credit) Research or individual investigation for master's level graduate students. Credits earned applied toward degree requirements if department approves. Prerequisite: Special approval and graduate standing.
1.00 TO 15.00 Credit hours
1.00 TO 15.00 Other hours

Levels: Graduate
Schedule Types: Research

Modern-Classical Lang Studies Department

FR 63199 - THESIS I

Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester distributed over several semesters if desired. Prerequisite: Graduate standing.
2.00 TO 6.00 Credit hours
2.00 TO 6.00 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Modern-Classical Lang Studies Department

FR 63201 - READING FRENCH FOR GRADUATE STUDENTS

Introduction to the fundamentals of French grammar for graduate students. Practice in reading and translation. Prerequisite: Graduate standing.
4.00 Credit hours
4.00 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

FR 63240 - LITERARY AND CULTURAL TRANSLATION

Translation of documents from a variety of literary and cultural sources, including literature, expository and journalistic prose, scholarly treatises and essays. Translation into French will also be emphasized. Prerequisite: Graduate standing.
3.00 Credit hours
3.00 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

FR 63250 - COMMERCIAL, LEGAL AND DIPLOMATIC TRANSLATION
An introduction to methods and resources for the translation of commercial, economic, financial, legal, diplomatic and governmental documents. Prerequisite: TRST 60010 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

FR 63251 - SCIENTIFIC, TECHNICAL AND MEDICAL TRANSLATION

An introduction to methods and resources for the translation of scientific, technical, industrial and medical documents. Prerequisite: TRST 60010 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

FR 63299 - THESIS II

Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: FR 63199 and graduate standing.
2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Modern-Classical Lang Studies Department

FR 63979 - CASE STUDY IN TRANSLATION

Students will be responsible for a major translation and a terminology glossary as well as a critical analysis of the source text, the problems encountered during the translation process and the strategies used to solve them. Prerequisite: Special approval and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

GAE 32000 - FUEL CELL TECHNOLOGY

Designed to provide a general perspective to fuel cell technology. Students are introduced to the various types of fuel cells, historical perspective, terminology, applications, fuel cell operation, basic electrochemical and thermodynamics principles involved in fuel cells, fuel cell components, materials and systems. Students learn basic fuel cell design principles and calculations. Prerequisite: PHY 13012 or PHY 13002.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
GAE 42002 - ENERGY MANAGEMENT SYSTEMS
Covers modern theory and applications of energy management. Students use software tools for the control and effective energy management of systems of diverse configurations. Students learn how to build device-to-enterprise applications and Internet-enabled products and software applications for controlling and managing diverse smart devices across an enterprise in real time. Prerequisite: junior standing.
3.000 Credit hours
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture

GAE 42003 - LEAN MANUFACTURING, SIX SIGMA AND OPERATIONS TECHNOLOGY
Designed to provide a better understanding of the components and underlying philosophy of Theory of Constraints, Lean, and Six Sigma and how the elements and philosophies work together to support an companies operational plan. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture

GAE 42004 - ADVANCED FUEL CELL TECHNOLOGY
Covers the theory and applications of fuel cell technology with an emphasis to proton exchange membrane fuel cells (PEMFCs). Students learn fuel cell component, stack and system design principles and fabrication methods, performance characterization, fuel cell testing and diagnostics methods. Students are introduced to transport phenomena in fuel cells. Introduction to hydrogen storage, generation and delivery, as well as hydrogen safety and regulations. Prerequisite: GAE 32000.
3.000 Credit hours
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture

GEOG 10160 - INTRODUCTION TO GEOGRAPHY
Emphasizes processes that generate diverse global human and environmental patterns. Interaction of geographical elements as expressed in spatial organization of cities, land use and cultural and political regions. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture
GEOG 16001 - SOIL AND HORTICULTURAL MANAGEMENT

To provide students with an understanding of the relationship of soil, nutrients and fertilizers, and to understand how to properly plant trees, shrubs and flowers. Offered at Salem campus only. Prerequisite: None. 3.000 Credit hours 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

GEOG 17063 - WORLD GEOGRAPHY

Examination and comparison of geographic conditions in different regions of the world. Stresses interrelationships between people and resources within and between regions and countries. Prerequisite: None. 3.000 Credit hours 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

GEOG 17064 - GEOGRAPHY OF THE UNITED STATES AND CANADA

Analysis of the spatial patterns of significant human and physical characteristics and interpretation of the major regions within the two nations. Prerequisite: None. 3.000 Credit hours 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

GEOG 20195 - SPECIAL TOPICS IN GEOGRAPHY

(Repeatable for credit) Explores emerging topics in geography not covered in other existing courses. Variable content course. Prerequisite: None. 1.000 TO 3.000 Credit hours 1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
**GEOG 21062 - PHYSICAL GEOGRAPHY**

Introduction to the study of the spatial characteristics of the Earth's physical environment, including how humans interact with it. Topics include weather and climate, vegetation, soils, ecosystems, landforms and landformation processes, human impacts on Earth systems and human societal adaptations to the physical environment. Prerequisite: none.

3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

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**GEOG 21063 - PHYSICAL GEOGRAPHY LABORATORY**

Practical experience examining physical geographic processes, including the study and manipulation of map projections, Earth-sun relationships and experiments relating to the atmosphere, biosphere, lithosphere and hydrosphere. Corequisite: GEOG 21062.

1.000 Credit hours  
2.000 Lab hours

Levels: Undergraduate  
Schedule Types: Laboratory

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**GEOG 22040 - INTRODUCTION TO GLOBAL TOURISM**

(Cross-listed with RPTM 26060) Introduction to travel and tourism around the world, including tourism technologies, cultural and natural environments as attractions, benefits of travel, travel ethics, and sustainable development. Prerequisite: None.

3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

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**GEOG 22061 - HUMAN GEOGRAPHY**

Introduction to the field of human geography. Topics include population migration, folk and popular culture, language, religion, ethnicity, political geography, development, agriculture, industry, services, urban patterns and resource problems. Emphasis is placed on historic and current spatial patterns and reasons for their
change. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Geography Department

Course Attributes:
Diversity Course-Global, Kent Core-Social Sciences, LER-Social Sciences, TAG - Social/Behavior Sciences, Trnfr Module-Social Sciences

**GEOG 22070 - NATURE AND SOCIETY**

Provides an introduction to interdisciplinary perspectives in nature-society scholarship, focusing on human dimensions of environmental problem domains such as natural resources, ecosystems, climate, and sustainability. It provides a balance of theory and application to illustrative case studies. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Geography Department

**GEOG 29160 - MAPPING OUR WORLD**

Introduction to maps and their uses, stressing their importance as a vehicle for understanding and communicating information about our world and its spatial characteristics. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Geography Department

Course Attributes:
TAG - Social/Behavior Sciences

**GEOG 31062 - FUNDAMENTALS OF METEOROLOGY**

Analysis of weather elements emphasizing energy exchanges and controls, and atmospheric circulation. Methods of weather prediction and man's modification of weather are highlighted. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Geography Department

**GEOG 31064 - PRINCIPLES OF CLIMATOLOGY**

A study of the physical processes causing the distribution of world climates. Focus on local and urban climates, climatic change and societal impacts of climate. Prerequisite: GEOG 31062.
GEOG 31070 - POPULATION AND THE ENVIRONMENT

This course examines the interrelations of population growth, resource depletion and the environment from a geographic perspective including the principal themes of space and place. Prerequisite: None.

GEOG 31080 - GEOGRAPHY OF WINE

Examines the physical environment of viticulture including climate, soil and farm practices; the cultural tradition of wine making, consumption and trade; and regional production styles. Prerequisite: None.

GEOG 32080 - POLITICS AND PLACE

Spatial aspects of political behavior as manifested in boundary changes, the sizes of states, interstate relations and spatial organization. Prerequisite: None.

GEOG 32091 - ENVIRONMENTAL STUDIES AND SUSTAINABILITY

(Repeatable for credit) Various aspects of environmental studies are explored. Topics will vary. Prerequisite: GEOG 22070.
**GEOG 34070 - ECONOMIC GEOGRAPHY**

Study of worldwide variations in economic activities, emphasizing both the reasons for and the significance of these variations. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**GEOG 35065 - GEOGRAPHY OF TRANSPORTATION AND SPATIAL INTERACTION**

Spatial interaction. Study of flows, networks and integrated systems at different spatial scales. Transport and economic development. Models and methods of analysis. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**GEOG 36065 - CITIES AND URBANIZATION**

Course examines what is a city, how it has evolved over time under changing economic conditions, what is its internal structure and how this has been influenced by transportation developments. Special attention is paid to the causes and consequences of social diversity within the city and how cities differ throughout the world. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Course Attributes:
Diversity Course-Global

**GEOG 37040 - GEOGRAPHY OF AFRICA**

Study of Africa as a distinctive region, its environment and the varied characteristics of its population, its historical geographic development and contemporary patterns and problems. Prerequisite: junior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**GEOG 37010 - GEOGRAPHY OF OHIO**

Study of Ohio as a distinctive region, its environment and the varied characteristics of its population, its historical geographic development and contemporary patterns and problems. Prerequisite: junior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
This course deals with the complex geographical and cultural elements in Africa. It demonstrates how the interaction of these elements has affected Africa's linkages to other continents especially North America. Furthermore, it discusses how this diversity has affected Africa's economic development and political evolution.

**Prerequisite:** None.

**3.000 Credit hours**

**3.000 Lecture hours**

**Levels:** Undergraduate

**Schedule Types:** Lecture

**Geography Department**

**Course Attributes:**

Diversity Course-Global

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**GEOG 37045 - GEOGRAPHY OF THE MIDDLE EAST**

The Middle East is a world region where the interactions between human and physical geographies have shaped its history, culture, economies, and population patterns. This course uses a thematic approach to understand these interactions and how they shape the modern Middle East and its relationship with the wider world.

**Prerequisite:** None.

**3.000 Credit hours**

**3.000 Lecture hours**

**Levels:** Undergraduate

**Schedule Types:** Lecture

**Geography Department**

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**GEOG 37050 - GEOGRAPHY OF RUSSIA AND THE COMMONWEALTH OF INDEPENDENT STATES**

Study of the physical, economical, political and cultural geography of Russia, Ukraine, Central Asia and other components of the former Soviet Union.

**Prerequisite:** None.

**3.000 Credit hours**

**3.000 Lecture hours**

**Levels:** Undergraduate

**Schedule Types:** Lecture

**Geography Department**

**Course Attributes:**

Diversity Course-Global

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**GEOG 37066 - GEOGRAPHY OF EUROPE**

Examination of the cultural, economic, political and physical geography of Western and Eastern Europe (excluding the former USSR).

**Prerequisite:** None.

**3.000 Credit hours**

**3.000 Lecture hours**

**Levels:** Undergraduate

**Schedule Types:** Lecture

**Geography Department**

**Course Attributes:**
<table>
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<tr>
<th>Course Code</th>
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<th>Lecture Hours</th>
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</thead>
<tbody>
<tr>
<td>GEOG 37070</td>
<td>GEOGRAPHY OF EAST AND SOUTHEAST ASIA</td>
<td>Analysis of the physical and cultural geography of East and Southeast Asia, extending from Japan and China to Burma and Indonesia. Prerequisite: None.</td>
<td>None</td>
<td>3.000</td>
<td>3.000</td>
</tr>
<tr>
<td>GEOG 37072</td>
<td>GEOGRAPHY OF CHINA</td>
<td>Examination of China's physical environment, natural and human resources, social and cultural characteristics and role in the global environment. Prerequisite: none.</td>
<td>None</td>
<td>3.000</td>
<td>3.000</td>
</tr>
<tr>
<td>GEOG 37084</td>
<td>GEOGRAPHY OF SOUTH AMERICA</td>
<td>Overview of region and survey of each country emphasizes systematic similarities and differences in physical environment, culture, economic development, population, land use, politics and history. Prerequisite: None.</td>
<td>None</td>
<td>3.000</td>
<td>3.000</td>
</tr>
<tr>
<td>GEOG 37085</td>
<td>GEOGRAPHY OF LATIN AMERICA AND THE CARIBBEAN</td>
<td>Latin America and the Caribbean is a traditional geographic region that has been uniquely shaped through multiple physical and cultural factors. In this course, a thematic approach is taken to understanding the interplay of these factors, and how they shape modern Latin America-Caribbean identity, the diversity of the environment and culture within the region, and how the region relates to the rest of the world. Prerequisite: None.</td>
<td>None</td>
<td>3.000</td>
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</tbody>
</table>
Geography Department

Course Attributes:
Diversity Course-Global

**GEOG 37095 - SPECIAL TOPICS IN REGIONAL GEOGRAPHY**

(Repeatable for a maximum of 3 times) Special topics course in a specific region of the world. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Geography Department

**GEOG 39002 - STATISTICAL METHODS IN GEOGRAPHY**

Explores probability theory, spatial statistics, estimation procedures, hypothesis testing, spatial sampling, methods of areal association and regression analysis. Geographic applications are emphasized. Prerequisite: MATH 11009 or MATH 11010 or MATH 10041.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Geography Department

**GEOG 40093 - VARIABLE TITLE WORKSHOP IN GEOGRAPHY**

(Repeatable for credit) S/u graded. Prerequisite: Permission.

1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Undergraduate
Schedule Types: Workshop

Geography Department

**GEOG 40191 - SEMINAR IN GEOGRAPHY**

(Repeatable for a maximum of 6 credit hours) Advanced study of the historical development of geography and of contemporary issues in the field. Emphasis on methods of geographic investigation and presentation of results. Prerequisite: Junior standing and geography (GEOG) major.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

Geography Department

Course Attributes:
Experiential Learning Requirem, Writing Intensive Course
<table>
<thead>
<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>GEOG 40192</td>
<td>PRACTICUM IN GEOGRAPHY</td>
</tr>
<tr>
<td>GEOG 40195</td>
<td>SPECIAL TOPICS IN GEOGRAPHY</td>
</tr>
<tr>
<td>GEOG 40292</td>
<td>FIELD EXPERIENCE IN GEOGRAPHY</td>
</tr>
<tr>
<td>GEOG 40392</td>
<td>PRACTICUM IN EMERGING GEOGRAPHIC TRENDS</td>
</tr>
</tbody>
</table>

**GEOG 40192 - PRACTICUM IN GEOGRAPHY**

(Repeatable for credit) Practical experience in using or teaching geographic techniques and/or problem-solving. Faculty supervised. Prerequisite: Permission.

- 1.000 TO 3.000 Credit hours
- 1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

**Course Attributes:**
Experiential Learning Requirem

**GEOG 40195 - SPECIAL TOPICS IN GEOGRAPHY**

(Repeatable for credit) (Cross-listed with GEOG 50195 and GEOG 70195) Prerequisite: special approval.

- 1.000 TO 3.000 Credit hours
- 1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**Course Attributes:**

**GEOG 40292 - FIELD EXPERIENCE IN GEOGRAPHY**

(Repeatable for credit) (Cross-listed with GEOG 50292 and GEOG 70292) Examination of geographic landscapes in the field. Prerequisite: special approval.

- 1.000 TO 6.000 Credit hours
- 12.000 TO 72.000 Other hours

Levels: Undergraduate
Schedule Types: Field Experience

**Course Attributes:**
Experiential Learning Requirem, Variable Title

**GEOG 40392 - PRACTICUM IN EMERGING GEOGRAPHIC TRENDS**

(Repeatable for credit) Examination of newly emerging geographic topics and techniques. Prerequisite: special approval.

- 1.000 TO 6.000 Credit hours
- 1.000 TO 6.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

**Course Attributes:**
Experiential Learning Requirem
**GEOG 40492 - STUDY AWAY IN GEOGRAPHY**

(Repeatable 6 times for credit) Examination of geographic landscapes in the field. Prerequisite: None.
1.000 TO 3.000 Credit hours
3.000 OR 9.000 Other hours

Levels: Undergraduate
Schedule Types: Field Experience

Geography Department

Course Attributes:
Experiential Learning Requirem

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**GEOG 40996 - INDIVIDUAL INVESTIGATION IN GEOGRAPHY**

(Repeatable for credit) Individual undergraduate investigation or research on specific geographical problems. Prerequisite: Permission.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Geography Department

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**GEOG 41051 - NATURAL DISASTERS AND SOCIETY**

Study of natural disasters, the physical causes of the hazards associated with the disasters, their effects on humans and societies, spatial and temporal distributions, and strategies to reduce the occurrences of disasters. Natural disasters include hurricanes, tornadoes, floods, landslides, heat waves, wildfire, blizzards, earthquakes, tsunami, and volcanoes. Mitigation for disasters and responses to disasters are studied across economically developing nations and developed nations. Taught through the analysis of numerous case studies of natural disasters. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Geography Department

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**GEOG 41052 - GLACIERS AND GLACIATION**

(Cross-listed with GEOL 44052, 54052 and 74052) Examination of how glacial ice masses change the shape of the Earth’s surface, how they are integral to climate and sea level change, and how they pose high risk hazards. Prerequisite: GEOG 21062 or GEOL 11040.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Geography Department

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**GEOG 41065 - APPLIED CLIMATOLOGY**
Aimed at providing a full appreciation for the range of applicability of climate data to real-world problems. There are three overarching goals of the course: To provide a broad overview of what weather and climate information is out there and how we synthesize weather and climate information for use in applied work; to enable a thorough appreciation for the breadth of disciplines in which applied climatology plays a role; and to provide real-world experience of working through an applied climatological problem, via the final project. Prerequisite: GEOG 31062 or 31064.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Geography Department

GEOG 41066 - CLIMATE CHANGE AND ITS IMPACT

(Cross-listed with GEOG 51066 and GEOG 71066) Examination of the evidence and causes of climate change and how these data are assessed. Past, present and future impacts of climate change and variability are discussed along with policy implications. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Geography Department

GEOG 41073 - CONSERVATION OF NATURAL RESOURCES

(Cross-listed with GEOG 51073 and GEOG 71073) Evaluation of past and current problems associated with the management of natural resources and the environments associated with their utilization. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Geography Department

GEOG 41074 - RESOURCE GEOGRAPHY

Culture-technology and distance in relation to resource adequacy and management concepts for societal decisions about common property and situations with external economies. Prerequisite: Junior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Geography Department

GEOG 41082 - GEOGRAPHY OF SOILS

An edaphological approach to soils including morphology, formation, classification, geographical distribution and utilization. Field work required. Prerequisite: GEOG 21062 or GEOL 11040.

3.000 Credit hours
3.000 Lecture hours
GEOG 41195 - SPECIAL TOPICS IN ENVIRONMENTAL GEOGRAPHY

(Repeatable for a maximum of 10 times) (Cross-listed with GEOG 51195 and GEOG 71195) Special topics in environmental geography. Prerequisite: none.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

GEOG 42040 - TOURISM DEVELOPMENT AND RECREATIONAL TRAVEL

(Cross-listed with RPTM 46000) Investigation of travel and tourism development using an interdisciplinary social science approach. Prerequisite: RPTM 36060.
3.000 Credit hours
3.000 Lecture hours

GEOG 42052 - MEDICAL GEOGRAPHY

(Cross-listed with GEOG 52052 and GEOG 72052) Geographic patterns of morbidity and mortality in the past and the present; diffusion of diseases and medicine; health in Third World emphasized. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

GEOG 42053 - GEOGRAPHIES OF MEMORY AND HERITAGE

(Cross-listed with GEOG 52053 and GEOG 72053) Gives students a working knowledge in, and ability to understand and analyze, the intersection of memory and landscape as a tangible re-presentation of the human past, oftentimes used as a tangible expression of cultural or political power. To this end the course focuses on memorialization, preservation, and tourism concepts and themes. Prerequisite: junior standing.
3.000 Credit hours
3.000 Lecture hours
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<tr>
<td>GEOG 42064</td>
<td>HISTORICAL GEOGRAPHY OF THE UNITED STATES AND CANADA</td>
<td>Regional origins and growth, evolution of spatial organization, changing evaluation of environments, and past geographies in United States and Canada from pre-Colonial times on. Prerequisite: GEOG 17064.</td>
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<td>3.00</td>
</tr>
<tr>
<td>GEOG 42195</td>
<td>SPECIAL TOPICS IN SOCIAL GEOGRAPHY</td>
<td>Special topics in social geography. Prerequisite: none.</td>
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<td>1.00 TO 3.00</td>
<td>1.00 TO 3.00</td>
</tr>
<tr>
<td>GEOG 44010</td>
<td>GEOGRAPHY OF THE GLOBAL ECONOMY</td>
<td>Geographic analysis of the increasing interconnectedness of economic activity. The social, technological and political changes associated with globalization are also discussed. Prerequisite: GEOG 34070 or ECON 22061.</td>
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<td>3.00</td>
</tr>
<tr>
<td>GEOG 44070</td>
<td>SPATIAL ANALYSIS AND LOCATION THEORY</td>
<td>Classical theories for location of economic activities and contemporary approach of spatial analysis, spatial organization of economic systems behavioral models in economic geography spatial allocation problems. Prerequisite: None.</td>
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<td>3.00</td>
</tr>
<tr>
<td>GEOG 45085</td>
<td>URBAN TRANSPORTATION</td>
<td>Spatial analysis of urban transportation, travel behavior, modes. Trip generation and distribution models, transportation planning, urban transportation problems.</td>
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</tbody>
</table>
Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Geography Department

GEOG 46070 - URBAN AND REGIONAL PLANNING
(Cross-listed with GEOG 56070 and GEOG 76070) Analysis of geographical aspects of planning for cities and regions. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Geography Department

GEOG 46080 - URBAN SUSTAINABILITY
(Slashed with GEOG 56080 and GEOG 76080) Provides an introduction to interdisciplinary perspectives on urban sustainability, focusing on environmental challenges caused by urbanization and the innovative ways urban dwellers seek to address those challenges. It provides background on relevant disciplinary perspectives and their application to environmental challenge domains. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture, Seminar

Geography Department

GEOG 46092 - INTERNSHIP IN GEOGRAPHY AND PLANNING
(Repeatable for credit) (Cross-listed with GEOG 56092) Pre-professional work experience in local, regional and environmental planning agencies and in business designed to utilize and develop academic skills. Prerequisite: Controlled registration admission competitive based on student's skills and interests and on number of positions available.
3.000 TO 6.000 Credit hours
3.000 TO 6.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Geography Department

Course Attributes:
Experiential Learning Requirem

GEOG 49070 - GEOGRAPHIC INFORMATION SCIENCE
(Cross-listed with GEOG 59070 and GEOG 79070) Introduction to theories and methods for geographic data processing, including data capture and input data storage and management and data analysis and displays. Emphasis is on laboratory exercises using GIS software packages for real world applications. Non-geographers
should contact the Department of Geography to discuss the course prerequisites. Prerequisite: GEOG 29160.
4.000 Credit hours
3.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Geography Department

**GEOG 49072 - GEOGRAPHIC INFORMATION SCIENCE AND HEALTH**

(Cross-listed with GEOG 59072 and GEOG 79072) Geographic theory and methods serve as the connection among disparate disciplines focused on how and why “health” varies between regions, cities, and neighborhoods. This course examines how geospatial technologies, especially GIS, have become an important health analysis tool. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Geography Department

**GEOG 49075 - GEOGRAPHIC INFORMATION SCIENCE: URBAN AND ECONOMIC APPLICATIONS**

(Cross-listed with GEOG 59075 and GEOG 79075) Urban and economic applications and analyses of spatial data, especially theoretical and conceptual issues including the possibilities and concerns associated with GIS, ethical considerations, and the various forms of data collection, visualization, analysis and dissemination. Prerequisite: GEOG 49070.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Geography Department

**GEOG 49076 - SPATIAL PROGRAMMING**

(Cross-listed with GEOG 59076 and GEOG 79076) Examination of the design, development and use of geographic information technologies with computer programming to model, process and visualize geographic phenomena. Prerequisite: GEOG 49070.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Geography Department

**GEOG 49078 - GEOGRAPHIC INFORMATION SCIENCE AND ENVIRONMENTAL HAZARDS**

(Slashed with GEOG 59078 and GEOG 79078) The study and management of natural hazards are inherently reliant on both physical and human processes and spatial patterns. Given the many variables involved and the variety of scales at which they operate, use of Geographic Information Systems (GIS) has become standard practice in research on hazards and in their management by government agencies at all levels. Exposes
students to a wide array of spatial data that is used in these activities, as well as standard mapping and spatial analysis procedures and forms of data dissemination. Prerequisite: GEOG 49070.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Geography Department

GEOG 49080 - ADVANCED GEOGRAPHIC INFORMATION SCIENCE

Advanced theories and techniques for handling geographic information systems, including 2D and 3D processing of geographic information, detection and analysis of geographic patterns, 2D and 3D mapping of geographic information, modeling of geographic processes, and an overview of GIS programming tools. Prerequisite: GEOG 49070.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Geography Department

GEOG 49085 - WEB AND MOBILE GEOGRAPHIC INFORMATION SCIENCE

(Cross-listed with GEOG 59085 and GEOG 79085) Explores how web and mobile phones present opportunities and challenges to the field of GIScience. This includes the examination of the use, design, and development of cyberinfrastructure-enabled GIS emphasizing web- and mobile-based interfaces and technologies. GIS experience recommended. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Geography Department

GEOG 49098 - RESEARCH IN GEOGRAPHIC INFORMATION TECHNOLOGY

(Repeatable for credit) Individual research on a topic in geographic information technology. Prerequisite: Special approval.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Research

Course Attributes:
Experiential Learning Requirem

Geography Department

GEOG 49162 - CARTOGRAPHY AND GEOVISUALIZATION

(Cross-listed with GEOG 59162 and GEOG 79162) Study of the design and production of dynamic, interactive, multimedia Web based mapping. Data acquisition and processing, symbolization, composition, text and color
utilization. Prerequisite: GEOG 49070. Corequisite: GEOG 49163.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Geography Department

GEOG 49163 - CARTOGRAPHY AND GEOVISUALIZATION LABORATORY

(Cross-listed with GEOG 59163 and GEOG 79163) Practical experience in the techniques of data acquisition and processing for dynamic, multimedia, and online map production and geovisualizations. Prerequisite: GEOG 49070. Corequisite: GEOG 49162.
1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Geography Department

GEOG 49195 - SPECIAL TOPICS IN GEOGRAPHIC INFORMATION SCIENCE

(Repeatable for a maximum of 10 times) (Cross-listed with GEOG 59195 and GEOG 79195) Special topics in geographic information sciences. Prerequisite: none.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Geography Department

GEOG 49198 - RESEARCH IN CARTOGRAPHY AND GEOGRAPHIC INFORMATION SYSTEMS

(Repeatable for credit) Individual research on a topic in cartography or GIS under the direction of any faculty member. Prerequisite: special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Research

Geography Department

Course Attributes:
Experiential Learning Required

GEOG 49230 - REMOTE SENSING

(Cross-listed with GEOG 59230 and GEOG 79230 and GEOL 42030 and GEOL 52030 and GEOL 72030) Computer analysis of multispectral satellite datasets. Applications in Terrestrial Earth Science are emphasized. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours
Geography Department

**GEOG 50093 - VARIABLE TITLE WORKSHOP IN GEOGRAPHY**

(Repeatable for credit) Variable title workshop in geography. Prerequisite: Graduate standing.
1.000 TO 5.000 Credit hours
1.000 TO 5.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Geography Department

**GEOG 50195 - SPECIAL TOPICS IN GEOGRAPHY**

(Repeatable for credit) (Cross-listed with GEOG 40195 and GEOG 70195) Topics vary according to research interest of person teaching the course. Prerequisite: Graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geography Department

**GEOG 50292 - FIELD EXPERIENCE IN GEOGRAPHY**

(Repeatable for credit) (Cross-listed with GEOG 40292 and GEOG 70292) Examination of geographic landscapes in the field. Prerequisite: Special approval and graduate standing.
1.000 TO 6.000 Credit hours
12.000 TO 72.000 Other hours

Levels: Graduate
Schedule Types: Field Experience

Geography Department

Course Attributes:
Variable Title

**GEOG 50392 - PRACTICUM IN EMERGING GEOGRAPHIC TRENDS**

(Repeatable for credit) Examination of newly emerging geographic topics and techniques. Prerequisite: Special approval and graduate standing.
1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Geography Department

**GEOG 50492 - STUDY AWAY IN GEOGRAPHY**
(Repeatable 6 times for credit) Examination of geographic landscapes in the field. Prerequisite: None.
1.000 TO 3.000 Credit hours
3.000 TO 9.000 Other hours

Levels: Graduate
Schedule Types: Field Experience

Geography Department

**GEOG 51051 - NATURAL DISASTERS AND SOCIETY**

Study of natural disasters, the physical causes of the hazards associated with the disasters, their effects on humans and societies, spatial and temporal distributions, and strategies to reduce the occurrences of disasters. Natural disasters include hurricanes, tornadoes, floods, landslides, heat waves, wildfire, blizzards, earthquakes, tsunami, and volcanoes. Mitigation for disasters and responses to disasters are studied across economically developing nations and developed nations. Taught through the analysis of numerous case studies of natural disasters. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geography Department

**GEOG 51052 - GLACIERS AND GLACIATION**

(Cross-listed with GEOL 44052, 54052 and 74052) Examination of how glacial ice masses change the shape of the earth’s surface, how they are integral to climate and sea level change and how they pose high risk hazards. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geography Department

**GEOG 51065 - APPLIED CLIMATOLOGY**

Aimed at providing a full appreciation for the range of applicability of climate data to real-world problems. There are three overarching goals of the course: To provide a broad overview of what weather and climate information is out there and how we synthesize weather and climate information for use in applied work; to enable a thorough appreciation for the breadth of disciplines in which applied climatology plays a role; and to provide real-world experience of working through an applied climatological problem, via the final project. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geography Department

**GEOG 51066 - CLIMATE CHANGE AND ITS IMPACTS**
(Cross-listed with GEOG 41066 and GEOG 71066) Examination of the evidence and causes of climate change and how these data are assessed. Past, present and future impacts of climate change and variability are discussed along with policy implications. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geography Department

**GEOG 51073 - CONSERVATION OF OUR NATURAL RESOURCES**

(Cross-listed with GEOG 41073 and GEOG 71073) Evaluation of past and current problems associated with the management of natural resources and the environments associated with their utilization. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geography Department

**GEOG 51074 - RESOURCE GEOGRAPHY**

Cultural attitudes, conceptual approaches and techniques in resource geography analysis of selected resource issues at various areal scales. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geography Department

**GEOG 51082 - GEOGRAPHY OF SOILS**

(Cross-listed with GEOG 41082 and GEOG 71082) Study and analysis of different soil types in their relation to geographic factors. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geography Department

**GEOG 51195 - SPECIAL TOPICS IN ENVIRONMENTAL GEOGRAPHY**

(Repeatable for a maximum of 10 times) (Cross-listed with GEOG 41195 and GEOG 71195) Special topics in environmental geography. Prerequisite: graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
### GEOG 52052 - MEDICAL GEOGRAPHY

(Cross-listed with GEOG 42052 and GEOG 72052) Examines the geographic patterns of morbidity and mortality, environmental correlates of major diseases and disease diffusion. Locational and accessibility issues of health care are discussed. Prerequisite: Graduate standing.

- 3.000 Credit hours
- 3.000 Lecture hours

**Levels:** Graduate  
**Schedule Types:** Lecture

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### GEOG 52053 - GEOGRAPHIES OF MEMORY AND HERITAGE

(Cross-listed with GEOG 42053 and GEOG 72053) Gives students a working knowledge in, and ability to understand and analyze, the intersection of memory and landscape as a tangible re-presentation of the human past, oftentimes used as a tangible expression of cultural or political power. To this end the course focuses on memorialization, preservation, and tourism concepts and themes. Prerequisite: graduate standing.

- 3.000 Credit hours
- 3.000 Lecture hours

**Levels:** Graduate  
**Schedule Types:** Lecture

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### GEOG 52064 - HISTORICAL GEOGRAPHY OF THE UNITED STATES AND CANADA

(Cross-listed with GEOG 42064 and GEOG 72064) Study of regional origins, growth evolution of spatial organization changing evaluation of environments and selective geographies in United States and Canada from precolonial times to present. Prerequisite: Graduate standing.

- 3.000 Credit hours
- 3.000 Lecture hours

**Levels:** Graduate  
**Schedule Types:** Lecture

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### GEOG 52195 - SPECIAL TOPICS IN SOCIAL GEOGRAPHY

(Repeatable for a maximum of 10 times) (Cross-listed with GEOG 42195 and GEOG 72195) Special topics in social geography. Prerequisite: graduate standing.

- 1.000 TO 3.000 Credit hours
- 1.000 TO 3.000 Lecture hours

**Levels:** Graduate  
**Schedule Types:** Lecture

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### GEOG 54010 - GEOGRAPHY OF THE GLOBAL ECONOMY

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(Cross-listed with GEOG 44010 and GEOG 74010) Geographic analysis of the increasing interconnectedness of economic activity. The social, technological and political changes associated with globalization are also discussed. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geography Department

GEOG 54070 - SPATIAL ANALYSIS AND LOCATION THEORY

(Cross-listed with GEOG 44070 and GEOG 74070) Classical theories for location of economic activities and contemporary approach of spatial analysis, spatial organization of economic systems behavioral models in economic geography and spatial allocation problems. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geography Department

GEOG 55085 - URBAN TRANSPORTATION

(Cross-listed with GEOG 45085 and GEOG 75085) Spatial interaction patterns in urban environments. Travel behavior, commodity flows, traffic patterns and urban transportation systems. Urban transportation problems. Theoretical developments and techniques of analysis in urban transportation. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geography Department

GEOG 56070 - URBAN AND REGIONAL PLANNING

(Cross-listed with GEOG 46070 and GEOG 76070) Analysis of the geographical aspects of planning for cities and regions. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geography Department

GEOG 56080 - URBAN SUSTAINABILITY

(Slashed with GEOG 46080 and GEOG 76080) Provides an introduction to interdisciplinary perspectives on urban sustainability, focusing on environmental challenges caused by urbanization and the innovative ways urban dwellers seek to address those challenges. It provides background on relevant disciplinary perspectives and their application to environmental challenge domains. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours
GEOG 56092 - INTERNSHIP IN GEOGRAPHY AND PLANNING

(Repeatable for credit) (Cross-listed with GEOG 46092) Preprofessional work experience in local, regional and environmental planning agencies and private business designed to utilize and develop academic skills. Prerequisite: Special approval and graduate standing.
3.000 TO 6.000 Credit hours
3.000 TO 6.000 Other hours

GEOG 59070 - GEOGRAPHIC INFORMATION SCIENCE

(Cross-listed with GEOG 49070 and GEOG 79070) Introduction to theories and methods for geographic data processing, including data capture and input, data storage and management, and data analysis and displays. Emphasis is on laboratory exercises using GIS software packages for real world applications. Prerequisite: Graduate standing.
4.000 Credit hours
3.000 Lecture hours
2.000 Lab hours

GEOG 59072 - GEOGRAPHIC INFORMATION SCIENCE AND HEALTH

Geographic theory and methods serve as the connection among disparate disciplines focused on how and why “health” varies between regions, cities, and neighborhoods. Examines how geospatial technologies, especially GIS, have become an important health analysis tool. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

GEOG 59075 - GEOGRAPHIC INFORMATION SCIENCE: URBAN AND ECONOMIC APPLICATIONS

Urban and economic applications and analyses of spatial data, especially theoretical and conceptual issues including the possibilities and concerns associated with GIS, ethical considerations, and the various forms of data collection, visualization, analysis, and dissemination. Prerequisites: GEOG 49070 or GEOG 59070; and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
**GEOG 59076 - SPATIAL PROGRAMMING**

(Cross-listed with GEOG 49076 and GEOG 79076) Examination of the design, development and use of geographic information technologies with computer programming to model, process and visualize geographic phenomena. Prerequisite: GEOG 59070 and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**GEOG 59078 - GEOGRAPHIC INFORMATION SCIENCE AND ENVIRONMENTAL HAZARDS**

(Slashed with GEOG 49078 and GEOG 79078) The study and management of natural hazards are inherently reliant on both physical and human processes and spatial patterns. Given the many variables involved and the variety of scales at which they operate, use of Geographic Information Systems (GIS) has become standard practice in research on hazards and in their management by government agencies at all levels. Exposes students to a wide array of spatial data that is used in these activities, as well as standard mapping and spatial analysis procedures and forms of data dissemination. Prerequisites: GEOG 49070 or 59070; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**GEOG 59080 - ADVANCED GEOGRAPHIC INFORMATION SCIENCE**

(Cross-listed with GEOG 49080 and GEOG 79080) Advanced theories and techniques for handling geographic information systems, including 2D and 3D processing of geographic information, detection and analysis of geographic patterns, 2D and 3D mapping of geographic information, modeling of geographic processes and an overview of GIS programming tools. Prerequisite: GEOG 4/59070 and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**GEOG 59085 - WEB AND MOBILE GEOGRAPHIC INFORMATION SCIENCE**

(Slashed with GEOG 49085 and GEOG 79085) Explores how web and mobile phones present opportunities and challenges to the field of GIScience. This includes the examination of the use, design, and development of cyberinfrastructure-enabled GIS emphasizing web- and mobile-based interfaces and technologies. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours
GEOG 59162 - CARTOGRAPHY AND GEOVISUALIZATION

(Cross-listed with GEOG 49162 and 79162) Study of the design and production of dynamic, interactive, multimedia Web based mapping. Data acquisition and processing, symbolization, composition, text and color utilization. Prerequisite: GEOG 49070 OR 59070 and graduate standing. Corequisite: GEOG 59163.
3.000 Credit hours
3.000 Lecture hours

GEOG 59163 - CARTOGRAPHY AND GEOVISUALIZATION LABORATORY

(Cross-listed with GEOG 49163 and GEOG 79163) Practical experience in the techniques of data acquisition and processing for dynamic, multimedia, and online map production and geovisualizations. Prerequisite: GEOG 49070 or 59070; and graduate standing. Corequisite: GEOG 59162.
1.000 Credit hours
2.000 Lab hours

GEOG 59195 - SPECIAL TOPICS IN GEOGRAPHIC INFORMATION SCIENCE

(Repeatable a maximum of 10 times) (Cross-listed with GEOG 49195 and GEOG 79195). Special topics in geographic information sciences. Prerequisite: graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

GEOG 59230 - REMOTE SENSING

(Cross-listed with GEOG 49230 and GEOG 79230 and GEOL 42030 and GEOL 52030 and GEOL 72030) Computer analysis of multispectral satellite datasets. Applications in Terrestrial Earth Science are emphasized. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Credits</th>
<th>Other Hours</th>
<th>Levels</th>
<th>Schedule Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 60191</td>
<td>Seminar in Topical Geography</td>
<td>(Repeatable for credit) (Cross-listed with GEOG 70191) Seminar in one of the major topical fields in geography offered by title in given semester. Prerequisite: Graduate standing.</td>
<td>3.000</td>
<td>3.000</td>
<td>Graduate</td>
<td>Seminar</td>
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<tr>
<td>GEOG 60197</td>
<td>Intradepartmental Colloquium</td>
<td>(Repeatable for credit) One hour credit per semester. Prerequisite: Graduate standing.</td>
<td>2.000</td>
<td>2.000</td>
<td>Graduate</td>
<td>Colloquium</td>
</tr>
<tr>
<td>GEOG 60199</td>
<td>Thesis I</td>
<td>Thesis students must register for a total of 6 hours, 2 to 6 hours in single semester distributed over several semesters if desired. Prerequisite: Graduate standing.</td>
<td>2.000 TO 6.000</td>
<td>2.000 TO 6.000</td>
<td>Graduate</td>
<td>Masters Thesis</td>
</tr>
<tr>
<td>GEOG 60299</td>
<td>Thesis II</td>
<td>Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: GEOG 60199 and graduate standing.</td>
<td>2.000</td>
<td>2.000</td>
<td>Graduate</td>
<td>Masters Thesis</td>
</tr>
<tr>
<td>GEOG 60800</td>
<td>Seminar in the Development of Geographic Thought</td>
<td>(Cross-listed with GEOG 70800) Development of geographic knowledge and concepts with emphasis on recent development. Critical analysis of writings of representative geographers and scientists in related fields. Prerequisite: Graduate standing.</td>
<td>3.000</td>
<td>3.000</td>
<td>Graduate</td>
<td>Seminar</td>
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</tbody>
</table>
GEOG 60900 - QUALITATIVE RESEARCH METHODS IN GEOGRAPHY

(Slashed with GEOG 70900) Introduces qualitative methods and research applications, along with methodological considerations of these approaches. Students consider the epistemology of qualitative research and learn the mechanics of conducting this research in the field. In class, these methods are put into practice and the results are put into writing. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

GEOG 60996 - RESEARCH IN GEOGRAPHY

(Repeatable for credit) Individual research problems in geography. Prerequisite: Special approval and graduate standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Research

GEOG 60998 - RESEARCH

(Repeatable for credit) Research or individual investigation for master's level graduate students. Credits earned may be applied toward meeting degree requirements if the department approves. Prerequisite: Graduate standing.

1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

GEOG 62062 - BEHAVIORAL GEOGRAPHY

Focuses on spatial perception, cognition and behavior. How we collect and process spatial information, behavior in space, locate space and interact in space. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

GEOG 67091 - SEMINAR IN REGIONAL GEOGRAPHY
Seminar on one of the major regions of the world offered by title in given semester. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

GEOG 69004 - QUANTITATIVE METHODS IN GEOGRAPHY

(Slashed with GEOG 79004) Explores the methods and applications of some of the most common statistics found in geographic work. It explores probability theory, spatial statistics, estimation procedures, hypothesis testing, spatial sampling, methods of areal association, correlation and regression analysis, and principal components analysis. Theory and execution of these methods are equally emphasized, and applications to geographic problems are examined within each theme. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

GEOG 69007 - SPATIOTEMPORAL ANALYTICS

Equips students with essential spatiotemporal thinking and technical skills in mapping, analyzing, visualizing, communicating, and simulating the spatiotemporal data. ArcGIS and free packages in R and Netlogo will be used in the instruction. Prerequisites: GEOG 59070; and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

GEOG 69073 - GEOGRAPHIC INFORMATION SCIENCE: GLOBAL HEALTH

Emerging and re-emerging diseases in non-developed countries pose one of the greatest health challenges of current times. Geospatial approaches often provide one of the only information sources in data poor and challenging environments. This course will expose students to these health issues and disease environments through varied case studies, while simultaneously highlighting the geospatial methods and approaches used to understand and combat disease. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

GEOG 69074 - GEOGRAPHIC INFORMATION SCIENCE: SPATIAL ANALYSIS FOR HEALTH GEOGRAPHY

Spatial analysis is used to verify patterns and associations in health data maps. These results can then be used to further hone the scientific question, or help design an intervention strategy. This course will introduce spatial
analytical approaches used by health researchers and practitioners in the exploratory investigation of health data. Students will also be exposed to new mobile technologies that can be used to enrich more traditional spatial data sources. Prerequisites: GEOG 59070 or GEOG 59072; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geography Department

### GEOG 69079 - ENVIRONMENTAL GEOGRAPHIC INFORMATION SCIENCE

GPS and environmental spatial data are commonly used in a variety of management and assessment plans in fields related to environmental science to achieve effective decision making and environmental resource management. This course will focus on techniques used to process, manage, visualize, and analyze environmental data using GIS. Students will learn how to collect and process GPS and online sources of geospatial data and how to employ techniques such as suitability modeling, measuring distributions, and calculating landscape metrics. Prerequisites: GEOG 59070; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geography Department

### GEOG 69082 - CYBERGIS

(Slashed with GEOG 79082) Explores cyberinfrastructure-enabled geographic information systems (i.e. cyberGIS) and related technologies including a broad introduction to the use, design, and development of cyberinfrastructure, spatial data infrastructures, geographic information services, and web-enabled mapping technologies. Situates CyberGIS in the broader context of geographic information science focusing on the how synthesizing computational thinking and spatial thinking influence methodological approaches. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geography Department

### GEOG 69083 - GEODATABASES

Essential concepts and skills needed to efficiently create a geodatabase, add data to it, and realistically model the real-world spatial relationships inherent to the data. Students will learn about geodatabase features that help ensure data integrity over time and about storing and managing geographic data. Prerequisites: GEOG 59070; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geography Department
### GEOG 69164 - CARTOGRAPHIC DESIGN

Introduces students to the principles of map design and the art of map construction. Students will become familiar with the cartographic process, especially as they apply basic mapping concepts such as scale, projections, typography, generalization, symbols, color scheme, and classification to the design and production of thematic maps. Students will also learn how to describe and manipulate spatial data and how to select an appropriate map type for a given task and data set. This course builds on students’ experiences with GIS to focus on the design needed to disseminate information beyond users of the software and produce effective print and web maps. Class exercises will provide hands-on experience in using GIS and graphic software packages. Principles and experiences learned in class will equip students with the fundamental skills necessary to effectively communicate graphic information through maps. Prerequisite: Graduate standing.

<table>
<thead>
<tr>
<th>Credit hours</th>
<th>Lecture hours</th>
<th>Lab hours</th>
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<tr>
<td>4.000</td>
<td>3.000</td>
<td>2.000</td>
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Levels: Graduate  
Schedule Types: Combined Lecture and Lab  

Geography Department

### GEOG 69231 - ENVIRONMENTAL REMOTE SENSING

Introduction to the basic principles of environmental remote sensing, including the electromagnetic spectrum, spectral properties of Earth objects, aerial photograph analysis and interpretation and satellite image analysis and interpretation. Special focus will be on environmental applications, especially as they pertain to understanding vegetation, water, and land use mapping and impacts. Prerequisite: Graduate standing.

<table>
<thead>
<tr>
<th>Credit hours</th>
<th>Lecture hours</th>
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<td>3.000</td>
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</table>

Levels: Graduate  
Schedule Types: Lecture  

Geography Department

### GEOG 69392 - PRACTICUM IN GEOGRAPHIC INFORMATION SCIENCE

Culminating experience for students in the MGISc program. It will be taken in place of two CarouselSpecialist courses on the schedule for the student's final semester. It is designed to provide practical experience in the application of MGISc course content in real-world professional settings. Students will select a professional project in consultation with their employer and program faculty and then will design, implement, and report on their activities in a culminating professional paper. Prerequisites: GEOG 59070 and GEOG 59080 and GEOG 69164; and two additional graduate-level GEOG courses; and graduate standing.

<table>
<thead>
<tr>
<th>Credit hours</th>
<th>Other hours</th>
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<tr>
<td>6.000</td>
<td>18.000</td>
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</tbody>
</table>

Levels: Graduate  
Schedule Types: Practicum or Internship  

Geography Department

### GEOG 69701 - RESEARCH AND PRESENTATION OF GEOGRAPHIC DATA

Critical discussion of techniques of geographic research and preparation and presentation of research papers. Prerequisite: Graduate standing.

<table>
<thead>
<tr>
<th>Credit hours</th>
<th>Other hours</th>
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</table>

Levels: Graduate
GEOG 70093 - VARIABLE TITLE WORKSHOP IN GEOGRAPHY

(Repeatable for credit) Variable title workshop in geography. Prerequisite: Doctoral standing.
1.000 TO 5.000 Credit hours
1.000 TO 5.000 Other hours

Levels: Graduate
Schedule Types: Workshop

GEOG 70191 - SEMINAR IN TOPICAL GEOGRAPHY

(Repeatable for credit) (Cross-listed with GEOG 60191) Seminar in one of the major topical fields in geography offered by title in given semester. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

GEOG 70195 - SPECIAL TOPICS IN GEOGRAPHY

(Repeatable for credit) (Cross-listed with GEOG 40195 and GEOG 50195) Special topics in geography. Prerequisite: Doctoral standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

GEOG 70292 - FIELD EXPERIENCE IN GEOGRAPHY

(Repeatable for credit) Examination of geographic landscapes in the field. Prerequisite: Doctoral standing and special approval.
1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Field Experience

GEOG 70392 - PRACTICUM IN EMERGING GEOGRAPHIC TRENDS

(Repeatable for credit) Examination of newly emerging geographic topics and techniques. Prerequisite: Special approval and doctoral standing.
1.000 TO 6.000 Credit hours
GEOG 70492 - STUDY AWAY IN GEOGRAPHY

(Repeatable 6 times for credit) Examination of geographic landscapes in the field. Prerequisite: None.
1.000 TO 3.000 Credit hours
3.000 TO 9.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Geography Department

GEOG 70800 - SEMINAR IN THE DEVELOPMENT OF GEOGRAPHIC THOUGHT

(Cross-listed with GEOG 60800) Development of geographic knowledge and concepts with emphasis on recent development. Critical analysis of writings of representative geographers and scientists in related fields. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Geography Department

GEOG 70900 - QUALITATIVE RESEARCH METHODS IN GEOGRAPHY

(Slashed with GEOG 60900) Introduces qualitative methods and research applications, along with methodological considerations of these approaches. Students consider the epistemology of qualitative research and learn the mechanics of conducting this research in the field. In class, these methods are put into practice and the results are put into writing. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geography Department

GEOG 71051 - NATURAL DISASTERS AND SOCIETY

Study of natural disasters, the hazards associated with the disasters, their effects on humans and societies, spatial and temporal distributions, and strategies to reduce the occurrences of disasters. Natural disasters include hurricanes, tornadoes, floods, landslides, heat waves, wildfire, blizzards, earthquakes, tsunami and volcanoes. Mitigation for disasters and responses to disasters are studied across economically developing nations and developed nations. Taught through the analysis of numerous case studies of natural disasters. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
GEOG 71052 - GLACIERS AND GLACIATION

(Cross-listed with GEOL 44052, 54052 and 74052) Examination of how glacial ice masses change the shape of the earth's surface, how they are integral to climate and sea level change and how they pose high risk hazards. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

GEOG 71065 - APPLIED CLIMATOLOGY

Aimed at providing a full appreciation for the range of applicability of climate data to real-world problems. There are three overarching goals of the course: To provide a broad overview of what weather and climate information is out there and how we synthesize weather and climate information for use in applied work; to enable a thorough appreciation for the breadth of disciplines in which applied climatology plays a role; and to provide real-world experience of working through an applied climatological problem, via the final project. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

GEOG 71066 - CLIMATE CHANGE AND ITS IMPACTS

(Cross-listed with GEOG 41066 and GEOG 51066) Examination of the evidence and causes of climate change and how these data are assessed. Past, present and future impacts of climate change and variability are discussed along with policy implications. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

GEOG 71073 - CONSERVATION OF OUR NATURAL RESOURCES

(Cross-listed with GEOG 41073 and GEOG 51073) Evaluation of past and current problems associated with the management of natural resources and the environments associated with their utilization. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
**GEOG 71074 - RESOURCE GEOGRAPHY**

Cultural attitudes, conceptual approaches and techniques in resource geography; analysis of selected resource issues at various areal scales. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geography Department

**GEOG 71082 - GEOGRAPHY OF SOILS**

(Cross-listed with GEOG 41082 and GEOG 51082) Study and analysis of different soil types in their relation to geographic factors. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geography Department

**GEOG 71195 - SPECIAL TOPICS IN ENVIRONMENTAL GEOGRAPHY**

(Repeatable for a maximum of 10 times) (Cross-listed with GEOG 41195 and GEOG 51195) Special topics in environmental geography. Prerequisite: doctoral standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geography Department

**GEOG 72052 - MEDICAL GEOGRAPHY**

(Cross-listed with GEOG 42052 and GEOG 52052) Examines the geographic patterns of morbidity and mortality, environmental correlates of major diseases and disease diffusion. Locational and accessibility issues of health care are discussed. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geography Department

**GEOG 72053 - GEOGRAPHIES OF MEMORY AND HERITAGE**

(Cross-listed with GEOG 42053 and GEOG 52053) Gives students a working knowledge in, and ability to understand and analyze, the intersection of memory and landscape as a tangible re-presentation of the human past, oftentimes used as a tangible expression of cultural or political power. To this end the course focuses on...
memorialization, preservation, and tourism concepts and themes. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geography Department

**GEOG 72062 - BEHAVIORAL GEOGRAPHY**

Focuses on spatial perception, cognition and behavior. How we collect and process spatial information behavior in space, locate space and interact in space. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geography Department

**GEOG 72064 - HISTORICAL GEOGRAPHY OF THE UNITED STATES AND CANADA**

(Cross-listed with GEOG 42064 and GEOG 52064) Study of regional origins, growth, evolution of spatial organization, changing evaluation of environments and selective geographies in United States and Canada from pre-colonial times to present. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geography Department

**GEOG 72195 - SPECIAL TOPICS IN SOCIAL GEOGRAPHY**

(Repeatable for a maximum of 10 times) (Cross-listed with GEOG 42195 and GEOG 52195) Special topics in social geography. Prerequisite: doctoral standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geography Department

**GEOG 74010 - GEOGRAPHY OF THE GLOBAL ECONOMY**

(Cross-listed with GEOG 44010 and GEOG 54010) Geographic analysis of the increasing interconnectedness of economic activity. The social, technological and political changes associated with globalization are also discussed. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisite</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>GEOG 74070</td>
<td>SPATIAL ANALYSIS AND LOCATION THEORY</td>
<td>Classical theories for location of economic activities and contemporary approach of spatial analysis, spatial organization of economic systems, behavioral models in economic geography and spatial allocation problems. Prerequisite: Doctoral standing.</td>
<td>3.000 Credit hours</td>
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<td>Levels: Graduate</td>
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<td>Schedule Types: Lecture</td>
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<tr>
<td>GEOG 75085</td>
<td>URBAN TRANSPORTATION</td>
<td>Spatial interaction patterns in urban environments. Travel behavior, commodity flows, traffic patterns and urban transportation systems. Urban transportation problems. Theoretical developments and techniques of analysis in urban transportation. Prerequisite: Doctoral standing.</td>
<td>3.000 Credit hours</td>
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<td>Levels: Graduate</td>
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<td>Schedule Types: Lecture</td>
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<tr>
<td>GEOG 76070</td>
<td>URBAN AND REGIONAL PLANNING</td>
<td>Analysis of the geographical aspects of planning for cities and regions.</td>
<td>3.000 Credit hours</td>
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<td>Levels: Graduate</td>
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<td>Schedule Types: Lecture</td>
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<tr>
<td>GEOG 76080</td>
<td>URBAN SUSTAINABILITY</td>
<td>Provides an introduction to interdisciplinary perspectives on urban sustainability, focusing on environmental challenges caused by urbanization and the innovative ways urban dwellers seek to address those challenges. It provides background on relevant disciplinary perspectives and their application to environmental challenge domains. Prerequisite: Doctoral standing.</td>
<td>3.000 Credit hours</td>
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<td>Levels: Graduate</td>
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<td>Schedule Types: Lecture, Seminar</td>
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<tr>
<td>GEOG 76081</td>
<td>SEMINAR IN URBAN GEOGRAPHY</td>
<td></td>
<td>Geography Department</td>
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</tbody>
</table>
Theoretical explanations of urban spatial patterns. Application of contemporary theories concepts and methods to selected urban geographic problems. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

GEOG 77091 - SEMINAR IN REGIONAL GEOGRAPHY

(Repeatable for credit) (Cross-listed with GEOG 67091) Seminar on one of the major regions of world offered by title in given semester. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

GEOG 79004 - QUANTITATIVE METHODS IN GEOGRAPHY

(Slashed with GEOG 69004) Explores the methods and applications of some of the most common statistics found in geographic work. It explores probability theory, spatial statistics, estimation procedures, hypothesis testing, spatial sampling, methods of areal association, correlation and regression analysis, and principal components analysis. Theory and execution of these methods are equally emphasized, and applications to geographic problems are examined within each theme. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

GEOG 79070 - GEOGRAPHIC INFORMATION SCIENCE

(Cross-listed with GEOG 49070 and GEOG 59070) Introduction to theories and methods for geographic data processing, including data capture and input data storage and management and data analysis and displays. Emphasis is on laboratory exercises using GIS software packages for real world applications. Prerequisite: Doctoral standing.
4.000 Credit hours
3.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

GEOG 79072 - GEOGRAPHIC INFORMATION SCIENCE AND HEALTH

Geographic theory and methods serve as the connection among disparate disciplines focused on how and why “health” varies between regions, cities, and neighborhoods. This course examines how geospatial technologies, especially GIS, have become an important health analysis tool. Prerequisite: doctoral standing.
GEOG 79075 - GEOGRAPHIC INFORMATION SCIENCE: URBAN AND ECONOMIC APPLICATIONS

(Cross-listed with GEOG 49075 and GEOG 59075) Urban and economic applications and analyses of spatial data, especially theoretical and conceptual issues including the possibilities and concerns associated with GIS, ethical considerations, and the various forms of data collection, visualization, analysis and dissemination. Prerequisites: GEOG 49070 or 59070 or 79070; and doctoral standing.

GEOG 79076 - SPATIAL PROGRAMMING

(Cross-listed with GEOG 49076 and GEOG 59076) Examination of the design, development and use of geographic information technologies with computer programming to model process and visualize geographic phenomena. Prerequisite: GEOG 79070 and doctoral standing.

GEOG 79078 - GEOGRAPHIC INFORMATION SCIENCE AND ENVIRONMENTAL HAZARDS

(Slashed with GEOG 49078 and GEOG 59078) The study and management of natural hazards are inherently reliant on both physical and human processes and spatial patterns. Given the many variables involved and the variety of scales at which they operate, use of Geographic Information Systems (GIS) has become standard practice in research on hazards and in their management by government agencies at all levels. Exposes students to a wide array of spatial data that is used in these activities, as well as standard mapping and spatial analysis procedures and forms of data dissemination. Prerequisites: GEOG 49070 or 59070 or 79070; and doctoral standing.

GEOG 79080 - ADVANCED GEOGRAPHIC INFORMATION SCIENCE

(Cross-listed with GEOG 49080 and GEOG 59080) Advanced theories and techniques for handling geographic information systems, including 2D and 3D processing of geographic information, detection and analysis of geographic patterns, 2D and 3D mapping of geographic information, modeling of geographic processes and an
overview of GIS programming tools. Prerequisite: GEOG 4/5/79070 and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geography Department

**GEOG 79082 - CYBERGIS**

(Slashed with GEOG 69082) Explores cyberinfrastructure-enabled geographic information systems (i.e. cyberGIS) and related technologies including a broad introduction to the use, design, and development of cyberinfrastructure, spatial data infrastructures, geographic information services, and web-enabled mapping technologies. Situates cyberGIS in the broader context of geographic information science focusing on the how synthesizing computational thinking and spatial thinking influence methodological approaches. Prerequisites: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geography Department

**GEOG 79085 - WEB AND MOBILE GEOGRAPHIC INFORMATION SCIENCE**

(Slashed with GEOG 49085 and 79085) Explores how web and mobile phones present opportunities and challenges to the field of GIScience. This will include the examination of the use, design, and development of cyberinfrastructure-enabled GIS emphasizing web- and mobile-based interfaces and technologies. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geography Department

**GEOG 79162 - CARTOGRAPHY AND GEOVISUALIZATION**

(Cross-listed with GEOG 49162 and 59162) Study of the design and production of dynamic, interactive, multimedia Web based mapping. Data acquisition and processing, symbolization, composition, text and color utilization. Prerequisite: GEOG 49070 OR 59070 OR 79070; and doctoral standing. Corequisite: GEOG 79163.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geography Department

**GEOG 79163 - CARTOGRAPHY AND GEOVISUALIZATION LABORATORY**

(Cross-listed with GEOG 49163 and GEOG 59163) Practical experience in the techniques of data acquisition and processing for dynamic, multimedia, and online map production and geovisualizations. Prerequisite: GEOG 49070 or 59070 or 79070; and doctoral standing. Corequisite: GEOG 79162.
GEOG 79195 - SPECIAL TOPICS IN GEOGRAPHIC INFORMATION SCIENCE

(Repeatable for a maximum of 10 times) (Cross-listed with GEOG 49195 and GEOG 59195). Special topics in geographic information sciences. Prerequisite: doctoral standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

GEOG 79230 - REMOTE SENSING

(Cross-listed with GEOG 49230 and GEOG 59230 and GEOL 42030 and GEOL 52030 and GEOL 72030) Computer analysis of multispectral satellite datasets. Applications in Terrestrial Earth Science are emphasized. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

GEOG 80197 - INTRADEPARTMENTAL COLLOQUIUM

(Repeatable for credit) One hour credit per semester. Prerequisite: Doctoral standing.
2.000 Credit hours
2.000 Other hours

GEOG 80199 - DISSERTATION I

(Repeatable for credit) Doctoral dissertation, for which registration in at least two semesters is required first of which will be semester in which dissertation work is begun and continuing until the completion of 30 hours. Prerequisite: Special approval and doctoral standing.
15.000 Credit hours
15.000 Other hours
**GEOG 80299 - DISSERTATION II**

(Repeatable for credit) Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. Prerequisite: GEOG 80199 and doctoral standing.

15.000 Credit hours
15.000 Other hours

Levels: Graduate
Schedule Types: Dissertation

Geography Department

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**GEOG 80998 - RESEARCH**

(Repeatable for credit) Research or individual investigation for doctoral students who have not yet passed their candidacy examination. Credits earned may be applied toward degree if department approves. Prerequisite: Doctoral standing.

1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

Geography Department

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**GEOG 81091 - RESEARCH IN PHYSICAL RESOURCES**

(Repeatable for credit) Research on basic processes related to formation of physical environment. Investigation of significant variables in resource utilization relevant to regional planning and development. Prerequisite: Doctoral standing.

2.000 OR 3.000 Credit hours
2.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Research

Geography Department

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**GEOG 89092 - GRADUATE FIELD CAMP**

(Repeatable for credit) Field research problems involving individual investigation of specific urban or rural region. Prerequisite: Doctoral standing.

5.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Field Experience

Geography Department

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**GEOG 89098 - RESEARCH IN CARTOGRAPHY**

(Repeatable for credit) Investigations into function of map as medium of scientific expression; problem of map design in relation to human perception of graphically expressed spatial information. Prerequisite: Doctoral standing.
GEOL 11040 - HOW THE EARTH WORKS

Explores processes that shape Earth's landscapes (volcanism, flooding, landslides, sea-level rise, mountain building) and that are of vital interest to humans (earthquakes, groundwater, energy and mineral resources, climate change). Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Geology Department

Course Attributes:
Kent Core-Basic Sciences, LER-Basic Sciences, TAG - Science, Trnfr Module-Natural Sciences

GEOL 11041 - HOW THE EARTH WORKS LABORATORY

Lab experience with earth materials (mineral crystals, common and unusual rock specimens), Google Earth images, and experiments demonstrating processes at earth's surface such as groundwater pollution, flooding, and on-line earthquake simulations. Pre/corequisite: GEOL 11040.

1.000 Credit hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Geology Department

Course Attributes:
Kent Core-Basic Sciences, Kent Core-Basic Sciences Lab, LER-Basic Sciences, TAG - Science, Trnfr Module-Natural Sciences

GEOL 11042 - EARTH AND LIFE THROUGH TIME

Explores major events in the history of Earth including mass extinctions, Snowball Earth, birth and death of oceans, growth of continents, explosion of life, dinosaurs, and the surprising inter-relatedness of earth and life processes. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Geology Department

Course Attributes:
Kent Core-Basic Sciences, LER-Basic Sciences, TAG - Science, Trnfr Module-Natural Sciences
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<tr>
<th>Course Code</th>
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<th>Credit Hours</th>
<th>Lecture Hours</th>
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<th>Levels</th>
<th>Course Attributes</th>
<th>Department</th>
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<tbody>
<tr>
<td>GEOL 11043</td>
<td>EARTH AND LIFE THROUGH TIME LABORATORY</td>
<td>Lab experience with interesting fossils, rocks, and sedimentary features, a river process simulator, and the concept of deep time. Pre/corequisite: GEOL 11042.</td>
<td>1.000</td>
<td>3.000</td>
<td>Laboratory</td>
<td>Undergraduate</td>
<td>Kent Core-Basic Sciences, Kent Core-Basic Sciences Lab, LER-Basic Sciences, TAG - Science, Trnfr Module-Natural Sciences</td>
<td>Geology</td>
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<tr>
<td>GEOL 21062</td>
<td>ENVIRONMENTAL EARTH SCIENCE</td>
<td>Application of Earth Science to environmental problems, including natural resource extraction, water supply, pollution, waste disposal, landslides, floods and land use planning. Local field trip. Prerequisite: None.</td>
<td>3.000</td>
<td>3.000</td>
<td>Lecture</td>
<td>Undergraduate</td>
<td>Kent Core-Basic Sciences, LER-Basic Sciences, Trnfr Module-Natural Sciences</td>
<td>Geology</td>
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<tr>
<td>GEOL 21080</td>
<td>ALL ABOUT THE OCEANS</td>
<td>Explores the many fascinating (and some still little known) features and processes of the Earth's Oceans including mid-ocean ridges, hydrothermal vents, tsunamis, tides, rogue waves, marine life, and the role of the Ocean in climate change. Prerequisite: none.</td>
<td>3.000</td>
<td>3.000</td>
<td>Lecture</td>
<td>Undergraduate</td>
<td>Kent Core-Basic Sciences, LER-Basic Sciences, Trnfr Module-Natural Sciences</td>
<td>Geology</td>
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<tr>
<td>GEOL 22000</td>
<td>INTRODUCTORY GEOLOGY SEMINAR</td>
<td>Provides new Geology and Earth Science majors with an overview of career paths and opportunities within these majors. Components of the course include a journal club, informational presentations by geoscientists in industry, government, and academia, and skills training needed for the major. Required overnight field trip. Prerequisite: none.</td>
<td>1.000</td>
<td>1.000</td>
<td>Lecture</td>
<td>Undergraduate</td>
<td>Kent Core-Basic Sciences, LER-Basic Sciences, Trnfr Module-Natural Sciences</td>
<td>Geology</td>
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</table>
GEOL 23063 - EARTH MATERIALS I
Occurrence, associations, characteristics, crystallography and crystal chemistry of common minerals. Laboratory identification emphasizing physical properties. Lecture three hours, lab two hours weekly. Required field trip. Prerequisite: GEOL 11040 and GEOL 11041; and pre- or corequisite CHEM 10060.
4.000 Credit hours
5.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

GEOL 31070 - EARTH MATERIALS II
Occurrence and origin of igneous, sedimentary and metamorphic rocks. Laboratory identification, description and classification of hand specimens. Lecture three hours, lab two hours weekly. Required field trip. Prerequisite: GEOL 23063.
4.000 Credit hours
3.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

GEOL 31080 - STRUCTURAL GEOLOGY
Mechanical principles of rock deformation. Structures in sedimentary igneous and metamorphic rocks. Lecture three hours lab two hours weekly. Required field trip. Prerequisite: none.
4.000 Credit hours
5.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

GEOL 32066 - GEOMORPHOLOGY
Earth's surface features as functions of geological structures, processes and time. Landform analysis using topographic maps and some stereographic aerial photos. Lecture three hours, lab two hours weekly. Trigonometry recommended. Prerequisite: GEOL 11040 and GEOL 11041.
4.000 Credit hours
4.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Geology Department

**GEOL 34061 - INVERTEBRATE PALEONTOLOGY**

Concepts applied to study of commonly preserved invertebrate organisms; identification of common North American fossils. Lecture three hours, lab two hours weekly. Required field trip. Prerequisite: GEOL 11042 and GEOL 11043. Corequisite: BSCI 10002 or 10110.

4.000 Credit hours
5.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Course Attributes:
Writing Intensive Course

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**GEOL 40093 - VARIABLE TITLE WORKSHOP IN GEOLOGY**

(Repeatable for credit) Workshop and/or training program focused on a specific professional or disciplinary topic. Prerequisite: Special approval.

1.000 TO 8.000 Credit hours
1.000 TO 8.000 Other hours

Levels: Undergraduate
Schedule Types: Workshop

Geology Department

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**GEOL 40095 - SELECTED TOPICS IN GEOLOGY**

(Cross-listed with GEOL 50095) (Repeatable for credit) Selected topics presented by visiting professors or one-time offerings presented by regular faculty. Prerequisite: 20 hours of geology courses.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Geology Department

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**GEOL 40096 - INDIVIDUAL INVESTIGATION IN GEOLOGY**

(Repeatable for credit) Directed field, laboratory and/or library research. Written report required. Open on special approval of faculty member directing work. Only 3 hours will be applied toward baccalaureate degree. Does not count toward geology major. Prerequisite: Special approval.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Geology Department
GEOL 41025 - GENERAL GEOPHYSICS

(Cross-listed with GEOL 51025) Physics of Earth, seismology, geomagnetism, heat flow, radioactivity, geochronology, geotectonic models. Required field trip. Prerequisite: GEOL 31070 and GEOL 31080 and MATH 12002; and PHY 13001 or PHY 23101.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Geology Department

GEOL 41073 - GEOLOGY OF OHIO

(Cross-listed with GEOL 51073) Minerals, rocks, fossils, structural geology, physiography, environmental geology and geologic resources. Required field trips. Does not satisfy requirements of geology major. Prerequisite: Junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Geology Department

GEOL 41077 - GEOLOGY OF THE NATIONAL PARKS

(Cross-listed with GEOL 51077) Introduction to the geology of selected major national parks, emphasizing basic geological principles and the processes which have produced the spectacular scenery, rocks and fossils in each park. Not counted toward requirements for a major in geology. Prerequisite: Junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Geology Department

GEOL 41079 - ALL ABOUT DINOSAURS

(Cross-listed with GEOL 51079) Dinosaurs (and some relatives) and their world, emphasizing how to interpret evidence concerning their history, biology and evolutionary relationships. Does not satisfy requirements of geology major. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Geology Department

GEOL 41080 - TECTONICS AND OROGENY

(Cross-listed with GEOL 51080) Introduces advanced concepts of plate tectonics and mountain building with emphasis on Western United States and Appalachians. Required field trip to New England. Prerequisite: GEOL
GEOL 41082 - ADVANCED STRUCTURAL GEOLOGY
(Cross-listed with GEOL 51082) Theoretical and applied studies in structural geology, including mechanical, mathematical, model and field investigations. Required field trip. Prerequisite: GEOL 31080.
3.000 Credit hours
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture
Geology Department

GEOL 41092 - SUMMER FIELD CAMP
(Cross-listed with GEOL 51092) Five weeks devoted to geologic mapping and solving structural and stratigraphic problems in Black Hills, S.D. Special fee on actual cost basis. Prerequisite: GEOL 31070 and GEOL 31080.
6.000 Credit hours
42.000 Other hours
Levels: Undergraduate
Schedule Types: Practicum or Internship
Geology Department

Course Attributes:
Experiential Learning Requirem

GEOL 42030 - REMOTE SENSING
(Cross-listed with GEOL 52030 and GEOL 72030 and GEOG 49230 and GEOG 59230 and GEOG 79230) Computer analysis of multispectral satellite datasets. Applications in Terrestrial Earth Science are emphasized. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture
Geology Department

GEOL 42035 - SCIENTIFIC METHODS IN GEOLOGY
(Cross-listed with GEOL 52035) Applying scientific methods to geologic data in the field and lab; models and sampling procedures. Collecting and analyzing data. Formulating and testing hypotheses. Provides background necessary for upper-level geology courses for majors. Lecture two hours, lab two hours weekly. Prerequisite: none.
3.000 Credit hours
GEOL 42065 - WATERSHED HYDROLOGY

(Slashed with GEOL 52065) Study of water movement, storage, and transformation across landscapes. Prerequisite: Junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Geology Department

GEOL 42067 - INTRODUCTORY HYDROGEOLOGY

(Slashed with GEOL 52067) Occurrence of ground water in geologic materials; emphasizing utilization, conservation and management of ground water resources. Prerequisite: Junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Geology Department

GEOL 42068 - CONTAMINANT HYDROLOGY AND HYDROGEOLOGY

(Cross-listed with GEOL 52068) An introduction to the basic principles of chemical and physical behavior of contaminants introduced by humans into the environment. Students are expected to understand concepts and work practical quantitative problems. Prerequisite: GEOL 42067 and CHEM 10060 and CHEM 10061 and CHEM 10062 and CHEM 10063.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Geology Department

GEOL 42069 - HYDROGEOCHEMISTRY

(Cross-listed with GEOL 52069 and GEOL 72069) Processes and evolution of the chemical composition of water in the natural hydrologic cycle. Methods of hydrochemical interpretation applied to ground water and pollution problems. Lecture three hours weekly. Prerequisite: 10 hours of chemistry.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
GEOL 42074 - ENVIRONMENTAL CORE AND WELL LOGGING

(Cross-listed with GEOL 52074) Examination of subsurface processes and the distribution of stratigraphic layers using core and well logging techniques based on analysis of physical properties of sediment, rock and pore fluids. Applications to paleoclimate, hydrogeology, engineering geology, oil and gas exploration and environmental remediation. Prerequisite: GEOL 31070.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Geology Department

GEOL 42078 - ENGINEERING GEOLOGY

(Cross-listed with GEOL 52078) Engineering properties of soils and rocks. Site evaluation for building foundations, dams, tunnels, and highways. Slope stability. Lecture three hours and lab two hours weekly. Prerequisite: Geology (GEOL) or Earth Science (ESCI) major with junior standing.

4.000 Credit hours
4.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Geology Department

GEOL 43040 - PRINCIPLES OF GEOCHEMISTRY

(Cross-listed with GEOL 53040) Introduction to chemical thermodynamics and its applications in solving geochemical problems. Distributions of elements and isotopes in the earth and laws governing these distributions. Prerequisite: GEOL 31070; and MATH 12002; and CHEM 10060 and CHEM 10061.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Geology Department

GEOL 43042 - ENVIRONMENTAL GEOCHEMISTRY

(Cross-listed with GEOL 53042 and GEOL 73042) Explores chemical processes that influence the natural environment, including anthropogenic impacts. Topics include atmospheric chemistry and air pollution, energy and climate change, toxic organic compounds, water chemistry and water pollution, metals, soils, sediments and waste disposal. Environmental problem solving using steady state and non-steady state box models, thermodynamics and energy transfer, and chemical reactions and equilibria is emphasized. Required half-day field trip. Prerequisites: CHEM 10060 and CHEM 10061.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Geology Department
GEOL 43044 - ENVIRONMENTAL ISOTOPES

(Cross-listed with GEOL 53044 and GEOL 73044) Deals with the fundamentals of isotope geochemistry and the application of primarily light stable isotopes (H, O, C, N) to earth system processes (involving the hydrosphere, biosphere, and upper geosphere). Prerequisites: CHEM 10060 and CHEM 10061.

3.00 Credit hours
3.00 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Geology Department

GEOL 43066 - OPTICAL PETROGRAPHY

(Cross-listed with GEOL 53066) Theory of optical crystallography and the microscopic examination and identification of igneous, sedimentary and metamorphic rocks in thin section. Lecture two hours, lab two hours weekly. Prerequisite: GEOL 31070.

3.00 Credit hours
3.00 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Geology Department

GEOL 44052 - GLACIERS AND GLACIATION

(Cross-listed with GEOG 41052, GEOG 51052 and GEOG 71052) Examination of how glacial ice masses change the shape of the earth's surface, how they are integral to climate and sea level change, and how they pose high risk hazards. Prerequisite: GEOG 21062 or GEOL 11040.

3.00 Credit hours
3.00 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Geology Department

GEOL 44070 - SEDIMENTOLOGY AND STRATIGRAPHY

(Slashed with GEOL 54070) Students are introduced to the principles regarding the systematics of sedimentary rocks and the relationships between geologic formations at various spatial and temporal scales. Lectures are integrated with readings from the open literature and required labs and field trips. Prerequisite: GEOL 31070.

4.00 Credit hours
3.00 Lecture hours
2.00 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Geology Department

GEOL 44074 - PALEOCEANOGRAPHY
A broad spectrum of geological approaches, including paleontology, geochemistry and stratigraphy is employed to interpret the history of earth’s oceans. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Geology Department

**GEOL 50093 - VARIABLE TITLE WORKSHOP IN GEOLOGY**

(Repeatable for credit) Workshop or training program focused on a specific professional or disciplinary topic within geology. Prerequisite: Graduate standing and special approval.

1.000 TO 8.000 Credit hours
1.000 TO 8.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Geology Department

**GEOL 50095 - SELECTED TOPICS IN GEOLOGY**

(Cross-listed with GEOL 40095) (Repeatable for credit) Selected topics presented by visiting professors or one-time offerings presented by regular faculty. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geology Department

**GEOL 51025 - GENERAL GEOPHYSICS**

Physics of Earth. Seismology, geomagnetism; heat flow, radioactivity, geochronology, gravity and isostasy, geotectonic models. Lecture 3 hours weekly. Required field trip. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geology Department

**GEOL 51073 - GEOLOGY OF OHIO**

(Cross-listed with GEOL 41073) Minerals, rocks, fossils, structural geology, physiography, environmental geology, geologic resources. Required field trips. Does not satisfy requirements for major in geology. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
GEOL 51077 - GEOLOGY OF THE NATIONAL PARKS

(Cross-listed with GEOL 41077) Introduction to the geology of selected major national parks, emphasizing basic geological principles and the processes which have produced the spectacular scenery, rocks and fossils in each park. Not counted toward requirements for a major in geology. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

GEOL 51079 - ALL ABOUT DINOSAURS

(Cross-listed with GEOL 41079) Dinosaurs (and some relatives) and their world, emphasizing how to interpret evidence concerning their history, biology and evolutionary relationships. Does not satisfy requirements of geology major. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

GEOL 51080 - TECTONICS AND OROGENY

Introduces advanced concepts of plate tectonics and mountain building with emphasis on Western United States and Appalachians. Required field trip to New England. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

GEOL 51082 - ADVANCED STRUCTURAL GEOLOGY

(Cross-listed with GEOL 41082) Theoretical and applied studies in structural geology, including mechanical, mathematical, model and field investigations. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

GEOL 51092 - SUMMER FIELD CAMP

(Repeatable for credit) Five weeks devoted to geologic mapping and solving structural and stratigraphic problems in Black Hills, S.D. Special fee on actual cost basis. Prerequisite: graduate standing.
GEOL 52030 - REMOTE SENSING

(Cross-listed with GEOL 42030 and GEOL 72030 and GEOG 41052 and GEOG 51052 and GEOG 71052) Computer analysis of multispectral satellite datasets. Applications in Terrestrial Earth Science are emphasized. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geology Department

GEOL 52035 - SCIENTIFIC METHODS IN GEOLOGY

(Cross-listed with GEOL 42035) Applying scientific methods to geologic data in the field and lab; models and sampling procedures. Collecting and analyzing data. Formulating and testing hypotheses. Lecture two hours, lab two hours. Prerequisite: graduate standing.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Geology Department

GEOL 52065 - WATERSHED HYDROLOGY

(Slashed with GEOL 42065) Study of water movement, storage, and transformation across landscapes. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geology Department

GEOL 52067 - INTRODUCTORY HYDROGEOLOGY

(Slashed with GEOL 42067) Occurrence of ground water in geologic materials; emphasizing utilization, conservation and management of ground water resources. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
**GEOL 52068 - CONTAMINANT HYDROLOGY AND HYDROGEOLOGY**

(Cross-listed with GEOL 42068) An introduction to the basic principles of chemical and physical behavior of contaminants introduced by humans into the environment. Students are expected to understand concepts and work practical quantitative problems. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**GEOL 52069 - HYDROGEOCHEMISTRY**

(Cross-listed with GEOL 42069 and GEOL 72069) Processes and evolution of the chemical composition of water in the natural hydrologic cycle. Methods of hydrochemical interpretation applied to ground water and pollution problems. Lecture three hours weekly. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**GEOL 52074 - ENVIRONMENTAL CORE AND WELL LOGGING**

(Cross-listed with GEOL 42074) Examination of subsurface processes and the distribution of stratigraphic layers using core and well logging techniques based on analysis of physical properties of sediment, rock and pore fluids. Applications to paleoclimate, hydrogeology, engineering geology, oil and gas exploration and environmental remediation. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**GEOL 52078 - ENGINEERING GEOLOGY**

(Cross-listed with GEOL 42078) Engineering properties of soils and rocks. Site evaluation for building foundations, dams, tunnels and highways. Slope stability. Lecture three hours and lab two hours weekly. Prerequisite: Graduate standing.

4.000 Credit hours
4.000 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

**GEOL 53040 - PRINCIPLES OF GEOCHEMISTRY**
GEOL 53042 - ENVIRONMENTAL GEOCHEMISTRY

(Cross-listed with GEOL 43042 and GEOL 73042) Explores chemical processes that influence the natural environment including anthropogenic impacts. Topics include atmospheric chemistry and air pollution, energy and climate change, toxic organic compounds, water chemistry and water pollution, metals, soils, sediments and waste disposal. Environmental problem solving using steady state and non-steady state box models, thermodynamics and energy transfer, and chemical reactions and equilibria is emphasized. Required half-day field trip. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geology Department

GEOL 53044 - ENVIRONMENTAL ISOTOPES

(Cross-listed with GEOL 43044 and GEOL 73044) Deals with the fundamentals of isotope geochemistry and the application of primarily light stable isotopes (H, O, C, N) to earth system processes (involving the hydrosphere, biosphere, and upper geosphere). Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geology Department

GEOL 53066 - OPTICAL PETROGRAPHY

(Cross-listed with GEOL 43066) Theory of optical crystallography and the microscopic examination and identification of igneous, sedimentary and metamorphic rocks in thin section. Lecture two hours, laboratory two hours weekly. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geology Department

GEOL 54052 - GLACIERS AND GLACIATION

(Cross-listed with GEOG 41052, GEOG 51052 and GEOG 71052) Examination of how glacial ice masses change
the shape of the earth’s surface, how they are integral to climate and sea level change and how they pose high risk hazards. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geology Department

GEOL 54070 - SEDIMENTOLOGY AND STRATIGRAPHY

(Cross-listed with GEOL 44070) Students are introduced to the principles regarding the systematics of sedimentary rocks and the relationships between geologic formations at various spatial and temporal scales. Lectures are integrated with readings from the open literature and required labs and field trips. Prerequisite: graduate standing.

4.000 Credit hours
3.000 Lecture hours
2.000 Lab hours
1.000 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Geology Department

GEOL 54074 - PALEOCEANOGRAPHY

(Cross-listed with GEOL 44074) A broad spectrum of geological approaches, including paleontology, geochemistry and stratigraphy is employed to interpret the history of Earth's oceans. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geology Department

GEOL 60080 - RESEARCH ORIENTATION

(Cross-listed with GEOL 70080) Faculty research presentations; thesis/dissertation proposal preparation; discussion of professional organizations, preparation of manuscripts and oral presentation of papers. Prerequisite: Graduate standing.

1.000 Credit hours
1.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geology Department

GEOL 60084 - GEOLOGY GRADUATE STUDENT ORIENTATION

(Slashed with GEOL 70084) Introduction to departmental resources, procedures, and expectations as well as approaches to successfully conduct research at a graduate level. Training and experience in presentation of data and college teaching of applied geology, as well as a discussion forum on professional ethics and
responsibilities. Prerequisite: Graduate standing.
1.000 Credit hours
1.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geology Department

GEOL 60091 - SEMINAR

(Cross-listed with GEOL 70091) (Repeatable for credit) Specialized topics in geology. Precise title to be inserted in schedule of classes. Prerequisite: Graduate standing.
1.000 TO 2.000 Credit hours
1.000 TO 2.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Geology Department

GEOL 60094 - COLLEGE TEACHING OF APPLIED GEOLOGY

(Cross-listed with GEOL 70094) (Repeatable for credit) Training and experience in presentation of data and college teaching of applied geology, as well as a discussion forum on professional ethics and responsibilities. Prerequisite: Graduate standing.
1.000 Credit hours
1.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geology Department

GEOL 60095 - SELECTED TOPICS IN GEOLOGY

(Repeatable for credit) Selected topics presented by visiting professors or one-time offerings presented by regular faculty. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geology Department

GEOL 60098 - RESEARCH

(Repeatable for credit) Research for master's level students. Credits earned may be applied toward degree if department approves. Prerequisite: Graduate standing.
1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

Geology Department
### GEOL 60199 - THESIS I

Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester distributed over several semesters if desired. Prerequisite: Graduate standing.

- 2.000 TO 6.000 Credit hours
- 2.000 TO 6.000 Other hours

Levels: Graduate  
Schedule Types: Masters Thesis

Geology Department

### GEOL 60299 - THESIS II

Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: GEOL 60199 and graduate standing.

- 2.000 Credit hours
- 2.000 Other hours

Levels: Graduate  
Schedule Types: Masters Thesis

Geology Department

### GEOL 61093 - WORKSHOP IN COLLEGE TEACHING

(Repeatable for credit) Workshop in college teaching. Prerequisite: Graduate standing.

- 1.000 TO 2.000 Credit hours
- 1.000 TO 2.000 Other hours

Levels: Graduate  
Schedule Types: Workshop

Geology Department

### GEOL 62011 - HYDROLOGY

(Cross-listed with GEOL 72011) Introduction to hydrologic measurements, properties of water precipitation, evapotranspiration runoff computations, streamflow and flood routing. Prerequisite: graduate standing.

- 3.000 Credit hours
- 3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Geology Department

### GEOL 62068 - ADVANCED HYDROGEOLOGY

(Cross-listed with GEOL 72068) Quantitative approach to occurrence of ground water; methods of investigation, evaluation and development of ground water resources emphasizing optimization and maximal exploitation without environmental changes. Prerequisite: graduate standing.

- 3.000 Credit hours
- 3.000 Lecture hours
### GEOL 62079 - ADVANCED ENGINEERING GEOLOGY

(Cross-listed with GEOL 72079) Role of geology in site selection, design and construction relative to dams, tunnels, highways, slope stability and nuclear power plants. Selected case histories. Lecture three hours weekly. Field trip and term paper required. Prerequisite: GEOL 4/52078 and graduate standing.

3.000 Credit hours
3.000 Lecture hours

### GEOL 62082 - INTRODUCTION TO SOIL MECHANICS

(Cross-listed with GEOL 72082) Engineering properties and engineering behavior of soils including classification properties, compaction permeability strength and compressibility. Lecture three hours and lab two hours weekly. Prerequisite: graduate standing.

4.000 Credit hours
5.000 Other hours

### GEOL 62083 - ROCK SLOPE STABILITY

(Cross-listed with GEOL 72083) Provide information used to recognize, avoid, design for, control and correct slope movements in rocks; determination of shear strength along rock discontinuities; stability analysis of rock slopes. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

### GEOL 62084 - FOUNDATION ENGINEERING

(Cross-listed with GEOL 72084) Seepage and drainage of foundation soils. Subsurface investigations. Principles, design and construction of shallow and deep foundations. Earth retaining structures. Lecture three hours weekly. Prerequisite: GEOL 42078 or 52078 or 72082; and graduate standing.

3.000 Credit hours
3.000 Lecture hours
GEOL 63063 - SEDIMENTARY PETROLOGY

(Cross-listed with GEOL 73063) Classification, texture, composition, provenance and diagenesis of sandstones and carbonates, following review of optical mineralogy. Petrographic microscopy and other laboratory techniques are emphasized. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geology Department

GEOL 63067 - CARBONATE ROCKS

(Cross-listed with GEOL 73067) Basic principles of carbonate sedimentology including composition, classification, origin and distribution of carbonate sediments their diagenesis and lithification. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geology Department

GEOL 64028 - PALEOECOLOGY

(Cross-listed with GEOL 74028) Relationships between ancient organisms and their environments, as interpreted from fossils, enclosing rock strata and recent analogs. Field and laboratory studies. Saturday field trips. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geology Department

GEOL 64030 - SYSTEMATIC INVERTEBRATE PALEONTOLOGY I

(Cross-listed with GEOL 74030) Detailed investigation and examination of important literature concerning taxonomic characters of invertebrate phyla: Protista, Porifera, Cnidaria and Bryozoa. Numerous oral reports, specimen examination. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geology Department

GEOL 64032 - SYSTEMATIC INVERTEBRATE PALEONTOLOGY II

(Cross-listed with GEOL 74032) Detailed investigation and examination of important literature concerning taxonomic characters of invertebrate phyla: Brachiopoda, Mollusca, Arthropoda and Echinodermata. Numerous
oral reports, specimen examination. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geology Department

GEOL 64038 - PALEOLIMNOLOGY

An overview of significant topics and applications in paleolimnology of Holocene (last 10,000 years) and Pleistocene (last 2 million years) records, including current issues in environmental and climatic reconstruction. Extensive reading expected. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geology Department

GEOL 64065 - SEDIMENTOLOGY

(Cross-listed with GEOL 74065) Fluid dynamics, grain transport, sedimentary structures, granulometry, bedform and facies sequences, and facies architecture. Interpretation of continental and marine clastic depositional environments and processes. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geology Department

GEOL 70080 - RESEARCH ORIENTATION

(Cross-listed with GEOL 60080) Faculty research presentations; thesis/dissertation proposal preparation; discussion of professional organizations, preparation of manuscripts and oral presentation of papers. Prerequisite: Doctoral standing.
1.000 Credit hours
1.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geology Department

GEOL 70084 - GEOLOGY GRADUATE STUDENT ORIENTATION

(Slashed with GEOL 60084) Introduction to departmental resources, procedures, and expectations as well as approaches to successfully conduct research at a graduate level. Training and experience in presentation of data and college teaching of applied geology, as well as discussion forum on professional ethics and responsibilities. Prerequisite: Doctoral standing.
1.000 Credit hours
1.000 Lecture hours
**GEOL 70091 - SEMINAR**

(Cross-listed with GEOL 60091) (Repeatable for credit) Specialized topics in geology. Precise title to be inserted in schedule of classes. Prerequisite: Doctoral standing.

1.000 TO 2.000 Credit hours
1.000 TO 2.000 Other hours

**GEOL 70093 - VARIABLE TITLE WORKSHOP IN GEOLOGY**

(Repeatable for credit) Workshop and/or training program, of varying duration focused on a specific professional or disciplinary topic. Prerequisite: Special approval and doctoral standing.

1.000 TO 8.000 Credit hours
1.000 TO 8.000 Other hours

**GEOL 70094 - COLLEGE TEACHING OF APPLIED GEOLOGY**

(Cross-listed with GEOL 60094) (Repeatable for credit) Training and experience in presentation of data and college teaching of applied geology, as well as a discussion forum on professional ethics and responsibilities. Prerequisite: Doctoral standing.

1.000 Credit hours
1.000 Lecture hours

**GEOL 71093 - WORKSHOP IN COLLEGE TEACHING**

(Repeatable for credit) Workshop in college teaching. Prerequisite: Doctoral standing.

1.000 TO 2.000 Credit hours
1.000 TO 2.000 Other hours

**GEOL 72011 - HYDROLOGY**

(Cross-listed with GEOL 62011) Introduction to hydrologic measurements, properties of water precipitation,
evapotranspiration, runoff computations, streamflow and flood routing. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geology Department

**GEOL 72030 - REMOTE SENSING**

(Cross-listed with GEOL 42030 and GEOL 52030 and GEOG 41052 and GEOG 51052 and GEOG 71052) Computer analysis of multispectral satellite datasets. Applications in Terrestrial Earth Science are emphasized. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geology Department

**GEOL 72068 - ADVANCED HYDROGEOLOGY**

Quantitative approach to occurrence of ground water; methods of investigation evaluation and development of ground water resources emphasizing optimization and maximal exploitation without environmental changes. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geology Department

**GEOL 72069 - HYDROGEOCHEMISTRY**

(Cross-listed with GEOL 42069 and GEOL 52069) Processes and evolution of the chemical composition of water in the natural hydrologic cycle. Methods of hydrochemical interpretation applied to ground water and pollution problems. Lecture three hours weekly. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geology Department

**GEOL 72079 - ADVANCED ENGINEERING GEOLOGY**

(Cross-listed with GEOL 62079) Role of geology in site selection, design and construction relative to dams, tunnels, highways, slope stability and nuclear power plants. Selected case histories. Lecture three hours weekly. Field trip and term paper required. Prerequisite: GEOL 4 52078 and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
GEOL 72082 - INTRODUCTION TO SOIL MECHANICS

(Cross-listed with GEOL 62082) Engineering properties and engineering behavior of soils including classification properties, compaction permeability strength and compressibility. Lecture three hours and lab two hours weekly. Prerequisite: doctoral standing.
4.000 Credit hours
5.000 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Geology Department

GEOL 72083 - ROCK SLOPE STABILITY

Provide information used to recognize, avoid design for control and correct slope movements in rocks determination of shear strength along rock discontinuities stability analysis of rock slopes. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geology Department

GEOL 72084 - FOUNDATION ENGINEERING

(Cross-listed with GEOL 62084) Seepage and drainage of foundation soils. Subsurface investigations. Principles design and construction of shallow and deep foundations. Earth retaining structures. Lecture three hours weekly. Prerequisite: GEOL 42078 or 52078 or 42082 or 52082 or 72082; and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geology Department

GEOL 73042 - ENVIRONMENTAL GEOCHEMISTRY

(Cross-listed with GEOL 43042 and GEOL 53042) Explores chemical processes that influence the natural environment including anthropogenic impacts. Topics include atmospheric chemistry and air pollution, energy and climate change, toxic organic compounds, water chemistry and water pollution, metals, soils, sediments and waste disposal. Environmental problem solving using steady state and non-steady state box models, thermodynamics and energy transfer, and chemical reactions and equilibria is emphasized. Required half-day field trip. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
**GEOL 73044 - ENVIRONMENTAL ISOTOPES**

(Cross-listed with GEOL 43044 and GEOL 53044) Deals with the fundamentals of isotope geochemistry and the application of primarily light stable isotopes (H, O, C, N) to earth system processes (involving the hydrosphere, biosphere, and upper geosphere). Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**GEOL 73063 - SEDIMENTARY PETROLOGY**

Classification, texture composition provenance and diagenesis of sandstones and carbonates following review of optical mineralogy. Petrographic microscopy and other laboratory techniques are emphasized. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**GEOL 73067 - CARBONATE ROCKS**

(Cross-listed with GEOL 63067) Basic principles of carbonate sedimentology including composition, classification, origin and distribution of carbonate sediments their diagenesis and lithification. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**GEOL 74028 - PALEOECOLOGY**

(Cross-listed with GEOL 64028) Relationships between ancient organisms and their environments, as interpreted from fossils, enclosing rock strata and recent analogs. Field and laboratory studies. Saturday field trips. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**GEOL 74030 - SYSTEMATIC INVERTEBRATE PALEONTOLOGY I**

(Cross-listed with GEOL 64030) Detailed investigation and examination of important literature concerning
taxonomic characters of invertebrate phyla: Protista, Porifera, Cnidaria and Bryozoa. Numerous oral reports, specimen examination. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geology Department

GEOL 74032 - SYSTEMATIC INVERTEBRATE PALEONTOLOGY II

(Cross-listed with GEOL 64032) Detailed investigation and examination of important literature concerning taxonomic characters of invertebrate phyla: Brachiopoda, Mollusca, Arthropoda and Echinodermata. Numerous oral reports, specimen examination. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geology Department

GEOL 74038 - PALEOLIMNOLOGY

An overview of significant topics and applications in paleolimnology of Holocene (last 10,000 years) and Pleistocene (last 2 million years) records, including current issues in environmental and climatic reconstruction. Extensive reading expected. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geology Department

GEOL 74052 - GLACIERS AND GLACIATION

(Cross-listed with GEOG 41052, GEOG 51052 and GEOG 71052) Examination of how glacial ice masses change the shape of the earth’s surface, how they are integral to climate and sea level change and how they pose high risk hazards. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geology Department

GEOL 74065 - SEDIMENTOLOGY

(Cross-listed with GEOL 64065) Fluid dynamics, grain transport, sedimentary structures, granulometry, bedform and facies sequences and facies architecture. Interpretation of continental and marine clastic depositional environments and processes. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture

Geology Department

**GEOL 80091 - SEMINAR IN APPLIED GEOLOGY**

(Repeatable for credit) Specialized topics in applied geology. Precise title to be inserted in schedule of classes. Prerequisite: Doctoral standing.
1.000 TO 2.000 Credit hours
1.000 TO 2.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Geology Department

**GEOL 80095 - ADVANCED TOPICS IN GEOLOGY**

(Repeatable for credit) Advanced topics presented by visiting professors or one-time offerings presented by regular faculty. Prerequisite: Special approval and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Geology Department

**GEOL 80098 - RESEARCH**

(Repeatable for credit) Research for doctoral students. Credits earned may be applied toward degree if department approves. Prerequisite: Doctoral standing.
1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

Geology Department

**GEOL 80199 - DISSERTATION I**

(Repeatable for credit) Doctoral dissertation, for which registration in at least two semesters is required first of which will be semester in which dissertation work is begun and continuing until the completion of 30 hours. Prerequisite: Admission to candidacy for doctoral degree and doctoral standing.
15.000 Credit hours
15.000 Other hours

Levels: Graduate
Schedule Types: Dissertation

Geology Department

**GEOL 80299 - DISSERTATION II**
Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation, continuing until all degree requirements are met. Prerequisite: GEOL 80199 and doctoral standing.

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<th>Schedule Types</th>
<th>Department</th>
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<tr>
<td>Graduate</td>
<td>Dissertation</td>
<td>Geology Department</td>
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**GER 11201 - ELEMENTARY GERMAN I**

An introduction to the German language in the context of the cultures of German-speaking lands. Prerequisite: None.

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Levels: Undergraduate

Schedule Types: Lecture

Modern-Classical Lang Studies Department

**GER 11202 - ELEMENTARY GERMAN II**

A continuation of the introduction to the German language in the context of the cultures of German-speaking lands. Prerequisite: GER 11201.

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Levels: Undergraduate

Schedule Types: Lecture

Modern-Classical Lang Studies Department

**GER 21201 - INTERMEDIATE GERMAN I**

Continued development of speaking, listening, reading and writing skills using a variety of cultural materials. Prerequisite: GER 11202.

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Levels: Undergraduate

Schedule Types: Lecture

Modern-Classical Lang Studies Department

**GER 21202 - INTERMEDIATE GERMAN II**

Continuation of GER 21201. Prerequisite: GER 21201.

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Levels: Undergraduate

Schedule Types: Lecture

Modern-Classical Lang Studies Department
GER 31095 - SPECIAL TOPICS

(Repeatable for credit) Topic announced in schedule of classes. Prerequisite: Junior standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

GER 31201 - INTENSIVE GERMAN GRAMMAR

A systematic approach to German grammar and syntax. Prerequisite: GER 21202.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

GER 31211 - GERMAN COMPOSITION AND CONVERSATION

Grammar review and practice in writing and speaking German. Prerequisite: GER 21202 and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

GER 31215 - GERMAN PHONETICS AND DICTION

Study of the German sound system with emphasis on pronunciation and intonation. Reading and performance of a series of skits and short plays. Prerequisite: GER 21202.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

GER 31231 - TRANSLATION PRACTICE: GERMAN

Translation practice with German texts using principles and techniques learned in the lecture class. Corequisite: TRST 30230.
1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
**GER 31240 - CONVERSATION FOR BUSINESS AND SPECIAL PURPOSES: GERMAN**

Introduction to the special vocabulary of business and other special subject areas; introduces the concept of language for special purposes and emphasizes the use of special vocabulary in conversations in business and other settings. Prerequisite: GER 31211.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**GER 31303 - INTRODUCTION TO GERMAN LITERATURE**

Introduction to German literature and textual analysis. Prerequisite: GER 21202 and GER 31201.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**GER 31421 - GERMAN CIVILIZATION**

A survey of German history and intellectual life to 1918; taught in German. Prerequisite: Six hours upper division German courses.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**GER 41095 - SPECIAL TOPICS**

(Repeatable for credit)(Cross-listed with GER 51095) Topic announced in schedule of classes. Prerequisite: Senior standing.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**GER 41096 - INDIVIDUAL INVESTIGATION**

(Repeatable for credit)(Cross-listed with GER 51096) Independent investigation of problems in German language or literature. Prerequisite: 6 hours of upper division German and special approval of the department chairperson.

1.000 TO 3.000 Credit hours
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Credit Hours</th>
<th>Lecture Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GER 41211</td>
<td>ADVANCED GERMAN COMPOSITION AND CONVERSATION</td>
<td>Advanced practice in speaking and writing German. Prerequisite: GER 31211.</td>
<td>3.000</td>
<td></td>
</tr>
<tr>
<td>GER 41216</td>
<td>CONTEMPORARY GERMAN CULTURE</td>
<td>(Cross-listed with GER 51216) A study of selected sociological, political, cultural and economic issues in contemporary German-speaking countries using readings, films and legal documents as the basis for discussions. Taught in German. Prerequisite: Six hours of upper division German courses.</td>
<td>3.000</td>
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</tr>
<tr>
<td>GER 41230</td>
<td>ADVANCED TRANSLATION PRACTICE: GERMAN</td>
<td>Theory and practice course that discusses translation theory and emphasizes German-to-English translation of selected texts in business, technology, medicine and law. Prerequisite: GER 31231.</td>
<td>3.000</td>
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</tr>
<tr>
<td>GER 41240</td>
<td>BUSINESS AND SPECIAL TEXTS: GERMAN</td>
<td>Survey of the typical text types of business in the German culture and language. Practice sessions focus on reading and understanding specialized texts, and on the translation and composition of selected special texts in German. Prerequisite: GER 31211.</td>
<td>3.000</td>
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</tbody>
</table>
GER 41330 - TWENTIETH-CENTURY GERMAN AUTHORS
(Cross-listed with GER 51330) A survey of the major movements and authors of the twentieth century. Prerequisite: Special approval. 3.000 Credit hours 3.000 Lecture hours

GER 41332 - GERMAN LITERATURE BY WOMEN
(Cross-listed with GER 51332) Readings of works by female German authors. Taught in German. Prerequisite: Junior standing. 3.000 Credit hours 3.000 Lecture hours

GER 41334 - THE GERMAN NOVELLA
(Cross-listed with GER 51334) Development of the German novella from the eighteenth century to the present. Readings of major works lectures analyses taught in German. Prerequisite: Special approval. 3.000 Credit hours 3.000 Lecture hours

GER 41338 - GERMAN POETRY
An examination of the nature of poetry with particular attention to its development in Germany, Austria and Switzerland. Taught in German. Prerequisite: Six hours of upper division German courses. 3.000 Credit hours 3.000 Lecture hours
### GER 41340 - HISTORY OF GERMAN LITERATURE TO 1750

A history of the development of German literature from the Germanic tribes through the Age of Enlightenment (the first half of the eighteenth century). Prerequisites: GER 31303 and 31421.

- 3.000 Credit hours
- 3.000 Lecture hours

**Levels:** Undergraduate  
**Schedule Types:** Lecture

Modern-Classical Lang Studies Department

### GER 41341 - HISTORY OF GERMAN LITERATURE 1750 TO THE PRESENT

A history of the development of German literature from the Age of Sensibility (the second half of the eighteenth century) to the present. Prerequisites: GER 31303 and 31421.

- 3.000 Credit hours
- 3.000 Lecture hours

**Levels:** Undergraduate  
**Schedule Types:** Lecture

Modern-Classical Lang Studies Department

### GER 41365 - CLASSICAL GERMAN LITERATURE

(Cross-listed with GER 51365) Reading and critical analysis of major works of the classical age with emphasis on Goethe. Prerequisite: Special approval.

- 3.000 Credit hours
- 3.000 Lecture hours

**Levels:** Undergraduate  
**Schedule Types:** Lecture

Modern-Classical Lang Studies Department

**Course Attributes:**  
Experiential Learning Requirem, Writing Intensive Course

### GER 41399 - RESEARCH PROJECT IN GERMAN LITERATURE

(Repeatable for credit) Thesis or other independent study. Prerequisite: 6 hours at the 40000-level.

- 3.000 Credit hours  
- 3.000 Other hours

**Levels:** Undergraduate  
**Schedule Types:** Senior Project/Honors Thesis

Modern-Classical Lang Studies Department

**Course Attributes:**  
Experiential Learning Requirem

### GER 41731 - SURVEY OF GERMAN CINEMA

(Cross-listed with GER 51731) A survey of major contributions to the German cinema from the beginnings to the present; taught in German. Prerequisite: Six hours of upper division German courses.
GER 51095 - SPECIAL TOPICS

(Repeatable for credit) (Cross-listed with GER 41095) Topic announced in schedule of classes. Prerequisite: Graduate standing.
1.000 TO 4.000 Credit hours
1.000 TO 4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

GER 51096 - INDIVIDUAL INVESTIGATION

(Repeatable for credit) (Cross-listed with GER 41096) Independent investigation of problems in German language or literature. Permission of the department chair required. Prerequisite: Graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Modern-Classical Lang Studies Department

GER 51212 - STYLISTICS

Development of written German style through selected readings, textual analysis and stylistic exercises. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

GER 51216 - CONTEMPORARY GERMAN CULTURE

(Cross-listed with GER 41216) A study of selected sociological, political, cultural and economic issues in contemporary German-speaking countries, using readings, films and legal documents as the basis for discussion. Taught in German. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department
GER 51330 - 20TH-CENTURY GERMAN AUTHORS

(Cross-listed with GER 41330) A survey of the major movements and authors of the twentieth century. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

GER 51332 - GERMAN LITERATURE BY WOMEN

(Cross-listed with GER 41332) Readings of works by female German authors. Taught in German. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

GER 51334 - THE GERMAN NOVELLA

(Cross-listed with GER 41334) Development of the German novella from the 18th century to the present. Readings of major works, lectures, analyses; taught in German. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

GER 51340 - HISTORY OF GERMAN LITERATURE TO 1750

A history of the development of German literature from the Germanic tribes through the Age of Enlightenment (the first half of the eighteenth century). Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

GER 51341 - HISTORY OF GERMAN LITERATURE 1750 TO THE PRESENT

A history of the development of German literature from the Age of Sensibility (the second half of the eighteenth century) to the present. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
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<tr>
<td>GER 51365</td>
<td>CLASSICAL GERMAN LITERATURE</td>
<td>(Cross-listed with GER 41365) Reading and critical analysis of major works of the classical age with emphasis on Goethe. Prerequisite: Graduate standing.</td>
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<td>3.000 Credit hours</td>
</tr>
<tr>
<td>GER 51731</td>
<td>SURVEY OF GERMAN CINEMA</td>
<td>(Cross-listed with GER 41731) A survey of major contributions to the German cinema from the beginnings to the present; taught in German. Prerequisite: Graduate standing.</td>
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<td>3.000 Credit hours</td>
</tr>
<tr>
<td>GER 61001</td>
<td>GRADUATE RESEARCH AND WRITING IN GERMAN</td>
<td>Individual instruction and assistance with problems encountered in academic research and writing in German. Required of all graduate students in their first semester of graduate work. Prerequisite: Graduate standing.</td>
</tr>
<tr>
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<td>3.000 Credit hours</td>
</tr>
<tr>
<td>GER 61010</td>
<td>THE PRACTICE OF GERMAN TRANSLATION</td>
<td>Students apply linguistic and communication science concepts to case studies of language mediation. Prerequisite: graduate standing. Corequisite: TRST 60010.</td>
</tr>
<tr>
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<td>2.000 Credit hours</td>
</tr>
<tr>
<td>GER 61091</td>
<td>VARIABLE TOPIC SEMINAR</td>
<td>(Repeatable for credit) Topic announced in schedule of classes. Prerequisite: Graduate standing.</td>
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<td>3.000 Credit hours</td>
</tr>
</tbody>
</table>
3.000 Other hours

**Levels:** Graduate  
**Schedule Types:** Seminar

Modern-Classical Lang Studies Department

### GER 61199 - THESIS I

Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester distributed over several semesters if desired.  
Prerequisite: Graduate standing.  
2.000 TO 6.000 Credit hours  
2.000 TO 6.000 Other hours

**Levels:** Graduate  
**Schedule Types:** Masters Thesis

Modern-Classical Lang Studies Department

### GER 61240 - LITERARY AND CULTURAL TRANSLATION

Translating documents from a variety of literary and cultural sources, including literature, expository and journalistic prose, scholarly treatises and essays. Translation into German will also be emphasized.  
Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours

**Levels:** Graduate  
**Schedule Types:** Lecture

Modern-Classical Lang Studies Department

### GER 61250 - COMMERCIAL, LEGAL AND DIPLOMATIC TRANSLATION

An introduction to methods and resources for the translation of commercial, economic, financial, legal, diplomatic and governmental documents. Prerequisite: TRST 60010 and graduate standing.  
3.000 Credit hours  
3.000 Lecture hours

**Levels:** Graduate  
**Schedule Types:** Lecture

Modern-Classical Lang Studies Department

### GER 61251 - SCIENTIFIC, TECHNICAL AND MEDICAL TRANSLATION

An introduction to methods and resources for the translation of scientific, technical, industrial and medical documents. Prerequisite: TRST 60010 and graduate standing.  
3.000 Credit hours  
3.000 Lecture hours

**Levels:** Graduate  
**Schedule Types:** Lecture

Modern-Classical Lang Studies Department
GER 61299 - THESIS II

Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: GER 61199 and graduate standing.
2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Modern-Classical Lang Studies Department

GER 61350 - SEMINAR ON THE LYRIC

Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

GER 61398 - RESEARCH

(Repeatable for credit) Research for master's level graduate students. Credit toward degree requirements may be given with department approval. Prerequisite: Special approval and graduate standing.
1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

Modern-Classical Lang Studies Department

GER 61901 - READING GERMAN FOR GRADUATE STUDENTS

Introduction to the fundamentals of German grammar for graduate students. Practice in reading and translation. Prerequisite: Graduate standing.
4.000 Credit hours
4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

GER 61902 - READING GERMAN FOR GRADUATE STUDENTS

Continued practice in reading and translation. Independent study of scholarly texts in the student's own discipline. Prerequisite: GER 61901 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
GER 61979 - CASE STUDY IN TRANSLATION

Students will be responsible for a major translation and a terminology glossary as well as a critical analysis of the source text, the problems encountered during the translation process and the strategies used to solve them. Prerequisite: Special approval and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

GERO 14029 - INTRODUCTION TO GERONTOLOGY

Interdisciplinary approach to the study of the aging process. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Course Attributes:
Diversity Course-Domestic, Kent Core-Social Sciences, LER-Social Sciences, Trnfr Module-Social Sciences

GERO 30656 - PSYCHOLOGY OF AGING

(Cross-listed with PSYC 30656) Exploration of basic research and theory on the psychological consequences of aging and psychological factors that affect the behavior of older persons. Prerequisite: PSYC 11762.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

GERO 41095 - SPECIAL TOPICS IN GERONTOLOGY

(Repeatable for credit) (Cross-listed with GERO 51095) Discussion of a major topic within a specific field of gerontology. Prerequisite: None.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

GERO 41096 - INDIVIDUAL INVESTIGATION

(Repeatable for credit) Independent study in gerontology. Prerequisite: Written permission from instructor.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Lifespan Dev and Educ Sciences Department

### GEROW 43092 - PRACTICUM IN NURSING HOME ADMINISTRATION I

Internship in nursing home care facility. One, 3 hour, on-campus seminar every three weeks (meets five times). Weekly one hour online lectures and discussions also take place. A minimum of 35 clock hours per week at internship site is required. Prerequisite: human development and family studies (HDFS) majors; and senior standing; and special approval.

6.000 Credit hours
2.000 Lecture hours
33.330 Other hours

Levels: Undergraduate
Schedule Types: Lecture, Practicum or Internship

Lifespan Dev and Educ Sciences Department

Course Attributes:
Experiential Learning Requirem

### GEROW 43192 - PRACTICUM IN NURSING HOME ADMINISTRATION II

Internship in nursing home care facility. One, 3 hour, on-campus seminar every three weeks (meets five times). One hour online lectures and discussions are held each week. A minimum of 35 clock hours per week is required. Prerequisite: human development and family studies (HDFS) major; and senior standing; and special approval.

6.000 Credit hours
2.000 Lecture hours
33.330 Other hours

Levels: Undergraduate
Schedule Types: Lecture, Practicum or Internship

Lifespan Dev and Educ Sciences Department

Course Attributes:
Experiential Learning Requirem

### GEROW 44030 - ADULT DEVELOPMENT AND AGING

(Cross-listed with GEROW 54030) Examines developmental processes across adulthood. Evaluation of theoretical models and scientific literature. Prerequisite: admission into the HDFS Professional Phase.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

Course Attributes:
## Writing Intensive Course

### GER 44031 - SOCIAL POLICY AND COMMUNITY RESOURCES FOR OLDER ADULTS

Overview of national, state and local public policy affecting older adults. Legislation, funding, planning and the service delivery system are examined. Prerequisite: GERO none.

3.000 Credit hours
3.000 Lecture hours

**Levels:** Undergraduate  
**Schedule Types:** Lecture

Lifespan Dev and Educ Sciences Department

### GER 44032 - LONG TERM CARE ADMINISTRATION

(Cross-listed with GER 54032) Presents an overview and introduction to the principles of long-term care (LTC) administration and other administration options. Prerequisites: nursing (NURS), human development and family studies (HDFS), integrated life science (ILS) or integrated health science (IHS) majors; junior or senior standing.

3.000 Credit hours
3.000 Lecture hours

**Levels:** Undergraduate  
**Schedule Types:** Lecture

Lifespan Dev and Educ Sciences Department

### GER 44092 - PRACTICUM IN GERONTOLOGY

(repeatable for a total of 6 credit hours.) Observation and participation in long-term care or community agencies serving older adults. One class discussion per week. Major GPA of 2.250 required. Prerequisite: HDFS 44018; human development and family studies (HDFS) majors and senior standing; and special approval.

3.000 OR 6.000 Credit hours  
1.000 Lecture hours  
2.000 OR 5.000 Other hours

**Levels:** Undergraduate  
**Schedule Types:** Practicum or Internship

Lifespan Dev and Educ Sciences Department

**Course Attributes:**  
Experiential Learning Requirem

### GER 51095 - SPECIAL TOPICS IN GERONTOLOGY

(Repeatable for credit) (Cross-listed with GER 41095) Discussion of a major topic or topics within the field of gerontology. Prerequisite: Graduate standing.

1.000 TO 4.000 Credit hours  
1.000 TO 4.000 Lecture hours

**Levels:** Graduate  
**Schedule Types:** Lecture

Lifespan Dev and Educ Sciences Department
GERO 51096 - INDIVIDUAL INVESTIGATION IN GERONTOLOGY

(Repeatable for credit) Independent study in the area of gerontology. Prerequisite: Graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Lifespan Dev and Educ Sciences Department

GERO 54030 - ADULT DEVELOPMENT AND AGING

(Cross-listed with GERO 44030) Examines developmental processes across adulthood. Evaluation of theoretical models and scientific literature. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

GERO 54032 - LONG TERM CARE ADMINISTRATION

(Slashed with GERO 44032) Presents an overview and introduction to the principles of long-term care (LTC) administration and other administration options. Prerequisite: graduate standing and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

GERO 61091 - SEMINAR IN GERONTOLOGY

(Repeatable for credit) Seminar dealing with topics in the field of gerontology. Prerequisite: Graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Lifespan Dev and Educ Sciences Department

GERO 61191 - INTERDISCIPLINARY SEMINARY IN GERONTOLOGY

(Repeatable for credit) Course is designed to assist students in developing the knowledge and skills needed to understand the major issues in gerontological theory, research and practice from a multi-disciplinary perspective. Prerequisite: Graduate standing and special approval.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar
**GERO 63092 - PRACTICUM IN NURSING HOME ADMINISTRATION I**

Internship in nursing home care facility. One, 3 hour, on-campus seminar every three weeks (meets five times). Weekly one hour online lectures and discussions also take place. A minimum of 35 clock hours per week at internship site is required. Prerequisites: GERO 54032; and graduate standing; and special approval.

6.000 Credit hours
2.000 Lecture hours
33.330 Other hours

Levels: Graduate
Schedule Types: Lecture, Practicum or Internship

**GERO 63192 - PRACTICUM IN NURSING HOME ADMINISTRATION II**

Internship in nursing home care facility. One, 3 hour, on-campus seminar every three weeks (meets five times). One hour online lectures and discussions are held each week. A minimum of 35 clock hours per week is required. Prerequisites: GERO 54032 and GERO 63092; and graduate standing; and special approval.

6.000 Credit hours
2.000 Lecture hours
33.330 Other hours

Levels: Graduate
Schedule Types: Lecture, Practicum or Internship

**GMD 80121 - PHYSICAL ASSESSMENT AND DIAGNOSIS**

Physiology and physical assessment are coordinated to allow students to integrate the underlying physiologic processes with physical diagnostic findings. Physiologic is a study of the basic concepts of normal organ and organ system function. Emphasis is placed on regulatory functions of each organ or system as well as the contribution of each to the whole body homeostasis. Physical diagnosis combines the patient’s symptoms and signs to arrive at a diagnosis of disease. Focus is on total body examination using the traditional processes of inspection, palpation, percussion and auscultation. Prerequisite: student must be enrolled in the Podiatric Medicine program.

3.000 Credit hours
0.730 Lecture hours
2.270 Lab hours

Levels: Professional
Schedule Types: Laboratory, Lecture

Podiatric Medicine Department

**GMD 80314 - NEUROLOGY**

A comprehensive study of neurological diseases that are pertinent to treatment of the podiatric patient. Includes etiologies, diagnosis and treatment of the neurologic diseases. Prerequisite: student must be enrolled in the Podiatric Medicine program.

2.000 Credit hours
2.000 Lecture hours

Levels: Professional
### GMD 80315 - DERMATOLOGY

Series of lectures on dermatologic manifestations of systemic diseases. Includes the etiology, diagnosis, treatment and management of dermatologic disorders. Prerequisite: student must be enrolled in the Podiatric Medicine program.

- 2.000 Credit hours
- 2.000 Lecture hours

**Levels:** Professional  
**Schedule Types:** Lecture

Podiatric Medicine Department

### GMD 80316 - GENERAL MEDICINE

Series of lectures dealing with etiology, recognition and treatment of medical problems that are common to podiatric patients. The lectures include those dealing with organ systems such as renal, cardiovascular, musculoskeletal, endocrine, digestive, etc., and their relationship to podiatric medicine. Particular attention is given to the medical clearance of the surgical patient and the care of non-podiatric emergencies. Prerequisite: student must be enrolled in the Podiatric Medicine program.

- 4.000 Credit hours
- 4.000 Lecture hours

**Levels:** Professional  
**Schedule Types:** Lecture

Podiatric Medicine Department

### GMD 80326 - GENERAL MEDICINE

A series of lectures dealing with etiology, recognition and treatment of medical problems that are common to podiatric patients. Lectures include those dealing with organ systems such as renal, cardiovascular, musculoskeletal, endocrine, digestive, etc., and their relationship to podiatric medicine. Particular attention is given to the medical clearance of the surgical patient and the care of non-podiatric emergencies. Prerequisite: student must be enrolled in the Podiatric Medicine program.

- 4.000 Credit hours
- 4.000 Lecture hours

**Levels:** Professional  
**Schedule Types:** Lecture

Podiatric Medicine Department

### GMD 80327 - BEHAVIORAL MEDICINE

Behavioral medicine is a series of lectures on major topics in the area including mood and anxiety disorders, alcoholism, substance abuse, psychoses and pain management. The presentations relate the relevance to the practice of podiatry. Prerequisite: student must be enrolled in the Podiatric Medicine program.

- 1.000 Credit hours
- 1.000 Lecture hours

**Levels:** Professional  
**Schedule Types:** Lecture
Podiatric Medicine Department

**GMD 80328 - WOMEN'S HEALTH**

Seminar covering important areas unique to women including pregnancy, contraception, infertility, cardiovascular health, osteoporosis and menopause. Prerequisite: student must be enrolled in the Podiatric Medicine program.
1.000 Credit hours
1.000 Lecture hours

Levels: Professional
Schedule Types: Lecture

Podiatric Medicine Department

Modern-Classical Lang Studies Department

**GRE 14201 - ELEMENTARY CLASSICAL GREEK I**

An introduction to the classical Greek language in the context of ancient Greek culture. Prerequisite: None.
4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**GRE 14202 - ELEMENTARY CLASSICAL GREEK II**

A continuation of the introduction to the classical Greek language in the context of ancient Greek culture. Prerequisite: GRE 14201.
4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

Modern-Classical Lang Studies Department

**GRE 24201 - INTERMEDIATE CLASSICAL GREEK I:READINGS**

Excerpts from classical Greek literature with emphasis on translation into English. Prerequisite: GRE 14202.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**GRE 24202 - INTERMEDIATE CLASSICAL GREEK II:READINGS**

Excerpts from classical Greek literature with emphasis on both prose (e.g. Plato) and poetry (e.g. Euripides). Prerequisite: GRE 24201.
3.000 Credit hours
3.000 Lecture hours
GRE 34370 - PLATO: APOLOGY AND PHAEDO

Readings in the original Greek of Plato's dialogues centering on the trial, conviction and death of Socrates. Prerequisite: GRE 24202.
3.000 Credit hours
3.000 Lecture hours

GRE 34371 - HOMER

Selections from the Iliad or Odyssey studied from a literary and grammatical standpoint. Prerequisite: GRE 24202.
3.000 Credit hours
3.000 Lecture hours

GRE 40393 - VARIABLE TITLE WORKSHOP

(Repeatable for credit) (Cross-listed with GRE 50393) Workshops individually designed to provide instruction and training in specific areas of Greek studies. S/U graded. Prerequisite: Department permission.
1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

GRE 44096 - INDIVIDUAL INVESTIGATION

(Repeatable for credit) Investigation of problems in Greek literature or linguistics. Prerequisite: special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

GRE 50393 - VARIABLE TITLE WORKSHOP IN GREEK

(Repeatable for credit) (Cross-listed with GRE 40393) Variable topic offered as need arises to train in specific...
area of field. Prerequisite: Graduate standing and special approval.
2.000 TO 4.000 Credit hours
2.000 TO 4.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Modern-Classical Lang Studies Department

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<tr>
<td>HDFS 14027</td>
<td>INTRODUCTION TO HUMAN DEVELOPMENT AND FAMILY STUDIES</td>
<td>Introduction to human services related to human development and family studies, the career opportunities available and the skills required to succeed in the field. Prerequisite: None.</td>
<td>Graduate</td>
<td>Workshop</td>
<td>2.000</td>
<td>2.000 Lecture hours</td>
</tr>
<tr>
<td>HDFS 24011</td>
<td>INTERPERSONAL RELATIONSHIPS AND FAMILIES</td>
<td>(Equivalent to SOC 24011) Exploration of the sociological nature of families across the lifespan, focusing on structure, diversity and life course processes such as dating, mate selection, cohabitation, marriage, parenthood, divorce, remarriage, singlehood, widowhood, parent-child interactions, sexual orientation, inequality and difference. Prerequisite: None.</td>
<td>Undergraduate</td>
<td>Lecture</td>
<td>3.000</td>
<td>3.000 Lecture hours</td>
</tr>
<tr>
<td>HDFS 24012</td>
<td>CHILD DEVELOPMENT</td>
<td>General development of the child from prenatal through middle childhood. Prerequisite: none.</td>
<td>Undergraduate</td>
<td>Lecture</td>
<td>3.000</td>
<td>3.000 Lecture hours</td>
</tr>
<tr>
<td>HDFS 24013</td>
<td>EARLY ADOLESCENCE</td>
<td>Examines the fundamental transitions, social contexts and psychosocial processes involved in human development from ages 10 through 15. Implications for working with this age group within schools, human services agencies and youth development programs. Prerequisite: None.</td>
<td>Undergraduate</td>
<td>Lecture</td>
<td>3.000</td>
<td>3.000 Lecture hours</td>
</tr>
</tbody>
</table>
HDFS 24095 - SPECIAL TOPICS IN HUMAN DEVELOPMENT AND FAMILY STUDIES

(Repeatable for credit) Discussion of a major topic within human development or family studies. Prerequisite: HDFS 24011.
1.000 TO 4.000 Credit hours
1.000 TO 4.000 Lecture hours

HDFS 25512 - MANAGEMENT OF FAMILY RESOURCES

Management as applied to individuals, families and human service professionals. Prerequisite: HDFS 24011.
3.000 Credit hours
3.000 Lecture hours

HDFS 34031 - CULTURAL DIVERSITY: IMPLICATIONS FOR THE HELPING PROFESSIONS

This class is designed to enhance the competence and success of students planning to work in human services. Learning how different cultural backgrounds influence the perceptions and behaviors of clients in the human service setting is emphasized. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

HDFS 41093 - VARIABLE TOPIC WORKSHOP: HUMAN DEVELOPMENT AND FAMILY STUDIES

(Repeatable for credit) Workshop setting dealing with a topic or topics in human development and family studies. Learning experiences are provided in a wide range of areas. Prerequisite: None.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

HDFS 41095 - SPECIAL TOPICS IN HUMAN DEVELOPMENT AND FAMILY STUDIES

(Repeatable for credit) (Cross-listed with HDFS 51095) Discussion of a major topic within human development
or family studies. Prerequisite: None.
1.000 TO 4.000 Credit hours
1.000 TO 4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**HDFS 41096 - INDIVIDUAL INVESTIGATION**

(Repeatable for credit) (Cross-listed with HDFS 51096) Independent study in human development and family studies. Prerequisite: Written special approval from instructor.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Lifespan Dev and Educ Sciences Department

**HDFS 42092 - HUMAN DEVELOPMENT AND FAMILY STUDIES STUDY AWAY EXPERIENCE**

(Repeatable twice for credit) Exploration of human development and family studies-related topics while visiting various cultural contexts. Prerequisite: 2.750 cumulative GPA and special approval.
3.000 Credit hours
9.000 Other hours

Levels: Undergraduate
Schedule Types: Field Experience

Lifespan Dev and Educ Sciences Department

Course Attributes:
Experiential Learning Requirem

**HDFS 44018 - PROFESSIONAL DEVELOPMENT IN HUMAN DEVELOPMENT/FAMILY STUDIES**

Preparation of students for professional work experiences as well as providing an opportunity to discuss recent developments in the fields of human development, family studies and gerontology. Prerequisite: admission into the HDFS Professional Phase and senior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**HDFS 44020 - ADOLESCENT DEVELOPMENT**

(Cross-listed with HDFS 54020) Study of adolescent development with emphasis on forces related to adolescent behavior in the family and society. Evaluation of current research. Prerequisite: admission into the HDFS Professional Phase.
3.000 Credit hours
3.000 Lecture hours
HDFS 44021 - FAMILY INTERVENTION ACROSS THE LIFESPAN

(Cross-listed with HDFS 54021) Evaluation of research and theoretical models in the area of family intervention. Focus on strategies for assisting families in coping with a variety of critical issues over the family life cycle. Prerequisite: admission into the HDFS Professional Phase.
3.000 Credit hours
3.000 Lecture hours

HDFS 44022 - CHANGING ROLES OF MEN AND WOMEN

A study of roles of men and women, past, present and future. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

HDFS 44023 - BUILDING FAMILY STRENGTHS

(Cross-listed with HDFS 54023) The Building Family Strengths Model builds upon family life potential; based on extensive research emphasizing identified family strengths. Prerequisite: admission into the HDFS Professional Phase.
3.000 Credit hours
3.000 Lecture hours

HDFS 44028 - PARENT-CHILD RELATIONSHIPS

(Cross-listed with HDFS 54028) Study of parent-child relationships across the life span and within various contexts. Emphasis on the process of socialization and determinants of parent-child relationships based on current research. Prerequisite: admission into the HDFS Professional Phase.
3.000 Credit hours
3.000 Lecture hours

HDFS 44029 - FAMILY POLICY
(Cross-listed with HDFS 54029) Understanding federal, state and local policy issues affecting families. Role of family life educator in promoting a family-friendly perspective in policy making. Prerequisite: admission into the HDFS Professional Phase.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**HDFS 44030 - FAMILY LIFE EDUCATION METHODOLOGY**

Developing teaching methods and techniques for family life education and the study of family life education content areas. Prerequisite: admission into the HDFS Professional Phase.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**HDFS 44032 - NONPROFIT FUNDRAISING AND GRANTWRITING**

Provides comprehensive preparation in planning, seeking and acquiring funding from available resources in supporting the mission of nonprofit human service agencies. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**HDFS 44033 - COMMUNITY OUTREACH IN NONPROFIT MANAGEMENT**

An overview of nonprofit organizations at the local, national and international levels, including how to start and manage one. A comprehensive examination of the Board of Directors, advocacy and lobbying, program development, mission, vision and strategic goals, philanthropic fundraising and the financial management process, as well as the legal aspects. In addition, students will study service learning and complete a Field Experience at a nonprofit organization. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

Course Attributes:
Experiential Learning Requirem

**HDFS 44034 - PRINCIPLES AND PRACTICES OF NONPROFIT MANAGEMENT**

An overview of nonprofit organizations including the areas of risk management, mentoring, cultural
competence, social entrepreneurship, and how to effectively manage paid staff and volunteers. In addition, students will learn about earned income strategies and the marketing-communication process, including the use of technology. The course will also cover leadership, communication and conflict resolution skills, Other areas of study include accountability and transparency, ethical behavior, building capacity, change management, and the importance of collaborations and mergers and government support in the sector. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

HDFS 44035 - ASSESSMENT AND STRATEGIES IN CASE MANAGEMENT

An examination of the evaluation of client needs and assessment of client condition. Course emphasizes interviewing as a major assessment strategy. Prerequisites: admission into the HDFS Professional Phase.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

HDFS 44036 - GENERAL CASE MANAGEMENT METHODS

Examination of case management processes and strategies, with focus on community resources to meet client needs in the human service setting. Prerequisite: admission into the HDFS Professional Phase.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

HDFS 44037 - POSITIVE YOUTH DEVELOPMENT

Examines individual, family, school and community characteristics that comprise developmental assets contributing to positive youth development (PYD). Definitions and descriptions of PYD approaches are examined as well as evaluations of program effectiveness. Common elements of PYD programs are explored, such as emphasizing youths' strengths, providing opportunities to learn healthy behaviors, promoting positive peer relationships, connecting youth with caring adults, empowering youth to assume leadership roles, and challenging youth in ways that build their competence. Implications for professional child and youth work are discussed. Prerequisite: HDFS 44020 and admission into the HDFS Professional Phase.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

HDFS 44038 - PROFESSIONAL CHILD AND YOUTH WORK PRACTICE

Provides students with an understanding of the historical and current methodologies and organizational
structures of professional child and youth work practice, emphasizing a synthesis of previous and new learning regarding five domains of competence (professionalism, cultural and human diversity, applied human development, relationship and communication and developmental practice methods). Practice issues in community-based and out-of-home care settings as well as work with various child and youth populations are explored. Prerequisites: HDFS 34031 and 44035 and 44037; and HED 34060; and admission into the HDFS Professional Phase.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**HDFS 44039 - BERREAVEMENT, TRAUMA AND OTHER LOSSES**

Exploration of the impact of death, trauma and other losses on individuals and families across the lifespan. Consideration of gender, social and cultural context. Implications for human services professionals. Prerequisite: HDFS 24011.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**HDFS 44092 - PRACTICUM IN HUMAN DEVELOPMENT AND FAMILY STUDIES**

(Repeatable for credit) (Cross-listed with HDFS 54092) Observation and participation in child, family and social service agencies. One class discussion per week. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned schoolagency before the first day of the semester in which student teaching internship will take place. Major GPA of 2.250 is required. Prerequisite: HDFS 44018; and admission into the HDFS Professional Phase; and senior standing; and special approval.

3.000 TO 6.000 Credit hours
1.000 Lecture hours
14.000 TO 35.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Lifespan Dev and Educ Sciences Department

Course Attributes:
Experiential Learning Requirem

**HDFS 44192 - INTERNSHIP IN HUMAN DEVELOPMENT AND FAMILY STUDIES-CASE MANAGEMENT I**

(Repeatable for credit) Supervised field experience in a human service agency. Joint university-agency supervision. Prerequisites: junior standing and admission into HDFS Professional Phase. Corequisite: HDFS 44035.

3.000 TO 6.000 Credit hours
3.000 TO 6.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship
HDFS 44292 - INTERNSHIP IN HUMAN DEVELOPMENT AND FAMILY STUDIES-CASE MANAGEMENT II

(Repeatable for credit) Continued supervised field experience in a human service agency. Joint university-agency supervision. Prerequisite: HDFS 44192; and junior standing; and admission into the HDFS Professional Phase. Corequisite: HDFS 44036.
3.000 TO 6.000 Credit hours
9.000 TO 18.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

HDFS 51093 - VARIABLE TITLE WORKSHOP IN HUMAN DEVELOPMENT AND FAMILY STUDIES

(Repeatable for credit) (Cross-listed with HDFS 41093) Workshop setting dealing with a topic or topics in human development and family studies. Learning experiences are provided in a wide range of areas. Prerequisite: Graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Workshop

HDFS 51095 - SPECIAL TOPICS IN HUMAN DEVELOPMENT AND FAMILY STUDIES

(Repeatable for credit) (Cross-listed with HDFS 41095) Discussion of a major topic within human development and family studies. Prerequisite: graduate standing.
1.000 TO 4.000 Credit hours
1.000 TO 4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

HDFS 51096 - INDIVIDUAL INVESTIGATION

(Repeatable for credit) (Cross-listed with HDFS 41096) Independent study in human development and/or family studies. Prerequisite: Graduate standing and special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation
HDFS 52092 - HUMAN DEVELOPMENT AND FAMILY STUDIES STUDY AWAY EXPERIENCE

(Repeatable twice for credit) Exploration of human development and family studies-related topics while visiting various cultural contexts. Prerequisite: graduate standing and special approval.

3.000 Credit hours
9.000 Other hours

Levels: Graduate
Schedule Types: Field Experience

Lifespan Dev and Educ Sciences Department

HDFS 54020 - ADOLESCENT DEVELOPMENT

(Cross-listed with HDFS 44020) Adolescent development with emphasis on forces related to adolescent behavior. Evaluation of current research. Prerequisite: Human Development and Family Studies (HDFS) major and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

HDFS 54021 - FAMILY INTERVENTION ACROSS THE LIFE SPAN

(Cross-listed with HDFS 44021) Evaluation of research and theoretical models in the area of family intervention. Focus on strategies for assisting families in coping with a variety of critical issues over the family life cycle. Prerequisite: Human Development and Family Studies (HDFS) major and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

HDFS 54023 - BUILDING FAMILY STRENGTHS

(Cross-listed with HDFS 44023) The building family strengths model builds upon family life potential, based on extensive research emphasizing identified family strengths. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

HDFS 54028 - PARENT-CHILD RELATIONSHIPS

Study of parent-child relationships across the life span and within various contexts. Emphasis on the process of socialization and determinants of parent-child relationships based on current research. Prerequisite: Human Development and Family Studies (HDFS) major and graduate standing.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisites</th>
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</thead>
</table>
| HDFS 54029  | FAMILY POLICY                                                                 | Understanding federal, state and local policy issues affecting families. Role of family life educator in promoting a family-friendly perspective in policy making. Prerequisite: Human Development and Family Studies (HDFS) major and graduate standing. | 3.000 Credit hours  
3.000 Lecture hours |
| HDFS 54037  | POSITIVE YOUTH DEVELOPMENT                                                   | Examines individual, family, school and community characteristics that comprise developmental assets contributing to positive youth development (PYD). Definitions and descriptions of PYD approaches are examined as well as evaluations of program effectiveness. Common elements of PYD programs are explored, such as emphasizing youths' strengths, providing opportunities to learn health behaviors, promoting positive peer relationships, connecting youth with caring adults, empowering youth to assume leadership roles, and challenging youth in ways that build their competence. Implications for professional child and youth work are discussed. Students complete a program development project. Prerequisites: HDFS 54020 and graduate standing. | 3.000 Credit hours  
3.000 Lecture hours |
| HDFS 54038  | PROFESSIONAL CHILD AND YOUTH WORK PRACTICE                                   | Provides students with an understanding of the historical and current methodologies and organizational structures of professional child and youth work practice emphasizing a synthesis of previous and new learning regarding five domains of competence (professionalism, culture and human diversity, applied human development, relationship and communication and developmental practice methods). Practice issues in community-based an out of home care settings as well as work with various child and youth populations are to be explored. Students complete a program development and evaluation project. Prerequisite: HDFS major, graduate standing. | 3.000 Credit hours  
3.000 Lecture hours |
| HDFS 54039  | BEREAVEMENT, TRAUMA AND OTHER LOSSES                                         |                                                                                               | 3.000 Credit hours  
3.000 Lecture hours |
Exploration of the impact of death, trauma and other losses on individuals and families across the lifespan. Consideration of gender, social and cultural context. Implications for human services professionals. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**HDFS 54092 - PRACTICUM IN HUMAN DEVELOPMENT AND FAMILY STUDIES**

(Repeatable for credit) (Cross-listed with HDFS 44092) Observation and participation in child, family and human service agencies. Prerequisite: Human Development and Family Studies (HDFS) major and graduate standing.
3.000 TO 6.000 Credit hours
1.000 Lecture hours
2.000 TO 5.000 Other hours

Levels: Graduate
Schedule Types: Lecture, Practicum or Internship

Lifespan Dev and Educ Sciences Department

**HDFS 61091 - SEMINAR**

(Repeatable for credit) Evaluation and interpretation of recent literature in human development and/or family studies. Topic selected for semester will be indicated in the schedule of classes. Prerequisite: Graduate standing.
2.000 OR 3.000 Credit hours
2.000 OR 3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Lifespan Dev and Educ Sciences Department

**HDFS 61098 - RESEARCH**

(Repeatable for credit) Research for master's level graduate students. Credits earned may be applied toward meeting degree requirements if school approves. Prerequisite: Graduate standing.
1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

Lifespan Dev and Educ Sciences Department

**HDFS 61198 - MASTER'S PROJECT**

(Repeatable for credit) (Cross-listed with NUTR 61198) Completion and successful defense of a master's project. Master's project students must register for a total of 6 hours, 2 to 6 hours in a single semester distributed over several semesters if desired. Prerequisite: Special approval and graduate standing.
2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours
Levels: Graduate
Schedule Types: Master's Project

Lifespan Dev and Educ Sciences Department

**HDFS 61199 - THESIS I**

Thesis students must register for total of 6 hours, 2 to 6 hours in a single semester distributed over several semesters if desired. Prerequisite: Special approval and graduate standing.

2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Lifespan Dev and Educ Sciences Department

**HDFS 61299 - THESIS II**

Thesis II students must continue registration each semester until all degree requirements are met. Prerequisites: HDFS 61199 and graduate standing.

2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Lifespan Dev and Educ Sciences Department

**HDFS 64023 - FAMILY THEORIES AND PROCESSES**

An examination of theories and research for understanding family dynamics and changes in families across the lifespan. Includes attention to diverse family structures, dyadic and group processes applicable to families, and social and cultural contexts. Prerequisites: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**HDFS 64024 - FAMILY LIFE EDUCATION**

Developing community acceptance, teaching aids and techniques and curriculum for family life education. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**HDFS 64027 - EARLY ADOLESCENCE**
Examines the fundamental changes, social contexts and psychosocial processes involved in human development from ages eight through 15. Implications for working with this age group within schools and human service agencies. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

HEBR 12101 - ELEMENTARY HEBREW I

An introduction to the modern Hebrew language in the context of Israeli culture. Prerequisite: None.
4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

HEBR 12102 - ELEMENTARY HEBREW II

A continuation of the introduction to the modern Hebrew language in the context of Israeli culture. Prerequisite: HEBR 12101.
4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

HEBR 22104 - INTERMEDIATE HEBREW I

Continued development of speaking, listening, reading and writing skills using a variety of cultural materials. Prerequisite: HEBR 12102.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

HEBR 22105 - INTERMEDIATE HEBREW II

Continuation of HEBR 22104. Prerequisite: HEBR 22104.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department
HED 11570 - PERSONAL HEALTH

This course examines the leading causes of death and disability in the United States with an emphasis on the application of knowledge and skills to reduce risk and enhance the quality of life. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Health Sciences Department

HED 11590 - COMMUNITY HEALTH EDUCATION

Identification of community health problems and measures for control. Emphasizes principles, objectives and methods of community health education. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Health Sciences Department

HED 13510 - WINNING COMBINATION: HEALTH AND ATHLETES

An exploration of strategies for promoting healthy lifestyles for athletes. The course is reserved for varsity athletes. Prerequisite: Special approval.
1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Health Sciences Department

HED 14020 - MEDICAL TERMINOLOGY

Identification of the meaning of various roots and terms and combining forms that are components of medical words, including anatomical physiological and pathological therapeutic terminology and implications for health literacy. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Health Sciences Department

HED 20000 - TEACHING HEALTH TO YOUNG LEARNERS

Investigate current health issues relevant to children in primary grades, and identify educational strategies to increase student health knowledge, foster positive health attitudes and promote healthy behaviors.
Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours
Health Sciences Department

**HED 21030 - INTRODUCTION TO HEALTH EDUCATION**

This course introduces the student to the health education profession. Roles and responsibilities of health educators in a variety of occupational settings are described. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Health Sciences Department

**HED 21050 - HEALTH EDUCATION THEORIES**

Application of various attitude and behavior models to health and illness behavior in order to develop a framework for educational intervention. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Health Sciences Department

**HED 32530 - DRUG USE AND MISUSE**

Introduction to the study of drug/alcohol abuse. Basic pharmacology of drug actions is reviewed. Common myths misconceptions about drug alcohol use are examined. Current drug problems and related prevention treatment issues are analyzed. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Health Sciences Department

**HED 32542 - METHODS AND APPLICATIONS OF HEALTH EDUCATION**

Analysis observation, demonstration and experience in the teaching-learning process utilizing methods, materials and resources appropriate to the preparation of professional health educators. This course includes 50 field/clinical hours. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school/agency before the first day of the semester in which student teaching/ internship will take place. Prerequisites: HED 11570 and HED 11590.

5.000 Credit hours
5.000 Lecture hours

Health Sciences Department
HED 32544 - HUMAN SEXUALITY

A study of the role and meaning of human sexuality throughout the life cycle for self and society. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Health Sciences Department

HED 32565 - MARKETING IN HEALTH EDUCATION

Examines the basic elements of marketing processes as they relate to promoting health in communities. Emphasis on application of marketing planning, concepts and practices for service providers involved with health education. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Health Sciences Department

HED 32575 - CONSUMER HEALTH

An overview of the health marketplace including health products, services, financing, promotional practices and consumer protection laws. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Health Sciences Department

HED 34050 - PROGRAM PLANNING AND EVALUATION IN HEALTH EDUCATION

Provides students with the knowledge and skills to assess health resources and needs, develop health programs to meet specific needs in particular populations and determine appropriate measures to evaluate the effectiveness of health programs. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Health Sciences Department

HED 34060 - SMALL GROUP PROCESSES
(Cross-listed with CES 37800) Group processes in human relationships, including techniques of democratic leadership and effective group membership. This course includes 25 field/clinical hours. Prerequisite: None.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Health Sciences Department

HED 36048 - EMERGENCY MEDICAL TRAINING

Basic immediate care procedures for victims of acute illnesses and accidents. Course does not conform to EMT-B National Standard Curriculum as adopted by the Ohio Department of Public Safety, Division of EMS. Prerequisite: None.

5.000 Credit hours
5.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Health Sciences Department

HED 40093 - VARIABLE TITLE WORKSHOP IN HEALTH EDUCATION AND PROMOTION

(Repeatable for credit) (Cross-listed with HED 50093 and 70093) Discussion of major issues in health and safety education. Content emphasis and prerequisites vary depending on workshop. Prerequisite: HED 11590 and special approval.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Workshop

Health Sciences Department

HED 42041 - HEALTH COACHING

(Cross-listed with HED 52041) Techniques of health coaching and motivational interviewing applied to health education. Individual and group approaches relative to personal, family and societal health issues. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Health Sciences Department

HED 42358 - STUDENT TEACHING IN HEALTH EDUCATION

Provides a twelve week student teaching experience. See student teaching section of catalog. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school/agency before the first day of the semester in which student teaching/ internship will take place. Prerequisite: Eligibility for admission to student teaching and admission to advanced study; and official valid certification of Child Safety Training, approved Basic Life Support and A.L.I.C.E. Training must be presented to
the campus office of clinical experience or designated faculty/staff at Regional campuses as prerequisite for student teaching.
9.000 Credit hours
27.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Health Sciences Department

Course Attributes:
Experiential Learning Requirem

**HED 42575 - HEALTH AND LEARNING: STRATEGIES FOR STUDENTS AND TEACHERS**

(Cross-listed with HED 52575) Focus on health issues/education/environment policy and practice/community strategies to respond to threats confronting students utilizing a coordinated school/community strategy to promote health to improve academic outcomes. CPR and first aid certification required for completion of course. Prerequisite: Admission to advanced study.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Health Sciences Department

**HED 44025 - WOMEN'S HEALTH ISSUES**

(Cross-listed with HED 54025) Traditional and feminist analysis of women's health issues and the health educational responses to those issues. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Health Sciences Department

**HED 44092 - INTERNSHIP IN COMMUNITY HEALTH EDUCATION**

(Repeatable for credit) Participation for one academic semester in the health education activities of an approved agency, organization or industry. Prerequisite: Senior standing.
12.000 Credit hours
36.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Health Sciences Department

Course Attributes:
Experiential Learning Requirem

**HED 44095 - SPECIAL TOPICS: HEALTH EDUCATION AND PROMOTION**

(Repeatable for credit) Selected topics related to public health issues facing professionals in communities,
schools, health care settings and the worksite. Prerequisite: None.
1.00 TO 3.00 Credit hours
1.00 TO 3.00 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Health Sciences Department

**HED 44096 - INDIVIDUAL INVESTIGATION IN HEALTH EDUCATION AND PROMOTION**

(Repeatable for credit) (Cross-listed with HED 54096 and 74096) Independent reading and/or research directed by a HED faculty member. Prerequisite: Permission.
1.00 TO 3.00 Credit hours
1.00 TO 3.00 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Health Sciences Department

**HED 44543 - ADMINISTRATION OF SCHOOL HEALTH PROGRAMS**

(Cross-listed with HED 54543) Organizational design and administration of a comprehensive school health program including health services, instruction and environment. This course includes 25 field/clinical hours. CPR and first aid certification required for completion of course. Prerequisite: Admission to advanced study.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Health Sciences Department

**HED 44544 - SEXUALITY EDUCATION PROGRAMS**

(Cross-listed with HED 54544) This course prepares the student to develop, implement and evaluate sexuality education programs in school and community settings. Prerequisite: HED 32544.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Health Sciences Department

**HED 44550 - DRUG ABUSE AND VIOLENCE EDUCATION PROGRAMS**

(Cross-listed with HED 54550) Drug abuse and violence prevention from theoretical, philosophical, empirical and practical perspectives. Application of theories to plan, implement, and evaluate drug and violence education programs. Prerequisite: HED 32530.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
HED 46052 - STRESS: RECOGNITION AND MANAGEMENT

(Cross-listed with HED 56052) An examination of stress, its role as a predisposing factor for various illnesses and diseases, types of stressors, the body’s reaction to stress, and techniques for recognizing, preventing and reducing stress. Prerequisite: None.
2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

HED 46057 - ADVANCED HUMAN SEXUALITY

(Cross-listed with HED 56057) Selected aspects of human sexuality; history, cross-cultural perspectives, medical/surgical conditions and sex therapy and counseling. Prerequisite: HED 32544.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

HED 46070 - HEALTH RELATED ASPECTS OF AGING

(Cross-listed with HED 56070) Theories of biological aging and identification of major health hazards, age-related diseases and age changes, their prevention and control. The health care delivery system for the elderly. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

HED 47070 - AIDS: ISSUES, EDUCATION AND PREVENTION

(Cross-listed with HED 57070) This course provides an extensive overview of the human immunodeficiency virus epidemic as it has developed and exists today. A particular emphasis will be given to aids education and prevention issues and strategies. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

HED 47091 - CURRENT ISSUES IN HEALTH EDUCATION AND PROMOTION

(Repeatable for credit) (Cross-listed with HED 57091 and 77091) Public health issues facing professionals in
communities, schools, health care settings and the worksite. Prerequisite: Junior or senior standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

Health Sciences Department

HED 48092 - FIELD EXPERIENCE IN HEALTH EDUCATION AND PROMOTION

(Repeatable for credit) (Cross-listed with HED 58092 and 78092) Observation and participation in educational and promotional activities of a public health agency, school or health care facility. Joint university agency supervision. Prerequisite: Permission.

1.000 TO 3.000 Credit hours
3.000 TO 9.000 Other hours

Levels: Undergraduate
Schedule Types: Field Experience

Health Sciences Department

Course Attributes:
Experiential Learning Requirem

HED 49525 - INQUIRY SEMINAR INTO PROFESSIONAL PRACTICE

Interdisciplinary inquiry into teaching as a professional practice in health education; emphasis on teacher as disciplined investigator. Utilization of teaching and learning technology. Prerequisite: admission to advanced study. Corequisite: EDUC 49526 or HED 42358.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

Health Sciences Department

HED 50093 - VARIABLE TITLE WORKSHOP IN HEALTH EDUCATION AND PROMOTION

(Repeatable for credit) (Cross-listed with HED 40093 and 70093) Discussion of major issues in health and safety education. Content emphasis and prerequisites vary depending on workshop. Prerequisite: Graduate standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Health Sciences Department

HED 52041 - HEALTH COACHING

(Cross-listed with HED 42041) Techniques of health coaching and motivational interviewing applied to health education. Individual and group approaches relative to personal, family and societal health issues. Prerequisite: Graduate standing.

3.000 Credit hours
HED 52575 - HEALTH AND LEARNING: STRATEGIES FOR STUDENTS AND TEACHERS

(Cross-listed with HED 42575) Focus on health issues/education/environment policy and practice/community strategies to respond to threats confronting students, utilizing a coordinated school community strategy to promote health and improve academic outcomes. CPR first aid certification required for completion of course. Prerequisite: Graduate standing.

Levels: Graduate
Schedule Types: Lecture

HED 54025 - WOMEN’S HEALTH ISSUES

(Cross-listed with HED 44025) Traditional and feminist analysis of women's health issues and the health educational responses to those issues. Prerequisite: Graduate standing.

Levels: Graduate
Schedule Types: Lecture

HED 54096 - INDIVIDUAL INVESTIGATION IN HEALTH EDUCATION AND PROMOTION

(Repeatable for credit) (Cross-listed with HED 44096 and 74096) Independent reading and/or research directed by a graduate faculty member. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school/agency before the first day of the semester in which student teaching/ internship will take place. Prerequisite: Graduate standing and special approval.

Levels: Graduate
Schedule Types: Individual Investigation

HED 54543 - ADMINISTRATION OF SCHOOL HEALTH PROGRAMS

(Cross-listed with HED 44543) Organizational design and administration of a comprehensive school health program including health services, instruction and environment. This course includes 25 field/clinical hours. CPR and first aid certification required for completion of course. Prerequisite: Graduate standing.

Levels: Graduate
HED 54544 - SEXUALITY EDUCATION PROGRAMS

(Cross-listed with HED 44544) This course prepares the student to develop, implement and evaluate sexuality education programs in school and community settings. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

HED 54550 - DRUG ABUSE AND VIOLENCE EDUCATION PROGRAMS

(Cross-listed with HED 44550) Drug abuse and violence prevention from theoretical, philosophical, empirical, and practical perspectives. Application of theories to plan, implement, and evaluate drug and violence education programs. Prerequisites: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

HED 56057 - ADVANCED HUMAN SEXUALITY

(Cross-listed with HED 46057) Selected aspects of human sexuality: history, cross-cultural perspectives, medical/surgical therapy and counseling. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

HED 56070 - HEALTH RELATED ASPECTS OF AGING

(Cross-listed with HED 46070) Theories of biological aging and identification of major health hazards, age-related diseases and age changes, their prevention and control. The health care delivery system for the elderly. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

HED 57070 - AIDS: ISSUES, EDUCATION AND PREVENTION
HED 57091 - CURRENT ISSUES IN HEALTH EDUCATION AND PROMOTION

(Repeatable for credit) (Cross-listed with HED 47091 and 77091) Public health issues facing professionals in communities, schools, health care settings and the worksite. Prerequisite: Graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Health Sciences Department

HED 58092 - FIELD EXPERIENCE IN HEALTH EDUCATION AND PROMOTION

(Repeatable for credit) (Cross-listed with HED 48092 and 78092) Observation and participation in educational and promotional activities of a public health agency, school, or health care facility joint university-agency supervision. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school/agency before the first day of the semester in which student teaching/ internship will take place. Prerequisite: Special approval and graduate standing.
1.000 TO 3.000 Credit hours
3.000 TO 9.000 Other hours

Levels: Graduate
Schedule Types: Field Experience

Health Sciences Department

HED 60199 - THESIS I

Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester distributed over several semesters if desired. Prerequisite: Graduate standing.
2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Health Sciences Department

HED 60299 - THESIS II

Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: HED 60199 and graduate standing.
2.000 Credit hours
2.000 Other hours
HED 64030 - INTRODUCTION TO RESEARCH AND DATA ANALYSIS IN HEALTH EDUCATION AND PROMOTION

Introduction of research methods in the field of health education and health promotion. Includes basic knowledge and skills in research design and concepts of descriptive and inferential statistics. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

HED 64050 - HEALTH BEHAVIOR

(Cross-listed with HED 84050) Analysis of a broad range of theoretical and empirical models of health and illness behavior. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

HED 64051 - BIOBEHAVIORAL ASPECTS OF DISEASE PREVENTION IN HEALTH EDUCATION AND PROMOTION

The etiology and pathogenesis of major diseases are studied from a biopsychosocial perspective with emphasis on implications for disease prevention, health promotion and behavioral intervention. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

HED 64055 - NEEDS ASSESSMENT AND PROGRAM PLANNING IN HEALTH PROMOTION

(Cross-listed with HED 84055) Students will assess individual and community needs for health promotion programs based on multiple sources of health data. Students will develop a rational plan to meet identified needs. Prerequisite: HED 64061 and HED 64050 and HED 64063 and HED 64059 and graduate standing.
3.000 Credit hours
3.000 Lecture hours
**HED 64057 - EVALUATION OF HEALTH PROMOTION PROGRAMS**

(Cross-listed with HED 84057) Reviews basic principles and types of evaluations. Students will develop an evaluation plan to determine effectiveness of program developed in HED 6/74055. Prerequisite: HED 64050 and HED 64055 and HED 64061 and HED 64063 and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

**HED 64058 - DEVELOPMENTAL APPROACH TO CONTENT AND RESOURCES IN HEALTH EDUCATION**

(Cross-listed with HED 84058) Focus on examination of six CDC problem priority areas through the lens of developmentally appropriate practice parameters for children and youth. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

**HED 64059 - COMMUNICATION AND MARKETING IN HEALTH EDUCATION AND PROMOTION**

(Cross-listed with HED 84059) Introduction to the theory and practice of planning, implementing, and evaluating marketing and communication programs in health promotion. Prerequisites: HED 64050 and HED 64061 and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

**HED 64061 - FOUNDATIONS OF HEALTH EDUCATION AND PROMOTION**

(Cross-listed with HED 84061) Historical, sociological and philosophical factors that have influenced definitions and the practice of health education and promotion are studied. Professional associations/leadership, government initiatives, standards of practice and accreditations are examined. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

**HED 64062 - ADMINISTRATION OF HEALTH PROMOTION PROGRAMS**

(Cross-listed with HED 84062) Basic concepts in the administration of health education/promotion programs.
Coordination of program services, consultative relationships, management of human and fiscal resources and organizational leadership are addressed. Prerequisite: HED 64061 and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

**HED 64063 - STRATEGIES IN HEALTH EDUCATION AND PROMOTION**

(Cross-listed with HED 84063) Health education and promotion methods, techniques and strategies are presented for a variety of audiences, learning environments and intervention levels. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

**HED 64070 - WORKSITE HEALTH PROMOTION**

(Cross-listed with HED 84070) Program planning and evaluation of health promotion programs in business and industry with an emphasis on the role of health educators. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

**HED 64080 - ADVOCACY AND POLICY ISSUES IN HEALTH EDUCATION AND PROMOTION**

(Cross-listed with HED 84080) Emphasizes the advocacy role of health educators. Includes use of research results to develop, analyze and influence health policy. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

**HED 64082 - READINGS IN HEALTH EDUCATION AND PROMOTION**

(Cross-listed with HED 84082) Independent study of approved topics in health and safety education related to the student's special interests. Adviser's permission required to repeat registration one time. Prerequisite: Graduate standing and Health Education (HED) or Public Health (PH) major.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation
HED 64094 - COLLEGE TEACHING OF HEALTH EDUCATION AND PROMOTION

(Repeatable for credit) (Cross-listed with HED 84094) Guided experiences in teaching selected undergraduate courses. Prerequisite: Graduate standing and special approval.
2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

HED 64098 - PROJECT IN HEALTH EDUCATION AND PROMOTION

(Repeatable for credit) (Cross-listed with HED 84098) Research or individual investigation for master's level graduate students. Prerequisite: Graduation standing and special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Research

HED 70093 - VARIABLE TITLE WORKSHOP IN HEALTH EDUCATION AND PROMOTION

(Repeatable for credit) (Cross-listed with HED 40093 and 50093) Discussion of major issues in health and safety education. Content emphasis and prerequisites vary depending on workshop. Prerequisite: Doctoral standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Workshop

HED 74096 - INDIVIDUAL INVESTIGATION IN HEALTH EDUCATION AND PROMOTION

(Repeatable for credit) (Cross-listed with HED 44096 and 54096) Independent reading and/or research directed by a graduate faculty member. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school/agency before the first day of the semester in which student teaching/ internship will take place. Prerequisite: Doctoral standing; special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

HED 77091 - CURRENT ISSUES IN HEALTH EDUCATION AND PROMOTION
(Repeatable for credit) (Cross-listed with HED 47091 and 57091) Public health issues facing professionals in communities, schools, health care settings and the worksite. Prerequisite: Graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Health Sciences Department

**HED 78092 - FIELD EXPERIENCE IN HEALTH EDUCATION AND PROMOTION**

(Repeatable for credit) (Cross-listed with HED 48092 and 58092) Observation and participation in educational and promotional activities of a public health agency, school or health care facility joint university-agency supervision. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school/agency before the first day of the semester in which student teaching/internship will take place. Prerequisite: Doctoral standing; special approval.
1.000 TO 3.000 Credit hours
3.000 TO 9.000 Other hours

Levels: Graduate
Schedule Types: Field Experience

Health Sciences Department

**HED 80199 - DISSERTATION I**

(Repeatable for credit) Registration for two semesters required, first semester dissertation work begins and continues until completion of 30 hours. Prerequisite: Doctoral standing.
15.000 Credit hours
15.000 Other hours

Levels: Graduate
Schedule Types: Dissertation

Health Sciences Department

**HED 80292 - PRACTICUM IN HEALTH EDUCATION AND PROMOTION**

(Repeatable for credit) In this course, students obtain permission to work with an individual faculty member on research, community projects, or other professional activities in various health education settings (school, community, medical care, worksite). Assignments are individualized to meet the needs of the practicum experience. Prerequisites: doctoral standing and special approval.
3.000 Credit hours
9.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Health Sciences Department

**HED 80299 - DISSERTATION II**

(Repeatable for credit) Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until degree requirements are met. Prerequisite: Doctoral standing.
15.000 Credit hours
HED 81100 - RESIDENCY SEMINAR: SYNTHESIS OF LITERATURE IN HEALTH EDUCATION AND PROMOTION

Exploration of philosophical, theoretical and empirical issues in health education and promotion. Students synthesize courses, research and practice in preparation for comprehensive examinations. Prerequisite: doctoral standing and special approval of instructor.
3.00 Credit hours
3.00 Other hours

HED 81150 - SEMINAR: PROFESSIONAL DEVELOPMENT IN HEALTH EDUCATION AND PROMOTION

Focuses on the process, practice and documentation of professional development in health education and promotion in the areas of instruction, program development, research and evaluation. Prerequisite: Doctoral standing.
3.00 Credit hours
3.00 Lecture hours

HED 81200 - RESIDENCY SEMINAR: RESEARCH PROPOSAL, DEVELOPMENT AND PRESENTATION

Review of the role of research and scholarly pursuits in the professorate, the professional health education literature, and in the development and dissemination of a range of scholarly products. Identification of requisite elements of a dissertation in health education and promotion. Refinement of a professional vita, updating of doctoral program prospectus, specification of dissertation topic, identification of potential dissertation committee members, development and presentation of draft dissertation proposal. Prerequisite: Doctoral standing and special approval of instructor.
3.00 Credit hours
3.00 Other hours

HED 81300 - HEALTH EDUCATION PRACTICE

Investigation of various health education settings including analysis of agency programming efforts and comparison to evidence-based practice. Application of community assessment, socioecological model, and community-based participatory research principles. Analysis of how health education theory and research are implemented in various practice settings. Prerequisite: doctoral standing.
3.00 Credit hours
HED 81400 - RESEARCH DISSEMINATION AND TECHNICAL WRITING IN HEALTH EDUCATION AND PROMOTION

Examination and practice of technical writing for research proposals, technical reports, and journal publications in health education and promotion. Other methods of disseminating research such as preparation and submission of conference presentation applications and writing as part of consultative relationships with community agencies is explored. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

HED 81450 - ADVANCED PROGRAM EVALUATION IN HEALTH EDUCATION AND PROMOTION

A review of evaluation methods used in health education programs. Emphasis is placed on data collection procedures, linking program activities to outcomes, participant attrition and reporting of the results. Prerequisite: HED 64055 or HED 74055; and HED 64057 or HED 74057; and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

HED 81550 - APPLIED THEORY IN HEALTH EDUCATION RESEARCH AND PRACTICE

Examination of theory/models/hypotheses applied to specific health behaviors. Emphasis on operationalization of theoretical constructs. Prerequisite: HED 6/74050.

3.000 Credit hours
3.000 Lecture hours

HED 84030 - INTRODUCTION TO RESEARCH AND DATA ANALYSIS IN HEALTH EDUCATION AND PROMOTION

Introduction of research methods in the field of health education and health promotion. Includes basic knowledge and skills in research design and concepts of descriptive and inferential statistics. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours
HED 84050 - HEALTH BEHAVIOR

(Cross-listed with HED 64050) Analysis of a broad range of theoretical and empirical models of health and illness behavior. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

HED 84051 - BIOBEHAVIORAL ASPECTS OF DISEASE PREVENTION IN HEALTH EDUCATION AND PROMOTION

(Cross-listed with HED 64051) The etiology and pathogenesis of major diseases are studied from a biopsychosocial perspective with an emphasis on implications for disease prevention, health promotion and behavioral intervention. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

HED 84055 - NEEDS ASSESSMENT AND PROGRAM PLANNING IN HEALTH PROMOTION

(Cross-listed with HED 64055) Students will assess individual and community needs for health promotion programs based on multiple sources of health data. Students will develop a rational plan to meet identified needs. Prerequisite: HED 64050 or 84050; and HED 64059 or 84059; and HED 64061 or 84061; and HED 64063 or 84063; and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

HED 84057 - EVALUATION OF HEALTH PROMOTION PROGRAMS

(Cross-listed with HED 64057) Reviews basic principles and types of evaluations. Students will develop an evaluation plan to determine effectiveness of program developed in HED 6/84055. Prerequisite: HED 64050 or 84050; and HED 64055 or 84055; and HED 64061 or 84061; and HED 64063 or 84063; and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department
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<tr>
<th>Course Code</th>
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<td>DEVELOPMENTAL APPROACH TO CONTENT AND RESOURCES IN HEALTH EDUCATION</td>
<td>Focus on examination of six CDC problem priority areas through the lens of developmentally appropriate practice parameters for children and youth. Prerequisite: doctoral standing.</td>
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<td>HED 84059</td>
<td>COMMUNICATION AND MARKETING IN HEALTH EDUCATION AND PROMOTION</td>
<td>Introduction to the theory and practice of planning, implementing, and evaluating marketing and communication programs in health promotion. Prerequisites: HED 64050 or 84050; and HED 64061 or 84061; and doctoral standing.</td>
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<td>HED 84061</td>
<td>FOUNDATIONS OF HEALTH EDUCATION AND PROMOTION</td>
<td>Historical, sociological and philosophical factors that have influenced definitions and the practice of health education and promotion are studied. Professional associations/ leadership, government initiatives, standards of practice and accreditations are examined. Prerequisite: doctoral standing.</td>
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<td>ADMINISTRATION OF HEALTH PROMOTION PROGRAMS</td>
<td>Basic concepts in the administration of health education/promotion programs. Coordination of program services, consultative relationships management of human and fiscal resources and organizational leadership are addressed. Prerequisite: HED 64061 or 84061; and doctoral standing.</td>
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<td>HED 84063</td>
<td>STRATEGIES IN HEALTH EDUCATION AND PROMOTION</td>
<td>Health education and promotion methods, techniques and strategies are presented for a variety of audiences, learning environments and intervention levels. Prerequisite: doctoral standing.</td>
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HED 84066 - HEALTH IN THE DEVELOPING NATIONS
(Cross-listed with HED 64066) Overview of national development, review of problems process and strategy of health development. Prerequisite: doctoral standing.
Levels: Graduate
Schedule Types: Lecture

HED 84070 - WORKSITE HEALTH PROMOTION
(Cross-listed with HED 64070) Program planning and evaluation of health promotion programs in business and industry with an emphasis on the role of health educators. Prerequisite: doctoral standing.
Levels: Graduate
Schedule Types: Lecture

HED 84080 - ADVOCACY AND POLICY ISSUES IN HEALTH EDUCATION AND PROMOTION
(Cross-listed with HED 64080) Emphasizes the advocacy role of health educators. Includes use of research results to develop analyze and influence health policy. Prerequisite: doctoral standing.
Levels: Graduate
Schedule Types: Lecture

HED 84082 - READINGS IN HEALTH EDUCATION AND PROMOTION
(Cross-listed with HED 64082) Independent study of approved topics in health and safety education related to the student's special interests. Adviser's permission required to repeat registration one time. Prerequisite: doctoral standing.
Levels: Graduate
Schedule Types: Individual Investigation
**HED 84094 - COLLEGE TEACHING OF HEALTH EDUCATION AND PROMOTION**

(Repeatable for credit) (Cross-listed with HED 64094) Guided experiences in teaching selected undergraduate courses. Prerequisite: doctoral standing and special approval.

2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Health Sciences Department

**HED 84098 - PROJECT IN HEALTH EDUCATION AND PROMOTION**

(Repeatable for credit) (Cross-listed with HED 64098) Research or individual investigation for doctoral level graduate students. Prerequisite: doctoral standing and special approval.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Research

Health Sciences Department

**HIED 46525 - CAREERS IN HIGHER EDUCATION**

Familiarize students with the history of higher education; philosophies of higher education, financial, legal and political issues facing higher education; and the careers available in colleges and universities. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**HIED 66492 - INTERNSHIP IN HIGHER EDUCATION ADMINISTRATION**

(Repeatable for a maximum of 12 credit hours) (Cross-listed with HIED 76492) Field-based internship of at least 150 clock hours, as approved by the program area faculty. Specific topics are outlined and shared at meetings prior to beginning internship. Prerequisite: graduate standing.

3.000 TO 6.000 Credit hours
10.000 TO 20.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Foundations Leadership Admin Department

**HIED 66521 - EMPLOYMENT LAW**

(Cross-listed with HIED 76521) Study of public and private sector bargaining law and all terms and conditions of employment. Prerequisites: Major in Higher Education and Student Personnel (EAHE) or Educational Administration-Higher Education (EDHE) and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**HIED 66594 - INTERNSHIP IN COLLEGE TEACHING**

(Repeatable for credit) (Cross-listed with HIED 76594) Application of course and lesson planning; instructional and evaluation skills under faculty supervision; lecturing, guiding group performance and evaluating performances. Arrangements made on individual basis. Prerequisite: Graduate standing and at least 12 hours in higher education.
3.000 Credit hours
9.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Foundations Leadership Admin Department

**HIED 66595 - SPECIAL TOPICS IN HIGHER EDUCATION ADMINISTRATION**

(Repeatable for credit) Specialized offerings in response to emerging or selected program needs. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**HIED 66596 - INDIVIDUAL INVESTIGATION IN HIGHER EDUCATION ADMINISTRATION**

(Repeatable for credit) Projects as assigned. Prerequisite: graduate standing and special approval.
2.000 TO 4.000 Credit hours
2.000 TO 4.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Foundations Leadership Admin Department

**HIED 66598 - RESEARCH IN HIGHER EDUCATION ADMINISTRATION**

(Repeatable for credit) Projects as assigned. Prerequisite: graduate standing and special approval.
2.000 TO 8.000 Credit hours
2.000 TO 8.000 Other hours

Levels: Graduate
Schedule Types: Research

Foundations Leadership Admin Department

**HIED 66600 - HISTORY OF HIGHER EDUCATION**
(Cross-listed with CULT 69567 and CULT 79567 and HIED 76600) Overview and exploration of history of higher education in the United States. Survey course covers ancient and medieval European antecedents but focuses largely on American higher education from the seventeenth through the 20th century. Students explore changes in student body curricula and purposes of higher education in the U.S. in the context of American culture. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

HIED 66601 - THE PRIVATE LIBERAL ARTS COLLEGE

(Cross-listed with HIED 76601) Explores a unique type of institution in American higher education, the private liberal arts college. Identifies common themes and challenges across institutions as well as the nature of specific examples of institutions. Prerequisite: major in Higher Education and Student Personnel (EAHE) or Educational Administration-Higher Education (EDHE) or special approval from the instructor and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

HIED 66651 - STUDENT AFFAIRS FUNCTIONS IN HIGHER EDUCATION

(Cross-listed with HIED 76651) Study of the history, philosophy, practices and organization of student affairs functions in higher education. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

HIED 66652 - LAW AND HIGHER EDUCATION

(Cross-listed with HIED 76652) Provides for the examination of major legal aspects of the administration of institutions of higher learning. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

HIED 66653 - COLLEGE STUDENT DEVELOPMENT: THEORY AND PRACTICE

(Cross-listed with HIED 76653) Study of theories concerning the development of college students and other adults, and principles for translating theory into practice. Prerequisite: Graduate standing.
HIED 66654 - STUDENTS AND THE COLLEGE ENVIRONMENT

(Cross-listed with HIED 76654) Study of the impact of different types of students and college environments on each other, within the context of a changing society. Prerequisite: HIED 6/76653 and special approval of instructor and graduate standing.

3.000 Credit hours
3.000 Lecture hours

HIED 66655 - CASE STUDIES IN HIGHER EDUCATION ADMINISTRATION

(Cross-listed with HIED 76655) Study of management responsibilities and leadership issues of student affairs administrators. Prerequisite: HIED 66652 and 66653 and 66657 and graduate standing.

3.000 Credit hours
3.000 Lecture hours

HIED 66656 - HIGHER EDUCATION CURRICULUM

(Cross-listed with HIED 76656) Introduces perspectives on curriculum development, implementation and assessment in higher education and addresses theoretical, historical, political and contemporary perspectives on higher education curriculum. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

HIED 66657 - LEADERSHIP IN EDUCATION ORGANIZATIONS

(Cross-listed with HIED 76657) By learning to appraise their own leadership styles, students improve their leadership effectiveness and explore the relationship between leadership and college and university effectiveness. Prerequisites: major in Higher Education and Student Personnel (EAHE) or Educational Administration-Higher Education (EDHE) and graduate standing.

3.000 Credit hours
3.000 Lecture hours
### HIED 66658 - THE COMMUNITY COLLEGE

A study of the foundations, structure, programs and issues of community college education in the United States.  
Prerequisite: graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  

Levels: Graduate  
Schedule Types: Lecture  

### HIED 66660 - FACULTY ROLES AND RESPONSIBILITIES

(Cross-listed with HIED 76660) A study of faculty roles and responsibilities in American higher education.  
Prerequisite: graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  

Levels: Graduate  
Schedule Types: Lecture  

### HIED 66662 - POLITICS AND POWER IN ORGANIZATIONS

(Cross-listed with HIED 76662) This course is designed to provide a conceptual framework for understanding the multifaceted processes of policy making that take place in both "internal" and "external" settings.  
Prerequisite: graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  

Levels: Graduate  
Schedule Types: Lecture  

### HIED 66663 - STATUS OF WOMEN IN HIGHER EDUCATION

Provides a comprehensive overview of the historical, contemporary, and scholarly perspectives on women students, faculty, administrators, and staff. We explore why and how women and men experience higher education differently, by drawing on historical, cultural, and psychological contexts, feminist theoretical and research perspectives, and scholarly contributions. As we do, we amplify voices from across identity groups, observing that there is not a homogeneous "woman in higher education." Likewise, we are sensitive to how consideration of context, recognition of power, other dimensions of identities, and desire to change society and the academy have fueled and shaped feminist study of the history and condition of women in higher education. Not only explores these issues through various media in class, but students also have the opportunity to investigate a problem of their choice in order to bring the content to life. Prerequisite: graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  

Levels: Graduate  
Schedule Types: Lecture
**HIED 66664 - SERVICE LEARNING IN HIGHER EDUCATION**

Examines the concepts, debate, and principles of practice of service-learning in U.S. higher education. Focus is on developing knowledge about service-learning and enhancing skills and competencies for designing service-learning opportunities in higher education, and involves an active, experiential component. Additionally, as a class, we investigate (problem-based) service-learning along a continuum of action to discern how it contributes to individual's civic efficacy. Prerequisite: graduate standing.

3.000 Credit hours

Levels: Graduate

Schedule Types: Lecture

**HIED 66665 - TECHNOLOGY, SYSTEMS AND DATA IN HIGHER EDUCATION ADMINISTRATION**

(Slashed with HIED 76665) Exploration of technology, systems, and data analysis essential to the practice of higher education administration. Students will examine and apply tools used for the organization, analysis, and dissemination of information including but not limited to ERP systems, learning management systems, web applications for data collection, and office productivity software. Students will perform tasks typically requested of administrators related to budget or workload management, managing lists and or rosters, exploring trend data for decision-making, and generating charts, tables and other data for reporting needs. Survey design and construction using online applications will be a significant component of this course. Moderate experience with office productivity software is strongly advised. Prerequisite: graduate standing.

3.000 Credit hours

Levels: Graduate

Schedule Types: Lecture

**HIED 66666 - FINANCIAL MANAGEMENT IN HIGHER EDUCATION**

(Cross-listed with HIED 76666) This course is designed to provide students of higher education with the knowledge of financial issues, sources of funds, economics of education, financial roles of professional and academic administrators, and the financial management skills as applicable to institutions of higher education. Prerequisite: graduate standing.

3.000 Credit hours

Levels: Graduate

Schedule Types: Lecture

**HIED 66667 - BUSINESS ADMINISTRATION IN HIGHER EDUCATION**

(Cross-listed with HIED 76667) This course introduces students to the administrative and business management of institutions of higher education. The course covers topics such as institutional planning, space management, insurance matters, personnel administration, purchasing and facility management. Prerequisite: HIED 6/76657 and graduate standing.

3.000 Credit hours

Levels: Graduate

Schedule Types: Lecture
HIED 66669 - ADMINISTRATION OF STUDENT DISABILITY SERVICES IN HIGHER EDUCATION

(Cross-listed with HIED 76669) Understanding the legal and practical issues regarding the identification, accommodation and matriculation of students with disabilities into colleges and universities. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

HIED 66670 - INTERNATIONALIZATION OF HIGHER EDUCATION INSTITUTIONS

(Cross-listed with HIED 76670) Students study the historical and current development of the internationalization of higher education institutions; explore higher education administrative leadership characteristics, social/political/economic factors, and national and international relationships that have affected various countries and regions; and examine rationales behind internationalization of higher education institutions, its meaning and approaches, and the different strategies and organizational models in different types of higher education institutions. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

HIED 66671 - THE ADMINISTRATION OF MULTICULTURALISM AND DIVERSITY IN HIGHER EDUCATION

(Cross-listed with HIED 76671) Course covers racial/ethnic and inclusive diversity and multiculturalism in U.S. higher education settings. Diversity is discussed from a historical perspective, providing a context for contemporary experiences described by and about students, staff, faculty and administrators. Main topics include multiculturalism in higher education in light of inclusive education; racial and ethnic diversity in higher education history; benefits of diversity; faculty issues; student issues; curriculum and pedagogy matters; research issues; law and policy issues; and strategic planning for institution diversity in higher education. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

HIED 66672 - INTERNATIONAL STUDENTS AND AMERICAN COLLEGES

(Cross-listed with HIED 76672) Bridging theory and application with an emphasis on the latter. The course begins with a national perspective and then concentrates on the various aspects and best practices of recruiting
and supporting international students at the institutional level. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**HIED 66673 - RESEARCH IN ADMINISTRATION OF INTERNATIONAL HIGHER EDUCATION**

(Cross-listed with HIED 76673) Examines and analyzes research related to higher education administration in the field of international and global education. Implications for application of findings for improvement of colleges and universities at home and abroad will be thoroughly discussed. Prerequisite: Major in Higher Education and Student Personnel (EAHE) or Educational Administration-Higher Education (EDHE) and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**HIED 66674 - COMPARATIVE HIGHER EDUCATION**

Students learn the differences between comparative, international and cross-border education. They reflect on how the United States higher education system grew out of specific historical, cultural and socio-economic contexts and analyze the higher education systems and structures of other selected countries and regions, focusing on the contexts which have influenced their development. Students examine emerging trends in the globalization of qualifications frameworks and quality assessment standards, and define their own positions in aspects of the universal criteria/local contexts debate. Prerequisite: Major in Higher Education and Student Personnel (EAHE) or Educational Administration-Higher Education (EDHE) and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**HIED 66675 - DESIGN AND DELIVERY OF EDUCATION ABROAD PROGRAMS**

Participants examine the many critical aspects of designing, planning and implementing an education abroad program; analyze its components, and, with others, design a new program. Students also consider the institutional contexts in which the program design occurs, on a campus or third-party organizational level, including design decisions about curriculum content and program delivery mechanisms, co-curricular activities, safety issues and more. Students also develop skills in conducting needs assessments and program evaluations. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department
HIED 66676 - INTERCULTURAL COMMUNICATION FOR INTERNATIONAL EDUCATORS

Students examine both classic and evolving intercultural communication theories, with an emphasis on the practical application of those theories to working in intercultural environments in higher education. Students analyze cultural influences on individuals, through the reading of cultural biographies and reflection on cultural influences in their own lives. Definitions of intercultural competence and strategies for intercultural learning, particularly in higher education contexts, are reviewed, with implications for program design in education abroad, work with international students, and other international education contexts, as relevant. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

HIED 66677 - WORKFORCE, ECONOMIC AND COMMUNITY DEVELOPMENT IN COMMUNITY COLLEGES

Within the context of social, economic, and technology shifts, this course examines the role of the community college in workforce, economic and community development. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

HIED 66678 - ISSUES AND TRENDS IN COMMUNITY COLLEGE ADMINISTRATION

Addresses current salient issues in community college administration. A variety of topics are examined as related to challenges for community college leaders arising from social, economic and political shifts. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

HIED 66679 - CAREER ADVISING: THEORY AND PRACTICE

(Slashed with HIED 76679) Develop practical skills in providing developmentally appropriate theory based academic and career advising to assist individuals in adding meaningful and purposeful work into their lives. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Foundations Leadership Admin Department

HIED 66680 - ADMINISTRATION OF CAREER AND ADVISING SERVICES
(Slashed with HIED 76680) Examines contemporary issues in administration of career and academic advising services. Challenges students to rethink the models and methods used to prepare individuals to enter the workforce and navigate their careers. Prerequisite: graduate standing.
1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Seminar

**HIED 66733 - INTERPERSONAL AND GROUP DYNAMICS IN EDUCATIONAL ORGANIZATIONS**

(Cross-listed with HIED 76733) Participants work in task groups learning about interpersonal, group and inter-group dynamics in organizations through lectures, discussions and analysis of their in group experiences. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**HIED 66740 - THEORIES AND METHODS OF ORGANIZATIONAL DEVELOPMENT**

(Cross-listed with HIED 76740) Study of theorists/practitioners in organization development. Involves exploration of consultant roles, intervention theory, methods of systems change applied to groups and organizations. Cross listed with CHDS 678403. Prerequisite: graduate standing and major in Higher Education and Student Personnel (EAHE) or Educational Administration-Higher Education (EDHE).
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**HIED 66749 - ASSESSMENT AND EVALUATION IN HIGHER EDUCATION**

(Cross-listed with HIED 76749) This course is designed to provide an understanding of current assessment and evaluation methods in higher education settings. Topics will span from individual classroom assessment through institutional accreditation processes. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**HIED 76492 - INTERNSHIP IN HIGHER EDUCATION ADMINISTRATION**

(Repeatable for a maximum of 12 credit hours) (Cross-listed with HIED 66492) Id-based internship of at least 150 clock hours, as approved by the program area faculty. Specific topics are outlined and shared at meetings prior to beginning internship. Prerequisite: doctoral standing.
3.000 TO 6.000 Credit hours
HIED 76521 - EMPLOYMENT LAW
(Cross-listed with HIED 66521) Study of public and private sector bargaining law and all terms of employment. Prerequisite: Major in Higher Education and Student Personnel (EAHE) or Educational Administration-Higher Education (EDHE). Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

HIED 76594 - INTERNSHIP IN COLLEGE TEACHING
(Repeatable for credit) (Cross-listed with HIED 66594) Application of course and lesson planning; instructional and evaluation skills under faculty supervision; lecturing, guiding group performance and evaluating performances. Arrangements made on individual basis. Prerequisite: Doctoral standing and at least 12 hours in higher education.
3.000 Credit hours
9.000 Other hours

HIED 76595 - SPECIAL TOPICS IN HIGHER EDUCATION ADMINISTRATION
(Repeatable for credit) Specialized offerings in response to emerging or selected program needs. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

HIED 76596 - INDIVIDUAL INVESTIGATION IN HIGHER EDUCATION ADMINISTRATION
(Repeatable for credit) Projects as assigned. Prerequisites: doctoral standing and special approval.
2.000 TO 4.000 Credit hours
2.000 TO 4.000 Other hours
HIED 76598 - RESEARCH IN HIGHER EDUCATION ADMINISTRATION
(Repeatable for credit) Projects as assigned. Prerequisites: doctoral standing and special approval.
2.000 TO 8.000 Credit hours
2.000 TO 8.000 Other hours
Levels: Graduate
Schedule Types: Research
Foundations Leadership Admin Department

HIED 76600 - HISTORY OF HIGHER EDUCATION
(Cross-listed with CULT 69567 and CULT 79567 and HIED 66600) Overview and exploration of history of higher education in the United States. Survey course covers ancient and medieval European antecedents but focuses largely on American higher education from the seventeenth through the 20th century. Students explore changes in student body, curricula and purposes of higher education in the U.S. in the context of American culture. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture
Foundations Leadership Admin Department

HIED 76601 - THE PRIVATE LIBERAL ARTS COLLEGE
(Cross-listed with HIED 66601) Explores a unique type of institution in American higher education, the private liberal arts college. Identifies common themes and challenges across institutions as well as the nature of specific examples of institutions. Prerequisite: Major in Higher Education and Student Personnel (EAHE) or Educational Administration-Higher Education (EDHE) or special approval from the instructor. Doctoral standing.
3.000 Credit hours
3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture
Foundations Leadership Admin Department

HIED 76651 - STUDENT AFFAIRS FUNCTIONS IN HIGHER EDUCATION
(Cross-listed with HIED 66651) Study of the history, philosophy, practices and organization of student affairs functions in higher education. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture
Foundations Leadership Admin Department

HIED 76652 - LAW AND HIGHER EDUCATION
(Cross-listed with HIED 66652) Provides for the examination of major legal aspects of the administration of institutions of higher learning. Prerequisite: Doctoral standing.
HIED 76653 - COLLEGE STUDENT DEVELOPMENT: THEORY AND PRACTICE

(Cross-listed with HIED 66653) Study of theories concerning the development of college students and other adults, and principles for translating theory into practice. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

HIED 76654 - STUDENTS AND THE COLLEGE ENVIRONMENT

(Cross-listed with HIED 66654) Study of the impact of different types of students and college environments on each other, within the context of a changing society. Prerequisite: HIED 6/76653 and special approval of the instructor and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

HIED 76655 - CASE STUDIES IN HIGHER EDUCATION ADMINISTRATION

(Cross-listed with HIED 66655) Study of management responsibilities and leadership issues of student affairs administrators. Prerequisite: HIED 76652 and 76653 and 76657 and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

HIED 76656 - HIGHER EDUCATION CURRICULUM

(Cross-listed with HIED 66656) Introduces perspectives on curriculum development, implementation and assessment in higher education and addresses theoretical, historical, political and contemporary perspectives on higher education curriculum. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department
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3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**HIED 76664 - SERVICE LEARNING IN HIGHER EDUCATION**

Examines the concepts, debate, and principles of practice of service-learning in U.S. higher education. Focus is on developing knowledge about service-learning and enhancing skills and competencies for designing service-learning opportunities in higher education, and involves an active, experiential component. Additionally, as a class, we investigate (problem-based) service-learning along a continuum of action to discern how it contributes to individual's civic efficacy. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**HIED 76665 - TECHNOLOGY, SYSTEMS AND DATA IN HIGHER EDUCATION ADMINISTRATION**

(Slashed with HIED 66665) Exploration of technology, systems, and data analysis essential to the practice of higher education administration. Students will examine and apply tools used for the organization, analysis, and dissemination of information including but not limited to ERP systems, learning management systems, web applications for data collection, and office productivity software. Students will perform tasks typically requested of administrators related to budget or workload management, managing lists and or rosters, exploring trend data for decision-making, and generating charts, tables and other data for reporting needs. Survey design and construction using online applications will be a significant component of this course. Moderate experience with office productivity software is strongly advised. Prerequisite: doctoral standing.

3.000 Credit hours
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Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**HIED 76666 - FINANCIAL MANAGEMENT IN HIGHER EDUCATION**

(Cross-listed with HIED 66666) This course is designed to provide students of higher education with the knowledge of financial issues, sources of funds, economics of education, financial roles of professional and academic administrators and the financial management skills as applicable to institutions of higher education. Prerequisite: doctoral standing.

3.000 Credit hours
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Levels: Graduate
**HIED 76667 - BUSINESS ADMINISTRATION IN HIGHER EDUCATION**

(Cross-listed with HIED 66667) This course introduces students to the administrative and business management of institutions of higher education. The course covers topics such as institutional planning, space management, insurance matters, personnel administration, purchasing and facility management. Prerequisite: HIED 6/76657 and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**HIED 76669 - ADMINISTRATION OF STUDENT DISABILITY SERVICES IN HIGHER EDUCATION**

(Cross-listed with HIED 66669) Understanding the legal and practical issues regarding the identification, accommodation and matriculation of students with disabilities into colleges and universities. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**HIED 76670 - INTERNATIONALIZATION OF HIGHER EDUCATION INSTITUTIONS**

(Cross-listed with HIED 66670) Students study the historical and current development of the internationalization of higher education institutions; explore higher education administrative leadership characteristics, social/political/economic factors, and national and international relationships that have affected various countries and regions; and examine rationales behind internationalization of higher education institutions, its meaning and approaches, and the different strategies and organizational models in different types of higher education institutions. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
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**HIED 76671 - THE ADMINISTRATION OF MULTICULTURALISM AND DIVERSITY IN HIGHER EDUCATION**

(Cross-listed with HIED 66671) Course covers racial/ethnic and inclusive diversity and multiculturalism in U.S higher education settings. Diversity is discussed from a historical perspective providing a context for contemporary experiences described by and about students, staff, faculty and administrators. Main topics include multiculturalism in higher education in light of inclusive education; racial and ethnic diversity in higher education history; benefits of diversity; faculty issues; student issues; administrator and leadership issues; curriculum and pedagogy matters; research issues; law and policy issues and strategic planning for institutional diversity in higher education. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**HIED 76672 - INTERNATIONAL STUDENTS AND AMERICAN-Colleges**

(Cross-listed with HIED 66672) Bridging theory and application with an emphasis on the latter. The course begins with a national perspective and then concentrates on the various aspects and best practices of recruiting and supporting international students at the institutional level. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**HIED 76673 - RESEARCH IN ADMINISTRATION OF INTERNATIONAL HIGHER EDUCATION**

(Cross-listed with HIED 66673) Examines and analyzes research related to higher education administration in the field of international and global education. Implications for application of findings for improvement of colleges and universities at home and abroad will be thoroughly discussed. Prerequisite: Major in Higher Education and Student Personnel (EAHE) or Educational Administration-Higher Education (EDHE) or special approval from the instructor. Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**HIED 76674 - COMPARATIVE HIGHER EDUCATION**

Students learn the differences between comparative, international and cross-border education. They reflect on how the United States higher education system grew out of specific historical, cultural and socio-economic contexts and analyze the higher education systems and structures of other selected countries and regions, focusing on the contexts which have influenced their development. Students examine emerging trends in the globalization of qualifications frameworks and quality assessment standards, and define their own positions in aspects of the universal criteria/local contexts debate. Prerequisite: Major in Higher Education and Student Personnel (EAHE) or Educational Administration-Higher Education (EDHE) and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**HIED 76675 - DESIGN AND DELIVERY OF EDUCATION ABROAD PROGRAMS**

Participants examine the many critical aspects of designing, planning and implementing an education abroad program; analyze its components, and, with others, design a new program. Students also consider the
institutional contexts in which the program design occurs, on a campus or third-party organizational level, including design decisions about curriculum content and program delivery mechanisms, co-curricular activities, safety issues and more. Students also develop skills in conducting needs assessments and program evaluations. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

HIED 76676 - INTERCULTURAL COMMUNICATION FOR INTERNATIONAL EDUCATORS

Students examine both classic and evolving intercultural communication theories, with an emphasis on the practical application of those theories to working in intercultural environments in higher education. Students analyze cultural influences on individuals, through the reading of cultural biographies and reflection on cultural influences in their own lives. Definitions of intercultural competence and strategies for intercultural learning, particularly in higher education contexts, are reviewed, with implications for program design in education abroad, work with international students, and other international education contexts, as relevant. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

HIED 76677 - WORKFORCE, ECONOMIC AND COMMUNITY DEVELOPMENT IN COMMUNITY COLLEGES

Within the context of social, economic, and technology shifts, this course examines the role of the community college in workforce, economic and community development. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

HIED 76678 - ISSUES AND TRENDS IN COMMUNITY COLLEGE ADMINISTRATION

Addresses current salient issues in community college administration. A variety of topics are examined as related to challenges for community college leaders arising from social, economic and political shifts. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

HIED 76679 - CAREER ADVISING: THEORY AND PRACTICE

(Slashed with HIED 66679) Develop practical skills in providing developmentally appropriate theory based
academic and career advising to assist individuals in adding meaningful and purposeful work into their lives. 
Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate 
Schedule Types: Seminar

Foundations Leadership Admin Department

HIED 76680 - ADMINISTRATION OF CAREER AND ADVISING SERVICES

(Slashed with HIED 66680) Examines contemporary issues in administration of career and academic advising services. Challenges students to rethink the models and methods used to prepare individuals to enter the workforce and navigate their careers. Prerequisite: Doctoral standing.
1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Foundations Leadership Admin Department

HIED 76733 - INTERPERSONAL AND GROUP DYNAMICS IN EDUCATIONAL ORGANIZATIONS

(Cross-listed with HIED 66733) Participants work in task groups learning about interpersonal, group and intergroup dynamics in organizations through lectures, discussions and analysis of their in-group experiences. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

HIED 76740 - THEORIES AND METHODS OF ORGANIZATIONAL DEVELOPMENT

(Cross-listed with HIED 66740) Study of theorists/practitioners in organization development. Involves exploration of consultant roles intervention theory methods of systems change applied to groups and organizations. Cross listed with CHDS 77840. Prerequisite: Major in Higher Education and Student Personnel (EAHE) or Educational Administration-Higher Education (EDHE) or special approval from the instructor doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

HIED 76749 - ASSESSMENT AND EVALUATION IN HIGHER EDUCATION

(Cross-listed with HIED 66749) This course is designed to provide an understanding of current assessment and evaluation methods in higher education settings. Topics will span from individual classroom assessment through institutional accreditation processes. Prerequisite: Doctoral standing.
3.000 Credit hours
**HIED 80080 - DISSERTATION PREPARATION SEMINAR**

Gain an in-depth understanding of the dissertation writing process. Complete dissertation proposal. Prerequisites: doctoral standing and special approval.

3.000 Credit hours
3.000 Other hours

**HIED 80199 - DISSERTATION I**

(Repeatable for credit) Doctoral dissertation for which registration in at least two semesters is required, the first of which is a semester in which dissertation work is begun and continuation of 30 hours. Prerequisites: doctoral standing and special approval.

15.000 Credit hours
15.000 Other hours

**HIED 80299 - DISSERTATION II**

(Repeatable for credit) Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. Prerequisite: HIED 80199 and doctoral standing.

15.000 Credit hours
15.000 Other hours

**HIED 86521 - ADVANCED EDUCATION LAW**

This doctoral-level course is designed to provide the opportunity for students to gain additional knowledge in the education law area; to improve writing skills; to begin writing for publication; to critically review their own work, as well as work of others; and to defend their work before their peers. Prerequisite: HIED 6/76520 or HIED 6/76652 or HIED 6/76518; and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
### HIED 86559 - ADVANCED STUDENT AND ADULT DEVELOPMENT

Helps develop an in-depth understanding of one or more current theories of student or adult development. Students will gain additional knowledge in student development theory and theory creation. Prerequisite: Major in Higher Education and Student Personnel (EAHE) or Educational Administration-Higher Education (EDHE) or special approval of the instructor; HIED 6/76653, doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

### HIST 11050 - WORLD HISTORY: ANCIENT AND MEDIEVAL

World history from early human societies through the mid-17th century. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Course Attributes:
Diversity Course-Global, Kent Core-Humanities, LER-Humanities, TAG - History, Trnfr Module-Humanities

### HIST 11051 - WORLD HISTORY: MODERN

World history from mid-17th century to the present. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Course Attributes:
Diversity Course-Global, Kent Core-Humanities, LER-Humanities, TAG - History, Trnfr Module-Humanities

### HIST 12070 - EARLY AMERICA: FROM PRE-COLONIZATION TO CIVIL WAR AND RECONSTRUCTION

A survey of United States history through 1877. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Course Attributes:
Diversity Course-Domestic, Kent Core-Humanities, LER-Humanities, TAG - History, Trnfr Module-Humanities
HIST 12071 - MODERN AMERICA: FROM INDUSTRIALIZATION TO GLOBALIZATION

A survey of United States history since 1877. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

History Department

Course Attributes:
Diversity Course-Domestic, Kent Core-Humanities, LER-Humanities, TAG - History, Trnfr Module-Humanities

HIST 31024 - WORLD WAR II

Survey of one of the greatest political and military events in history, focusing especially on causes, major personalities and chief political, ideological, moral, scientific and diplomatic aspects. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

History Department

HIST 31027 - HISTORY OF ENGLAND TO 1688

Survey of medieval and early modern England. Topics include Norman Conquest, medieval culture and society, Reformation, Age of Elizabeth, English Revolution. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

History Department

HIST 31028 - ENGLAND SINCE 1688

Survey of national development from the Glorious Revolution through the Second World war, with special attention to leaders, prominent individuals and problems of change. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

History Department

HIST 31030 - NATO: THE ENDURING ALLIANCE

Examination of the historical and contemporary roles of the North Atlantic Treaty Organization. Prerequisite: Junior standing or special approval of instructor.
3.000 Credit hours
### HIST 31035 - THE GLOBAL COLD WAR

Explores the Cold War through a global lens. Includes political, diplomatic, cultural, and social perspectives. Prerequisite: Junior standing.

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### HIST 31040 - AMERICAN HISTORY THROUGH POPULAR MUSIC

Allows students to develop an understanding of the interconnection between the rise of popular music in the period after 1865 to the social, political, and technological changes that this period witnessed and how this helps to understand the meaning and significance of cultural identity in modern American history. Prerequisite: sophomore standing.

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### HIST 31050 - HISTORY AND SOCIETY OF MODERN GREECE

Study of modern Greece concentrating on political, economic, cultural and societal developments since 1821. Prerequisite: None.

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<th>3.000 Credit hours</th>
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### HIST 31052 - HISTORY OF MODERN FRANCE

Survey of French history from 1815 to the present. Topics include industrialization, republicanism and revolution, the experience of war and defeat, empire and decolonization. Prerequisite: None.

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<th>3.000 Credit hours</th>
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<td>Course Code</td>
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<tr>
<td>HIST 31053</td>
<td>MODERN EUROPE, 1815 TO PRESENT</td>
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<tr>
<td>HIST 31061</td>
<td>HISTORY OF OHIO</td>
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<tr>
<td>HIST 31071</td>
<td>US FOREIGN RELATIONS THROUGH 1898</td>
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<tr>
<td>HIST 31072</td>
<td>US FOREIGN RELATIONS, 1898-1945</td>
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<tr>
<td>HIST 31073</td>
<td>US FOREIGN RELATIONS SINCE 1945</td>
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</tbody>
</table>
HIST 31075 - HISTORY OF WOMEN IN THE UNITED STATES
(Cross-listed with WMST 30100) An exploration of the political, economic, social, intellectual, and cultural forces that have shaped women's lives, women's thought, perceptions of womanhood, and feminism for 1607 to the present in what is now the United States. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

HIST 31080 - AFRICAN AMERICAN HISTORY: SLAVERY TO FREEDOM
(Cross-listed with PAS 33101) Survey of African American history from the colonial period to 1877. Course provides a general knowledge of the social, political and cultural history of African Americans from colonial times to the end of the Reconstruction. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

HIST 31112 - CHINESE CIVILIZATION
General survey of evolution of Chinese civilization from the Bronze Age to the rise of communism. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

HIST 31114 - TRADITION AND REVOLUTION IN SOUTHEAST ASIA
Focusing on Southeast Asia, this course is organized chronologically around three broad periods: traditional states and societies (to 1800); colonial transformations and indigenous responses (1800-1945); and the emergence of modern nations (since 1945). Within these broad time frames, the course will explore several themes, including the origins of indigenous states; the impact of colonial domination; responses to colonial rule; and the nature of post-colonial societies and political systems. Given the size and diversity of the region, the course will concentrate on four nation-states: Burma, Thailand, the Philippines, and Indonesia. Prerequisite: Junior standing.
3.000 Credit hours
3.000 Lecture hours
HIST 31115 - INDIA SINCE 1526

Presents a broad introduction to the modern history and culture of India, or South Asia. Students will gain an understanding of the geography, traditions, religions, and culture that make India a distinct civilization. The course traces the history of Modern India from the Mughal Empire through the British Raj, Ghandi and nationalism, partition, and the Republic of India. Finally, the course examines the recent rise of Hindu fundamentalism and its implications for the world's largest democracy. Prerequisite: Junior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

HIST 31118 - VIETNAM WAR

Study of the causes, evolution and effects of warfare in Vietnam from 1946 to 1975 with special attention to colonialism, nationalism, communism and American intervention. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

HIST 31126 - HISTORY OF THE MIDDLE EAST

A survey of Islamic civilization in Middle Eastern context from the earliest days to the present. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

HIST 31127 - ANCIENT AND EARLY MEDIEVAL JEWISH HISTORY

Deals with the ancient and early medieval Jewish history from approximately 2000 B.C. to approximately 1200 A.D. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

HIST 31128 - LATE MEDIEVAL AND MODERN JEWISH HISTORY
Survey of Jewish history in Europe and the middle east from the age of the crusades to the 20th century. 
Prerequisite: None. 
3.000 Credit hours 
3.000 Lecture hours 

Levels: Undergraduate 
Schedule Types: Lecture 

History Department 

**HIST 31130 - HISTORY OF AFRICAN CIVILIZATION**

Survey of cultural, political, social and economic history of Africa from antiquity to European conquest. Emphasis on precolonial. Prerequisite: None. 
3.000 Credit hours 
3.000 Lecture hours 

Levels: Undergraduate 
Schedule Types: Lecture 

History Department 

**HIST 31140 - MODERN LATIN AMERICA**

Focuses on 20th-century Latin America and the efforts by social classes and their political leaderships to overcome obstacles of underdevelopment. Emphasis on Argentina, Brazil, Chile, Mexico, Cuba and Central America. Prerequisite: None. 
3.000 Credit hours 
3.000 Lecture hours 

Levels: Undergraduate 
Schedule Types: Lecture 

Course Attributes: 
Diversity Course-Global 

**HIST 31141 - EARLY LATIN AMERICA**

Examines Latin America from precolonial times to the late 19th century. Lectures emphasize political and economic questions while readings focus on social history. Prerequisite: None. 
3.000 Credit hours 
3.000 Lecture hours 

Levels: Undergraduate 
Schedule Types: Lecture 

History Department 

**HIST 31500 - FOUNDATIONS IN THE HISTORY AND PHILOSOPHY OF SCIENCE**

(Cross-listed with PHIL 31080) An introduction to the study of science as a social, cultural, and historical phenomenon with an emphasis on the history of science primarily in Western civilization since 1500 and the major philosophical approaches to science developed in the twentieth century. Prerequisite: None. 
3.000 Credit hours 
3.000 Lecture hours
HIST 31543 - THE SCIENTIFIC REVOLUTION

A survey of the major social, cultural, and historical developments in the sciences and medicine in Europe from 1500 to 1750. Prerequisite: Junior standing.
3.000 Credit hours
3.000 Lecture hours

HIST 31550 - MEDICINE IN THE MODERN WORLD SINCE 1500

An introduction to the main social, cultural, and intellectual developments in the history of medicine from the Renaissance to the twentieth century using an approach to the history of medicine which emphasizes the interactions between ideas, institutions, and individuals. Prerequisite: Junior standing.
3.000 Credit hours
3.000 Lecture hours

HIST 32050 - HISTORICAL RESEARCH METHODS

Introduction to the study and practice of historical writing including historical methods, historiography, primary and secondary source research, critical analysis or documentary sources, historical reasoning and the preparation of written reports. Emphasis on developing effective communication skills and research procedures, record-keeping, citation, and bibliography. Prerequisite: None.
3.000 Credit hours
3.000 Other hours

HIST 38095 - SPECIAL TOPICS IN UNITED STATES HISTORY

(Repeatable for credit) Special course in the history of the United States, the subject and topic of which varies by term and instructor. Precise titles and descriptions to be inserted in the Schedule of Classes. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisites</th>
<th>Credits</th>
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<th>Other Hours</th>
<th>Schedule Types</th>
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<tr>
<td>HIST 38195</td>
<td>SPECIAL TOPICS IN EUROPE SINCE 1500</td>
<td>(Repeatable for credit) Special course in the history of Europe since 1500, the subject and topic of which varies by term and instructor. Precise titles and descriptions to be inserted in the Schedule of Classes. Prerequisite: none.</td>
<td>3.000 Credit hours, 3.000 Lecture hours</td>
<td>Undergraduate</td>
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<tr>
<td>HIST 38295</td>
<td>SPECIAL TOPICS IN GLOBAL HISTORY</td>
<td>(Repeatable for credit) Special course in the history of one or more of the following: the ancient and medieval worlds, Africa, Asia, Latin America, or the Middle East, the subject and topic of which varies by term and instructor. Precise titles and descriptions to be inserted in the Schedule of Classes. Prerequisite: none.</td>
<td>3.000 Credit hours, 3.000 Lecture hours</td>
<td>Undergraduate</td>
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<tr>
<td>HIST 40092</td>
<td>INTERNSHIP IN HISTORY</td>
<td>(Repeatable for credit) Student internship at an institution related to the history major (e.g., historical society, museum, archives, historic preservation organization). Prerequisite: Junior standing.</td>
<td>3.000 Credit hours, 3.000 Other hours</td>
<td>Undergraduate</td>
<td>Practicum or Internship</td>
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<td>History Department</td>
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<td>HIST 40093</td>
<td>WORKSHOP IN HISTORY</td>
<td>(Repeatable for credit) Special workshop in history. Topic will vary according to professor. Prerequisite: None.</td>
<td>1.000 TO 6.000 Credit hours, 1.000 TO 6.000 Other hours</td>
<td>Undergraduate</td>
<td>Workshop</td>
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<tr>
<td>HIST 40197</td>
<td>AMERICAN CULTURAL HERITAGE: THE ARTS AND SOCIETY</td>
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Examination of music, painting and literature in their cultural contexts during four periods of American history. American studies methodology and interdisciplinary thought. Prerequisite: Junior standing and one prior course in history.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Colloquium

History Department

**HIST 41000 - INTRODUCTION TO PUBLIC HISTORY**

(Cross-listed with HIST 51000 and HIST 71000) A survey of public history including: archives, editing, museums and historical agency administration; historic preservation and related skill areas (e.g. artifact analysis, oral history). Prerequisite: Junior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

History Department

**HIST 41006 - ROMAN HISTORY**

(Cross-listed with CLAS 41006 and CLAS 51006, HIST 51006 and HIST 71006) A survey of Roman history from its beginnings to the fall of the Roman empire. Prerequisite: Junior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

History Department

**HIST 41010 - THE EARLY MIDDLE AGES**

(Cross-listed with HIST 51010 and HIST 71010) Survey of major political, social and cultural developments of Europe from the fourth through 10th centuries. Prerequisite: Junior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

History Department

**HIST 41011 - THE HIGH MIDDLE AGES**

(Cross-listed with HIST 51011 and HIST 71011) Survey of political, social and cultural developments of Europe from 11th through 13th centuries. Prerequisite: Junior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
HIST 41014 - EUROPE IN THE RENAISSANCE

Analysis of the various factors leading Europe from a rural, feudal, ecclesiastical society to one characterized by urbanism, trade, secularism and the state. Prerequisite: Junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

HIST 41016 - THE PROTESTANT AND CATHOLIC REFORMATIONS

Comprehensive course dealing with the religious, political, economic and social change accompanying the religious upheavals of the 16th century. Prerequisite: Junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

HIST 41017 - SEVENTEENTH-CENTURY EUROPE

This course will analyze those political, economic, social, religious and intellectual factors leading to economic crisis and civil wars in Europe. Prerequisite: Junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

HIST 41020 - NINETEENTH-CENTURY EUROPE

Focus on industrialization and social transformation, political upheavals, intellectual thought, nationalism and foreign policy in Great Britain, France, Prussia and Austria. Prerequisite: Junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

HIST 41024 - MODERN EUROPEAN HISTORY, 1914-1945

(Cross-listed with HIST 51024 and HIST 71024) Special attention paid to the two world wars, Bolshevik Revolution, rise of fascism and fate of European Jewry. Prerequisite: Junior standing.
3.000 Credit hours
### HIST 41025 - MODERN EUROPEAN HISTORY: 1945-PRESENT

(Cross-listed with HIST 51025 and HIST 71025) Survey of European political, economic, social and cultural developments since 1945. Prerequisite: Junior standing.

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### HIST 41032 - CONSUMPTION AND MASS CULTURE IN MODERN EUROPE

Examines shifts in consumption and the growth of mass consumer society in Europe from 1815 to the present, including the evolution of consumer societies, or those societies in which people construct their identities through commodities; the changes that ensued with the growth of mass consumption; and differing consumption regimes in Eastern and Western Europe in the twentieth century. Prerequisite: Junior standing.

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### HIST 41033 - WOMEN AND GENDER IN MODERN EUROPE

The modern period of European history saw revolutionary change politically, economically and socially. In this course, the ways that a gendered analysis can change and deepen our understanding of these historical changes and events is examined, including the “lived experience” of women and men focusing on family, sexual lives, work and politics. Prerequisite: Junior standing.

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### HIST 41041 - HISTORY OF GERMANY, 1871-PRESENT

Focuses on the impact of industrialization, the dilemma of the German left, the rise of Nazism and the emergence of two German states after 1945. Prerequisite: Junior standing.

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<tr>
<td>HIST 41044</td>
<td>IMPERIAL RUSSIA, 1689-1917</td>
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<td>HIST 41045</td>
<td>MODERN RUSSIA, 1917-PRESENT</td>
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<tr>
<td>HIST 41051</td>
<td>POLITICS, CULTURE AND SOCIETY OF 20TH-CENTURY EUROPE</td>
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<tr>
<td>HIST 41056</td>
<td>HISTORY OF COLONIAL AMERICA:1492-1714</td>
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<tr>
<td>HIST 41057</td>
<td>EIGHTEENTH-CENTURY AMERICA:1714-1789</td>
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Course Attributes: Diversity Course-Domestic
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<th>Lecture Hours</th>
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<th>History Department</th>
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<tbody>
<tr>
<td>HIST 41058</td>
<td>JEFFERSON-JACKSON ERA, 1789-1848</td>
<td>(Cross-listed with HIST 51058 and HIST 71058) Study of the founding and development of the American nation, especially the periods of Jefferson and Jackson. Prerequisite: Junior standing.</td>
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<td>Undergraduate</td>
<td>Lecture</td>
<td>History Department</td>
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<tr>
<td>HIST 41060</td>
<td>COMPARATIVE FASCISM</td>
<td>(Cross-listed with HIST 51060 and HIST 71060) Examination of the theories and practices of fascist movements and regimes in twentieth-century Europe utilizing a variety of perspectives. Organized primarily thematically instead of geographically with readings and discussions based on historiographical and critical analyses. Prerequisite: junior standing.</td>
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<td>Lecture</td>
<td>History Department</td>
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<tr>
<td>HIST 41062</td>
<td>THE UNITED STATES: THE WESTWARD MOVEMENT</td>
<td>(Cross-listed with HIST 51062 and HIST 71062) The process of settlement from its beginnings; consequences for American history. Prerequisite: Junior standing.</td>
<td>3.000</td>
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<td>Lecture</td>
<td>History Department</td>
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<tr>
<td>HIST 41065</td>
<td>SECTIONAL CONFLICT AND CIVIL WAR</td>
<td>(Cross-listed with HIST 51065 and HIST 71065) Differences within the United States, including the controversy over slavery; the Civil War in all its aspects. Prerequisite: Junior standing.</td>
<td>3.000</td>
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<td>Undergraduate</td>
<td>Lecture</td>
<td>History Department</td>
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HIST 41066 - RECONSTRUCTION AND THE LATER SOUTH

(Cross-listed with HIST 51066 and HIST 71066) Controversy during and after the Civil War as to racial and sectional relationships; the post-Reconstruction compromises and their undoing. Prerequisite: Junior standing. 3.000 Credit hours
3.000 Lecture hours

HIST 41071 - AMERICAN SOCIAL AND INTELLECTUAL HISTORY, 1876-PRESENT

(Cross-listed with HIST 51071 and HIST 71071) Development of social Darwinism, racism, pragmatism, popular arts. Prerequisite: Junior standing.
3.000 Credit hours
3.000 Lecture hours

HIST 41075 - WAR AND SOCIETY IN THE UNITED STATES FROM 1607 THROUGH 1865

An examination of the impact of conflict and the military upon the society, culture, economy and diplomacy of the United States. Topics include colonial Indian wars, the Revolutionary War, the War of 1812, the Mexican-American War and the Civil War. Prerequisite: HIST 12070.
3.000 Credit hours
3.000 Lecture hours

HIST 41076 - WAR AND SOCIETY IN THE UNITED STATES FROM 1865 TO THE PRESENT

An examination of the impact of conflict and the military on the society, culture, economy and diplomacy of the United States. Topics include the frontier Army, the Spanish-American War and empire in the Pacific, the two world wars, the Cold War and the War on Terror. Prerequisite: HIST 12071.
3.000 Credit hours
3.000 Lecture hours
HIST 41077 - THE GREAT DEPRESSION IN AMERICA

Examines the impact and meaning of the Depression era, suggesting that the crisis helped to usher in a new way of imagining American society. Beginning with an overview of modernism, modernity and the modern age, the course explores how the New Deal fits into these theories, how specific programs operated under their ideals, and finally, how American society adapted and accepted this ‘modern’ vision. Prerequisite: junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

History Department

HIST 41079 - MIGRATIONS TO AMERICA, 1607 TO PRESENT

Examines the coming together of people from five continents to the United States and provides an overview of shifting patterns of migration both coerced and free to the United States. Starting in the colonial era, when slaves and servants typified the migration to America, this course then follows the migrations of pre-industrial, industrial, and post-industrial immigrants, their reception by American institutions and natives, and their efforts to construct communities in a new country. Prerequisite: junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

History Department

HIST 41083 - U.S. FOREIGN RELATIONS THROUGH WORLD WAR I

The evolution of U.S. foreign policy from its colonial origins through the Paris Peace Conference of 1919 with special emphasis on the domestic roots of foreign policy. Prerequisite: Junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

History Department

HIST 41084 - U.S. FOREIGN RELATIONS FROM 1920

The history of U.S. foreign policy from the 1920s on with special emphasis on the evolving role of America as a world power. Prerequisite: Junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

History Department
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisite</th>
<th>Credit Hours</th>
<th>Lecture Hours</th>
</tr>
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<tbody>
<tr>
<td>HIST 41085</td>
<td>THE SIXTIES IN AMERICA</td>
<td>The era of the 1960s outlined the debates and patterns of American history in the latter part of the twentieth century and continues to resonate in our contemporary world. This course examines the seminal events, persons and developments - including JFK's New Frontiers policy; Martin Luther King Jr. and Malcolm X; the March on Washington; Johnson's Great Society; the Vietnam War; the New Left; the counter-culture; country music; the rise of modern conservatism; Nixon; Watergate; and the Oil Crisis - to get a better understanding of the meaning and significance of this crucial era to the history of the United States and the world. Prerequisite: junior standing.</td>
<td>3.000 Credit hours</td>
<td>3.000</td>
<td>Lecture hours</td>
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<tr>
<td>HIST 41087</td>
<td>PROGRESSIVE AMERICA:THE UNITED STATES, 1896-1919</td>
<td>Major political, economic, social, cultural and diplomatic events from the crisis of the 1890s through the first World War. Prerequisite: Junior standing.</td>
<td>3.000 Credit hours</td>
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<td>Lecture hours</td>
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<tr>
<td>HIST 41088</td>
<td>NEW ERA THROUGH WORLD WAR:THE UNITED STATES, 1920-1945</td>
<td>(Cross-listed with HIST 51088 and HIST 71088) Major political, economic, social, cultural and diplomatic events from the new era of the 1920s through the second World War. Prerequisite: Junior standing.</td>
<td>3.000 Credit hours</td>
<td>3.000</td>
<td>Lecture hours</td>
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<tr>
<td>HIST 41089</td>
<td>RECENT AMERICA:THE UNITED STATES, 1945-PRESENT</td>
<td>Examines everyday life and culture, assesses the degree to which presidents and their administrations are the reflections of their constituencies, and evaluates the significant events and themes of U.S. history since 1945. Prerequisite: Junior standing.</td>
<td>3.000 Credit hours</td>
<td>3.000</td>
<td>Lecture hours</td>
</tr>
<tr>
<td>HIST 41097</td>
<td>COLLOQUIUM:SAINTS, MONKS, AND THE MEDIEVAL COMMUNITY</td>
<td>(Cross-listed with HIST 51097 and HIST 71097) Investigates major religious institutions that shaped medieval</td>
<td>3.000 Credit hours</td>
<td>3.000</td>
<td>Lecture hours</td>
</tr>
</tbody>
</table>
European society and the impact on popular piety. Prerequisite: Junior standing.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Colloquium

History Department

**HIST 41112 - HISTORY OF MODERN CHINA**

(Cross-listed with HIST 51112 and HIST 71112) Disintegration of the Chinese empire amid Western challenge and internal disorder and the subsequent rise of communism. Prerequisite: Junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

History Department

**HIST 41116 - HISTORY OF JAPAN**

(Cross-listed with HIST 51116 and HIST 71116) General survey of the development of Japan from a loose confederation of clans to a modern industrial state. Prerequisite: junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

History Department

**HIST 41129 - THE HOLOCAUST: THE DESTRUCTION OF EUROPEAN JEWRY, 1938-1945**

Analysis of those political, economic, social and intellectual factors leading to systematic destruction of European Jewry during World War II. Prerequisite: Junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

History Department

**HIST 41132 - HISTORY OF AFRICA, 1880-PRESENT**

(Cross-listed with HIST 51132 and HIST 71132) Prerequisite: Junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

History Department
### HIST 41789 - THE FRENCH REVOLUTION AND NAPOLEON

(Cross-listed with HIST 51789 and HIST 71789) Analysis of the causes of Revolution in France, political, ideological and social conflict in the construction of French democracy expansion of the revolution outside of France. Prerequisite: Senior standing.

3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

History Department

### HIST 42140 - THE SIXTIES: A THIRD WORLD VIEW

(Cross-listed with HIST 52140 and HIST 72140) Examines the political, social and cultural upheaval of the 1960s in Latin America, Africa and Asia. Prerequisite: Junior standing.

3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

History Department

### HIST 42141 - COMPARATIVE THIRD WORLD REVOLUTIONS

Examination of 20th-century revolutions in Latin America, Africa and Asia focusing on ideologies and political leadership. Prerequisite: Junior standing.

3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

History Department

### HIST 42142 - AFRO-LATIN AMERICA

(Cross-listed with HIST 52142, HIST 72142 and PAS 43300) Focuses on the social, cultural and political life of the African population of Latin America, from 19th century slaves to shantytown dwellers of megacities such as Rio de Janeiro. Topics include black resistance to racism, race mixture in multicultural societies, and how employment, political participation and family organization empowered the lives of Afro-Latin women. Prerequisite: Junior standing.

3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

History Department

### HIST 42297 - COLLOQUIUM: CHINA AND JAPAN

Study of important issues in the history of China and Japan through reading and discussing major works pertinent to the issues selected. Prerequisite: Junior standing.

3.000 Credit hours
HIST 42497 - COLLOQUIUM: WOMEN IN MODERN EUROPE

(Cross-listed with HIST 52497 and HIST 72497) The colloquium addresses the experiences of European women from the Enlightenment to the present. Using primary sources and recent scholarship, students examine the relationship between women and state formation, industry, sexuality, empire, socialism, war, welfare, migration and feminism. Prerequisite: Junior standing.

3.000 Credit hours
3.000 Other hours

HIST 43097 - COLLOQUIUM: MEDIEVAL RUSSIA

(Cross-listed with HIST 53097 and HIST 73097) Political, social, economic and cultural developments from the 9th-17th centuries, particularly the nature of political organization, the Mongol impact, the role of the church and religious life in pre-Petrine Russia. Prerequisite: Junior standing.

3.000 Credit hours
3.000 Other hours

HIST 43797 - COLLOQUIUM ON VICTORIAN ENGLAND

Consideration of distinctive features of Victorian England including class structure, ideas, manners, politics, foreign affairs, empire. Prerequisite: None.

3.000 Credit hours
3.000 Other hours

HIST 48697 - COLLOQUIUM: U.S. MIDDLE PERIOD, 1820-1900

3.000 Other hours

Levels: Undergraduate
Schedule Types: Colloquium

History Department

Course Attributes:
Writing Intensive Course
HIST 48897 - COLLOQUIUM IN AFRICAN AMERICAN HISTORY SINCE 1877

(Cross-listed with HIST 58897 and HIST 78897) This colloquium specializes in African American history after 1877, with emphasis on historiographical literature of the period. Prerequisite: Junior standing.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Colloquium

History Department

HIST 49091 - SENIOR SEMINAR IN HISTORY

(Repeatable for credit) History majors complete a significant work of original research based on primary sources. Topics vary by instructor. Enrollment limited to senior history majors. Prerequisite: History major and senior standing and HIST 32050 with C or higher.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

History Department

Course Attributes:
Experiential Learning Requirem, Writing Intensive Course

HIST 49095 - SPECIAL TOPICS IN UNITED STATES HISTORY

(Repeatable for a maximum of 18 credit hours) (Cross-listed with HIST 59095 and HIST 79095) Special course in the history of the United States, the subject and topic of which varies by term and instructor. Precise titles and descriptions to be inserted in the Schedule of classes. Prerequisite: junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

History Department

HIST 49195 - SPECIAL TOPICS: EUROPE SINCE 1500

(repeatable for maximum 18 credit hours) (Cross-listed with HIST 59195 and HIST 79195) Special course in the
history of Europe since 1500, the subject and topic of which varies by term and instructor. Precise titles and
descriptions to be inserted in the Schedule of Classes. Prerequisite: junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

History Department

HIST 49196 - INDIVIDUAL INVESTIGATION

(Repeatable for credit) Prerequisite: special approval.
2.000 OR 3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

History Department

HIST 49199 - SENIOR HONORS PROJECT

(Repeatable for credit) Thesis or other independent study or creative project. Required of students seeking to
graduate with honors in history. Prerequisite: Permission (see HONR 40099).
3.000 TO 6.000 Credit hours
3.000 TO 6.000 Other hours

Levels: Undergraduate
Schedule Types: Senior Project/Honors Thesis

History Department

Course Attributes:
Experiential Learning Requirem

HIST 49295 - SPECIAL TOPICS IN GLOBAL HISTORY

(Repeatable for credit) (Cross-listed with HIST 59295 and HIST 79295) Special course in the history of the
ancient and medieval worlds, Africa, Asia, Latin America, and/or the Middle East, the subject and topic of which
varies by term and instructor. Precise titles and descriptions to be inserted in the Schedule of Classes.
Prerequisite: junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

History Department

HIST 50093 - WORKSHOP IN HISTORY

(Repeatable for credit) (Cross-listed with HIST 40093) Special workshop in history. Topic will vary according to
professor. Prerequisite: None.
1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours
HIST 51000 - PUBLIC HISTORY

(Cross-listed with HIST 41000 and HIST 71000) A survey of public history including: archives; editing, museums and historical agency administration; historic preservation; and related skill areas (e.g. artifact analysis, oral history). Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

HIST 51005 - TEACHING WORLD HISTORY

(Repeatable for credit) (Cross-listed with HIST 71005) To prepare graduate students to teach world history at the university level. Special focus on integrating non-Western sources and points of view into the world history curriculum, preparation of world history syllabus and justification of selected readings and topics, mastery of on-line and in-class technologies to deliver world history materials. Prerequisite: graduate standing in history (HIST).
3.000 Credit hours
3.000 Lecture hours

HIST 51006 - ROMAN HISTORY

(Cross-listed with CLAS 41006 and CLAS 51006, HIST 41006 and HIST 71006) A survey of Roman history from its beginnings to the Fall of the Roman Empire. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

HIST 51010 - THE EARLY MIDDLE AGES

(Cross-listed with HIST 41010 and HIST 71010) A survey of the major political, social and cultural developments of Europe from the fourth through the tenth century. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours
HIST 51011 - THE HIGH MIDDLE AGES
(Cross-listed with HIST 41011 and HIST 71011) A survey of political, social and cultural developments of Europe from the eleventh through the thirteenth century. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

History Department

HIST 51024 - MODERN EUROPEAN HISTORY, 1914-1945
(Cross-listed with HIST 41024 and HIST 71024) Special attention paid to the two World Wars, Bolshevik Revolution, rise of Fascism and fate of European Jewry. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

History Department

HIST 51025 - MODERN EUROPEAN HISTORY: 1945 TO PRESENT
(Cross-listed with HIST 41025 and HIST 71025) Survey of European political, economic, social and cultural developments since 1945. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

History Department

HIST 51044 - RUSSIA FROM ITS ORIGINS TO 1801
(Cross-listed with HIST 41044 and HIST 71044) Study of the entire imperial period, with focus on modernization, state institutions, nationalities, social groups and estates, economy, politics and ideologies, and elite and popular culture. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

History Department

HIST 51045 - MODERN RUSSIA, 1917-PRESENT
(Cross-listed with HIST 41045 and HIST 71045) Focus on 1917 revolutions, civil war, nationalities question, NEP, collectivization, Great Terror, World War II, Cold War, Soviet foreign policy and culture, Perestroika, and post-Soviet economic, political, and ideological changes. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours
HIST 51056 - HISTORY OF COLONIAL AMERICA, 1492-1714

(Cross-listed with HIST 41056 and HIST 71056) Major patterns of thought and behavior among Spanish, French and English expansionists; English colonization to 1714. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

HIST 51060 - COMPARATIVE FASCISM

(Cross-listed with HIST 41060 and HIST 71060) Examination of the theories and practices of fascist movements and regimes in twentieth-century Europe utilizing a variety of perspectives. Organized primarily thematically instead of geographically with readings and discussions based on historiographical and critical analyses. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

HIST 51062 - THE UNITED STATES: THE WESTWARD MOVEMENT

(Cross-listed with HIST 41062 and HIST 71062) The process of settlement from its beginning; consequences for American history. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

HIST 51065 - SECTIONAL CONFLICT AND CIVIL WAR

(Cross-listed with HIST 41065 and HIST 71065) Differences within the United states, including the controversy over slavery; the Civil War in all its aspects. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

HIST 51066 - RECONSTRUCTION AND THE LATER SOUTH
(Cross-listed with HIST 41066 and HIST 71066) Controversy during and after the Civil War as to racial and sectional relationships; the post-Reconstruction compromises and their undoing. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

HIST 51088 - NEW ERA THROUGH WORLD WAR:THE UNITED STATES 1920-1945

(Cross-listed with HIST 41088 and HIST 71088) Major political, economic, social, cultural and diplomatic events from the new era of the 1920s through the second World War. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

HIST 51097 - COLLOQUIUM:SAINTS, MONKS AND THE MEDIEVAL COMMUNITY

(Repeatable for credit) (Cross-listed with HIST 41097 and HIST 71097) Investigates major religious institutions that shaped medieval European society and the impact on popular piety. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Colloquium

HIST 51132 - HISTORY OF AFRICA, 1880-PRESENT

(Cross-listed with HIST 41132 and HIST 71132) Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

HIST 51789 - THE FRENCH REVOLUTION AND NAPOLEON

(Cross-listed with HIST 41789 and HIST 71789) Analysis of the causes of revolution in France, political ideological and social conflict in the construction of French democracy expansion of the revolution outside of France. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
HIST 52497 - COLLOQUIUM: WOMEN IN MODERN EUROPE
(Repeatable for credit) (Cross-listed with HIST 42497 and HIST 72497) The colloquium addresses the experiences of European women from the Enlightenment to the present. Using primary sources and recent scholarship, students examine the relationship between women and state formation, industry, sexuality, empire, socialism, war, welfare, migration and feminism. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Colloquium

HIST 53097 - COLLOQUIUM: MEDIEVAL RUSSIA
(Repeatable for credit) (Cross-listed with HIST 43097 and HIST 73097) Political, social, economic and cultural developments from the 9th-17th centuries, particularly the nature of political organization, the Mongol impact, the role of the church and religious life in pre-Petrine Russia. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Colloquium

HIST 58697 - COLLOQUIUM: U.S. MIDDLE PERIOD 1820-1900
(Repeatable for credit) (Cross-listed with HIST 48697 and HIST 58697) Reading, discussion and written reviewing of important works on the period. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Colloquium

HIST 58897 - COLLOQUIUM IN AFRICAN-AMERICAN HISTORY SINCE 1877
(Repeatable for credit) (Cross-listed with HIST 48897 and HIST 78897) This colloquium specializes in African American history from 1877, with emphasis on historiographical literature of the period. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Colloquium

HIST 59095 - SPECIAL TOPICS IN UNITED STATES HISTORY
Special course in the history of the United States, the subject and topic of which varies by term and instructor. Precise titles and descriptions to be inserted in the Schedule of Classes. Repeatable. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

History Department

HIST 59195 - SPECIAL TOPICS: EUROPE SINCE 1500

(Repeatable for credit) (Cross-listed with HIST 49195 and HIST 79195) Special course in the history of Europe since 1500, the subject and topic of which varies by term and instructor. Precise titles and descriptions to be inserted in the Schedule of Classes. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

History Department

HIST 59295 - SPECIAL TOPICS IN GLOBAL HISTORY

(Repeatable for credit) (Cross-listed with HIST 49295 and HIST 79295) Special course in the history of the ancient and medieval worlds, Africa, Asia, Latin America, and/or the Middle East, the subject and topic of which varies by term and instructor. Precise titles and descriptions to be inserted in the Schedule of Classes. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

History Department

HIST 60092 - PUBLIC HISTORY INTERNSHIP

(Repeatable for credit) (Cross-listed with HIST 70092) Students serve an internship at an institution related to their emphasis in public history (e.g., historical society, museum, archives, historical preservation organization). Prerequisite: Graduate standing.

3.000 TO 6.000 Credit hours
3.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

History Department

HIST 61001 - METHODS OF HISTORICAL RESEARCH

An introduction to methods of historical research, with an emphasis on behavioral techniques. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisite</th>
<th>Credit Hours</th>
<th>Lecture Hours</th>
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<tbody>
<tr>
<td>HIST 61002</td>
<td>HISTORIOGRAPHY</td>
<td>Development of historical thinking. Students will read excerpts of famous historians and prepare papers. Prerequisite: Graduate standing. 3.000 Credit hours 3.000 Lecture hours</td>
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<tr>
<td>HIST 61070</td>
<td>WRITING SEMINAR IN HISTORY</td>
<td>(Repeatable for credit) (Cross-listed with HIST 81070) Students will spend the semester conceptualizing, researching and writing an article-length piece of original historical scholarship. Basic topics to be addressed include prospectus drafting, source identification, historiography, research methods, scholarly writing and revision, oral presentation and professional critiquing. All students will be expected to supplement the guidance they receive from the seminar instructor with regular consultations with their departmental advisors. Prerequisite: graduate standing. 3.000 Credit hours 3.000 Lecture hours</td>
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<tr>
<td>HIST 62097</td>
<td>PUBLIC HISTORY COLLOQUIUM</td>
<td>(Repeatable for credit) (Cross-listed with HIST 72097) Assigned readings, discussions and papers focus on particular emphases and skill areas in public history. Prerequisite: Graduate standing. 3.000 Credit hours 3.000 Other hours</td>
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<tr>
<td>HIST 69199</td>
<td>THESIS I</td>
<td>Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester distributed over several semesters if desired. Prerequisite: Graduate standing. 2.000 TO 6.000 Credit hours 2.000 TO 6.000 Other hours</td>
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### HIST 69299 - THESIS II

Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: HIST 69199 and graduate standing.

<table>
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<tr>
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Levels: Graduate  
Schedule Types: Masters Thesis  

History Department

### HIST 69896 - INDIVIDUAL INVESTIGATION

(Repeatable for credit) Prerequisite: Graduate standing.

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Levels: Graduate  
Schedule Types: Individual Investigation  

History Department

### HIST 69898 - RESEARCH

(Repeatable for credit) Prerequisite: Graduate standing.

<table>
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</table>

Levels: Graduate  
Schedule Types: Research  

History Department

### HIST 70092 - PUBLIC HISTORY INTERNSHIP

(Repeatable for credit) (Cross-listed with HIST 60092) Students serve an internship at an institution related to their emphasis in public history (e.g., historical society, museum, archives, historical preservation organization). Prerequisite: Doctoral standing.

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<th>Other hours</th>
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<td>3.000 TO 6.000</td>
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</tbody>
</table>

Levels: Graduate  
Schedule Types: Practicum or Internship  

History Department

### HIST 71000 - PUBLIC HISTORY

(Cross-listed with HIST 41000 and HIST 51000) A survey of public history including: archives, editing, museums and historical agency administration; historic preservation; and related skill areas (e.g. artifact analysis, oral history). Prerequisite: Doctoral standing.

<table>
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<tr>
<th>Credit hours</th>
<th>Lecture hours</th>
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</tbody>
</table>

Graduate
HIST 71005 - TEACHING WORLD HISTORY

(Repeatable for a maximum of 9 credit hours) (Cross-listed with HIST 51005) To prepare graduate students to teach world history at the university level. Special focus on integrating non-Western sources and points of view into the world history curriculum, preparation of world history syllabus and justification of selected readings and topics, mastery of on-line and in-class technologies to deliver world history materials. Prerequisite: doctoral standing in history (HIST).

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

History Department

HIST 71010 - THE EARLY MIDDLE AGES

(Cross-listed with HIST 41010 and HIST 51010) Survey of major political, social and cultural developments of Europe from the fourth through 10th centuries. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

History Department

HIST 71011 - THE HIGH MIDDLE AGES

(Cross-listed with HIST 41011 and HIST 51011) Survey of political, social and cultural developments of Europe from 11th through 13th centuries. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

History Department

HIST 71024 - MODERN EUROPEAN HISTORY, 1914-1945

(Cross-listed with HIST 41024 and HIST 51024) Special attention paid to the two world wars, Bolshevik Revolution, rise of fascism and fate of European Jewry. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

History Department
HIST 71025 - MODERN EUROPEAN HISTORY: 1945 TO PRESENT

(Cross-listed with HIST 41025 and HIST 51025) Survey of European political, economic social and cultural developments since 1945. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

History Department

HIST 71044 - RUSSIA FROM ITS ORIGINS TO 1801

(Cross-listed with HIST 41044 and HIST 51044) Study of the entire imperial period, with focus on modernization, state institutions, nationalities, social groups and estates, economy, politics and ideologies, and elite and popular culture. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

History Department

HIST 71045 - MODERN RUSSIA, 1917-PRESENT

(Cross-listed with HIST 41045 and HIST 51045) Focus on 1917 revolutions; Civil War; nationalities question; NEP; collectivization; great terror; World War II; Cold War; Soviet Foreign policy and culture; Perestroika and post-Soviet economic, political and ideological changes. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

History Department

HIST 71056 - HISTORY OF COLONIAL AMERICA, 1492-1714

(Cross-listed with HIST 41056 and HIST 51056) Major patterns of thought and behavior among Spanish, French and English expansionists; English colonization to 1714. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

History Department

HIST 71058 - THE JEFFERSON-JACKSON ERA, 1789-1848

(Cross-listed with HIST 41058 and HIST 51058) Study of the founding and development of the American nation, especially the periods of Jefferson and Jackson. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours
HIST 71060 - COMPARATIVE FACISM

(Cross-listed with HIST 41060 and HIST 51060) Examination of the theories and practices of fascist movements and regimes in twentieth-century Europe utilizing a variety of perspectives. Organized primarily thematically instead of geographically with readings and discussions based on historiographical and critical analyses. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

HIST 71062 - THE UNITED STATES: THE WESTWARD MOVEMENT

(Cross-listed with HIST 41062 and HIST 51062) The process of settlement from its beginnings; consequences for American history. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

HIST 71065 - SECTIONAL CONFLICT AND CIVIL WAR

(Cross-listed with HIST 41065 and HIST 51065) Differences within the United States, including the controversy over slavery; the Civil War in all its aspects. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

HIST 71066 - RECONSTRUCTION AND THE LATER SOUTH

(Cross-listed with HIST 41066 and HIST 51066) Controversy during and after the Civil War as to racial and sectional relationships; the post-Reconstruction compromises and their undoing. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours
### HIST 71088 - NEW ERA THROUGH WORLD WAR: THE UNITED STATES 1920-1945

(Cross-listed with HIST 41088 and HIST 51088) Major political, economic, social, cultural and diplomatic events from the new era of the 1920s through the second World War. Prerequisite: Doctoral standing.

- **3.000 Credit hours**
- **3.000 Lecture hours**

**Levels:** Graduate  
**Schedule Types:** Lecture  

**History Department**

### HIST 71097 - COLLOQUIUM: SAINTS, MONKS AND THE MEDIEVAL COMMUNITY

(Repeatable for credit) (Cross-listed with HIST 41097 and HIST 51097) Investigates major religious institutions that shaped medieval European society and the impact on popular piety. Prerequisite: Doctoral standing.

- **3.000 Credit hours**
- **3.000 Other hours**

**Levels:** Graduate  
**Schedule Types:** Colloquium  

**History Department**

### HIST 71132 - HISTORY OF AFRICA, 1880-PRESENT

(Cross-listed with HIST 41132 and HIST 51132) Prerequisite: Doctoral standing.

- **3.000 Credit hours**
- **3.000 Lecture hours**

**Levels:** Graduate  
**Schedule Types:** Lecture  

**History Department**

### HIST 71789 - THE FRENCH REVOLUTION AND NAPOLEON

(Cross-listed with HIST 41789 and HIST 51789) Analysis of the causes of revolution in France, political ideological and social conflict in the construction of French democracy expansion of the revolution outside of France. Prerequisite: Doctoral standing.

- **3.000 Credit hours**
- **3.000 Lecture hours**

**Levels:** Graduate  
**Schedule Types:** Lecture  

**History Department**

### HIST 72097 - PUBLIC HISTORY COLLOQUIUM

(Repeatable for credit) (Cross-listed with HIST 62097) Assigned readings, discussions and papers focus on particular emphases and skill areas in public history. Prerequisite: Doctoral standing.

- **3.000 Credit hours**
- **3.000 Other hours**

**Levels:** Graduate  
**Schedule Types:** Colloquium
**HIST 72140 - THE SIXTIES: A THIRD WORLD VIEW**

(Cross-listed with HIST 42140 and HIST 52140) Examines the political, social and cultural upheaval of the 1960s in Latin America, Africa and Asia. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

History Department

**HIST 72497 - COLLOQUIUM: WOMEN IN MODERN EUROPE**

(Repeatable for credit) (Cross-listed with HIST 42497 and HIST 52497) The colloquium addresses the experiences of European women from the Enlightenment to the present. Using primary sources and recent scholarship, students examine the relationship between women and state formation, industry, sexuality, empire, socialism, war, welfare, migration and feminism. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Colloquium

History Department

**HIST 73097 - COLLOQUIUM: MEDIEVAL RUSSIA**

(Repeatable for credit) (Cross-listed with HIST 43097 and HIST 53097) Political, social, economic and cultural developments from the 9th to 17th centuries particularly the nature of political organization, the Mongol impact, the role of the church and religious life in pre-Petrine Russia. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Colloquium

History Department

**HIST 78697 - COLLOQUIUM: U.S. MIDDLE PERIOD 1820-1900**

(Repeatable for credit) (Cross-listed with HIST 48697 and HIST 58697) Coverage of the historical literature on Europe's major political, diplomatic, economic and social developments since 1945. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Colloquium

History Department

**HIST 78897 - COLLOQUIUM IN AFRICAN-AMERICAN HISTORY SINCE 1877**
This colloquium specializes in African American history after 1877, with emphasis on historiographical literature of the period. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Colloquium

HIST 79095 - SPECIAL TOPICS IN UNITED STATES HISTORY

(Repeatable for credit) (Cross-listed with HIST 49095 and HIST 59095) Special course in the history of the United States, the subject and topic of which varies by term and instructor. Precise titles and descriptions to be inserted in the Schedule of Classes. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

HIST 79195 - SPECIAL TOPICS: EUROPE SINCE 1500

(Repeatable for credit) (Cross-listed with HIST 49195 and HIST 59195) Special course in the history of Europe since 1500, the subject and topic of which varies by term and instructor. Precise titles and descriptions to be inserted in the Schedule of Classes. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

HIST 79295 - SPECIAL TOPICS IN GLOBAL HISTORY

(Repeatable for credit) (Cross-listed with HIST 49295 and HIST 59295) Special course in the history of the ancient and medieval worlds, Africa, Asia, Latin America, and/or the Middle East, the subject and topic of which varies by term and instructor. Precise titles and descriptions to be inserted in the Schedule of Classes. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

HIST 81001 - METHODS OF HISTORICAL RESEARCH

The course introduces graduate students to library reference tools, journal literature, research methodology, quantitative techniques and writing and original research paper. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours
### HIST 81002 - HISTORIOGRAPHY

Development of historical thinking. Students will read excerpts of famous historians and prepare papers. Prerequisite: Doctoral standing.

- **Credit hours:** 3.000
- **Lecture hours:** 3.000

### HIST 81070 - WRITING SEMINAR IN HISTORY

(Repeatable twice for credit) (Cross-listed with HIST 61070) Students will spend the semester conceptualizing, researching, and writing an article-length piece of original historical scholarship. Basic topics to be addressed include prospectus drafting, source identification, historiography, research methods, scholarly writing and revision, oral presentation, and professional critiquing. All students will be expected to supplement the guidance they receive from the seminar instructor with regular consultations with their departmental advisors. Prerequisite: doctoral standing.

- **Credit hours:** 3.000
- **Lecture hours:** 3.000

### HIST 89199 - DISSERTATION I

(Repeatable for credit) Doctoral dissertation, for which registration in at least two semesters is required first of which will be semester in which dissertation work is begun and continuing until the completion of 30 hours. Prerequisite: Doctoral standing.

- **Credit hours:** 15.000
- **Other hours:** 15.000

### HIST 89299 - DISSERTATION II

(Repeatable for credit) Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. Prerequisite: HIST 89199 and doctoral standing.

- **Credit hours:** 15.000
- **Other hours:** 15.000
HIST 89896 - INDIVIDUAL INVESTIGATION

(Repeatable for credit) Prerequisite: Doctoral standing.
2.000 OR 3.000 Credit hours
2.000 OR 3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

HIST 89898 - RESEARCH

(Repeatable for credit) Prerequisite: Doctoral Standing.
1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

HM 13022 - SANITATION AND SAFETY PRINCIPLES AND PRACTICES

Food safety and sanitation practices for restaurants and foodservices as related to foodborne illness prevention, food purchasing, receiving, storage, preparation, cooling and heating practices, and sanitation of dishes and overall facility. HACCP plans, microbiological concerns related to foods, government regulations and inspections, and employee safety and accident prevention are covered. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

HM 13023 - TECHNIQUES OF FOOD PRODUCTION

Commercial food production principles for milk, cheese, eggs, produce, grains, meats, poultry and fish are covered. Sauces, soups, salads, entrees, side dishes and desserts are prepared with an emphasis on food quality and safety, effective equipment use, work planning and simplification, recipe standardization, pricing and presentation. Prerequisite: HM 13022; and hospitality management (HSPM) major.
5.000 Credit hours
2.000 Lecture hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

HM 13024 - INTRODUCTION TO HOSPITALITY MANAGEMENT
Career opportunities and the scope, development and history of the hospitality industry. Introduction to management in the hospitality industry including food service, lodging and tourism. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**HM 21095 - SPECIAL TOPICS IN HOSPITALITY MANAGEMENT**

(Repeatable for a maximum of 8 credit hours) Discussion of a major discipline or subject within the hospitality industry. Prerequisite: none.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**HM 23012 - FOOD STUDY**

Principles of food preparation and quality evaluation with an emphasis on food science concepts, food consumption trends, government regulation, and nutrition. Course includes lecture and lab components. Prerequisite: NUTR 23511.

3.000 Credit hours
1.000 Lecture hours
4.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Foundations Leadership Admin Department

Course Attributes:
TAG - Health

**HM 23030 - HOTEL OPERATIONS**

The purpose of this course is to give students a basic understanding of the overall hotel operations. Students will be introduced to the principles and practices of managerial functions relating to the operation of hotels and other accommodations. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**HM 33020 - LEGAL ISSUES IN THE HOSPITALITY INDUSTRY**

Overview and analysis of legal issues of concern to the hospitality operation. Topics include employment law, food and beverage liabilities, patron civil rights, local, state, and federal regulations; and franchising. Prerequisite: Junior standing.
HM 33026 - HOSPITALITY COST CONTROL AND ANALYSIS

Prepares students to analyze and control costs encountered in hospitality operations. Includes computer applications, math drills and simulations. Prerequisite: MIS 24053 and ACCT 23020 and HM 13023.

Levels: Undergraduate
Schedule Types: Lecture

Foundations Leadership Admin Department

HM 33028 - HOSPITALITY PURCHASING

Emphasis on the selection of food, goods and services for the management of hospitality organizations. Emphasis is placed on product identification, grading and quality standards. Prerequisite: HM 13023.

Levels: Undergraduate
Schedule Types: Lecture

Foundations Leadership Admin Department

HM 33029 - CATERING AND BANQUET MANAGEMENT

The course includes an in-depth analysis of all components of the catering profession including management, legal aspects, getting started in business, catering contracts, menu planning, beverage service, catering equipment, catering logistics, personnel, marketing, pricing, sanitation and safety practices, purchasing, accessory services, accounting and control practices. Prerequisite: HM 33026.

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Foundations Leadership Admin Department

HM 33031 - FOOD, WINE AND BEVERAGE PAIRING

Provides knowledge of the sensory relationship of food, wine, beer and other spirits and the important role this process has on hospitality operations. Topics include developing an understanding of wine, beer and food pairing as a hierarchical process. Menu development and cooking the food play an important role in this class; food is chosen first then paired with the appropriate beverage. Students must be 21 years old to enroll in the class. Prerequisite: none.

Levels: Undergraduate
Schedule Types: Lecture

Foundations Leadership Admin Department
Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab

Foundations Leadership Admin Department

**HM 33036 - CLUB MANAGEMENT**

Introduction to private club management and operations. Strategic planning, marketing, human resources, service excellence, legal issues and financial management will be emphasized within the context of food and beverage, golf and recreation. Prerequisite: Junior standing.  
3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

Foundations Leadership Admin Department

**HM 33040 - CONVENTION SALES AND MANAGEMENT**

From a sales and convention management perspective, the convention and meetings industry is examined. Students are introduced to all facets of the conventions and meetings industry. Prerequisite: HM 23030 and junior standing.  
3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

Foundations Leadership Admin Department

**HM 33050 - PROFESSIONAL PRACTICE IN HOSPITALITY MANAGEMENT**

Preparation of students for professional work experiences in hospitality management. Career development and professional workplace issues are addressed. Prerequisite: junior standing and meet hospitality management professional study requirements.  
1.000 Credit hours  
1.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

Foundations Leadership Admin Department

**HM 33070 - INTERNATIONAL CUISINE**

Provides comprehensive coverage of cuisines found throughout the world, not only through recipes and techniques but also through coverage of the history, culture, geography, religion, and locally grown ingredients that influence these various cuisines. The intent is to increase learning and retention through repetitive practice cooking, using recipes steeped in culinary history and culture from around the world. Prerequisite: sophomore standing.  
4.000 Credit hours  
1.500 Lecture hours  
5.000 Lab hours

Levels: Undergraduate
HM 33145 - BAKING AND PASTRY FUNDAMENTALS

Building on the theoretical and practical foundations of Baking and Pastry Fundamentals, this course will help students develop advanced skills and knowledge in the production and selection of quality handcrafted and purchased products. Scientific principles and experimental methods will be explored and additional emphasis will be placed on advanced decorating and finishing techniques, yeast beads, sweet doughs, cakes, tortes, chocolate work. Prerequisite: none.
3.000 Credit hours
1.500 Lecture hours
4.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

HM 37777 - CASINO MANAGEMENT AND GAMING OPERATIONS

Introduction to the various aspects of the casino and gaming industry. Students study the structure of casino organizations, gain basic understanding of gaming operations and responsible gaming. Casino environments are experienced through on-site visitations. Funds for travel are the student's responsibility, and all students must be legal age of 21 prior to on-site class visitations. Prerequisite: special approval.
3.000 Credit hours
2.500 Lecture hours
1.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

HM 41093 - VARIABLE TOPIC WORKSHOP IN HOTELITY MANAGEMENT

(Repeatable for credit) Workshop setting dealing with a topic or topics in hospitality management. Learning experiences are provided in a wide range of areas. Prerequisite: None.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Workshop

HM 41095 - SPECIAL TOPICS IN HOSPITALITY MANAGEMENT

(Repeatable for credit) Discussion of a major topic within a specific field of hospitality management. Prerequisite: None.
1.000 TO 4.000 Credit hours
1.000 TO 4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
**HM 41096 - INDIVIDUAL INVESTIGATION**

(Repeatable for credit) Independent study in hospitality management. Prerequisite: Written permission from instructor.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

**HM 43025 - HOSPITALITY MARKETING**

Application of marketing principles, practices and theories relevant to hospitality organizations. Case studies drawn from the hospitality industry are incorporated. Prerequisite: HM 13023 and MIS 24163 and MKTG 25010.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**HM 43027 - HOSPITALITY HUMAN RESOURCE MANAGEMENT**

(Cross-listed with HM 53027) Application of human resource management principles, practices, theories and legal issues relevant to hospitality organizations. Hospitality management focused case studies are incorporated. Prerequisite: HM 13023 and MIS 34180.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Course Attributes:
Writing Intensive Course

**HM 43030 - FOOD SERVICE SYSTEMS MANAGEMENT**

(Cross-listed with HM 53030) The study of food service systems management, including menu planning and evaluation, recipe development, purchasing equipment, financial management, marketing and human resources. Prerequisite: HM 23012.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Course Attributes:
### HM 43031 - LAYOUT AND DESIGN OF FOOD SERVICE OPERATIONS

Analysis and planning for the layout and design of commercial food service operations. Includes basic principles of design; space analysis; and equipment use, care, selection and layout for food service facilities based on the financial performance of the operation; food codes and related regulations. An appreciation for engineering and architecture concerns pertaining to food service operations is developed. Prerequisite: HM 33026.

3.000 Credit hours  
3.000 Lecture hours

**Levels:** Undergraduate  
**Schedule Types:** Lecture

### HM 43032 - FOOD PRODUCTION AND SERVICE MANAGEMENT

The application of management principles in food production and service systems, including production management, quality control, distribution and service, and physical facilities. A laboratory is included in the course. Prerequisite: HM 23012 and HM 43030.

3.000 Credit hours  
1.500 Lecture hours  
1.500 Lab hours

**Levels:** Undergraduate  
**Schedule Types:** Laboratory, Lecture

### HM 43035 - HOSPITALITY SERVICE QUALITY MANAGEMENT

(Slashed with HM 53035) Tourism and hospitality are service industries. A significant element in these industries is management of the service encounters which will be the focus this course. In order to provide a comprehensive, inter- and multi-disciplinary view, the course will be constructed in three modules. The first module will present the characteristics and dynamics of the service encounter. The second module will focus on successful service encounters (service quality) and its outcome (customer satisfaction). The third module will present the dynamics of service failure and service recovery. The three modules of this course will provide an opportunity to understand the dynamics of the service encounter, to manage service quality and to learn how to identify service failure and plan for service recovery. Prerequisite: MIS 24163.

3.000 Credit hours  
3.000 Lecture hours

**Levels:** Undergraduate  
**Schedule Types:** Lecture

### HM 43040 - STRATEGIC HOTEL MANAGEMENT

(Cross-listed with HM 53040) The hotel manager's role as a strategic thinker is emphasized. Techniques such as co-alignment model, brand strategy, competitor analysis, market research, risk management and finance options are used to develop strategic plans in hotels. Prerequisite: HM 23030 and HM 33026.

3.000 Credit hours
HM 43043 - HOSPITALITY MEETINGS MANAGEMENT

(Cross-listed with HM 53043) Exploration of the unique issues associated with managing hospitality meeting and event planning. Emphasis on management of social, association and corporate events, weddings, reunions, award banquets, receptions and annual meetings held in hospitality venues requiring food and beverage and/or lodging. Prerequisite: HM 23030 and HM 33026.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Foundations Leadership Admin Department

HM 43092 - PRACTICUM IN HOSPITALITY MANAGEMENT

(Repeatable for a total of 6 credit hours) Supervised professional experience in the hospitality industry including operations such as restaurants, hotels, clubs, health care, theme parks and food distribution. Course assignments are included. Repeatable for a total of 6 credits. Prerequisite: HM 33050 and junior or senior standing and special approval.

3.000 TO 6.000 Credit hours
19.000 TO 37.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Foundations Leadership Admin Department

Course Attributes:
Experiential Learning Requirem

HM 43192 - HOSPITALITY MEETINGS MANAGEMENT PRACTICUM

(Slashed with HM 53044) Practical experience in a hospitality establishment related to: inside and outside event sales, event management, guest services, food and beverage management, event staff scheduling, banquet operations, maintenance and housekeeping related to events. Corequisite: HM 43043.

2.000 Credit hours
4.000 Lab hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Foundations Leadership Admin Department

Course Attributes:
Experiential Learning Requirem

HM 53025 - HOSPITALITY MARKETING
(Cross-listed with HM 53025) Application of marketing principles, practices and theories relevant to hospitality organizations. Internet marketing in hospitality. Case studies drawn from the hospitality industry are incorporated. Prerequisite: Special approval and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**HM 53027 - HOSPITALITY HUMAN RESOURCE MANAGEMENT**

(Cross-listed with HM 43027) Application of human resource management principles, practices, theories and legal issues relevant to hospitality organizations. Hospitality management focused case studies and current controversies are incorporated. Prerequisite: Special approval and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**HM 53030 - FOOD SERVICE SYSTEMS MANAGEMENT**

(Cross-listed with HM 43030) The study of food services systems management, including menu planning and evaluation, recipe development, purchasing, equipment, financial management, marketing and human resources. Prerequisite: Special approval and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**HM 53035 - HOSPITALITY SERVICE QUALITY MANAGEMENT**

(Slashed with HM 43035) Tourism and hospitality are service industries. A significant element in these industries is management of the service encounters which will be the focus this course. In order to provide a comprehensive, inter- and multi-disciplinary view, the course will be constructed in three modules. The first module will present the characteristics and dynamics of the service encounter. The second module will focus on successful service encounters (service quality) and its outcome (customer satisfaction). The third module will present the dynamics of service failure and service recovery. The three modules of this course will provide an opportunity to understand the dynamics of the service encounter, to manage service quality and to learn how to identify service failure and plan for service recovery. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**HM 53040 - STRATEGIC HOTEL MANAGEMENT**
The hotel manager's role as a strategic thinker is emphasized. Techniques such as co-alignment model, brand strategy, competitor analysis, market research, risk management and finance options are used to develop strategic plans in hotels. Prerequisite: Graduate standing.

Levels: Graduate
Schedule Types: Combined Lecture and Lab

HM 53043 - HOSPITALITY MEETINGS MANAGEMENT

(Cross-listed with HM 43043) Exploration of the unique issues associated with managing hospitality meeting and event planning. Emphasis on management of social, association and corporate events, weddings, reunions, award banquets, receptions and annual meetings held in hospitality venues requiring food and beverage and/or lodging. Prerequisite: Special approval and graduate standing.

Levels: Graduate
Schedule Types: Lecture

HM 53192 - HOSPITALITY MEETINGS MANAGEMENT PRACTICUM

(Slashed with HM 43192) Practical experience in a hospitality establishment related to: inside and outside event sales, event management, guest services, food and beverage management, event staff scheduling, banquet operations, maintenance and housekeeping related to events. Co-requisite: HM 53043. Prerequisite: special approval and graduate standing.

Levels: Graduate
Schedule Types: Practicum or Internship

HM 61098 - RESEARCH IN HOSPITALITY MANAGEMENT

(Repeatable for credit) Research for master's-level graduate students. Credit earned may be applied toward meeting degree requirements if school approves. Prerequisite: graduate standing and special approval.

Levels: Graduate
Schedule Types: Research

HM 61198 - MASTERS PROJECT IN HOSPITALITY MANAGEMENT

(Repeatable for credit) Completion and successful defense of master's project. Master's project students must register for a total of 6 credit hours, 2-6 in a single semester; distributed over several semesters if desired. Prerequisites: graduate standing and special approval.
HM 61199 - THESIS I

(Repeatable for credit) Thesis students register for a total of 6 credit hours, 2 to 6 hours in a single semester, distributed over several semesters if desired. Prerequisite: graduate standing and special approval.

2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Foundations Leadership Admin Department

HM 61299 - THESIS II

(Repeatable for credit) Thesis II students must continue registration each semester until all degree requirements are met. Prerequisite: HM 61199 and graduate standing.

2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Foundations Leadership Admin Department

HM 63022 - CURRENT ISSUES IN HOSPITALITY AND TOURISM MANAGEMENT

Current research and management issues in hotels, resorts, restaurants, clubs and other hospitality operations are explored through the peer-reviewed and professional literature. Current tourism topics with implications for hospitality managers are included. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

HM 63024 - MANAGEMENT OF FOOD AND NUTRITION SERVICES

Management issues in healthcare, food and nutrition services, child nutrition programs and other noncommercial food services will be examined. The impact of quality standards, public policy and current societal trends upon management of noncommercial operations will be studied. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
HM 63026 - RESEARCH SEMINAR

(Repeatable once for credit) Presentation and discussion of research and projects by students and faculty. 2 credit hours to be applied toward degree requirements. Prerequisite: graduate standing. Corequisite: SRM 63098 or 63199 or 63299; or HM 61198 or 61199 or 61299.
1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Seminar

HM 63092 - HOSPITALITY AND TOURISM MANAGEMENT PRACTICUM

Supervised professional experience in a hospitality or travel and tourism setting. This course is supervised by a practitioner and faculty member(s) with whom the student works closely. Course assignments are included. Prerequisite: graduate standing and hospitality and tourism management (HTM) major.
1.000 Credit hours
20.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

HM 63095 - SPECIAL TOPICS IN HOSPITALITY MANAGEMENT

(Repeatable for credit) Specialized offering of a major topic within hospitality management. Prerequisite: graduate standing.
1.00 TO 3.00 Credit hours
1.00 TO 3.00 Lecture hours

Levels: Graduate
Schedule Types: Lecture

HONR 10096 - INDIVIDUAL HONORS WORK

(Repeatable for credit) Directed independent study for freshmen in any department. Prerequisite: Special approval of department.
1.00 TO 4.00 Credit hours
1.00 TO 4.00 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Honors Department
Course Attributes: Honors Course

HONR 10197 - FRESHMAN HONORS COLLOQUIUM I
(Repeatable for credit) Required of all honors freshmen in lieu of College Writing. Stresses exploration, discussion and communication of ideas expressed in works related to theme of colloquium. Prerequisite: Admitted to the Honors College.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Undergraduate
Schedule Types: Colloquium

Honors Department

Course Attributes:
Honors Course, Kent Core-Composition, LER-Composition

**HONR 10297 - FRESHMAN HONORS COLLOQUIUM II**

(Repeatable for credit) Continuation of HONR 10197. Prerequisite: Admitted to the Honors College.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Undergraduate
Schedule Types: Colloquium

Honors Department

Course Attributes:
Honors Course, Kent Core-Composition, LER-Composition

**HONR 13597 - COLLOQUIUM: THE WESTERN IDENTITY**

(Repeatable for credit) Focuses on Western and non-Western cultures from a comparative perspective, in order to identify both different and shared values and to see how one's own culture shapes one's perspective, ideology, and values. Prerequisite: admitted to the Honors College and special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Colloquium

Honors Department

Course Attributes:
Kent Core-Additional

**HONR 20096 - INDIVIDUAL HONORS WORK**

(Repeatable for credit) Directed independent study for sophomores in any department. Prerequisite: Special approval of department.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Honors Department

Course Attributes:
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Description</th>
<th>Prerequisite</th>
<th>Credit Hours</th>
<th>Other Hours</th>
<th>Levels</th>
<th>Schedule Types</th>
<th>Honors Department</th>
<th>Course Attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>HONR 20197</td>
<td>Sopomore Colloquium</td>
<td>One-semester course or two-semester sequence exploring interdisciplinary ideas and issues related to a single theme, by means of readings, discussion and individual papers and projects.</td>
<td>Admitted to the Honors College.</td>
<td>1.00 TO 4.00</td>
<td>1.00 TO 4.00</td>
<td>Undergraduate</td>
<td>Colloquium</td>
<td>Honors Department</td>
<td>Honors Course</td>
</tr>
<tr>
<td>HONR 20297</td>
<td>Sopomore Colloquium</td>
<td>(Repeatable for credit) See HONR 20197. Prerequisite: Admitted to the Honors College.</td>
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<td>1.00 TO 4.00</td>
<td>1.00 TO 4.00</td>
<td>Undergraduate</td>
<td>Colloquium</td>
<td>Honors Department</td>
<td>Honors Course</td>
</tr>
<tr>
<td>HONR 30096</td>
<td>Individual Honors Work</td>
<td>Directed independent study for juniors in any department. Prerequisite: Special approval of department.</td>
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<td>1.00 TO 4.00</td>
<td>1.00 TO 4.00</td>
<td>Undergraduate</td>
<td>Individual Investigation</td>
<td>Honors Department</td>
<td>Honors Course</td>
</tr>
<tr>
<td>HONR 30197</td>
<td>Junior Colloquium</td>
<td>One-semester course or two-semester sequence for juniors or seniors exploring interdisciplinary ideas and issues related to single theme, by means of readings, discussion and individual papers and projects.</td>
<td>Admitted to the Honors College.</td>
<td>1.00 TO 4.00</td>
<td>1.00 TO 4.00</td>
<td>Undergraduate</td>
<td>Colloquium</td>
<td>Honors Department</td>
<td>Honors Course</td>
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<td>Course Code</td>
<td>Course Name</td>
<td>Description</td>
<td>Prerequisite</td>
<td>Credit/Other Hours</td>
<td>Levels</td>
<td>Schedule Types</td>
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<tr>
<td>HONR 30297</td>
<td>JUNIOR COLLOQUIUM</td>
<td>(Repeatable for credit) See HONR 30197. Prerequisite: Admitted to the Honors College.</td>
<td>1.000 TO 4.000 Credit hours 1.000 TO 4.000 Other hours</td>
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<td>Colloquium</td>
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<tr>
<td>HONR 40085</td>
<td>SENIOR HONORS PORTFOLIO</td>
<td>Construction of a senior portfolio, consisting of a collection of artifacts and a reflective essay interpreting the student's growth during the college years. Prerequisite: Senior standing.</td>
<td>1.000 Credit hours 1.000 Other hours</td>
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<td>Individual Investigation</td>
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<tr>
<td>HONR 40096</td>
<td>INDIVIDUAL HONORS WORK</td>
<td>(Repeatable for credit) Directed independent study for seniors in any department. Prerequisite: Prior special approval of instructor and special approval of and preregistration with Honors College.</td>
<td>1.000 TO 4.000 Credit hours 1.000 TO 4.000 Other hours</td>
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<td>Individual Investigation</td>
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<tr>
<td>HONR 40099</td>
<td>SENIOR HONORS THESIS/PROJECT</td>
<td>(Repeatable for credit) Thesis or creative project. Prerequisite: Special approval of department.</td>
<td>1.000 TO 10.000 Credit hours 1.000 TO 10.000 Other hours</td>
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</table>
Schedule Types: Senior Project/Honors Thesis

Honors Department

Course Attributes: Experiential Learning Requirem, Honors Course

**HONR 40197 - SENIOR COLLOQUIUM**

(Repeatable for credit) One-semester course or two-semester sequence exploring interdisciplinary ideas and issues related to single theme, by means of readings, discussion and individual papers and projects. Prerequisite: Admitted to the Honors College.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Undergraduate
Schedule Types: Colloquium

Honors Department

Course Attributes: Honors Course

**HONR 40297 - SENIOR COLLOQUIUM**

(Repeatable for credit) See HONR 40197. Prerequisite: Admitted to the Honors College.

1.000 TO 4.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Colloquium

Honors Department

Course Attributes: Honors Course

**HORT 16001 - INTRODUCTION TO HORTICULTURE**

A survey of those opportunities available within the "green industry" both in education and as a career option. Guest speakers and field trips are part of the class. Prerequisite: None.

1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Biological Sciences Department

**HORT 26001 - OCCUPATIONAL REGULATIONS AND SAFETY**

Presentation of the basic standards, rules, safety regulations and laws pertaining to horticultural and related industries which will affect the work atmosphere. Lecture two hours weekly; offered only at the Geauga and Salem campuses. Corequisites: BSCI 16001 and HORT 16001.

2.000 Credit hours
2.000 Lecture hours
Levels: Undergraduate  
Schedule Types: Lecture

Biological Sciences Department

**HORT 26010 - ARBORICULTURE**

Basics of pruning and tree climbing techniques. Covers the equipment and safe use of equipment commonly found in the arboricultural industry. Lecture two hours weekly; lab three hours weekly; offered only at the Salem campuses. Prerequisites: BSCI 16001 and HORT 16001.

3.000 Credit hours  
2.000 Lecture hours  
3.000 Lab hours

Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab

Biological Sciences Department

**HORT 26011 - COOPERATIVE WORK EXPERIENCE IN TREE CARE**

(Repeatable for credit) Cooperative work program through which the skills necessary to perform professionally in this occupation will be acquired. This course offered only at the Salem Campus. Requires a minimum of 30 hours per week of work experience. Not more than 9 semester hours in this or a combination of other work experience classes will be allowed. Corequisite: HORT 26010.

3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Field Experience

Biological Sciences Department

**HORT 26012 - URBAN FORESTRY**

Urban forestry and the planning and managing of urban green-scapes. Appraisal and computerized GIS/GPS inventory of urban vegetation, urban land use planning and legal ordinances, maintenance and management of street and park trees. Outdoor field trips and guest lecturers. Prerequisite: HORT 16001 and BSCI 16001.

3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

Biological Sciences Department

**HORT 26016 - IRRIGATION DESIGN AND MAINTENANCE**

Principles of irrigation design, installation maintenance and drainage. Specific information about the selection of sprinkler heads, pipe, pumps, basic hydraulics, water conservation methods and automatic control systems shall be explored. Drawing of irrigation plans shall be required. Prerequisite: HORT 16001 and BSCI 16001.

3.000 Credit hours  
3.000 Other hours

Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab
HORT 26018 - LANDSCAPE CONSTRUCTION

The basic skills and techniques involved in landscape contracting and construction, including building material data, site grading, contour mapping, deck construction, water features, lighting, landscape paving and retaining walls. Field trips and outside hands-on experience. Prerequisite: HORT 16001 or advisor's approval.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Biological Sciences Department

HORT 26020 - LANDSCAPE MANAGEMENT

A detailed discussion and practice of managing trees, shrubs and flowers within the landscape. Additional concepts such as the types of equipment used in the "green industry," marketing, writing specifications, bidding projects and personnel management. Prerequisite: BSCI 16001 and HORT 16001.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Biological Sciences Department

HORT 26021 - COOPERATIVE WORK EXPERIENCE IN LANDSCAPE MANAGEMENT

(Repeatable for credit) Cooperative work program through which the skills necessary to perform professionally in this occupation will be acquired. This course offered only at the Salem Campus. Requires a minimum of 30 hours per week of work experience. Not more than 9 semester hours in this or a combination of other work experience will be allowed. Corequisite: HORT 26020.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Field Experience

Biological Sciences Department

HORT 26030 - TURF GRASS MANAGEMENT

Basic principles of turf management. Covers turf equipment and the safe use of equipment commonly found in the turf industry. Lecture two hours weekly; lab three hours weekly; course offered only at the Salem campus. Prerequisites: BSCI 16001 and HORT 16001.

3.000 Credit hours
2.000 Lecture hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Biological Sciences Department
**HORT 26031 - COOPERATIVE WORK EXPERIENCE IN TURF GRASS MANAGEMENT**

(Repeatable for Credit) Cooperative work program through which the skills necessary to perform professionally in this occupation will be acquired. This course offered only at the Salem Campus. Requires a minimum of 30 hours per week of work experience. Not more than 9 semester hours in this or a combination of other work experience classes will be allowed. Corequisite: HORT 26030.

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<td>3.000 Lecture hours</td>
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</table>

Levels: Undergraduate  
Schedule Types: Field Experience  

Biological Sciences Department

**HORT 26032 - GOLF COURSE MANAGEMENT**

The golf course environment as it relates to turf grass maintenance and pest/disease management. The construction and management of greens, tees, water and bunker management practices, turf aerification issues, topdressing and administrative concerns. Prerequisite: HORT 16001 and HORT 26031 and BSCI 16001.

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<th>3.000 Credit hours</th>
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<td>3.000 Lecture hours</td>
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Levels: Undergraduate  
Schedule Types: Lecture  

Biological Sciences Department

**HORT 26046 - LANDSCAPE DESIGN I**

An introduction to landscape appreciation and history, the landscape industry and elements of the landscape design process. Students will assess proper plant placement and uses, develop graphic communication skills and present a project. Field trips and project site work as required. Prerequisite: HORT 16001 and BSCI 16001 and BSCI 26003.

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<td>3.000 Other hours</td>
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Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab  

Biological Sciences Department

**HORT 36014 - PLANT PROPAGATION AND GREENHOUSE PRODUCTION**

Asexual/vegetative propagation including anatomical and physical concepts. Techniques covered include cuttings, budding, grafting, layering, dividing and micropropagation. Plant propagation by seeding and plugs are promoted along with crop production. Students provide an annual production schedule. Lecture two hours weekly; lab three hours weekly. Prerequisites: HORT 16001 and BSCI 16001.

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<td>2.000 Lecture hours</td>
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<tr>
<td>3.000 Lab hours</td>
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</table>

Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab  

Biological Sciences Department

**HORT 36018 - LANDSCAPE CONSTRUCTION II**


Advanced landscape construction techniques involved in landscape contracting with an emphasis on the overall layout and planning of a landscape project. Students master and research product documentation, layout plans, written specifications and detailed construction drawings as they pertain to built landscape environments. Specific field site work with real world applications. Lecture two hours weekly; lab 3 hours weekly. Prerequisites: HORT 26018; and junior or senior standing.

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Biological Sciences Department

**HORT 36025 - PROFESSIONAL PRACTICE IN HORTICULTURE**

Investigation into owning and operating a green industry company including customer relations, wholesale and retail marketing, project bidding, potential profit and loss margins, communication requirements, and overall services to public and private clientele. Prerequisites: HORT 26001 and 26016 and 26018.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Biological Sciences Department

Course Attributes:
Writing Intensive Course

**HORT 36034 - SPORTS TURF MANAGEMENT**

Identification of grass plant species; culture and morphology; turf ecology with practical information on turf establishment and cultural practices. Covers issues of design, renovation, and maintenance of sports grounds and facilities. Class requires 20 hours service learning component. Prerequisites: HORT 26030; and junior or senior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Biological Sciences Department

**HORT 36046 - LANDSCAPE DESIGN II**

Advanced landscape design looking at overall landscape planning, including site and planting design, site amenities, irrigation design and client needs. Special attention to communication formats such as color rendering and graphics, as well as to overall presentation. Some design modeling and graphic sketching are included. Prerequisites: HORT 26012 or 26032 or 26046; and junior or senior standing.

3.000 Credit hours
2.000 Lecture hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab
HORT 36092 - INTERNSHIP IN HORTICULTURE

(Repeatable for credit) Internship experience in an advanced field of study within the horticulture/green industry, building on the student's understanding of science-based fundamentals. Internship requires a minimum of 210 working hours with an approved public organization or private green industry firm, and 2 hours per week consultation on independent research as approved and supervised by the academic program director. Work includes supporting documentation and written reports as deemed appropriate give the subject studied. Prerequisites: 6 hours from HORT 26011 and 26021 and 26031; and special approval.

4.000 Credit hours
16.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship, Research

Biological Sciences Department
Course Attributes: Experiential Learning Requirem

HORT 41096 - INDIVIDUAL INVESTIGATION IN HORTICULTURE

(Repeatable for credit) Research under the direction of a horticulture faculty/program director mentor. Investigation of specific horticulture topics that build upon previous concentration areas of study. Prerequisite: junior or senior standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Biological Sciences Department

HORT 46014 - GARDEN CENTER AND NURSERY PRODUCTION MANAGEMENT

Survey of plant production of container, bare-root, balled-in-burlap plant materials in a nursery setting. Exploration of physiological principles involved, including planting, maturity dates for harvest, shipping, garden center activities and wholesale and retail marketing of stock. Prerequisites: BSCI 26002 and BMRT 11000; and junior or senior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Biological Sciences Department

HORT 46092 - PRACTICUM IN HORTICULTURE

(Repeatable for credit) An in-depth individual project, combining field experiences with original research within a green industry niche. Area of interest supports the student’s educational goals given their intended concentration of past class work. Prerequisites: HORT 36092; and junior or senior standing.

3.000 Credit hours
16.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Biological Sciences Department

Course Attributes:
Experiential Learning Requirement

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Schedule Types</th>
<th>Department</th>
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</thead>
<tbody>
<tr>
<td>HPM 50196</td>
<td>INDIVIDUAL INVESTIGATION IN HEALTH POLICY AND MANAGEMENT</td>
<td>1.000 TO 3.000</td>
<td>Individual Investigation</td>
<td>Health Policy and Management Department</td>
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</tbody>
</table>

(repeatable for a maximum of 6 credits) Individual graduate investigation or research in areas related to health policy and management. Prerequisite: graduate standing and special approval.

Levels: Graduate
Schedule Types: Individual Investigation

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<th>Course Code</th>
<th>Course Title</th>
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<th>Department</th>
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<tbody>
<tr>
<td>HPM 52015</td>
<td>EMERGING ISSUES IN PUBLIC HEALTH POLICY AND MANAGEMENT</td>
<td>3.000</td>
<td>Lecture</td>
<td>Health Policy and Management Department</td>
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</table>

(Cross-listed with HPM 72015) An overview of emerging challenges in public health policy and management. Examples include pandemic H1N1 response, bio preparedness, national health care reform, public health financing challenges, global tuberculosis drug resistance. Prerequisite: graduate standing.

Levels: Graduate
Schedule Types: Lecture

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<th>Course Code</th>
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<th>Schedule Types</th>
<th>Department</th>
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</thead>
<tbody>
<tr>
<td>HPM 52016</td>
<td>PUBLIC HEALTH ADMINISTRATION</td>
<td>3.000</td>
<td>Lecture</td>
<td>Health Policy and Management Department</td>
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</tbody>
</table>

Public health administration comprises efforts to improve the health of communities. Provides an overview for public health administration and practice, including organization, law, legislative relations, financing, workforce issues, leadership and surveillance. Prerequisite: graduate standing.

Levels: Graduate
Schedule Types: Lecture

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<tr>
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<th>Schedule Types</th>
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<tbody>
<tr>
<td>HPM 53003</td>
<td>HEALTH CARE SYSTEMS</td>
<td>3.000</td>
<td>Lecture</td>
<td>Health Policy and Management Department</td>
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</tbody>
</table>

Provides a systems approach to delivering health care and public health services in the US. Includes an overview of public health, outpatient, inpatient, managed care, long term care and health services for special populations. Prerequisite: graduate standing.

Levels: Graduate
Schedule Types: Lecture
HPM 53004 - PUBLIC HEALTH POLICY, LAW AND ETHICS

Provides a comprehensive review of health policymaking, public health law and ethical principles as applied to public health decision making. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Policy and Management Department

HPM 53005 - FINANCIAL MANAGEMENT FOR PUBLIC HEALTH ORGANIZATIONS

Provides an overview of financial management of public health organizations. Topics include planning for public health program budgeting, understanding costs and short and long term financing, accountability and control, reporting results and financial statement and financial conditions analysis. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Policy and Management Department

HPM 53006 - COST BENEFIT ANALYSIS IN PUBLIC HEALTH PROGRAMS

Provides an overview of cost-benefit analysis as applied to the evaluation of public health programs. Students apply principles of cost benefit analysis and related cost utility analysis to case studies in the public health sector. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Policy and Management Department

HPM 53007 - PUBLIC HEALTH PROGRAMS: PLANNING, IMPLEMENTATION AND EVALUATION

Overview of developing, implementing and evaluating public health programs. Examines how public health programs can target different levels within a population, different determinants of health and strategies and interventions. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Policy and Management Department

HPM 53008 - FOUNDATIONS FOR EFFECTIVE PUBLIC HEALTH LEADERSHIP

Intended to provide students with an initial exploration of the leadership practices of public health leaders with an understanding of the basic skill set necessary for successful leadership on a continuing basis. Prerequisite: graduate standing.
### HPM 53009 - WHOLE SYSTEMS APPROACHES TO LEADING ORGANIZATIONAL CHANGE IN PUBLIC HEALTH

Intended to provide students with an initial exploration and overview of whole systems approaches to organizational change in public health settings, a more detailed working knowledge of key whole systems methodologies, and a detailed working knowledge and practical experience with one of the most frequently used and favored whole systems approaches. Prerequisite: graduate standing. Pre or corequisite: HPM 53008.

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### HPM 53010 - COMMUNITY HEALTH NEEDS ASSESSMENT

This course covers concepts and methods relevant to community health needs assessment, such as systems thinking, the use of quantitative and qualitative methods, primary and secondary data, and the role of community assessment in current national policy, including the Affordable Care Act and on community health improvement. Students will draw from multiple disciplines to assess health status and its determinants (social, behavioral, and environmental), needs for health services, and the capacity and resources of the local community. Students will also learn to facilitate and evaluate the use of data for decision-making by partnerships, organizations and policy makers. Prerequisite: graduate standing.

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### HPM 60191 - VARIABLE CONTENT SEMINAR IN HEALTH POLICY AND MANAGEMENT

(Repeatable for a maximum of 6 credit hours) (Cross-listed with HPM 80191) Seminar on current and important topics in health policy and management. Subject matter varies depending on the topic. Prerequisites: Graduate standing

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### HPM 60192 - PRACTICUM EXPERIENCE IN HEALTH POLICY AND MANAGEMENT

Observational and participation in public health activities of a public health agency, hospital or other approved organization. The student completes the field experience with joint supervision from the university and
approved organization or agency. Prerequisites: graduate standing and special approval.
6.000 Credit hours
20.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Health Policy and Management Department

**HPM 60195 - SPECIAL TOPICS IN HEALTH POLICY AND MANAGEMENT**

(Repeatable for a maximum of 6 credit hours) (Cross-listed with HPM 80195) Special topics to sample new offerings on topics in health policy and management. Prerequisites: Graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Policy and Management Department

**HPM 72015 - EMERGING ISSUES IN PUBLIC HEALTH POLICY AND MANAGEMENT**

(Cross-listed with HPM 52015) An overview of emerging challenges in public health policy and management. Examples include pandemic H1N1 response, bio preparedness, national health care reform, public health financing challenges, global tuberculosis drug resistance. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Policy and Management Department

**HPM 72030 - GRANT WRITING IN PUBLIC HEALTH**

Doctoral students should take this course at the end of the program of study. Students in this doctoral level course for Public Health learn the basics of grant writing for federal (NIH) and non-federal funding agencies with a particular emphasis on the components required of most grant proposal submitted for funding. This includes rationale for seeking funds, collaborations with community organizations, and working with consultants and subcontractors. Participants also learn about the basic sections of grant writing such as specific aims and hypotheses, developing your literature review, background and significance, research design and methodology, developing a budget, and conducting research with human subjects. Participants have the opportunity to write sample grant proposals, learn about the review and scoring process and post-award grant management.
Prerequisite: doctoral standing and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Policy and Management Department

**HPM 73021 - HEALTH CARE FINANCE**

Covers the financial environment of health services in the US, including accounting principles, financial statement analysis, delivery models, management control processes of budgeting and capital project analysis,
managerial accounting, program development and financial plan. Prerequisite: doctoral standing.

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<th>Course Code</th>
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<tbody>
<tr>
<td>HPM 73022</td>
<td>STRATEGIC MANAGEMENT OF PUBLIC HEALTH ORGANIZATIONS</td>
<td>Covers basic and advanced principles of strategic management of public health organizations including service area analysis, internal environment analysis, developing and evaluating strategic alternatives and quality indicators. Prerequisite: doctoral standing.</td>
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<tr>
<td>HPM 73023</td>
<td>OPERATIONS MANAGEMENT IN PUBLIC HEALTH</td>
<td>Provides a framework for health care operations management including the history of performance management and tools for applying operations management to public health care delivery systems. Prerequisite: doctoral standing.</td>
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<tr>
<td>HPM 73031</td>
<td>PUBLIC HEALTH POLICY ANALYSIS</td>
<td>Provides a framework for conducting public health policy analysis. Applies concepts to case studies of health policies at the local, state and Federal levels. Prerequisite: doctoral standing.</td>
<td>3.000</td>
<td>3.000</td>
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<tr>
<td>HPM 80191</td>
<td>VARIABLE CONTENT SEMINAR IN HEALTH POLICY AND MANAGEMENT</td>
<td>(Repeatable for a maximum of 6 credit hours) (Cross-listed with HPM 60191) Seminar on current and important topics in health policy and management. Subject matter varies depending on the topic. Prerequisites: Doctoral standing.</td>
<td>1.000 TO 3.000</td>
<td>1.000 TO 3.000</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Description</td>
<td>Prerequisites</td>
<td>Credit Hours</td>
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<tr>
<td>HPM 80195</td>
<td>SPECIAL TOPICS IN HEALTH POLICY AND MANAGEMENT</td>
<td>(Repeatable for a maximum of 6 credit hours) (Cross-listed with HPM 60191) Special topics to sample new offerings on topics in health policy and management. Prerequisites: Doctoral standing.</td>
<td>1.000 TO 3.000 Credit hours</td>
<td>1.000 TO 3.000 Lecture hours</td>
</tr>
<tr>
<td>HPM 80198</td>
<td>DIRECTED RESEARCH IN HEALTH POLICY AND MANAGEMENT</td>
<td>(Repeatable for credit) Directed research or individual investigation for doctoral students in the Health Policy and Management concentration. Prerequisite: doctoral standing and special approval.</td>
<td>1.000 TO 15.000 Credit hours</td>
<td>1.000 TO 15.000 Other hours</td>
</tr>
<tr>
<td>HPM 80199</td>
<td>DISSERTATION I</td>
<td>(Repeatable for credit) Registration for two semesters required, first semester dissertation work begins and continues until completion of Dissertation II and 30 hours of total dissertation work. Prerequisite: doctoral standing and special approval.</td>
<td>15.000 Credit hours</td>
<td>15.000 Other hours</td>
</tr>
<tr>
<td>HPM 80299</td>
<td>DISSERTATION II</td>
<td>(Repeatable for credit) Registration for two semesters required, first semester dissertation work begins and continues until completion of 30 hours. Prerequisites: HPM 80199; and doctoral standing; and special approval.</td>
<td>15.000 Credit hours</td>
<td>15.000 Other hours</td>
</tr>
<tr>
<td>HPM 81000</td>
<td>PUBLIC HEALTH LAW AND REGULATION</td>
<td>Enables participants to describe, apply, and explain key aspects and principles of law, regulation, and policy relating to public health issues and topics. Requires students to master the content material for the course, and</td>
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apply it to particular (a) topics or issues relating public health. Students also are required to design and/or conduct a research project and explain their hypotheses, methods, findings and/or conclusions. Prerequisites: HPM 52016 and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Policy and Management Department

**HRTG 10101 - ELEMENTARY I (VARIABLE LANGUAGE)**

An introduction to a heritage language in the context of the culture of its speakers. Prerequisite: None.

4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

Course Attributes:
Variable Title

**HRTG 10102 - ELEMENTARY II (VARIABLE LANGUAGE)**

A continuation of the introduction to a heritage language in the context of the culture of its speakers. Prerequisite: HRTG 10101 and special approval.

4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

Course Attributes:
Variable Title

**HRTG 20201 - INTERMEDIATE I (VARIABLE LANGUAGE)**

Continued development of speaking, listening, reading and writing skills using a variety of cultural materials. Prerequisite: HRTG 10102 and special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

Course Attributes:
Variable Title

**HRTG 20202 - INTERMEDIATE II (VARIABLE LANGUAGE)**
Continuation of HRTG 20201. Prerequisite: HRTG 20201.
3.000 Credit hours
3.000 Lecture hours

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<tr>
<th>Course</th>
<th>Title</th>
<th>Overview</th>
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<tbody>
<tr>
<td>HRTG 30095 - SPECIAL TOPICS</td>
<td>(Repeatable for credit)Topic announced in schedule of classes. Prerequisite: Permission.</td>
<td>1.000 TO 3.000 Credit hours 1.000 TO 3.000 Lecture hours</td>
</tr>
<tr>
<td>HST 11000 - INTRODUCTION TO HUMAN SERVICES</td>
<td>A survey of the role of human service technologists, their professional and ethical responsibilities, employment possibilities and avenues for professional advancement. Prerequisite: None.</td>
<td>1.000 Credit hours 1.000 Lecture hours</td>
</tr>
<tr>
<td>HST 11001 - GROUP PROCESS IN HUMAN SERVICES</td>
<td>The structure and function of groups, focusing on problem solving and communication in human service agencies, including chemical dependency. Prerequisite: None.</td>
<td>2.000 Credit hours 3.000 Lecture hours</td>
</tr>
<tr>
<td>HST 11002 - SURVEY OF COMMUNITY RESOURCES</td>
<td>A survey of providers at the federal, regional, state and local levels, including services provided and regulations of private and public agencies. Prerequisite: none.</td>
<td>3.000 Credit hours 3.000 Lecture hours</td>
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</table>

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

Course Attributes:
Variable Title
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Credit Hours</th>
<th>Lecture Hours</th>
<th>Levels:</th>
<th>Schedule Types:</th>
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<tbody>
<tr>
<td>HST 21000</td>
<td>DYNAMICS OF HELPING RELATIONSHIPS</td>
<td>The dynamics of helping relationship in human services agencies. Skill development in listening and provision of assistance to clients is emphasized. Prerequisite: HST 11001.</td>
<td>3.000</td>
<td>3.000</td>
<td>Undergraduate</td>
<td>Lecture</td>
</tr>
<tr>
<td>HST 21001</td>
<td>ASSESSMENT OF CLIENT NEEDS</td>
<td>An introduction to the evaluation of client needs and assessment of client condition. Prerequisite: HED 21050. Corequisites: HST 21092.</td>
<td>3.000</td>
<td>3.000</td>
<td>Undergraduate</td>
<td>Lecture</td>
</tr>
<tr>
<td>HST 21002</td>
<td>CLIENT ADVOCACY AND CASE MANAGEMENT IN HUMAN SERVICE ORGANIZATIONS</td>
<td>Assessment of case management strategies with an emphasis on the role of the client advocate in the human service setting. Prerequisite: HST 21001. Corequisite: HST 21192.</td>
<td>3.000</td>
<td>3.000</td>
<td>Undergraduate</td>
<td>Lecture</td>
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<tr>
<td>HST 21092</td>
<td>INTERNSHIP IN HUMAN SERVICES TECHNOLOGY I</td>
<td>(Repeatable for credit) Supervised field experience in a human service agency totalling 315 hours. Joint university-agency supervision. Prerequisite: Advisor special approval. Corequisites: HST 21001.</td>
<td>3.000</td>
<td>21.000</td>
<td>Undergraduate</td>
<td>Practicum or Internship</td>
</tr>
<tr>
<td>HST 21095</td>
<td>SPECIAL TOPICS IN HUMAN SERVICES TECHNOLOGY</td>
<td>(Repeatable for credit) Discussion of a major topic within human services. Prerequisite: None.</td>
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HST 21192 - INTERNSHIP IN HUMAN SERVICES TECHNOLOGY II

(Repeatable for credit) Continued supervised field experience in a human services agency totaling 315 hours. Joint university-agency supervision. Prerequisites: HST 21092 and special approval. Corequisite: HST 21002.

1.000 TO 3.000 Credit hours
21.000 Other hours

IAKM 41095 - SPECIAL TOPICS IN INFORMATION ARCHITECTURE AND KNOWLEDGE MANAGEMENT

(Repeatable for credit) Topics will be announced in schedule of classes. Offered irregularly as resources and opportunities permit. Prerequisite: None.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

IAKM 41096 - INDIVIDUAL INVESTIGATION IN INFORMATION ARCHITECTURE, INFORMATION USE OR KNOWLEDGE MANAGEMENT

(Repeatable for credit) Research or individual investigation for baccalaureate level students at or above the junior level. Prerequisite: Permission of instructor.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

IAKM 60002 - KNOWLEDGE ORGANIZATION STRUCTURES, SYSTEMS AND SERVICES

(Slashed with IAKM 80002; Cross-listed with LIS 60636 and LIS 80636) Introduction to various types of knowledge organization systems/services/structures (KOS) used in the networked environment. Understanding of the functional, philosophical, logical and linguistic fundamentals of KOS. Explanation of design options, features of KOS, and procedures to be used in the thesaurus, taxonomy and ontology construction. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours
IAKM 60101 - INFORMATION ARCHITECTURE I

Introduction to the fundamental concepts and practices of information architecture (IA). Students develop practical skills for comparing, analyzing, critiquing and designing information architectures. Major topics include organization, navigation, labeling, search and other core IA concepts. Students learn to create blueprints, wireframes, process flows and other documents used to communicate an information architecture design. Prerequisites: IAKM 60120 or IAKM 80120; IAKM 60121 or IAKM 80121 with a minimum of C; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

IAKM 60102 - INFORMATION AND VISUAL DESIGN

This course provides a cultural and technological context for understanding the information design process. Topics include: basic design and typographic principles, aesthetics and information design, functional integration of visual and verbal elements, creation and use of information graphics visualization of quantitative information and visual navigation systems. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

IAKM 60103 - RESEARCHING THE USER EXPERIENCE I

(Slashed with IAKM 80103) Design research seeks to understand user needs, goals and tasks. Deals with research methods for human-centered design of information-rich artifacts and experiences. Covers interviews, surveys, diary studies and other methods applicable to the formative stages of the design process. Students learn to distill research findings into audience segments, user profiles, personas, scenarios and other documents that model user behavior. Prerequisite: IAKM 60120 or IAKM 80120 with a minimum grade of C (2.000); and IAKM 60121 or IAKM 80121 with a minimum grade of C (2.000); and graduate standing.

3.000 Credit hours
3.000 Lecture hours

IAKM 60104 - USABILITY I

Provides a conceptual and practical overview of the processes and methods of usability testing, such as Think Aloud protocols, performance measurements and eye-tracking analysis. Actual usability testing is performed, using quantitative and qualitative methods and employing current and emerging software tools to facilitate data
collection and analysis. Prerequisites: IAKM 60120 and IAKM 60121; and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

**IAKM 60105 - INFORMATION TECHNOLOGIES**

(Cross-listed with IAKM 80105) Covers four aspects of information technology: essential technology concepts, the making of software, the social consequences of information technology and the role of non-programmers in technology design. Topics include operating systems, networks, search engines, markup languages, social software, dynamic languages, cloud computing, open source software, technology trends and the history of computing. Prerequisite: IAKM 60120 and IAKM 60121; and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

**IAKM 60106 - CONTENT STRATEGY I**

(Slashed with IAKM 80106) Introduces the field of content strategy and its relationship to user experience design. Includes history and practices of content strategy, how to analyze user needs for content, the production of written materials related to content strategy and content audits and governance models. This course is the conceptual basis behind content strategy. Prerequisites: IAKM 60120 or IAKM 80120; and IAKM 60121 or IAKM 80121; and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

**IAKM 60110 - CONTENT MANAGEMENT SYSTEMS**

(Cross-listed with IAKM 80110) This course provides an overview of the concepts and practices of Content Management (CM) and Content Management Systems (CMS), including understanding the parts and branches of a CMS criteria for selecting a CMS, CMS configuration, and evaluating and implementing CMS software. Prerequisite: IAKM 60105 or 80105; and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

**IAKM 60111 - ONLINE BRANDING**

(Cross-listed with IAKM 80111) This course will focus on the strategies needed to advance brands through effective online experiences including web sites, intranets extranets and emerging web technologies. Students
will also learn how to extend the brand through personalization, localization and other segmentation techniques. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

**IAKM 60112 - INFORMATION ARCHITECTURE II**

(Slashed with IAKM 80112) Web site design from emerging directions, such as the separation of content from presentation with e.g., the use of Cascading Style Sheets (CSS) for formatting web-based documents. The course includes considerations of making web sites compliant with federal regulations or other standards and validation for various markup guidelines. Prerequisite: IAKM 60120 or IAKM 80120 with a minimum grade of C (2.000); and IAKM 60121 or IAKM 80121 with a minimum grade of C (2.000); and IAKM 60101 or IAKM 80101 with a minimum grade of C (2.000); and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

**IAKM 60113 - RESEARCHING THE USER EXPERIENCE II**

(Slashed with IAKM 80113) In order to design and develop effective user interfaces, task analysis process and theory are explored and applied via principles drawn from anthropology, ethnography, cognitive psychology, document and instruction systems design and market research. Practical techniques and methodologies are presented to improve interface design through all phases of the design process. Prerequisites: IAKM 60120 or IAKM 80120 with a minimum grade of C (2.000); and IAKM 60121 or IAKM 80121 with a minimum grade of C (2.000); and IAKM 60103 or IAKM 80103 with a minimum grade of C (2.000); and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

**IAKM 60114 - USABILITY II**

Provides students with an understanding of qualitative and quantitative research methods appropriate for conducting advanced studies of human interaction with computers. In addition, students learn how to evaluate, purchase, implement and operate equipment for usability labs in a manner consistent with research methods. Prerequisites: IAKM 60104 or 80104; and IAKM 60120 and IAKM 60121; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

**IAKM 60116 - CONTENT STRATEGY II**
Delves into the actual practice of content strategy, and more advanced topics of how content strategy intersects with user experience design. Topics such as return on investment, change management, content management systems, document delivery, future-proofing, and content promotion and optimization are introduced as topics relevant to user experience design. Prerequisites: IAKM 60106 and IAKM 60120 and IAKM 60121; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

IAKM 60120 - USER EXPERIENCE DESIGN PRINCIPLES AND CONCEPTS

(Cross-listed with VCD 60120; slashed with IAKM 80120) Students explore the context in which User Experience Design exists and the various methods employed by designers in various fields related to design research, the generation of ideas and implementation of designs. Students are introduced to methods of design evaluation and to the conceptual framework of the related curricula. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

IAKM 60121 - USER EXPERIENCE DESIGN IN PRACTICE

(Slashed with IAKM 80121) Students learn and employ methods for engaging in creative problem solving. Introduce students to design research methods and current research on human behavior as it applies to user experience design. A core set of design deliverables are examined. Students begin to develop individual portfolio materials. Prerequisite: IAKM 60120 or IAKM 80120 with a minimum grade of C (2.000); and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

IAKM 60122 - PROFESSIONAL PORTFOLIO DESIGN AND ASSESSMENT

Students complete the assembly and evaluation of their work throughout the User Experience Design program in the form of a professional portfolio that will be used in efforts to gain employment or freelance work. Evaluation is done through critique by User Experience Design faculty and by peers. Prerequisites: completion of 30 credit hours of IAKM courses; and graduate standing.

1.000 Credit hours
1.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department
**IAKM 60301 - FOUNDATIONAL PRINCIPLES OF KNOWLEDGE MANAGEMENT**

This course covers an introduction to: historical roots for knowledge and knowledge management; theories/definitions of knowledge; theories, applications tools and practices of KM; Knowledge Management Life-Cycle Framework and Models; significant issues in KM-- best practices, culture, economics, strategy, intellectual capital, sustainable innovation. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

**IAKM 60302 - FOUNDATIONS OF DOCUMENT MANAGEMENT**

Covers three main themes: Principles, which covers the document and records management conceptual framework, relationships with information policy, definitions and industry standards; Practices, which covers the management and procedural framework for effective planning and implementation of document and records management solutions; Technologies, which provides a business-oriented analysis of the nature of the enabling information systems available to support effective document and records management solutions. Prerequisite: IAKM 60301 and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

**IAKM 60303 - KNOWLEDGE ASSESSMENT AND EVALUATION**

Explores all aspects of effective knowledge management within all types of organizations. Lays out the context for knowledge management – at each multiple levels (strategic, technical, business-aligned, and individual) and across all competencies. Covers theory, practice and methods of assessment and evaluation for all levels and all competencies. Provides an introduction to knowledge strategy formulation and planning, knowledge management maturity modeling, knowledge typologies and audits, knowledge mapping, organizational network analysis, knowledge competency mapping and human capital analytics, strategic workforce planning concepts, internal knowledge markets and incentives, community of practice metrics, organizational culture metrics. Prerequisite: IAKM 60301 and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

**IAKM 60304 - RESEARCH METHODS FOR KNOWLEDGE MANAGEMENT**

This course provides a broad overview of the use of the qualitative methods in knowledge management, including an examination of the process of conducting qualitative research from conceptualization, design, data collection, articulation and preliminary implementation. Critical thinking analysis and writing skills are emphasized. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
IAKM 60305 - COMMUNITIES OF PRACTICE

(Blurred with IAKM 80305) Explores collaboration and communities from both a theoretical and a practical perspective. The theory includes structural elements (defining a community identity, scoping the domain, defining practice), and natural lifecycles, and best practices for cultivating communities. On the practical side, students explore strategic placement of communities, the community development process, community design and implementation, and measuring the impacts of communities on intellectual capital creation. Communities of practice are also discussed in the context of digital ecosystems (Web 2.0 and Web 3.0). Utilizes readings and reviews of real life case studies of communities of practice in education, health care and nursing, disaster management, military sciences, and hobbies and craft circles. Students also complete a course project pertaining to community of practice evaluation. Prerequisite: IAKM 60301 or IAKM 80301; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

IAKM 60306 - ORGANIZATIONAL CULTURE ASSESSMENT

Examines different types of cultures and how each type influences a knowledge organization - how culture influences the way knowledge workers work, how they make decisions and how they behave, the internal cultures of groups and communities, the cultural attributes of knowledge workers which may impact their knowledge behaviors. Organizational cultures of multicultural, global and virtual organizations are covered. Students conduct an organizational culture assessment. Prerequisites: IAKM 60301 and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

IAKM 60307 - ORGANIZATIONAL LEARNING

Addresses organizational learning in fast-paced, complex and changing organizational environments. For knowledge organizations in the 21st century, learning is a continuous activity. To survive and grow, a knowledge organization must learn through its people, its groups and the organization as a whole. The capacity to learn is a competitive advantage for a knowledge organization. Covers the fundamental theory of organizational learning, organizational learning types, and the five disciplines of learning organizations, and factors that facilitate or impede organizational learning. Prerequisites: IAKM 60301 and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

IAKM 60310 - INTELLECTUAL CAPITAL MANAGEMENT
This course encompasses the new knowledge-intensive economic units: human capital and social capital, intellectual assets, intellectual property, brands and trademarks. A "lifecycle" approach for intellectual assets is described—creation, codification, valuation, protection and leveraging of intellectual assets for competitive advantage. Prerequisite: IAKM 60301 or 80301 with a minimum grade of C (2.000) and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

**IAKM 60311 - BUSINESS PROCESS MANAGEMENT**

Introduction to business process management and workflow management. BPM will describe how organizational business processes (internal, external, manual and automated) can be transformed and managed to increase efficiency, effectiveness and positively affect performance. Topics include the discovery, analysis, modeling and automation of workflow processes. Prerequisite: IAKM 60301 or 80301 with a minimum grade of C (2.000); and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

**IAKM 60312 - BUSINESS INTELLIGENCE-COMPETITIVE INTELLIGENCE**

An introduction to strategic intelligence consisting of competitive and business intelligence. Strategic intelligence is an art, science and craft. Businesses and governments require effective intelligence programs, processes and tools to track businesses competitors, markets and trends by acquiring, creating, managing and disseminating intelligence knowledge. Prerequisite: IAKM 60301 or 80301 with a minimum grade of C (2.000); and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

**IAKM 60340 - BUSINESS NARRATIVE AND STORYTELLING**

(Slashed with IAKM 80340) Focuses on the business use of storytelling and narrative intelligence. Narrative intelligence is the ability to make sense of the world through narrative and storytelling. Business narrative helps a knowledge organization to strengthen its organizational visions, to enhance communications, to capture and transfer knowledge, externalize and internalize tacit knowledge, encourage innovation, build communities, and develop effective training, mentoring and learning strategies. Business narrative is the primary way that procedural knowledge is understood and shared. Covers oral and written stories, documentaries, oral histories, organizational myths and legends, case scenarios, training scenarios, encoded and embedded business rules, gossip and business conversations. Students learn how to develop business stories, craft and deliver a springboard story, evaluate narrative architectures, and design systems that support access to business narratives and stories. Prerequisites: IAKM 60301; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
IAKM 60370 - SEMANTIC ANALYSIS METHODS AND TECHNOLOGIES

Introduces students to the practical contexts, methods and tools associated with semantic analysis. Focuses on early life cycle aspects of semantics, including identification and modeling of semantic problems, design of semantic solutions, and the identification and implementation of appropriate semantic technologies. Covers natural language processing, rule-based and grammar based concept extraction, rule-based and dynamic classification and automated summarization. Students work with a variety of semantic technologies.

Prerequisite: IAKM 60301 or DSCI 64210 or MIS 64036; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

IAKM 60401 - HEALTH INFORMATICS MANAGEMENT

Covers the areas encompassing health informatics management including the planning, selection, deployment, and management of electronic medical records (EMR), management decision-support and tracking systems (DSS), and other health information technologies (HIT). Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

IAKM 60402 - LEGAL ISSUES IN HEALTH INFORMATICS

Introduction to the fundamentals of law for Health Informatics and Information Management. Elements of the course include general legal principles and healthcare; legal electronic medical records (EMR); Health Insurance Portability and Accountability Act (HIPAA) privacy rules and security rules; access, requests and disclosure of health information; required reporting and mandatory disclosure laws; risk management and quality improvement; compliance; workforce overview; related ethics and social issues. Prerequisite: IAKM 60401; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

IAKM 60403 - HEALTH INFORMATION SYSTEMS

Introduction to information systems and their applications in healthcare used for managerial and clinical support. Study the fundamentals of information systems, including Electronic Medical Records (EMR), information security. Understand the role of standardized codes, vocabularies and terminologies used in health information systems. Analysis of management and enterprise systems, identify the key elements to manage information resources effectively and the trends affecting the development of health information systems and networks. Prerequisite: IAKM 60401; and graduate standing.
### IAKM 60410 - HEALTH RECORDS MANAGEMENT

Conceptual foundations and practicum for health records management, including the planning, implementation and operation of electronic medical records (EMR); the management of EMR in management and enterprise systems; identifying, selecting and evaluating EMR and health information systems, applications, and repositories; and issues of data quality, integrity, migration, and interoperability. Prerequisite: IAKM 60401; and graduate standing.

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Levels: Graduate  
Schedule Types: Lecture

Library and Information Sci Department

### IAKM 60411 - CLINICAL ANALYTICS

The use of well-defined and well-integrated clinical analytics throughout the healthcare value chain can be transformative. Through careful implementation of health analytics, hospitals can transform unwieldy amalgamations of data into information that can: improve patient outcomes, increase safety, enhance operational efficiency and support public health. Given the immense size of the data challenge, the distinctness and geographic spread of many healthcare-related activities, and the fact that so many healthcare activities are conducted by different entities which must interact with each other, there is really no other way to provide operations management tools necessary to deliver personalized medicine and to control spiraling costs. Since clinical analytics is an immature discipline, we carefully examine the practices of those institutions who are standard setters in the industry. Prerequisite: IAKM 60401 or MIS 64936; and graduate standing.

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Levels: Graduate  
Schedule Types: Lecture

Library and Information Sci Department

### IAKM 60412 - CLINICAL DECISION SUPPORT

Provides a practical survey of clinical decision support systems that collect clinical data and enable the transition to clinical knowledge in real world applications intended to improve quality and safety of patient care. Students become familiar with the basic requirements for clinical decision support systems and the challenges associated with the development and deployment of new applications within the healthcare setting. Prerequisite: IAKM 60401; and graduate standing.

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Levels: Graduate  
Schedule Types: Lecture

Library and Information Sci Department
IAKM 60413 - CHANGE MANAGEMENT IN HEALTH INFORMATICS

(Slashed with IAKM 80413) Designed to cover the process of change management in large healthcare organizations in light of current trends. Topics related to technology requirements, technology implementations, risk assessment and buy-in are among those covered. Prerequisites: IAKM 60401 or IAKM 80401; and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

IAKM 60414 - HUMAN FACTORS AND USABILITY IN HEALTH INFORMATICS

Provides students with the foundational principles of usability and human factors as applied to safety and quality in health informatics technology. Course readings and materials review the concepts of human factors, usability and the cognitive consequences of health information technology on clinical performance and decision making. Attention is given to the role of mobile computing in health care, as well as information visualization. Prerequisites: IAKM 60401 or IAKM 80401 with a minimum grade of C (2.000); and graduate standing
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

IAKM 60415 - HEALTH INFORMATICS INQUIRY AND ASSESSMENT

Provides a foundation for understanding research in health informatics with a focus on user and experience design research. Through lectures, readings, discussions and assignments, students review user research methods, data collection techniques and communication strategies within the healthcare context. Students then apply this knowledge to creating a research plan for assessing health information technology and communicating results to key organizational stakeholders. Prerequisites: IAKM 60401 or IAKM 80401 with a minimum C (2.00) grade; and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

IAKM 60691 - SEMINAR IN INFORMATION ARCHITECTURE AND KNOWLEDGE MANAGEMENT

(Repeatable for credit) Advanced research by students who are qualified to examine problems of certain special areas related to concentrations of study in information architecture and knowledge management. Prerequisite: Graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Library and Information Sci Department
**IAKM 60692 - PRACTICUM IN INFORMATION ARCHITECTURE AND KNOWLEDGE MANAGEMENT**

Supervised work experience in concentration areas in IAKM Program of a professional nature of not less than 100 clock hours with directed readings and preparation of a paper. Prerequisite: Graduate standing and special approval.

- 2.000 OR 3.000 Credit hours
- 2.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Library and Information Sci Department

**IAKM 60693 - VARIABLE TITLE WORKSHOP IN INFORMATION ARCHITECTURE AND KNOWLEDGE MANAGEMENT**

(Repeatable for credit) Intensive examination of special topics of interest to those involved in program concentrations. Maximum number of workshop credits for the MS-IAKM degree is 4 semester hours. Prerequisite: Graduate standing.

- 1.000 TO 3.000 Credit hours
- 1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Library and Information Sci Department

**IAKM 60792 - INTERNSHIP IN INFORMATION ARCHITECTURE AND KNOWLEDGE MANAGEMENT**

(Repeatable for credit) Supervised work experience of an advanced professional nature that concentrates on developing skills in areas of concentration in the IAKM program. Prerequisite: Graduate standing and director's approval.

- 1.000 TO 3.000 Credit hours
- 1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Library and Information Sci Department

**IAKM 61081 - CAPSTONE EXPERIENCE**

Provides students the opportunity to integrate their knowledge from all IAKM courses and experiences, interact with other IAKM students who may have different perspectives and make connections with real-world problems through a guided, project-based, collaborative culminating experience. Prerequisites: IAKM 60001 and 60002 and graduate standing and special approval.

- 3.000 Credit hours
- 3.000 Other hours

Levels: Graduate
Schedule Types: Research

Library and Information Sci Department

**IAKM 61095 - SELECTED TOPICS IN INFORMATION ARCHITECTURE AND KNOWLEDGE MANAGEMENT**
IAKM 61096 - INDIVIDUAL INVESTIGATION IN INFORMATION ARCHITECTURE AND KNOWLEDGE MANAGEMENT

(Repeatable for credit) Research or individual investigation for master's level students. Maximum credit towards master's degree: 6 hours. Prerequisite: graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Library and Information Sci Department

IAKM 61098 - MASTER'S PROJECT

Provides a means for the application of the knowledge, research and competencies learned through study in the Information Architecture and Knowledge Management Program to the development of an information system, product, setting or service. Cumulative GPA of 3.000 is required prior to enrolling in the course. Prerequisite: Minimum 30 credit hours in IAKM; and graduate standing; and special approval.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Master's Project

Library and Information Sci Department

IAKM 61199 - THESIS I

Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester distributed over several semesters if desired. A 3.000 cumulative GPA is required prior to enrolling in this course. Prerequisite: Minimum 30 credit hours of IAKM courses; and graduate standing; and special approval.
2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Library and Information Sci Department

IAKM 61299 - THESIS II

Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: IAKM 61199; graduate standing; and special approval.
2.000 Credit hours
2.000 Other hours
IAKM 80002 - KNOWLEDGE ORGANIZATION STRUCTURES, SYSTEMS AND SERVICES

(Slashed with IAKM 60002; Cross-listed with LIS 60636 and LIS 80636) Introduction to various types of knowledge organization systems/services/structures (KOS) used in the networked environment. Understanding of the functional, philosophical, logical and linguistic fundamentals of KOS. Explanation of design options, features of KOS, and procedures to be used in the thesaurus, taxonomy and ontology construction. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

IAKM 80101 - INFORMATION ARCHITECTURE I

(Slashed with IAKM 60101) Introduction to the fundamental concepts and practices of information architecture (IA). Students develop practical skills for comparing, analyzing, critiquing and designing information architectures. Major topics include organization, navigation, labeling, search and other core IA concepts. Students learn to create blueprints, wireframes, process flows and other documents used to communicate an information architecture design. Prerequisites: IAKM 60120 or IAKM 80120 with a minimum grade of C (2.000); and IAKM 60121 or IAKM 80121 with a minimum grade of C (2.000); and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

IAKM 80102 - INFORMATION AND VISUAL DESIGN

(Cross-listed with IAKM 60102) This course provides a cultural and technological context for understanding the information design process. Topics include: basic design and typographic principles, aesthetics and information design, functional integration of visual and verbal elements, creation and use of information graphics, visualization of quantitative information, and visual navigation systems. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

IAKM 80103 - RESEARCHING THE USER EXPERIENCE I

(Slashed with IAKM 60103) Design research seeks to understand user needs, goals and tasks. Deals with research methods for human-centered design of information-rich artifacts and experiences. Covers interviews, surveys, diary studies and other methods applicable to the formative stages of the design process. Students learn to distill research findings into audience segments, user profiles, personas, scenarios and other documents.
that model user behavior. Prerequisites: IAKM 60120 or IAKM 80120 with a minimum grade of C (2.000); IAKM 60121 or IAKM 80121 with a minimum grade of C (2.000); and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

**IAKM 80104 - USABILITY I**

(Cross-listed with IAKM 60104) Provides a conceptual and practical overview of the processes and methods of usability testing, such as Think Aloud protocols, performance measurements and eye-tracking analysis. Actual usability testing is performed, using quantitative and qualitative methods and employing current and emerging software tools to facilitate data collection and analysis. Prerequisite: IAKM 80120 and IAKM 80121; and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

**IAKM 80105 - INFORMATION TECHNOLOGIES**

(Cross-listed with IAKM 60105) Covers four aspects of information technology: essential technology concepts, the making of software, the social consequences of information technology and the role of non-programmers in technology design. Topics include operating systems, networks, search engines, markup languages, social software, dynamic languages, cloud computing, open source software, technology trends and the history of computing. Prerequisite: IAKM 80120 and IAKM 80121; and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

**IAKM 80106 - CONTENT STRATEGY I**

(Slashed with IAKM 60106) Introduces the field of content strategy and its relationship to user experience design. Includes history and practices of content strategy, how to analyze user needs for content, the production of written materials related to content strategy, and content audits and governance models. This course is the conceptual basis behind content strategy. Prerequisites: IAKM 60120 or IAKM 80120; and IAKM 60121 or IAKM 80121; and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

**IAKM 80110 - CONTENT MANAGEMENT SYSTEMS**
(Cross-listed with IAKM 60110) This course provides an overview of the concepts and practices of Content Management (CM) and Content Management Systems (CMS), including understanding the parts and branches of a CMS, criteria for selecting a CMS, CMS configuration, and evaluating and implementing CMS software. Prerequisite: IAKM 60105 or 80105; and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

IAKM 80111 - ONLINE BRANDING

(Cross-listed with IAKM 60111) This course will focus on the strategies needed to advance brands through effective online experiences including Web sites, intranets, extranets and emerging web technologies. Students will also learn how to extend the brand through personalization, localization and other segmentation techniques. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

IAKM 80112 - INFORMATION ARCHITECTURE II

(Slashed with IAKM 80112) Web site design from emerging directions, such as the separation of content from presentation, with e.g., the use of Cascading Style Sheets (CSS) for formatting web-based documents. The course includes considerations of making web sites compliant with federal regulations or other standards and validation for various markup guidelines. Prerequisites: IAKM 60120 or IAKM 80120 with a minimum grade of C (2.000); and IAKM 60121 or IAKM 80121 with a minimum grade of C (2.000); IAKM 60101 or 80101 with a minimum grade of C (2.000); and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

IAKM 80113 - RESEARCHING THE USER EXPERIENCE II

(Slashed with IAKM 60113) In order to design and develop effective user interfaces, task analysis process and theory are explored and applied via principles drawn from anthropology, ethnography, cognitive psychology, document and instruction systems design and market research. Practical techniques and methodologies are presented to improve interface design through all phases of the design process. Prerequisites: IAKM 60120 or IAKM 80120 with a minimum grade of C (2.000); and IAKM 60121 or IAKM 80121 with a minimum grade of C (2.000); and IAKM 60103 or IAKM 80103 with a minimum grade of C (2.000); and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department
IAKM 80114 - USABILITY II

Provides students with an understanding of qualitative and quantitative research methods appropriate for conducting advanced studies of human interaction with computers. In addition, students learn how to evaluate, purchase, implement and operate equipment for usability labs in a manner consistent with research methods. Prerequisites: IAKM 60104 or 80104; and IAKM 80120 and 80121; and doctoral standing. 
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

IAKM 80116 - CONTENT STRATEGY II

(Slashed with IAKM 60116) Delves into the actual practice of content strategy, and more advanced topics of how content strategy intersects with user experience design. Topics such as return on investment, change management, content management systems, document delivery, future-proofing, and content promotion and optimization are introduced as topics relevant to user experience design. Prerequisites: IAKM 60106 or IAKM 80106; and IAKM 60120 or IAKM 80120; and IAKM 60121 or IAKM 80121; and doctoral standing. 
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

IAKM 80120 - USER EXPERIENCE DESIGN PRINCIPLES AND CONCEPTS

(Cross-listed with VCD 60120; slashed with IAKM 60120) Students explore the context in which User Experience Design exists and the various methods employed by designers in various fields related to design research, the generation of ideas and implementation of designs. Students are introduced to methods of design evaluation and to the conceptual framework of the related curricula. Prerequisite: Doctoral standing. 
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

IAKM 80121 - USER EXPERIENCE DESIGN IN PRACTICE

(Slashed with IAKM 60121) Students learn and employ methods for engaging in creative problem solving. Introduce students to design research methods and current research on human behavior as it applies to user experience design. A core set of design deliverables are examined. Students begin to develop individual portfolio materials. Prerequisite: IAKM 60120 or IAKM 80120 with a minimum grade of C (2.000); and doctoral standing. 
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department
IAKM 80301 - FOUNDATIONAL PRINCIPLES OF KNOWLEDGE MANAGEMENT

This course covers an introduction to: historical roots for knowledge and knowledge management; theories/definitions of knowledge; theories, applications, tools, and practices of KM; Knowledge Management Life-Cycle Framework and Models; significant issues in KM - best practices, culture, economics, strategy, intellectual capital, sustainable innovation. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

IAKM 80302 - FOUNDATIONS OF DOCUMENT MANAGEMENT

Covers three main themes: Principles, which covers the document and records management conceptual framework, relationships with information policy, definitions and industry standards; Practices, which covers the management and procedural framework for effective planning and implementation of document and records management solutions; Technologies, which provides a business-oriented analysis of the nature of the enabling information systems available to support effective document and records management solutions. Prerequisite: IAKM 60301 or 80301; and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

IAKM 80303 - KNOWLEDGE ASSESSMENT AND EVALUATION

Explores all aspects of effective knowledge management within all types of organizations. Lays out the context for knowledge management - at each multiple levels (strategic, technical, business-aligned, and individual) and across all competencies. Covers theory, practice and methods of assessment and evaluation for all levels and all competencies. Provides an introduction to knowledge strategy formulation and planning, knowledge management maturity modeling, knowledge typologies and audits, knowledge mapping, organizational network analysis, knowledge competency mapping and human capital analytics, strategic workforce planning concepts, internal knowledge markets and incentives, community of practice metrics, organizational culture metrics. Prerequisite: IAKM 60301 or 80301; and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

IAKM 80304 - RESEARCH METHODS FOR KNOWLEDGE MANAGEMENT

This course provides a broad overview of the use of qualitative methods in knowledge management, including an examination of the process of conducting qualitative research from conceptualization, design, data collection, articulation, and preliminary implementation. Critical thinking, analysis, and writing skills are emphasized. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours
IAKM 80305 - COMMUNITIES OF PRACTICE

(Slashed with IAKM 60305) Explores collaboration and communities from both a theoretical and a practical perspective. The theory includes structural elements (defining a community identity, scoping the domain, defining practice), and natural lifecycles, and best practices for cultivating communities. On the practical side, students explore strategic placement of communities, the community development process, community design and implementation, and measuring the impacts of communities on intellectual capital creation. Communities of practice are also discussed in the context of digital ecosystems (Web 2.0 and Web 3.0). Utilizes readings and reviews of real life case studies of communities of practice in education, health care and nursing, disaster management, military sciences, and hobbies and craft circles. Students also complete a course project pertaining to community of practice evaluation. Prerequisites: IAKM 60301 or IAKM 80301; and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

IAKM 80306 - ORGANIZATIONAL CULTURE ASSESSMENT

Examines different types of cultures and how each type influences a knowledge organization - how culture influences the way knowledge workers work, how they make decisions and how they behave, the internal cultures of groups and communities, the cultural attributes of knowledge workers which may impact their knowledge behaviors. Organizational cultures of multicultural, global and virtual organizations are covered. Students conduct an organizational culture assessment. Prerequisites: IAKM 60301 or 80301; and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

IAKM 80307 - ORGANIZATIONAL LEARNING

Addresses organizational learning in fast-paced, complex and changing organizational environments. For knowledge organizations in the 21st century, learning is a continuous activity. To survive and grow, a knowledge organization must learn through its people, its groups and the organization as a whole. The capacity to learn is a competitive advantage for a knowledge organization. Covers the fundamental theory of organizational learning, organizational learning types, and the five disciplines of learning organizations, and factors that facilitate or impede organizational learning. Prerequisites: IAKM 60301 or 80301; and doctoral standing.
3.000 Credit hours
3.000 Lecture hours
IAKM 80310 - INTELLECTUAL CAPITAL MANAGEMENT

This course encompasses the new knowledge-intensive economic units: human capital and social capital intellectual assets, intellectual property, brands, and trademarks. A "lifecycle" approach for intellectual assets is described - creation, codification, valuation, protection and leveraging of intellectual assets for competitive advantage. Prerequisite: IAKM 60301 or IAKM 80301 with a minimum grade of C (2.000); and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

IAKM 80311 - BUSINESS PROCESS MANAGEMENT

Introduction to business process management and workflow management. BPM will describe how organizational business processes, (internal, external, manual and automated), can be transformed and managed to increase efficiency, effectiveness and positively affect performance. Topics include the discovery, analysis, modeling and automation of workflow processes. Prerequisites: IAKM 60301 or 80301 with a minimum grade of C (2.000); and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

IAKM 80312 - BUSINESS INTELLIGENCE-COMPETITIVE INTELLIGENCE

An introduction to strategic intelligence consisting of competitive and business Intelligence. Strategic intelligence is an art, science, and craft. Businesses and governments require effective intelligence programs, processes, and tools to track businesses, competitors, markets and trends by acquiring, creating, managing, packaging, and disseminating intelligence knowledge. Prerequisites: IAKM 60301 or 80301 with a minimum grade of C (2.000); and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

IAKM 80340 - BUSINESS NARRATIVE AND STORYTELLING

(Slashed with IAKM 60340) Focuses on the business use of storytelling and narrative intelligence. Narrative intelligence is the ability to make sense of the world through narrative and storytelling. Business narrative helps a knowledge organization to strengthen its organizational visions, to enhance communications, to capture and transfer knowledge, externalize and internalize tacit knowledge, encourage innovation, build communities, and develop effective training, mentoring and learning strategies. Business narrative is the primary way that procedural knowledge is understood and shared. Covers oral and written stories, documentaries, oral histories, organizational myths and legends, case scenarios, training scenarios, encoded and embedded business rules, gossip and business conversations. Students learn how to develop business stories, craft and deliver a springboard story, evaluate narrative architectures, and design systems that support access to business narratives and stories. Prerequisites: IAKM 60301 or IAKM 80301; and doctoral standing.
IAKM 80370 - SEMANTIC ANALYSIS METHODS AND TECHNOLOGIES

Introduces students to the practical contexts, methods and tools associated with semantic analysis. Focuses on early life cycle aspects of semantics, including identification and modeling of semantic problems, design of semantic solutions, and the identification and implementation of appropriate semantic technologies. Covers natural language processing, rule-based and grammar based concept extraction, rule-based and dynamic classification and automated summarization. Students work with a variety of semantic technologies.

Prerequisites: IAKM 80301 and doctoral standing.

IAKM 80401 - HEALTH INFORMATICS MANAGEMENT

Covers the areas encompassing Health informatics management including the planning, selection, deployment, and management of electronic medical records (EMR), management decision-support and tracking systems (DSS), and other health information technologies (HIT). Prerequisite: doctoral standing.

IAKM 80402 - LEGAL ISSUES IN HEALTH INFORMATICS

Introduction to the fundamentals of law for Health Informatics and Information Management. Elements of the course include general legal principles and healthcare; legal electronic medical records (EMR); Health Insurance Portability and Accountability Act (HIPAA) privacy rules and security rules; access, requests and disclosure of health information; required reporting and mandatory disclosure laws; risk management and quality improvement; compliance; workforce overview; related ethics and social issues. Prerequisite: IAKM 80401; and doctoral standing.

IAKM 80403 - HEALTH INFORMATION SYSTEMS

Introduction to information systems and their applications in healthcare used for managerial and clinical support. Study the fundamentals of information systems, including Electronic Medical Records (EMR),
information security. Understand the role of standardized codes, vocabularies and terminologies used in health information systems. Analysis of management and enterprise systems, identify the key elements to manage information resources effectively and the trends affecting the development of health information systems and networks. Prerequisite: IAKM 80401; and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

IAKM 80410 - HEALTH RECORDS MANAGEMENT

Conceptual foundations and practicum for health records management, including the planning, implementation and operation of electronic medical records (EMR); the management of EMR in management and enterprise systems; identifying, selecting and evaluating EMR and health information systems, applications, and repositories; and issues of data quality, integrity, migration, and interoperability. Prerequisite: IAKM 80401; and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

IAKM 80411 - CLINICAL ANALYSIS

The use of well-defined and well integrated clinical analytics throughout the healthcare value chain can be transformative. Through careful implementation of health analytics, hospitals can transform unwieldy amalgamations of data into information that can: Improve patient outcomes, increase safety, enhance operational efficiency and support public health. Given the immense size of the data challenge, the distinctness and geographic spread of many healthcare-related activities, and the fact that so many healthcare activities are conducted by different entities which must interact with each other, there is really no other way to provide operations management tools necessary to deliver personalized medicine and to control spiraling costs. Since clinical analytics is an immature discipline, we carefully examine the practices of those institutions who are standard setters in the industry. Prerequisite: IAKM 80401; and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

IAKM 80412 - CLINICAL DECISION SUPPORT

(Cross-listed with IAKM 60412) Provides a practical survey of clinical decision support systems that collect clinical data and enable the transition to clinical knowledge in real world applications intended to improve quality and safety of patient care. Students become familiar with the basic requirements for clinical decision support systems and the challenges associated with the development and deployment of new applications within the healthcare setting. Prerequisite: IAKM 80401; and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
IACKM 80413 - CHANGE MANAGEMENT IN HEALTH INFORMATICS

(Slashed with IACKM 60413) Designed to cover the process of change management in large healthcare organizations in light of current trends. Topics related to technology requirements, technology implementations, risk assessment, end user computing and buy-in are among those covered. Prerequisites: IACKM 60401 or IACKM 80401 with a minimum grade of C (2.000); and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

IACKM 80414 - HUMAN FACTORS AND USABILITY IN HEALTH INFORMATICS

(Slashed with IACKM 60414) Provides students with the foundational principles of usability and human factors as applied to safety and quality in health informatics technology. Course readings and materials review the concepts of human factors, usability, and the cognitive consequences of health information technology on clinical performance and decision making. Attention is given to the role of mobile computing in healthcare, as well as information visualization. Prerequisites: IACKM 60401 or IACKM 80401 with a minimum grade of C (2.000); and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

IACKM 80415 - HEALTH INFORMATICS INQUIRY AND ASSESSMENT

(Slashed with IACKM 60415) This course will provide a foundation for understanding research in health informatics with a focus on user and experience design research. Through course lectures, readings, discussions and assignments, students will review user research methods, data collection techniques and communication strategies within the healthcare context. Students will then apply this knowledge to creating a research plan for assessing health information technology and communicating results to key organizational stakeholders. Prerequisites: IACKM 60401 or IACKM 80401 with a minimum grade of C (2.000); and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

IACKM 80691 - SEMINAR IN INFORMATION ARCHITECTURE AND KNOWLEDGE MANAGEMENT

(Repeatable for credit) Advanced research by students who are qualified to examine problems of certain special areas related to current concentrations of study in IACKM. Prerequisite: doctoral standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours
IAKM 80693 - VARIABLE TITLE WORKSHOP IN INFORMATION ARCHITECTURE AND KNOWLEDGE MANAGEMENT

(Repeatable for credit) Intensive examination of special topics of interest to those involved in program concentrations. Prerequisite: doctoral standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Workshop

IAKM 81095 - SELECTED TOPICS IN INFORMATION ARCHITECTURE AND KNOWLEDGE MANAGEMENT

(Repeatable for credit) Offered irregularly as resources and-or opportunities permit. Topics could include current or emerging issues in concentrations available in the IAKM program. Specific topics will be announced in the Schedule of Classes. Prerequisite: doctoral standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

IAKM 81096 - INDIVIDUAL INVESTIGATION IN INFORMATION ARCHITECTURE AND KNOWLEDGE MANAGEMENT

(Repeatable for credit) Research or individual investigation for doctoral level students. Prerequisite: doctoral standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

ID 14011 - INTRODUCTION TO INTERIOR DESIGN

Introduction to a broad range of interior design issues including environmental, ecological, aesthetic, social, global, spatial, ethical and technical, and addresses the needs of the human being related to interior design practice. Students acquire knowledge and understanding of significant aspects in interior design and diverse options within the profession, which helps them to identify their career paths in interior design. Prerequisite: none.
1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
ID 14012 - DESIGN AND HUMAN BEHAVIOR
Introduces the concepts of human factors, the way in which humans relate to the physical environment within cultural milieus, and investigates applications of these factors in the design of interiors with consideration of specialized populations. Prerequisite: minimum grade of C (2.000) in ID 14011.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Architecture Department

ID 14501 - STUDIO PROBLEMS IN INTERIOR DESIGN I
Studio problems in interior design is a course for the beginning student whose interest is in interior space design. Prerequisite: TECH 11083.
4.000 Credit hours
2.000 Lecture hours
2.000 Other hours

Levels: Undergraduate
Schedule Types: Lecture, Studio

Architecture Department

ID 14512 - INTERIOR DESIGN GRAPHICS I
Studio based course introducing concepts of architectural drawing and sketching techniques including plan, elevation, section and perspective. Prerequisite: Interior Design (ID) major.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Architecture Department

ID 24001 - INTERIOR DESIGN STUDIO I-SPACE PLANNING AND HUMAN FACTORS
Focuses on space planning and the application of human factors to interior design solutions. Based on knowledge received in ID 14012 Design and Human Behavior, the following areas are incorporated into the studio projects: Americans with Disabilities Act; data gathering; space analysis and synthesis. Prerequisite: minimum grade of C (2.000) in ID 14012.
3.000 Credit hours
6.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Architecture Department

ID 24002 - INTERIOR DESIGN STUDIO II-DETAILING AND FABRICATION
Focus is the understanding of detailing and fabrication in interior design that leads students to have a balanced ability between the creative and the technical abilities in design projects. Studies of architectural and interior design detailing, custom cabinetry, casework, joinery, millwork, fabrication, and FF&E are blended into each of the projects to instill a proficiency in construction execution. Usage of a 3D printer and laser cutter is introduced along with design projects. Prerequisite: minimum grade of C (2.000) in ID 24001.

3.000 Credit hours
6.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Architecture Department

ID 24011 - METHODS AND MATERIALS I: BUILDING SYSTEMS

Introduction to the principles of building construction and systems. Covers topics related to structural systems in buildings which include: floor, wall and roof systems; environmental comfort and sustainability; safety and security; HVAC; electrical; building control; and conveying systems, that influence and interact with interior design. Designed to advance the student to a higher level of understanding and competence in building technology for interior design. Prerequisite: minimum grade of C (2.000) in ID 14012. Corequisite: ID 24001.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Architecture Department

ID 24012 - CODES AND STANDARDS FOR INTERIOR DESIGN

Presents codes, standards and regulations that pertain to the materials and finishes of building interiors, their proper methods of application, installation and maintenance. Prerequisite: minimum grade of C (2.000) in ID 24001. Corequisite: ID 24002.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Architecture Department

ID 24013 - HISTORY OF INTERIORS I-ANCIENT TO 15TH CENTURY

Provides a thorough background of the major design periods and traditions of global civilizations from ancient times to the 15th century including the design of furnishings, architecture, interiors, textiles, and the decorative and fine arts. The influences of culture, geography, technology, religion and politics on design are investigated. Prerequisite: minimum grade of C (2.000) in ID 24001. Corequisite: ID 24002.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Architecture Department

ID 24021 - INTEGRATED DIGITAL APPLICATIONS I
Prepares students for an ongoing exploration and integration of architectural software to assist with design problems within the interior design practice. Course work covers basic fundamentals of popular architectural programs and enables students to continuously build upon acquired knowledge and skills. Prerequisite: minimum grade of C in AED 10102. Corequisite: ID 24001.

3.000 Credit hours
6.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Architecture Department

**ID 24022 - 3D MODELING AND RENDERING**

Introduces fundamental concepts, principles and practices of 3D digital modeling and rendering techniques applicable to design practice. Thorough instruction is given in the production of geometric surfaces and forms using surface and solid modeling tools, texturing, and lighting. Tutorial-based with supporting demonstrations and lectures on the various commands and approaches to interior design and architectural modeling and rendering. Prerequisite: minimum grade of C (2.000) in ID 24001. Corequisite: ID 24002.

2.000 Credit hours
4.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Architecture Department

**ID 24502 - STUDIO PROBLEMS IN INTERIOR DESIGN II**

Special problems dealing with design of residential and related spaces, traffic flow, placement of furnishings, emphasis on color and textural experience and lighting of space. Practical, integrated approach. Prerequisite: Interior design (ID) major and ID 14501.

4.000 Credit hours
2.000 Lecture hours
2.000 Other hours

Levels: Undergraduate
Schedule Types: Lecture, Studio

Architecture Department

**ID 24510 - TEXTILES IN THE BUILT ENVIRONMENT**

A concise background in textile science is established with a hands-on approach to the evaluation, selection and application of textiles by interior design professionals and architects. Prerequisite: interior design (ID) major. Corequisite: ID 34503.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Architecture Department

**ID 24522 - INTERIOR DESIGN GRAPHICS II**

Studio based course continuation of ID 14512. Exploration of color, media and graphic representation of interior
design materials and environments. Prerequisite: ID 14501 and ID 14512 and ID 24502.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Architecture Department

ID 34001 - INTERIOR DESIGN STUDIO III-LARGE SCALE PLANNING AND DOCUMENTATION

Introduction to large-scale commercial space design through studio projects and lectures with an emphasis on space planning, office systems furniture planning, and development of workstation prototype development. Prerequisite: minimum grade of C (2.000) in ID 24002.
4.000 Credit hours
8.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Architecture Department

ID 34002 - INTERIOR DESIGN STUDIO IV-GLOBAL AND HISTORICAL CONTEXT

Focus is on projects involving the historical design traditions of the United States and various global cultures. Historical approaches to interiors include: preservation; restoration; recreation of historic interiors; and the reuse of historic structures for new purposes. The use of metric dimensioning is a component of one project. Prerequisite: minimum grade of C (2.000) in ID 34001. Corequisite: ID 44014.
4.000 Credit hours
8.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Architecture Department

ID 34011 - LIGHTING FOR INTERIOR SPACES

Lighting for Interior Spaces is structured to provide the interior design student with the knowledge required to select, design and install the proper lighting in the interior environment. Builds from elementary information to the complex and current technology in the industry. Prerequisite: minimum grade of C (2.000) in ID 24002. Corequisite: ID 34001.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Architecture Department

ID 34012 - METHODS AND MATERIALS II-INTERIOR MATERIALS

Explores the methods and materials utilized in the design and construction of the sustainable interior environment. Presents the standards and requirements that pertain to finishes and materials; manufacture and composition of various interior materials and finishes; and proper methods of application and installation of selected materials. Prerequisites: minimum grade of C (2.000) in ID 24002. Corequisite: ID 34001.
3.000 Credit hours
ID 34013 - INTERIOR DESIGN BUSINESS AND PROFESSIONAL PRACTICE

Undertakes a study of business and professional practices of interior designers. Topics to be covered include: opportunities within the design profession; types of business formations; legal and ethical responsibilities; business operations; and project management. Students develop a business plan; write resumes and cover letters; and develop a design services proposal. Prerequisite: minimum grade of C (2.000) in ID 24002. Corequisite: ID 34001.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Architecture Department

ID 34021 - LIGHTING FOR INTERIOR SPACES LABORATORY

Lighting for Interior Spaces Lab is a co-requisite to ID 34011 Lighting for Interior Spaces lecture. Structured for hands-on experience with calculating, specifying and testing different types of light and their application. Prerequisite: minimum grade of C (2.000) in ID 24002. Corequisite: ID 34011.

1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Architecture Department

ID 34022 - METHODS AND MATERIALS II-INTERIOR MATERIALS LABORATORY

Provides hands-on experience in the application of selected materials for the design and construction of the sustainable interior environment. Information presented in ID 34012 Methods and Materials II - Interior Materials are applied to design scenarios. Prerequisite: minimum grade of C (2.000) in ID 24002. Corequisite: ID 34012.

1.000 Credit hours
1.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Architecture Department

ID 34023 - PERSONAL BRANDING AND IMAGE MAKING

Designed to provide the student with an understanding of 1) branding as a mechanism for personal and group identity; 2) the job market, versatility of the profession, and industry expectations; 3) a developed knowledge of portfolio layout, cover letter and resume writing; 4) increased sense of who they are as a designer and their future; and 5) the ability to market themselves and their work. Prerequisite: minimum grade of C (2.000) in ID 24002. Corequisite: ID 34001.

3.000 Credit hours
3.000 Lab hours
Levels: Undergraduate
Schedule Types: Lecture

Architecture Department

**ID 34503 - STUDIO PROBLEMS IN INTERIOR DESIGN III**

Special problems concerning design of small to moderate size commercial interior space. Prerequisite: ID 24502.

4.000 Credit hours
2.000 Lecture hours
2.000 Other hours

Levels: Undergraduate
Schedule Types: Lecture, Studio

Architecture Department

**ID 34504 - STUDIO PROBLEMS IN INTERIOR DESIGN IV**

Introduction to large scale planning. Prerequisite: ARCH 10101 and ID 34503; and pre/corequisite PHY 13001.

4.000 Credit hours
2.000 Lecture hours
2.000 Other hours

Levels: Undergraduate
Schedule Types: Lecture, Studio

Architecture Department

**ID 34515 - COMPUTER AIDED DESIGN FOR INTERIOR DESIGNERS**

Introduction to application of computer drawing and drafting techniques used in interior design. Study of two dimensional and three dimensional techniques as well as symbol libraries. Prerequisite: interior design (ID) major. Corequisite: ID 34503.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Laboratory

Architecture Department

**ID 34522 - METHODS AND MATERIALS FOR INTERIOR DESIGN**

Information regarding the manufacture, construction and application of materials used in interior design. Proper methods and installation procedures of both surface materials and furnishings required in the profession are explored. Prerequisite: interior design (ID) major. Corequisite: ID 24502.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Architecture Department
ID 41093 - VARIABLE TITLE WORKSHOP IN INTERIOR DESIGN

(Repeatable for credit) Workshops dealing with variable topics related to the interior design profession. Learning experiences provided in a broad spectrum of specialties. Prerequisite: Interior design (ID) major.
1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Undergraduate
Schedule Types: Workshop

Architecture Department

ID 41095 - SPECIAL TOPICS IN INTERIOR DESIGN

(Repeatable for credit) Discussion of a major topic or issue within the profession of interior design. Repeat registration permitted. Prerequisite: Interior design (ID) major.
1.000 TO 4.000 Credit hours
1.000 TO 4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Architecture Department

ID 41096 - INDIVIDUAL INVESTIGATION IN INTERIOR DESIGN

(Repeatable for credit) Independent study of interior design and related topics under the guidance of a faculty member. Prerequisite: Interior design (ID) major.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Architecture Department

ID 44001 - INTERIOR DESIGN STUDIO V-SPECIALIZED FOCUS AND POPULATIONS

Structured to allow for a specialized focus on design problems that can occur based on current trends or issues that affect the built environment for varying populations. Environmental conditions and current and on-going specific design issues in the interior environment are utilized as problems for the course. Prerequisite: minimum grade of C (2.000) in ID 34002.
5.000 Credit hours
10.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Architecture Department

ID 44002 - INTERIOR DESIGN STUDIO VI-COMMUNITY ENGAGEMENT

Community engagement refers to the process by which organizations and individuals build ongoing, permanent relationships for the purpose of applying a collective vision for the benefit of a community. Structured to establish relationships and work with community organizations and leaders in formal and informal manners and
partnering to create change and improve physical environments. Prerequisite: minimum grade of C (2.000) in ID 44001.

5.000 Credit hours
10.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Architecture Department

ID 44011 - INTEGRATED DESIGN PRACTICE AND PROJECT MANAGEMENT

Introduction and application of current interior design and related disciplines project management needs, methods, and techniques in order to complete a design-build project. Content is project scheduling, documentation and supervision of all members of a design-build team including interior designers, architects, construction personnel and assorted trades involved in producing a built environment. Prerequisite: minimum grade of C (2.000) in ID 44612. Corequisite: ID 44001.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Architecture Department

ID 44014 - HISTORY OF INTERIORS II-16TH THROUGH 19TH CENTURY

Provides a thorough background of the major design periods and traditions of global civilizations from the 16th through the 19th centuries including the design of furnishings, architecture, interiors, textiles, and the decorative and fine arts. The influence of culture, geography, technology, religion and politics on design are investigated. Prerequisite: minimum grade of C (2.000) in ID 24013. Corequisite: ID 34002.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Architecture Department

ID 44015 - HISTORY OF INTERIORS III-20TH CENTURY TO THE PRESENT

Provides a thorough background of the major design periods and traditions of global civilizations from the 20th century to the present including the design of furnishings, architecture, interiors, textiles, and the decorative and fine arts. The influence of culture, geography, technology, religion and politics on design are investigated. Prerequisite: minimum grade of C (2.000) in ID 44014. Corequisite: ID 44001.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Architecture Department

ID 44041 - CURRENT ISSUES IN INTERIOR DESIGN

Structured to inform the advanced design student about issues within the design and social world and how design contributes to improving human well-being and livelihood. Focuses the student on developing an
understanding that designers and creative professionals have a responsibility and are able to cause real change in the world through good design. Prerequisite: ID 44001. Corequisite: ID 44002.
1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Architecture Department

ID 44505 - STUDIO PROBLEMS IN INTERIOR DESIGN V

Introduction to principles of historic design focusing on hands-on and on-site design techniques. For interior design majors only. Prerequisite: ID 34504 and ID 44534. Corequisite: ID 44535.
2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Architecture Department

ID 44506 - STUDIO PROBLEMS IN INTERIOR DESIGN VI

Special problems concerning the design of large-scale commercial environments. Prerequisite: TECH 31015 and ID 44505. Corequisite: ARCH 30501.
4.000 Credit hours
2.000 Lecture hours
2.000 Other hours

Levels: Undergraduate
Schedule Types: Lecture, Studio

Architecture Department

ID 44507 - STUDIO PROBLEMS IN INTERIOR DESIGN VII

This course will provide the opportunity for a senior design thesis. Problems will be selected by the students and will represent their own area of interest. Prerequisite: ID 44506 and ARCH 30501.
4.000 Credit hours
2.000 Lecture hours
2.000 Other hours

Levels: Undergraduate
Schedule Types: Lecture, Studio

Architecture Department

ID 44512 - HISTORIC FURNISHING TEXTILES

Designed to acclimate students to historic textiles created primarily for use in interior architecture. Focus is on aesthetics, design and construction. A comprehensive adaptive reuse or restoration project is required. Prerequisite: ID 44534 and ID 44535.
2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
ID 44523 - INTERIOR DESIGN PROFESSIONAL PRACTICE

A study of the business and professional practices of interior designers. Prerequisite: ID 34504.  
2.000 Credit hours  
2.000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture

Architecture Department

ID 44525 - LIGHTING APPLICATION IN INTERIOR SPACES

Design application of lighting technology for various interior spaces. Field trips to study lighting installations. Prerequisite: ID 34503.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture

Architecture Department

ID 44527 - STUDY TOURS

A series of study tours for in-depth, first-hand experiences of historic sites, markets, manufacturing facilities and attendance at product seminars. Prerequisite: junior or senior standing.  
1.000 TO 10.000 Credit hours  
1.000 TO 10.000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture

Architecture Department

ID 44534 - HISTORY OF INTERIORS TO 1600

A chronological study of housing and furnishings from civilization to the 15th century. Prerequisite: ID 34504; and ARTH 22006 and ARTH 22007; or ARCH 10011 and ARCH 10012; and special approval.  
4.000 Credit hours  
4.000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture

Architecture Department

Course Attributes:  
Writing Intensive Course

ID 44535 - HISTORY OF INTERIORS-1600 TO PRESENT
A chronological study of housing and furnishings from the Renaissance to the Victorian Period-16th to 19th centuries and 20th century. Prerequisite: ID 44534.

4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Architecture Department

**ID 44592 - PROFESSIONAL INTERIOR DESIGN INTERNSHIP**

(Repeatable for a maximum of 4 credit hours) Provides practical professional interior design experience by exposing the student to first-hand knowledge of the professional work environment. Students are required to prepare a portfolio and resume, and interview for the positions offered by the professional design firms locally, nationally and internationally. Prerequisite: minimum grade of C in ID 34002.

1.000 TO 4.000 Credit hours
12.000 TO 48.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Architecture Department

Course Attributes:
Experiential Learning Requirem

**ID 44611 - INTERIOR DESIGN RESEARCH AND PROGRAMMING**

Structured to provide the student with an understanding of the research systems of inquiry related to the interior design process; the ability to demonstrate an understanding of the knowledge and tools related to the gathering of data related to the successful completion of a design project; and experience in researching, evaluating and programming of private and public spaces. Prerequisite: minimum grade of C (2.000) in ID 34001. Corequisite: ID 44631.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Architecture Department

**ID 44612 - INTERIOR SPECIFICATIONS AND COST ANALYSIS**

Promotes an understanding of specifications and cost analysis of materials and furniture utilized in the design and construction of the sustainable interior environment. Informs students about format and content of the specifications that pertain to the interior contract documentation. Prerequisite: minimum grade of C (2.000) in ID 34001. Corequisite: ID 34002.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Architecture Department

**ID 44631 - INQUIRY FOR EVIDENCE BASED DESIGN**
Structured to provide the student with the ability 1) to apply the research systems of inquiry related to the interior design process; 2) to demonstrate an understanding of the knowledge and tools related to the gathering of data related to the successful completion of a design project; 3) to experience the research, evaluation, and programming of private and public spaces. Prerequisite: minimum grade of C (2.000) in ID 34001. Corequisite: ID 44611.

1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Architecture Department

Course Attributes:
Writing Intensive Course

**ID 51093 - VARIABLE TITLE WORKSHOP IN INTERIOR DESIGN**

(Repeatable for credit) Workshop topics dealing with variable topics related to the interior design profession. Learning experiences are provided in a wide range of areas. Prerequisite: Interior design (ID) major and graduate standing.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Architecture Department

**ID 51095 - SPECIAL TOPICS IN INTERIOR DESIGN**

(Repeatable for credit) Discussion of a major topic or issue within the profession of interior design. Prerequisite: Interior design (ID) major and graduate standing.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Architecture Department

**ID 51096 - INDIVIDUAL INVESTIGATION IN INTERIOR DESIGN**

(Repeatable for credit) Independent study of interior design and related topics under the guidance of a faculty member. Prerequisite: Interior design (ID) major and graduate standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Architecture Department

**ID 54534 - HISTORY OF INTERIORS TO 1600**

A chronological study of housing and furnishings from civilization to the 15th century. Prerequisites: Graduate
standing and special approval and ID 34504; and ARTH 22006 and ARTH 22007; or ARCH 20001 and ARCH 20002.
4.000 Credit hours
4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Architecture Department

ID 54535 - HISTORY OF INTERIORS 1600 TO PRESENT

A chronological study of housing and furnishings from the Renaissance to the Victorian Period, sixteenth to nineteenth centuries and twentieth century. Prerequisite: ID 54534 and graduate standing.
4.000 Credit hours
4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Architecture Department

IERT 12005 - APPLICATIONS IN COMPUTER-AIDED DESIGN

Course for training on the use of a popular, computer-aided drafting and design software. Practice with the advanced features of the software applicable to modern design in the graphics, mechanical, industrial and electronics fields. Prerequisite: None.
2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

IERT 20192 - INTERNSHIP IN ENGINEERING TECHNOLOGY

(Repeatable for credit) Supervised internship experience in approved business or industrial environment relative to the student's major. The internship experience must be for a period of at least 12 consecutive weeks at 25 hours per week, or 20 hours per week for 15 weeks, totaling not less than 300 hours. Most co-ops occur during the summer. Prerequisites: Sophomore standing; and special approval.
2.000 Credit hours
20.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Regional College Department

Course Attributes:
Experiential Learning Requirem

IERT 21096 - INDIVIDUAL INVESTIGATION IN SYSTEMS/INDUSTRIAL ENGINEERING TECHNOLOGY

(Repeatable for credit) Independent, in depth research of a systems industrial engineering technology topic supervised and coordinated by an engineering technology faculty member. Prerequisite: Permission.
1.000 TO 4.000 Credit hours
IERT 22000 - STATISTICAL PROCESS CONTROL

Process variability, process monitoring, statistical methods using control charts for variables and attributes; acceptance sampling plans; process capability, process adjustment, process improvement. Prerequisite: Special approval.
4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

IERT 22001 - MOTION AND TIME STUDY

Motion economics, SPC, activity charts, methods improvement, use of standard data method of making studies, computerized line balancing. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

IERT 22003 - SUPERVISION AND LABOR RELATIONS

Practical methods and techniques for improving supervision and labor relations in industry. Personnel and performance evaluation, implementing policy, labor contracts, collective bargaining, wage and salary administration. Prerequisite: None.
5.000 Credit hours
5.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

IERT 22004 - FACILITIES ENGINEERING

Principles of facilities engineering to meet production needs. Applications of material-handling devices, plant layout drawings, templates, models and FMS systems. Prerequisite: None.
2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department
IERT 22005 - PRODUCTION AND INVENTORY CONTROL

Basic principles, objectives and influencing factors of production control in industrial organizations of various kinds and their effects on costs. Applied planning and scheduling. Prerequisite: Sophomore standing.
2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

IERT 22006 - ECONOMIC DECISION ANALYSIS

Economic decision making for industrial engineering technology with applications emphasis, estimating economic elements, interest and economic equivalence, methods of comparing alternatives and evaluating replacement alternatives. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

Course Attributes:
TAG - Engineering

IERT 22010 - COMPUTER INTEGRATED MANUFACTURING

Planning, developing and implementing a strategy to control and coordinate all the engineering production and business operations within a manufacturing enterprise. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

IERT 22095 - SPECIAL TOPICS

(Repeatable for credit) Special topics in systems/industrial engineering technology. Prerequisite: Permission.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

IERT 42095 - TRAINING TOPICS IN ENGINEERING TECHNOLOGY

(Repeatable for credit) Specialized advanced instruction oriented primarily to the theoretical base and application of current technology developed by experts in the specific engineering technology discipline. This course requires substantial base knowledge. Prerequisite: special approval.
IERT 43096 - INDIVIDUAL INVESTIGATION IN ENGINEERING TECHNOLOGY

(Repeatable for a maximum of 6 credit hours) Work study of an individual nature on a topic in a field of engineering technology. Prerequisites: junior standing and special approval.

Levels: Undergraduate
Schedule Types: Lecture

IGST 40099 - SENIOR PROJECT

(Repeatable twice for credit) Thesis or independent study project done under the supervision of a faculty advisor. Students need written approval of faculty advisor, faculty member's unit, or director of the Center for Comparative and Integrative Programs in order to enroll in this course. Prerequisite: Senior standing in a multidisciplinary program in the Center for Comparative and Integrative Programs; and special approval.

Levels: Undergraduate
Schedule Types: Senior Project/Honors Thesis

Course Attributes:
Experiential Learning Requirem, Writing Intensive Course

IHS 10000 - CAREERS IN HEALTH SCIENCES AND HUMAN SERVICES

This course presents the diverse career options in the fields of health sciences and human services. Academic preparation and credentialing for professions will be included. Prerequisite: None.

Levels: Undergraduate
Schedule Types: Lecture

IHS 40091 - SEMINAR FOR PRACTICUM IN INTEGRATED HEALTH STUDIES

(Repeatable for credit) Seminar focuses on applying concepts from previous educational experiences to the practicum work experience. Prerequisite: IHS 10000. Corequisite: IHS 44092.

Levels: Undergraduate
IHS 44010 - RESEARCH DESIGN AND STATISTICAL METHODS IN THE HEALTH PROFESSIONS

Fundamental concepts and procedures for systematic collection, analysis and interpretation of qualitative and quantitative data in health related fields includes group and single-subject designs and use of parametric and nonparametric statistics. Prerequisite: PSYC 21621.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Health Sciences Department

IHS 44091 - PROFESSIONAL SEMINAR IN INTEGRATED HEALTH STUDIES

(Repeatable for credit) This course presents and integrates the role of scientists, practitioners and administrators in the health care and human service professions as they attempt to meet the needs of the individual in diverse environments. Current issues will be addressed. 400 hours observation/work experience in health/human service-related fields required prior to registration for this course. Prerequisite: Senior standing and special approval.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

Health Sciences Department

Course Attributes:
Writing Intensive Course

IHS 44092 - PRACTICUM IN INTEGRATED HEALTH STUDIES

(Repeatable for credit) Practicum focuses on providing supervised practical experience in a health science, health care and human services organization which allows students to apply theoretical knowledge and skills learned in their coursework. Prerequisite: Integrated health studies (IHS) majors and senior standing and special approval. Corequisite: IHS 40091.
3.000 TO 10.000 Credit hours
9.000 TO 30.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Health Sciences Department

Course Attributes:
Experiential Learning Requirem

IHS 44095 - SPECIAL TOPICS IN INTEGRATED HEALTH STUDIES

(Repeatable for credit) Selected topics in integrated health dependent upon interest. Prerequisite: none.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours
Health Sciences Department

**IHS 44096 - INDIVIDUAL INVESTIGATION IN INTEGRATED HEALTH**

(Repeatable for credit) Independent study completed under the supervision of a faculty member. Written approval of supervising faculty member and school director required prior to registration. Prerequisite: special approval.

1.000 TO 3.000 Credit hours
3.000 TO 9.000 Other hours

Health Sciences Department

**ILS 21091 - INTEGRATED LIFE SCIENCES SEMINAR I**

(Repeatable for credit) Seminar for first-year students in Kent State/NEOUCOM program to provide correlation of natural sciences, social sciences and humanities with medical sciences. Prerequisite: Integrated Life Sciences (ILS) major.

2.000 Credit hours
2.000 Other hours

Arts and Sciences Department

**ILS 21092 - INTEGRATED LIFE SCIENCES SEMINAR II**

Seminar for first-year students in Kent State/NEOUCOM program to provide correlation of natural sciences, social sciences and humanities with medical sciences. Prerequisite: ILS 21091 and Integrated Life Sciences major.

2.000 Credit hours
2.000 Other hours

Arts and Sciences Department

**ILS 30392 - PSYCHOLOGICAL HELPING SKILLS FOR MEDICINE**

Basic strategies for helping persons in crisis. Includes guided self exploration of attitudes values and personality styles. Prerequisite: Integrated Life Sciences majors.

3.000 Credit hours
3.000 Lecture hours

Arts and Sciences Department
**Arts and Sciences Department**

**Course Attributes:**
Experiential Learning Requirem

**ILS 32091 - INTEGRATED LIFE SCIENCES SEMINAR III**
(Repeatable for credit) Continuation of ILS 21092. Prerequisites: ILS 21091 and 21092 and Integrated Life Sciences majors. 
2.000 Credit hours 
2.000 Other hours 

Levels: Undergraduate 
Schedule Types: Seminar 

**ILS 32092 - INTEGRATED LIFE SCIENCES SEMINAR IV**
Continuation of ILS 32091. Prerequisites: ILS 21091, 21092 and 32091 and Integrated Life Sciences majors. 
2.000 Credit hours 
2.000 Other hours 

Levels: Undergraduate 
Schedule Types: Seminar 

**ILS 32592 - SOCIOLOGICAL PERSPECTIVES IN PUBLIC HEALTH**
Sociological phenomena of public health through research/theory and field-research experience consisting of participatory and non-participatory experiences in areas related to medical practice, but not associated with traditionally legitimated medical curricula. Prerequisite: Integrated Life Sciences majors. 
3.000 Credit hours 
3.000 Lecture hours 

Levels: Undergraduate 
Schedule Types: Lecture 

**ILS 40392 - PRACTICUM IN MEDICAL PSYCHOLOGY**
Community mental health through community agency field placement. Observation and participation in interviewing crisis intervention and community consultation. Didactic exposure to community mental health theory. Prerequisite: Integrated Life Sciences majors. 
3.000 Credit hours 
3.000 Lecture hours 

Levels: Undergraduate
ILS 42591 - MEDICAL SOCIOLOGY RESEARCH SKILLS
Formulation of community health-related research problem, theoretical concepts and techniques of data collection and analysis. Prerequisite: Integrated Life Sciences majors. Corequisite: ILS 42592.
2.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

ILS 42592 - MEDICAL SOCIOLOGY PRACTICUM
Application of sociological research designs and methods to problems in medical sociology through field research and report on a community health-related research problem. Prerequisite: Integrated Life Sciences majors. Corequisite: IILS 42591.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture, Practicum or Internship

INS 29000 - INTRODUCTION TO INSURANCE AND RISK
Introduction into the fields of insurance and risk management including, property and casualty, life, health, auto and other types of insurances. Personal and commercial risks are identified and quantified for potential loss. Prerequisite: ACTT 11000 or BMRT 11000.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

INS 39000 - INSURANCE LAW, FINANCE AND RISK MANAGEMENT
Next-level insurance and risk management topics including ERM, insurance law and financial statement analysis. Other topics include impact of laws and regulation on insurers and additional elements of life insurance, annuities, IRAs, auto insurance, crime insurance and surety bonds. Prerequisite: INS 29000.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
**INS 39001 - INSURANCE OPERATIONS**

A detailed review of the strategic and tactical operations of the insurance industry. Explores the Function and role of insurers, claims management, rate making, financial structures and underwriting. Prerequisite: INS 39000 with a minimum grade of C (2.000).

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**INS 49000 - LIFE AND HEALTH INSURANCE**

A detailed review of life and health insurance and their impact on individuals and society. The objective is a familiarization with various life and health products and how these products protect people and their families against financial losses caused by death, accident, sickness or disability. Prerequisite: INS 39001 with a minimum grade of C (2.000).

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**INS 49001 - PERSONAL LINES INSURANCE**

Study of property and casualty personal lines of insurance including automobile, homeowner, dwelling and other residential policies, "toys" such as motor homes, motorcycles and boats, and high-risk plans for earthquake, flood and windstorm. Prerequisite: INS 39001 with a minimum grade of C (2.000).

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**INS 49002 - COMMERCIAL INSURANCE**

Advanced concepts in commercial lines insurance including commercial property, commercial liability, business income, commercial crime and equipment breakdown insurance, commercial auto, workers compensation, business owners and specialty coverages. Prerequisite: INS 39001 with a grade of C (2.000) or better.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
### INS 49010 - LIFE AND HEALTH INSURANCE LAW, FINANCE AND RISK MANAGEMENT

Explores enterprise risk management, life and health insurance regulation and legal principles, and the financial operations of life and health insurers. The structure and analysis of life and health insurance contracts are also covered as well as how to buy life insurance. Annuities and IRAs are explained and then contrasted and compared to life insurance products. Prerequisite: INS 29000.

3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

### INS 49011 - PROPERTY AND CASUALTY INSURANCE LAW, FINANCE AND RISK MANAGEMENT

Explores enterprise risk management, property and casualty insurance regulation and legal principles, and the financial operations of property and casualty insurers. The structure and analysis of property and casualty insurance contracts are also covered. Additionally, crime insurance and surety bonds are explained as are the societal impacts of auto accident injuries. Prerequisite: INS 29000.

3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

### INS 49020 - LIFE AND HEALTH INSURANCE OPERATIONS

Offers a detailed study of the strategic and tactical operations of life and health insurance industry players. It explores the roles of insurers as well as their key functional areas including underwriting, marketing, distribution, claims management and rate making. Corporate finance and both GAAP and SAAP accounting are studied as is the preparation and analysis of life and health statutory annual financial statements. Life and health reinsurance and regulation are also explored. Prerequisite: INS 49010.

3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

### INS 49021 - PROPERTY AND CASUALTY INSURANCE OPERATIONS

Offers a detailed study of the strategic and tactical operations of property and casualty insurance industry players. Explores the roles of insurers as well as their key functional areas including underwriting, marketing, distribution, claims management and rate making. Corporate finance and both GAAP and SAAP accounting are studied as is the preparation and analysis of property and casualty statutory annual financial statements. Property and casualty reinsurance and regulation are also explored. Prerequisite: INS 49011.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

Course Attributes:
Writing Intensive Course

**INS 49030 - LIFE INSURANCE**

An in-depth study of life insurance and its impact on individuals and society. Students gain a strong understanding of life insurer operations (including compliance, rate making, underwriting, claims and distribution), life insurance products and policy contracts. They also learn how these products protect people and businesses against the financial losses resulting from death or disability. Prerequisite: INS 49020 with a minimum grade of C (2.000).

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**INS 49031 - HEALTH INSURANCE**

An in-depth study of health insurance and its impact on individuals and society. Students gain a strong understanding of health insurer operations (including compliance, rate making, underwriting, claims and distribution), health insurance products and policy contracts. Both individual and group products are examined. Students also learn how health insurance products protect people and businesses against the financial losses related to sickness and accidents. Prerequisite: INS 49020 with a minimum grade of C (2.000).

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**INS 49032 - ADVANCED TOPICS IN LIFE AND HEALTH INSURANCE**

Investigates selected topics in life and health insurance either not covered, or not in depth, in other life and health insurance courses within the insurance studies degree program. This includes ICD, CPT and Level II coding systems and the nomenclature, language and terms used in medical billing environments. Students also learn about OSHA, HIPAA, PPACA, electronic medical records and other current topics relevant to health insurance compliance, underwriting and claim functions. Additionally, contemporary topics relevant to both life and health insurance are addressed to ensure students are up to date on the industry's most current challenges and opportunities Prerequisites: INS 49030 and 49031 both with a minimum grade of C (2.000)

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department
**INS 49041 - PERSONAL LINES PROPERTY AND CASUALTY INSURANCE**

Covers all property and casualty personal lines of insurance including automobile, homeowners and other residential policies. Also examined are watercraft, RV, mobile home and personal umbrella products. Also explores personal lines profitability, pricing and portfolio management. Prerequisite: INS 49021 with a minimum grade of C (2.000).

3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

Regional College Department

**INS 49042 - COMMERCIAL LINES PROPERTY AND CASUALTY INSURANCE**

Covers all property and casualty commercial lines of insurance including building and personal property and causes of loss forms, business income insurance, crime, equipment breakdown, aviation, marine and ocean cargo. Also covers commercial general liability, business auto, garage and motor carrier products, workers compensation and employers liability, environmental, cyber and terrorism insurance along with management and professional liability and business owners (BOP) policies. The factors affecting rates for these products are also explored. Prerequisite: INS 49021 with a minimum grade of C (2.000).

3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

Regional College Department

**INS 49043 - ADVANCED TOPICS IN PROPERTY AND CASUALTY INSURANCE**

Investigates selected topics in property and casualty insurance either not covered, or not covered in depth, in other property and casualty insurance courses within the insurance studies degree program. This includes E&S, RPGs, Catastrophic coverages, as well as insurance agency operations, reinsurance and technology. Medical coding nomenclature, language and terms are also explored. Additionally, contemporary topics relevant to property and casualty insurance are addressed to ensure students are up to date on the industry's most current challenges and opportunities. Prerequisite: INS 49041 and 49042 with a minimum grade of C (2.000).

3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

Regional College Department

**INS 49092 - INSURANCE PRACTICUM GENERAL**

(Repeatable for credit) Course requires an on-site internship and/or a project with an insurance related organization approved by the Instructor. Prerequisite: INS 39000 and 39001; and special approval.

3.000 Credit hours  
21.000 Other hours

Levels: Undergraduate  
Schedule Types: Practicum or Internship

Regional College Department
**INS 49192 - PROPERTY AND CASUALTY INSURANCE PRACTICUM**

(Repeatable for credit 2 times) Requires an on-site internship and/or project with a property and/or casualty insurance related organization approved by the Instructor. Prerequisites: INS 49011 and 49021 both with a minimum grade of C (2.000) and special approval.

3.000 Credit hours
21.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

**INS 49292 - LIFE AND HEALTH INSURANCE PRACTICUM**

(Repeatable for credit 2 times) Requires an on-site internship and/or project with a life and/or health insurance related organization approved by the Instructor. Prerequisite: INS 49010 and 49020 both with a minimum grade of C (2.000); and special approval.

3.000 Credit hours
21.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

**ITAL 15201 - ELEMENTARY ITALIAN I**

An introduction to the Italian language in the context of Italian culture. Prerequisite: None.

4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**ITAL 15202 - ELEMENTARY ITALIAN II**

A continuation of the introduction to the Italian language in the context of Italian culture. Prerequisite: ITAL 15201.

4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department
### ITAL 15204 - BASIC CONVERSATIONAL ITALIAN I

Exposure to basic grammar and to current Italian useful to travelers. Not applicable to fulfillment of foreign language requirement. Prerequisite: special approval.

2.000 Credit hours  
2.000 Lecture hours  

Levels: Undergraduate  
Schedule Types: Lecture  

Modern-Classical Lang Studies Department

### ITAL 15205 - BASIC CONVERSATIONAL ITALIAN II

Continuation of ITAL 15204. Prerequisite: ITAL 15204.

2.000 Credit hours  
2.000 Lecture hours  

Levels: Undergraduate  
Schedule Types: Lecture  

Modern-Classical Lang Studies Department

### ITAL 25201 - INTERMEDIATE ITALIAN I

Continued development of speaking, listening, reading and writing skills using a variety of cultural materials. Prerequisite: ITAL 15202.

3.000 Credit hours  
3.000 Lecture hours  

Levels: Undergraduate  
Schedule Types: Lecture  

Modern-Classical Lang Studies Department

### ITAL 25202 - INTERMEDIATE ITALIAN II

Continuation of ITAL 25201. Prerequisite: ITAL 25201.

3.000 Credit hours  
3.000 Lecture hours  

Levels: Undergraduate  
Schedule Types: Lecture  

Modern-Classical Lang Studies Department

### ITAL 35211 - ITALIAN COMPOSITION AND CONVERSATION I

Study and practice of written and oral Italian with emphasis on acquisition of written and oral proficiency in the language. Prerequisite: ITAL 25202.

3.000 Credit hours  
3.000 Lecture hours  

Levels: Undergraduate  
Schedule Types: Lecture
**ITAL 35213 - ITALIAN COMPOSITION AND CONVERSATION II**
Advanced practice in speaking and writing the Italian language. Prerequisite: ITAL 35211.
3.000 Credit hours
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**ITAL 35332 - RECENT ITALIAN LITERATURE**
This course surveys the major movements and authors from the Baroque period through the 20th century. Prerequisite: ITAL 35211.
3.000 Credit hours
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

Course Attributes:
Experiential Learning Requirem, Writing Intensive Course

**ITAL 35421 - ITALIAN CIVILIZATION**
Lectures, readings, oral and written reports on outstanding features of the culture and civilization of Italy. Prerequisite: ITAL 25202.
3.000 Credit hours
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**ITAL 35597 - COLLOQUIUM**
(Repeatable for credit)Variable topic course deals with single literary theme in Italian literature or a single author. May be offered in Italian or in English translation. Prerequisite: Permission.
3.000 Credit hours
3.000 Other hours
Levels: Undergraduate
Schedule Types: Colloquium

Modern-Classical Lang Studies Department

**ITAL 45093 - VARIABLE TITLE WORKSHOP IN ITALIAN**
(Repeatable for credit)Workshops individually designed to provide instruction and training in specific areas of Italian studies. S u graded. Prerequisite: Departmental permission.
ITAL 45096 - INDIVIDUAL INVESTIGATION

(Repeatable for a total of 6 credit hours) Allows the advanced, serious student to carry out research study project on Italian literature, language or culture. Prior approval of supervising faculty member department required. Prerequisite: ITAL 25202 and junior standing and special approval.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Modern-Classical Lang Studies Department

ITAP 16620 - WORD PROCESSING I

Builds expertise in creating business documents applying the basic features of popular word processing software. Emphasis on hands on experience. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

ITAP 16621 - WORD PROCESSING II

Design and create documents by using advanced features of word processing software. Prerequisite: ITAP 16620.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

ITAP 16625 - BUSINESS PRESENTATIONS

Development and production of professional computer-projected presentation materials using popular software. Includes use of graphic design techniques, color layout design principles and transparencies. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department
**ITAP 16636 - DATA MANAGEMENT FOR ADMINISTRATIVE PROFESSIONALS**

Introduction to the role of data and its management and evolution to information and knowledge in business environments. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**ITAP 16639 - DATABASE APPLICATIONS**

Concepts, terminology and use of current database software to manage and retrieve business information. Emphasis on hands-on experiences. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**ITAP 16640 - ADVANCED DATABASE APPLICATIONS**

Provides the student with the skills and knowledge on creating advanced queries, forms and reports. Students learn how to customize, automate and secure the database structure. Prerequisite: ITAP 16639 and special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**ITAP 16680 - COMPUTER KEYBOARDING**

Basic keyboarding course using computers for students having no previous keyboarding instruction or a speed of less than 30 words a minute. To pass the course students must keyboard above 30 words a minute for three minutes with no more than three errors. Prerequisite: None.

1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**ITAP 26611 - SPREADSHEET APPLICATIONS**

Use of electronic spreadsheets from beginning to advanced applications that may prepare for software certification. Prerequisite: none.

3.000 Credit hours
### ITAP 26622 - DESKTOP PUBLISHING I

Study and application of the principles of proper document design using high-end desktop publishing software for newsletters, brochures, reports, forms and other computer-based business documents. Prerequisite: ITAP 16620.

- 3.000 Credit hours
- 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

### ITAP 26623 - DESKTOP PUBLISHING II

High-end layout design and illustration software. Includes advanced documents, Web publishing, makeovers, computer graphic concepts and formatting, image editing techniques and the use of color. Prerequisite: ITAP 26622.

- 3.000 Credit hours
- 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

### ITAP 26635 - ADMINISTRATIVE RESOURCE MANAGEMENT

Explores how office professionals can apply resource management skills to the areas of space/workflow, forms, budgetary control, staff and materials supplies. Prerequisite: None.

- 3.000 Credit hours
- 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

### ITAP 26636 - PROJECT MANAGEMENT FOR ADMINISTRATIVE PROFESSIONALS

Provides the basic tools needed to effectively manage projects and to automate and streamline such functions as resource allocation, work scheduling and communication. Project management software is used in the course. Prerequisite: None.

- 1.000 Credit hours
- 1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department
ITAP 26638 - BUSINESS COMMUNICATIONS

Theory and application of oral and written business communication with emphasis on business letters, reports, employment process, visual presentations and electronic communications. Basic word processing skills are suggested. Prerequisite: ENG 11011 or HONR 10197.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

ITAP 26640 - CURRENT TECHNOLOGIES

Current trends and technology for the marketplace from an end user perspective. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

ITAP 26650 - MEDICAL BILLING PROCEDURES

Introductory course in the preparation of various medical documents and forms in the health care industry. Use of computers and various word processing software is included. This course requires a 30 clock hour internship. Prerequisites: ITAP 26655; and ITAP 26656.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

ITAP 26655 - ICD CODING

Basic medical coding using the current version of the ICD classification system and nomenclature. Prerequisite: ITAP 26651 or HED 14020.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

ITAP 26656 - CPT CODING

Introduction to coding rules for the CPT and Level II coding systems, incorporating and applying ICD rules to code patient services. Prerequisite: ITAP 26655.

3.000 Credit hours
3.000 Lecture hours
Regional College Department

**ITAP 26691 - SEMINAR FOR ADMINISTRATIVE PROFESSIONALS**

Refines job search strategies, integrates coursework with realistic office settings, presents interpersonal and ethical issues, provides outreach activities, and emphases career management. Prerequisite: Sophomore standing.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**ITAP 26692 - INTERNSHIP FOR ADMINISTRATIVE PROFESSIONALS**

(Repeatable for a maximum of 4 credit hours) Supervised field experience of ten hours per week paid or seven hours per week unpaid in a business environment functioning as an administrative professional. Prerequisite: Sophomore standing and 2.000 GPA or better in major and special approval.

1.000 TO 3.000 Credit hours
7.000 TO 21.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Regional College Department

Course Attributes:
Experiential Learning Requirem

**ITAP 26695 - SPECIAL TOPICS IN INFORMATION TECHNOLOGY FOR ADMINISTRATIVE PROFESSIONALS**

(Repeatable for credit) Special topics in information technology topics for administrative professionals. Prerequisite: Permission.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**ITAP 26696 - INDIVIDUAL INVESTIGATION: INFORMATION TECHNOLOGY FOR ADMINISTRATIVE PROFESSIONALS**

(Repeatable for credit) Independent, in-depth research of an ITAP topic supervised and coordinated by an ITAP faculty member. Prerequisite: 12 credit hours of ITAP courses and special approval of a full-time ITAP faculty member.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Undergraduate
ITEC 19525 - EDUCATIONAL TECHNOLOGY

Develops skills associated with identifying, designing, utilizing, and evaluating educational technologies as instructional resources in the classroom, to enhance both teaching and learning. Prerequisite: CULT 29535.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

Course Attributes:
TAG - Education

ITEC 40093 - VARIABLE TITLE WORKSHOP IN EDUCATIONAL MEDIA

(Repeatable for credit) Variable topic workshop designed to respond to curriculum trends and issues and specialized needs. S u graded. Prerequisite: Permission.
1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Undergraduate
Schedule Types: Workshop

Lifespan Dev and Educ Sciences Department

ITEC 47411 - DESIGNING VISUALS FOR INSTRUCTION

Investigation of historical, cultural, aesthetic dimensions of instructional visual design. Focus on design of instructional visuals across media including print, video, computer-based technology. Presentations lab activities. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

ITEC 47413 - DIGITAL VIDEO IN EDUCATION

(Cross-listed with ITEC 57413 and ITEC 77413) Students learn how to produce their own video programs, beginning with the planning and scripting process, developing camerawork and audio recording skills, and editing the final production. They also learn how to obtain footage in the field and work with other participants. In addition, the use of video for instruction is explored, with an emphasis upon how it can be effectively integrated into curricula and used to enhance lessons in dynamic ways. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisites</th>
<th>Credit Hours</th>
<th>Lecture Hours</th>
<th>Levels</th>
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<tbody>
<tr>
<td>ITEC 47427</td>
<td>TECHNOLOGY AND LEARNING</td>
<td>Overview of technology used in education. Focuses on implementing and facilitating learner-centered curriculum with computer technology. Students develop web-based instructional materials. Prerequisite: none.</td>
<td>none.</td>
<td>3.000</td>
<td>3.000</td>
<td>Undergraduate</td>
<td>Lecture</td>
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<tr>
<td>ITEC 47430</td>
<td>COMPUTER APPLICATIONS IN EDUCATION</td>
<td>Preparation for use of computers effectively in variety of educational settings. Students should have some expertise with computers. Focus on advanced applications in education. Macintosh and Windows. Prerequisite: none.</td>
<td>none.</td>
<td>3.000</td>
<td>3.000</td>
<td>Undergraduate</td>
<td>Lecture</td>
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<tr>
<td>ITEC 47495</td>
<td>SPECIAL TOPICS: EDUCATIONAL MEDIA</td>
<td>(Repeatable for credit) Specialized offering in response to emerging or selected program needs in educational media and instructional design. Prerequisite: none.</td>
<td>none.</td>
<td>1.000 TO 5.000</td>
<td>1.000 TO 5.000</td>
<td>Undergraduate</td>
<td>Lecture</td>
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<tr>
<td>ITEC 47496</td>
<td>INDIVIDUAL INVESTIGATION IN EDUCATIONAL MEDIA</td>
<td>(Repeatable for credit) Directed independent reading and/or research of special interest or need in student's program. Planned with and directed by a faculty member. Prerequisite: none.</td>
<td>none.</td>
<td>1.000 TO 5.000</td>
<td>1.000 TO 5.000</td>
<td>Undergraduate</td>
<td>Individual Investigation</td>
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<tr>
<td>ITEC 50093</td>
<td>VARIABLE TITLE WORKSHOP IN EDUCATIONAL MEDIA</td>
<td>(Repeatable for credit) Prerequisite: Grading standing and special approval.</td>
<td>Grading standing and special approval.</td>
<td>1.000 TO 4.000</td>
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<td>Undergraduate</td>
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</table>
1.000 TO 4.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Lifespan Dev and Educ Sciences Department

**ITEC 57400 - SELECTION AND UTILIZATION OF EDUCATIONAL MEDIA**

Discusses principles and techniques in the selection and utilization of media for instructional purposes. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**ITEC 57402 - ORGANIZATION AND ADMINISTRATION OF EDUCATIONAL MEDIA PROGRAMS AND CENTERS**

Examines the planning, organizing, administering and evaluating of educational media programs and centers. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**ITEC 57411 - DESIGNING VISUALS FOR INSTRUCTION**

Investigation of historical, cultural, aesthetic dimensions of instructional visual design. Focus on design of instructional visuals across media, including print, video, computer-based technology. Presentations, lab activities. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**ITEC 57413 - DIGITAL VIDEO IN EDUCATION**

(Cross-listed with ITEC 47413 and ITEC 77413) Students learn how to produce their own video programs, beginning with the planning and scripting process, developing camerawork and audio recording skills, and editing the final production. They also learn how to obtain footage in the field and work with other participants. In addition, the use of video for instruction is explored, with an emphasis upon how it can be effectively integrated into curricula and used to enhance lessons in dynamic ways. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
Lifespan Dev and Educ Sciences Department

**ITEC 57427 - TECHNOLOGY AND LEARNING**

Overview of technology used in education. Focuses on implementing and facilitating learner-centered curriculum with computer technology. Students develop web-based instructional materials. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**ITEC 57430 - COMPUTER APPLICATIONS IN EDUCATION**

Preparation for use of computers effectively in variety of educational settings. Students should have some expertise with computers. Focus on advanced applications in education. Macintosh and Windows. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**ITEC 60199 - THESIS I**

(Repeatable for credit) Master of arts students must register for at least one semester of Thesis I under the supervision of an adviser. Prerequisite: Grading standing and special approval.

2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Lifespan Dev and Educ Sciences Department

**ITEC 60299 - THESIS II**

(Repeatable for credit) If 6 credits of Thesis I have been completed, M.A. students must continue to register each semester under Thesis II until all degree requirements are met. Prerequisite: ITEC 60199 and graduate standing.

2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Lifespan Dev and Educ Sciences Department

**ITEC 67403 - INSTRUCTIONAL DESIGN**
Enables students to design and develop instructional systems and materials using a systematic and research- and theory-based instructional design model. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**ITEC 67410 - SIMULATION-GAMES IN EDUCATION**

Provides students with opportunities to explore simulation and games as a strategy for learning. Experiences in both group role-playing simulations and computer simulations will be included. Prerequisite: Graduate standing and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**ITEC 67420 - RESEARCHING CURRENT ISSUES IN INSTRUCTIONAL TECHNOLOGY**

Exploration of significant current issues in the field of instructional technology, including latest research findings, use of newest technologies, instructional design issues, present state of the field and future directions. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**ITEC 67425 - MANAGING TECHNOLOGICAL CHANGE**

Analysis and evaluation of change process are explored, particularly as they relate to use of instructional technology. Management role for facilitating planned change as studied through communication and management models. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**ITEC 67426 - NETWORKING BASIC FOR EDUCATORS**

Provides an overview of networking, including client hardware and software typically found in school settings. Topics include networking design, protocols, software and hardware, wireless networking, security and acceptable use, management strategies, desktop client and server configurations, and professional issues for network administrators. Intended for those seeking licensure as K-12 computer/technology coordinators. Prerequisite: graduate standing.
3.000 Credit hours
ITEC 67432 - DESIGNING MULTIMEDIA FOR INSTRUCTION

Focuses on the design, production and evaluation of computer-assisted instructional materials. Instructional design and research are applied to the development of software. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

ITEC 67434 - EMERGING TECHNOLOGIES

Focus on theoretical foundations, design and development of instructional delivery systems employing leading-edge or emergent technologies. Specific technologies include multimedia, interactive Web-based instruction. Presentations, lab. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

ITEC 67435 - VIRTUAL REALITY

Virtual reality provides promise as a tool for educators. Students will learn to create and evaluate instructional applications. Activities will include actual production of virtual worlds as well as virtual experiences on the Internet. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

ITEC 67436 - DISTANCE EDUCATION

This course explores various approaches to delivering instruction to distant sites and examines a variety of critical issues, such as planning, choice of technology, cost, teaching strategies, evaluation, etc. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours
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<th>Course Code</th>
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<td>ITEC 67439</td>
<td>PORTFOLIO REVIEW</td>
<td>Students modify projects and products developed in earlier courses to ensure highest quality. Students present results to faculty to show expertise in instructional design, virtual design, multimedia and World Wide Web development. Prerequisite: Graduate standing.</td>
<td>1.000</td>
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<td>Online learning and teaching present new challenges for designing high quality instructional experiences for students. This course enables students to design and develop effective online educational materials, interactions and discourses to increase learning in online settings. Students design and develop online materials. Course is presented online. Prerequisite: graduate standing.</td>
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and asynchronous discussions, facilitating embedded assessment, enhancing online interactivity, collaboration and community and incorporating self-directed learning. Students discuss, analyze and use these strategies in online teaching and learning. Course is presented online. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**ITEC 67449 - RESEARCH IN ONLINE LEARNING**

Course reviews current research issues in online teaching and learning and explores potential new areas of research. Students engage in guided inquiry to identify, understand, apply and critique current research in online learning and to discover and construct new areas. Students participate in a constructive online learning environment. Course in presented online. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**ITEC 67491 - SEMINAR: EDUCATIONAL MEDIA**

(Repeatable for credit) Variable topic seminar for advanced study of specialized areas and topics. Normally designed around research and theory applied to practice. Prerequisite: Graduate standing.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Lifespan Dev and Educ Sciences Department

**ITEC 67492 - ADVANCED PRACTICUM AND INTERNSHIP**

(Repeatable for credit) Supervised program requiring application of theory to practice in the use of instructional technology directed by a graduate faculty member and a practitioner in the field. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school-agency before the first day of the semester in which internship will take place. Prerequisite: Graduate standing.

1.000 TO 10.000 Credit hours
3.000 TO 33.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Lifespan Dev and Educ Sciences Department

**ITEC 67495 - SPECIAL TOPICS IN EDUCATIONAL MEDIA**

(Repeatable for credit) Specialized offering in response to emerging or selected program needs in instructional technology. Prerequisite: Graduate standing.

1.000 TO 5.000 Credit hours
ITEC 67496 - INDIVIDUAL INVESTIGATION IN INSTRUCTIONAL TECHNOLOGY

(Repeatable for credit) Directed independent reading and/or research of special interest or need in student's program. Planned with and directed by a graduate faculty member. Prerequisite: Graduate standing and special approval.

1.000 TO 5.000 Credit hours
1.000 TO 5.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Lifespan Dev and Educ Sciences Department

ITEC 67498 - INDEPENDENT RESEARCH IN INSTRUCTIONAL TECHNOLOGY

(Repeatable for credit) Students pursue an individualized research project on a specialized topic with approval and under direction of instructor. Prerequisite: graduate standing.

1.000 TO 5.000 Credit hours
1.000 TO 5.000 Other hours

Levels: Graduate
Schedule Types: Research

Lifespan Dev and Educ Sciences Department

ITEC 77403 - INSTRUCTIONAL DESIGN

Enables students to design and develop instructional systems and materials using a systematic and research- and theory-based instructional design model. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

ITEC 77410 - SIMULATION-GAMES IN EDUCATION

Provides students with opportunities to explore simulation and games as a strategy for learning. Experiences in both group role-playing simulations and computer simulations will be included. Prerequisite: Doctoral standing and special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department
ITEC 77411 - DESIGNING VISUALS FOR INSTRUCTION
Investigation of historical, cultural, aesthetic dimensions of instructional visual design. Focus on design of instructional visuals across media including print, video, computer based-technology. Presentations lab activities. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

ITEC 77413 - DIGITAL VIDEO IN EDUCATION
(Cross-listed with ITEC 47413 and ITEC 57413) Students learn how to produce their own video programs, beginning with the planning and scripting process, developing camerawork and audio recording skills, and editing the final production. They also learn how to obtain footage in the field and work with other participants. In addition, the use of video for instruction is explored, with an emphasis upon how it can be effectively integrated into curricula and used to enhance lessons in dynamic ways. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

ITEC 77420 - RESEARCHING CURRENT ISSUES IN INSTRUCTIONAL TECHNOLOGY
Exploration of significant current issues in the field of instructional technology, including latest research findings, use of newest technologies, instructional design issues, present state of the field and future directions. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

ITEC 77425 - MANAGING TECHNOLOGICAL CHANGE
Analysis and evaluation of change process are explored, particularly as they relate to use of instructional technology. Management role for facilitating planned change as studied through communication and management models. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

ITEC 77426 - NETWORKING BASIC FOR EDUCATORS
Provides an overview of networking, including client hardware and software typically found in school settings. Topics include networking design, protocols, software and hardware, wireless networking, security and acceptable use, management strategies, desktop client and server configurations, and professional issues for network administrators. Intended for those seeking licensure as K-12 computer/technology coordinators. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

ITEC 77432 - DESIGNING MULTIMEDIA FOR INSTRUCTION

Focuses on the design, production and evaluation of computer-assisted instructional materials. Instructional design and research are applied to the development of software. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

ITEC 77434 - EMERGING TECHNOLOGIES

Focus on theoretical foundations, design and development of instructional delivery systems employing leading-edge or emergent technologies. Specific technologies include multimedia, interactive Web-based instruction. Presentations; lab. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

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3.000 Credit hours
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Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

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3.000 Credit hours
3.000 Lecture hours

ITEC 77442 - DESIGNING ONLINE COURSES

Online learning and teaching present new challenges for designing high quality instructional experiences for students. This course enables students to design and develop effective online educational materials, interactions and discourses to increase learning in online settings. Students design and develop online materials. Course is presented online. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

ITEC 77444 - TEACHING ONLINE COURSES

Explores using pedagogical approaches appropriate to online learning, including facilitating synchronous and asynchronous discussions, facilitating embedded assessment, enhancing online interactivity, collaboration and community and incorporating self-directed learning. Students discuss, analyze and use these strategies in online teaching and learning. Course is presented online. Prerequisite: doctoral standing.

3.000 Credit hours
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Course reviews current research issues in online teaching and learning and explores potential new areas of research. Students engage in guided inquiry to identify, understand, apply and critique current research in online learning and to discover and construct new areas. Students participate in a constructive online learning environment. Course in presented online. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

ITEC 77491 - SEMINAR: EDUCATIONAL MEDIA

(Repeatable for credit)Variable topic seminar for advanced study of specialized areas and topics. Normally designed around research and theory applied to practice. Prerequisite: Doctoral standing.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Graduate
Schedule Types: Seminar

ITEC 77492 - ADVANCED PRACTICUM AND INTERNSHIP IN INSTRUCTIONAL TECHNOLOGY

Supervised program requiring application of theory to practice in the use of instructional technology directed by a graduate faculty member and a practitioner in the field. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school-agency before the first day of the semester in which internship will take place. Prerequisite: Doctoral standing.

1.000 TO 10.000 Credit hours
3.000 TO 33.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

ITEC 77495 - SPECIAL TOPICS IN EDUCATIONAL MEDIA

(Repeatable for credit)Specialized offering in response to emerging or selected program needs in instructional technology. Prerequisite: Doctoral standing.

1.000 TO 5.000 Credit hours
1.000 TO 5.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
ITEC 77496 - INDIVIDUAL INVESTIGATION IN INSTRUCTIONAL TECHNOLOGY

(Repeatable for credit) Directed independent reading and/or research of special interest or need in student's program. Planned with and directed by a graduate faculty member. Prerequisite: Doctoral standing and special approval.

1.000 TO 5.000 Credit hours
1.000 TO 5.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Lifespan Dev and Educ Sciences Department

ITEC 77498 - INDEPENDENT RESEARCH IN INSTRUCTIONAL TECHNOLOGY

(Repeatable for credit) Students pursue an individualized research project on a specialized topic with approval and under direction of instructor. Prerequisite: doctoral standing.

1.000 TO 5.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Research

Lifespan Dev and Educ Sciences Department

ITEC 87450 - LEARNING WITH INSTRUCTIONAL TECHNOLOGIES

Accompanies the Educational Psychology doctoral seminar EPSY 87450: Psychological Principles of Education. Doctoral students are required to take both courses simultaneously. In this ITEC course, students address how technologies can most effectively be used to enhance instruction, based upon current findings about the learning process. Students are also required to develop a research project, which utilizes technology to test theories about learning and instruction. Prerequisite: doctoral standing. Corequisite: EPSY 87450.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

JAPN 15101 - ELEMENTARY JAPANESE I

Introduction to modern standard Japanese in the context of Japanese culture. Prerequisite: None.

5.000 Credit hours
5.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

JAPN 15102 - ELEMENTARY JAPANESE II

A continuation of the introduction to modern standard Japanese in the context of Japanese culture. Prerequisite: JAPN 15101.

5.000 Credit hours
5.000 Lecture hours
Modern-Classical Lang Studies Department

**JAPN 25201 - INTERMEDIATE JAPANESE I**

Continued development of speaking, listening, reading and writing skills using a variety of cultural materials. Prerequisite: JAPN 15102.
5.000 Credit hours
5.000 Lecture hours

Modern-Classical Lang Studies Department

**JAPN 25202 - INTERMEDIATE JAPANESE II**

Continuation of JAPN 25201. Prerequisite: JAPN 25201.
5.000 Credit hours
5.000 Lecture hours

Modern-Classical Lang Studies Department

**JAPN 30095 - SPECIAL TOPICS**

(Repeatable for credit) Topic to be announced in schedule of classes. Prerequisite: Permission.
3.000 Credit hours
3.000 Lecture hours

Modern-Classical Lang Studies Department

**JAPN 35101 - ADVANCED INTERMEDIATE JAPANESE I**

A continuation of the study of modern standard Japanese in the context of Japanese culture. Further development of listening, speaking, reading and writing skills using a variety of materials. Prerequisite: minimum grade of C (2.000) in JAPN 25202.
5.000 Credit hours
5.000 Lecture hours

Modern-Classical Lang Studies Department

**JAPN 35102 - ADVANCED INTERMEDIATE JAPANESE II**

Continuation of JAPN 35101. Prerequisite: minimum grade of C (2.000) in JAPN 35101.
JAPN 45096 - INDIVIDUAL INVESTIGATION IN JAPANESE

(Repeatable for credit) Individual study supervised by a faculty member on an approved topic dealing with Japanese language and-or culture. Prerequisite: JAPN 25201.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

JAPN 45201 - ADVANCED JAPANESE I

Advanced study of the four language skills, with particular emphasis on general conversational proficiency and reading of authentic texts to enhance linguistic and cultural competence. Prerequisite: minimum grade of C (2.000) in JAPN 35102.

5.000 Credit hours
5.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

JAPN 45202 - ADVANCED JAPANESE II

A continuation of Advanced Japanese I, teaches the four skills equally—listening, speaking, reading and writing. The class is conducted in Japanese. Students learn how to use Japanese to solve problems in authentic situations. Prerequisite: minimum grade of C (2.000) in JAPN 45201.

5.000 Credit hours
5.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

JAPN 45301 - BUSINESS JAPANESE

Development of the four language skills in a manner specific to Japanese corporate settings. Introduces Japanese business practice and business etiquette. Prerequisite: JAPN 35102.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
**JAPN 45421 - JAPANESE CULTURE**

Explores key aspects of traditional and contemporary Japanese culture. Taught in English; no knowledge of Japanese necessary. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

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**JAPN 45591 - VARIABLE TOPIC SEMINAR IN JAPANESE**

(Repeatable for credit) Seminar in Japanese literature or culture; course may be repeated when content varies. Student should have completed at least 9 hours of upper division work in Japanese. Prerequisite: special approval.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

Modern-Classical Lang Studies Department

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**JAPN 55301 - BUSINESS JAPANESE**

Development of the four language skills in a manner specific to Japanese corporate settings. Introduces Japanese business practice and business etiquette. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

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**JAPN 65010 - THE PRACTICE OF JAPANESE TRANSLATION**

Provides an introduction to the translation of non-specialized, non-fiction Japanese texts, focusing on common problem areas, general translation strategies, and specific techniques for resolving problems. Prerequisite: Graduate standing. Corequisite: TRST 60010.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

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**JAPN 65091 - SEMINAR**

(Repeatable for credit) Topic announced in schedule of classes; may be repeated when content varies. Prerequisite: Graduate standing.

3.000 Credit hours
JAPN 65098 - RESEARCH

(Repeatable for credit) Research or individual investigation for master's level graduate students. Credits earned applied toward degree requirements if department approves. Prerequisite: Graduate standing and departmental approval.
1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

JAPN 65240 - LITERARY AND CULTURAL TRANSLATION

Translation of documents from a variety of literary and cultural sources, including literature, expository and journalistic prose, scholarly treaties and essays. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

JAPN 65250 - COMMERCIAL, LEGAL AND DIPLOMATIC TRANSLATION

An introduction to methods and resources for the translation of commercial, economic, financial, legal, diplomatic and governmental documents. Prerequisite: TRST 60010 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

JAPN 65251 - SCIENTIFIC, TECHNICAL AND MEDICAL TRANSLATION

An introduction to methods and resources for the translation of scientific, technical, industrial and medical documents. Prerequisite: TRST 60010 and graduate standing.
3.000 Credit hours
3.000 Lecture hours
JAPN 65979 - CASE STUDY IN TRANSLATION

Students will be responsible for a major translation and a terminology glossary as well as a critical analysis of the source text, the problems encountered during the translation process and the strategies used to solve them. Prerequisite: Special approval and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

JMC 12001 - ELEMENTARY PHOTOGRAPHY

Introduction to fundamentals and techniques of still and motion picture photography. Terminal course for students who do not have photography requirements. Prerequisite: None.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

JMC 20001 - MEDIA, POWER AND CULTURE

Fosters critical understanding of mass media in their historical, ideological, economic and cultural contexts. Examines what forces influence media and how media influence consumers. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

Course Attributes:
Diversity Course-Domestic, Kent Core-Social Sciences, LER-Social Sciences, Trnfr Module-Social Sciences

JMC 20003 - INTRODUCTION TO MASS COMMUNICATION

Introduction to various fields of mass communication with a particular emphasis on evolution of new media technologies. History of technological and cultural change leading to the present media forms and consideration of new media. Prerequisite: Journalism and mass communication (JMC) major.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

Course Attributes:
TAG - Communication

JMC 20004 - ADVERTISING WRITING AND STORYTELLING
Introduces students to writing for advertising. In particular, students will understand how to effectively and strategically communicate to a variety of audiences, including business partners and consumers. Prerequisites: 2.000 minimum cumulative GPA; and journalism and mass communication (JMC) major or minor.

| 3.000 Credit hours |
| 2.000 Lecture hours |
| 2.000 Lab hours |

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Journalism and Mass Comm Department

**JMC 20005 - FUNDAMENTALS OF MEDIA MESSAGES**

Working with messages for print, broadcast, electronic and new media outlets. Course may not be taken for credit nor applied toward any requirements by a journalism and mass communication (JMC) major. Prerequisite: Communication studies (COMM) major or fashion merchandising (FM) or community health education (CHED) major.

| 3.000 Credit hours |
| 3.000 Lecture hours |

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

**JMC 20006 - MULTIMEDIA TECHNIQUES**

Introduction to basic elements of multimedia journalistic storytelling, including the creation of audio, video, slideshows and multimedia packages for distribution via the Internet. Prerequisite: JMC major.

| 3.000 Credit hours |
| 2.000 Lecture hours |
| 2.000 Lab hours |

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Journalism and Mass Comm Department

**JMC 20008 - RESEARCH & MEASUREMENT IN ADVERTISING AND PUBLIC RELATIONS**

Understand the ways research is employed and applied in integrated communication, including both primary and secondary research. Students will understand how to use research and insights to develop strategy, or to craft research on business strategy. They also will become thoughtful researchers and consumers of research who are cognizant of the ethical and moral responsibilities associated with human subjects research. Students will be expected to understand and appreciate the diversity of audiences. Finally, students will develop critical thinking and writing skills in order to create and share a well-crafted presentation to clients that reflect a strong understanding of the connections among data, insight, and strategy. Prerequisites: minimum 2.000 cumulative GPA; and minimum grade of C- (1.700) in minimum two courses from JMC 20006, JMC 21001 or JMC 28001, and JMC 21004; and journalism and mass communication (JMC) major or minor.

| 3.000 Credit hours |
| 3.000 Lecture hours |

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department
JMC 20009 - VIDEO AUDIO PRODUCTION AESTHETICS

Study of basic video and audio production aesthetics; analysis of film, television and radio through creative use of images and sound to create meaning. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

JMC 20011 - VIDEO AUDIO FUNDAMENTALS

Introduction to beginning digital video and audio acquisition and editing. Prerequisite: 2.000 overall GPA; and JMC 20009; and journalism and mass communication (JMC) major or minor, or art education (ARTE) or visual communication design (VCD) major.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

JMC 21001 - PRINCIPLES OF ADVERTISING

Advertising history, purposes, techniques, media and research; analysis of functions of advertising organizations. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

Course Attributes:
TAG - Communication

JMC 21004 - ADVERTISING AND PUBLIC RELATIONS INDUSTRY TOOLS

Understanding of and proficiency in word processing, spreadsheet, design and presentation tools. Prerequisite: Journalism and mass communication (JMC) major or minor.
1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

JMC 21005 - ADVERTISING MESSAGING AND COMMUNICATION

Introduces students to the history and development of advertising, including the ways various audiences have
been targeted and represented. This course also has a strong emphasis on professional writing and communication. Prerequisites: JMC 20004 and JMC 20006 and JMC 20008 and JMC 21001 and JMC 21004 with minimum grades of C- (1.700); and minimum cumulative GPA of 2.000; and advertising (ADV) major or minor.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

**JMC 21008 - SOCIAL MEDIA STRATEGIES**

(Cross-listed with COMM 21008) Designed to help students understand and use social media in critical and strategic ways that will improve their lives and careers. Helps students harness the power and potential of the social Web, including strategies used to position and market organizations as well as individuals. Exposes students to the latest social-media applications and to critical views of social media's impact on business, society and culture. Students are also introduced to interaction perspectives of social media, which are embedded within both the communication studies and the journalism and mass communication curriculum. Students emerge from the class with a strategic plan designed to enhance their lives and their careers.

Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

**JMC 22000 - PHOTOGRAPHY BASICS**

Fundamentals of b/w and color photography and digital manipulation software. Introduction of basic themes of journalistic photography including flash photography. Student furnishes 35mm or APS camera with flash. Disposable cameras not acceptable. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA; integrated language arts (INLA), digital media production (DMP) or journalism (JNL) major.

1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

**JMC 22001 - PHOTOGRAPHY**

Basic camera and digital techniques to provide a better understanding of photography as a creative and journalistic skill. Prerequisite: art education (ARTE) or journalism (JNL) major.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

Course Attributes:
TAG - Communication
**JMC 22002 - VIDEOGRAPHY BASICS**

Instruction in basic camcorder videography and video editing techniques to provide understanding of processes as creative, journalistic skills and as practical application of knowledge acquired in the prerequisite class. 
Prerequisites: journalism and mass communication (JMC) or integrated language arts (INLA) or visual communication and design (VCD) major.

1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

**JMC 22003 - VIDEOGRAPHY BASICS II**

Emphasis on video editing for broadcast news and electronic media production applications using computer video editing skills. Prerequisite: journalism and mass communication (JMC) major or minor. Pre- or Corequisite: JMC 22002 with a grade of C- (1.700) or better.

1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

**JMC 22004 - VISUAL STORYTELLING**

Technical and digital skills needed to produce photos that communicate. Course will stress narrative work, detailed caption information and reporting. A GPA of 2.700 is required in the major. Prerequisite: 2.000 cumulative GPA; JMC 22001 or VCD 28000; and journalism and mass communication (JMC) or visual communication design (VCD) major.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

**JMC 23030 - BASIC VIDEO PRODUCTION**

Theoretical and practical application of program production for video. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA; and minimum grade of C- (1.700) in JMC 20001 or JMC 20003; and minimum grade of C- (1.700) in JMC 20004 and JMC 22002; and journalism and mass communication (JMC) major.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Journalism and Mass Comm Department

**JMC 23031 - BASIC AUDIO PRODUCTION**
Theoretical and practical application of program production for audio production. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA; and a grade of C- (1.700) or better in JMC 20001 or JMC 20003; and a grade of C- (1.700) or better in JMC 20004 and 22002; and journalism and mass communication (JMC) major or minor.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

JMC 26001 - WRITING ACROSS PLATFORMS

Theory and practice in writing basic print and digital news and feature stories. Prerequisites: Journalism and mass communication (JMC) major or minor; or integrated language arts (INLA) major. Pre- or corequisites: JMC 20001 or JMC 20003; and JMC 20006.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

JMC 26005 - STORYTELLING ACROSS PLATFORMS

Multimedia as story telling tools. Developing the multimedia mindset. Using different delivery platforms and understanding deadlines of various media forms. Formatting stories for webmobile delivery. Learning different multimedia formats. Using multimedia in breaking news situations. Creating multimedia features and packages. Stand alone vs. compleemntary stories. Learning more about capturing and using video, audio and still photos. Ethical and legal issues surrounding online news reporting and presentation. A GPA of 2.700 is required in the major. Prerequisites: COMM 21000 and JMC 20001 and JMC 20006 with minimum grades of C- (1.700); and minimum 2.000 cumulative GPA; and journalism (JNL) or public relations (PR) major.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

JMC 26007 - REPORTING

Gathering and writing news: interviewing techniques, cultivating sources, developing beats, meeting deadlines. Includes campus reporting for Daily Kent Stater. A GPA of 2.700 is required in the major. Prerequisites: JMC 26005 and COMM 21000 with minimum grades of C- (1.700); and minimum 2.000 cumulative GPA; and journalism and mass communication (JMC) major.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours
JMC 26008 - BROADCAST REPORTING

Writing news, developing sources and beats, meeting deadlines as they relate to electronic media. Includes reporting campus news for daily broadcasts. A GPA of 2.700 is required in the major. Prerequisites: JMC 26005 and COMM 21000 with a minimum grade of C- (1.700); and minimum 2.000 cumulative GPA; and journalism and mass communication (JMC) major.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

JMC 26395 - SPECIAL TOPICS IN JOURNALISM SKILLS

(Repeatable three times for credit) Includes writing different types of news stories for various platforms. Prerequisite: Special approval.
3.000 Credit hours
3.000 Lecture hours

JMC 28001 - PRINCIPLES OF PUBLIC RELATIONS

Explores strategic role and function of public relations in business, nonprofit public institutions and society. Covers public relations practice from development to present. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

JMC 30004 - WRITING FOR VIDEO AND AUDIO MEDIA

Application of standard writing styles and formats in the electronic media. Writing practice in commercials, continuity, promotions and introductory scriptwriting techniques. A GPA of 2.700 is required in the major. Prerequisite: cumulative GPA of 2.000; and grade of C- (1.700) or better in JMC 20009 or JMC 20004; and journalism and mass communication (JMC) major.
3.000 Credit hours
3.000 Lecture hours
**JMC 30034 - PROG ELECT MEDIA**

Background analysis of radio, TV, cable and Internet programming and the relationship to audience needs, interests, expectations and audience measurement procedures. A GPA of 2.700 is required in the major.

Prerequisites: 2.000 overall GPA; and journalism and mass communication (JMC) major.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

**JMC 31002 - ADVERTISING COPYWRITING**

Examination and practice in various forms of advertising copywriting and their applications. A GPA of 2.700 is required in the major. Prerequisites: 2.000 overall GPA; minimum grade of C- in JMC 20004 and 21001 and 31011; and advertising (ADV) major or minor.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

Course Attributes:
Writing Intensive Course

**JMC 31003 - ADVERTISING MEDIA PLANNING**

Analysis, selection and scheduling of advertising media. Examination of advertising research, technique and application. A GPA of 2.700 is required in the major. Prerequisites: 2.000 cumulative GPA; and minimum grade of C- in JMC 20004 and 20008 and 21001; and advertising (ADV) major or minor.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

**JMC 31004 - DIGITAL ADVERTISING**

Explores digital targeting, advertising and mobilization in detail. Students will learn how to run winning digital advertising campaigns that educate and activate constituents. It is the study of overall strategic creation of digital advertising communication with a focus on copy writing and the implementation of basic production skills. A 2.70 GPA is required in the major. Prerequisites: JMC 20004 and JMC 20008 and JMC 21001 with minimum grades of C- (1.700); and minimum 2.000 cumulative GPA; and advertising (ADV) major or minor.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
**JMC 31007 - DIGITAL ANALYTICS IN ADVERTISING AND PUBLIC RELATIONS**

Explores digital analytics and online measurement. Students will start with planning and setting measurable objectives, finding online audiences, and then design and implement measurement plans. Students will use social media analytics tools and Google analytics to capture data and then determine next steps. A 2.70 GPA is required in the major. Prerequisites: JMC 20008 with a minimum grade of C- (1.700); and minimum 2.000 cumulative GPA; and advertising (ADV) or public relations (PR) major or minor.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

**JMC 31011 - ADVERTISING STRATEGY DEVELOPMENT**

Ad majors learn problem-solving techniques, which they will apply to business and creative proposals designed to promote products and or services. Development of good, clear writing skills is a key component of the course. Prerequisites: JMC 20004 and JMC 20006 and JMC 20008 and JMC 21001 and JMC 21004 with minimum grades of C- (1.700); and minimum 2.000 cumulative GPA; and advertising (ADV) major or minor.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

**JMC 32001 - PHOTOJOURNALISM I**

Production of photographs for newspapers, magazines and online news media. A laboratory course emphasizing color and black and white photography. A GPA of 2.700 is required in the major. Prerequisites: JMC 22001 or VCD 28000 with a minimum grade of C- (1.700); and minimum 2.000 cumulative GPA; and journalism and mass communication (JMC) major or minor.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Journalism and Mass Comm Department

**JMC 32002 - PHOTOJOURNALISM II**

(Repeatable once for credit) Continuation of JMC 32001. Advanced news and feature photography for newspapers, magazines and online including a collaborative project. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA and JMC 32001 with a grade of C- (1.700) or better and a journalism and mass communication (JMC) major.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
**JMC 32004 - ADVANCED PHOTOGRAPHY**

Use of specialized equipment, materials and techniques. Student furnishes own view camera. Special equipment furnished. Prerequisite: 2.750 overall GPA; and JMC 22001 and 32002 and journalism and mass communication (JMC) major.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**JMC 32005 - VIDEO FOR STILL PHOTOGRAPHERS**

Teaches video skills for photojournalists, including interviewing, establishing a narrative, editing, and how video is paired with the written story. A GPA of 2.700 is required in the major. Prerequisites: JMC 22004 with a minimum grade of C- (1.700); and journalism and mass communication (JMC) major.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**JMC 33024 - BROADCAST PERFORMANCE**

Development of effective communication techniques in performance situations for visual media. A GPA of 2.700 is required in the major. Prerequisites: JMC 20001 and JMC 20006 and JMC 26008 with a minimum grade of C- (1.700); and minimum 2.000 cumulative GPA; and journalism and mass communication (JMC) major or minor.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**JMC 33032 - AUDIO SET-UP AND MIXING**

Production of in-studio audio programming units, with laboratory unit required as part of course. A GPA of 2.700 is required in the major. Prerequisite: cumulative GPA of 2.000; JMC 20011 or JMC 23031 with a grade of C- (1.700) or better; and a journalism and mass communication (JMC) major.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**JMC 33033 - LOCATION SOUND RECORDING**
A study of the theory and craft of location sound recording, providing analysis and practice of remote location dialogue, sound effects and music recording. A GPA of 2.700 is required in the major. Prerequisites: Overall GPA of 2.000; and JMC 20011 or JMC 23031 with a minimum grade of C-. and a journalism and mass communication (JMC) major or minor.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

**JMC 33036 - TELEVISION ENGINEERING**

Introduction to basic electronic media technology and systems, providing knowledge and vocabulary to allow communication with broadcast engineers. Overview of radio/TV operations and legal viewpoint. Prep for SBE operators' cert. exam. A GPA of 2.700 is required in the major. Prerequisite: cumulative GPA of 2.000; MATH 11009; and JMC 23030 with a grade of C- (1.700) or better and JMC 23031 with a grade of C- (1.700) or better; and a journalism and mass communication (JMC) major.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

**JMC 33042 - STUDIO TELEVISION**

Study of all positions of a live television program including technical directing, floor directing, graphics, digital playback, and audio engineering. Two hours lecture two hours lab. A GPA of 2.700 is required in the major. Prerequisites: Overall GPA of 2.000; and JMC 20011 or JMC 23030 with a minimum grade of C-; and JMC 30004 with a minimum grade of C-; and a journalism and mass communication (JMC) major or minor.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Journalism and Mass Comm Department

**JMC 33043 - DIGITAL CINEMATOGRAPHY**

Course focuses on digital cinematography techniques for shooting documentary and narrative fiction. Two hours lecture two hours lab. A GPA of 2.700 is required in the major. Prerequisite: overall GPA of 2.000; and JMC 20011 or JMC 23030 with a minimum grade of C-; and JMC 30004 with a minimum grade of C-; and journalism and mass communication (JMC) major or minor.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Journalism and Mass Comm Department
**JMC 33092 - STUDENT MEDIA PRACTICUM IN DIGITAL MEDIA PRODUCTION**

(Repeatable for a maximum of 3 credit hours) Performance of assigned activities in radio or television under student media supervision. A GPA of 2.700 is required in the major. Prerequisite: cumulative GPA of 2.000; and JMC 20001 or JMC 20003 with a grade of C- (1.700) or better; and sophomore standing and special approval.

1.000 TO 3.000 Credit hours
3.000 TO 9.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Journalism and Mass Comm Department

Course Attributes:
Experiential Learning Requirem

**JMC 36005 - COPY EDITING AND NEWS DESIGN**

Improving the writing of other journalists and writing headlines. Intensive review of AP style and grammar. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA; and COMM 21000 and JMC 26001 with a grade of C- (1.700) or better.

3.000 Credit hours
3.000 Lecture hours
0.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Journalism and Mass Comm Department

**JMC 36008 - FREELANCE JOURNALISM**

Provides students the tools, resources and strategies needed to pitch creative works to magazines, book publishers, contests and other media companies. They will learn to research markets, craft effective queries and manage the business considerations of being a freelancer. A GPA of 2.700 is required in the major. Prerequisites: JMC 26007 or JMC 36018 with a minimum grade of C- (1.700); and minimum 2.000 cumulative GPA; and journalism and mass communication (JMC) major or minor.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

**JMC 36010 - INTERVIEWING AND DATA FOR JOURNALISTS**

Interviewing techniques for reporters across media platforms. Skills for in-person, phone, email and social media interviews that will be used to produce stories for publication. Includes ethics of journalistic interviews and interrogating data. Introduction to data collection for reporters. A 2.70 GPA is required in the JMC major. Prerequisites: JMC 20006 with a minimum grade of C- (1.700); and minimum 2.000 cumulative GPA; and journalism and mass communication (JMC) major or minor.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
### JMC 36018 - FEATURE WRITING
Researching writing and placement of feature stories in publications. A GPA of 2.700 is required in the major. Prerequisites: JMC 26007 with a minimum grade of C- (1.700); and minimum 2.000 cumulative GPA.

3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

### JMC 36020 - STORYTELLING WITH SOUND
Teaches students how to research, write, edit and produce compelling audio news stories. Students will learn both the technical side of producing audio stories and the journalistic side of writing audio stories. A 2.700 is required in the major. Prerequisites: JMC 26005 with a minimum grade of C- (1.700); and minimum 2.000 cumulative GPA; and journalism and mass communication (JMC) major or minor.

3.000 Credit hours  
2.000 Lecture hours  
2.000 Lab hours

Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab

### JMC 36040 - MAGAZINE EDITING AND DESIGN
Teaches the fundamentals of editing and design for print magazine media. It teaches the skills necessary to become an editor. A 2.70 GPA is required in the journalism major. Prerequisites: JMC 36005 and JMC 46016 with minimum grades of C- (1.700); and minimum 2.000 cumulative GPA; and journalism and mass communication (JMC) major or minor.

3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

### JMC 36050 - ADVANCED REPORTING
Focuses on accountability journalism. Students will work on both individual and team reporting projects. Students will develop and report stories of substance on local, state, and national issues. Each student will have to conduct at least one accountability interview with either a member of Congress or a member of the state legislature on a specific topic or issue. A GPA of 2.700 is required in the major. Prerequisites: JMC 26007 or JMC 26008; and a minimum 2.000 cumulative GPA; and journalism and mass communication (JMC) major or minor.

3.000 Credit hours  
2.000 Lecture hours  
2.000 Lab hours

Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab
JMC 36395 - SPECIAL TOPICS IN JOURNALISM REPORTING

(Repeatable three times for credit) Topics of special interest not covered in existing reporting classes. A GPA of 2.700 is required in the major. Prerequisite: Minimum 2.000 cumulative GPA; and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

JMC 38002 - PUBLIC RELATIONS CASE STUDIES

Explores the process and the practice of public relations through review and analysis of actual case studies. Students also learn pr process by planning and preparing their own case study projects for a real world client organization. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA; and minimum grade of C- (1.700) or better in JMC 26001 and JMC 28001.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

JMC 40004 - COMPUTER ASSISTED REPORTING

(Cross-listed with JMC 50004) Computer analysis of large data sets, focusing on government court police records for preparation of news stories basics of online searching software and databases. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA; and JMC 26007 or 26008 either with a grade of C- (1.700) or better.
3.000 Credit hours
3.000 Lecture hours
0.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

JMC 40006 - LAW OF MASS COMMUNICATION

(Slashed with JMC 50006) Libel and slander; privacy copyright obscenity regulation of advertising broadcasting and corporate speech access to government legal; problems of new media. A GPA of 2.700 is required in the major. Prerequisite: minimum 2.000 cumulative GPA; and journalism and mass communication (JMC) major; and junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
JMC 40007 - REVIEWING THE ARTS

(Cross-listed with JMC 50007) Reviewing and criticizing of performing, visual and literary arts. Emphasis on books, film, TV and theatre. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA; and a grade of B- (2.700) or better in JMC 20004 or JMC 26001 with a grade of C- (1.700) or better; and junior or senior standing.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

JMC 40009 - COMPARATIVE MEDIA SYSTEMS

Study of the forms, organization scope and modes of operation of media systems in foreign lands. Also examines agents channels and contents of international communication. A GPA of 2.700 is required in the major.

Prerequisite: 2.000 overall GPA; and junior or senior standing and special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

JMC 40010 - ETHICS AND ISSUES IN MASS COMMUNICATION

Ethical problems and issues in mass communication within a framework of basic theories, functions and social roles of the mass media. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA; and journalism and mass communication (JMC); and senior standing; and at least 18 hours of JMC courses with a C- (1.700) or better, including a grade of C- (2.700) or better in JMC 20004 or 26001.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

Course Attributes:
Writing Intensive Course

JMC 40011 - ETHICAL ISSUES IN INTEGRATED COMMUNICATION

Focuses specifically on the ethical and moral issues affecting Advertising and Public Relations professionals. Focuses solely on Integrated Communications. Students will understand and appreciate the complex moral and ethical decisions that professionals make each day, often under intense deadline pressure. They also acquire their basic problem-solving skills to manage these issues in real time. A GPA of 2.700 is required in the major.

Prerequisites: 2.000 overall GPA; JMC 31002 and 31003 or JMC 38002; and advertising (ADV) or public relations (PR) major.

1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
JMC 40012 - ONLINE JOURNALISM

Study and evaluation of online news and news sites; reporting and writing for online news media design production and maintenance of an online news site ethical legal and economic issues related to online news. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA; and JMC 26007 or 26008 with a grade of C- (1.700) or better.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

JMC 40013 - TELEVISION SPORTS PRODUCTION

(Cross-listed with JMC 50013) A comprehensive study of the production of live action television. A GPA of 2.700 is required in the major. Prerequisite: 2.000 cumulative GPA; and sophomore, junior or senior standing; and journalism and mass communication (JMC) major.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

JMC 40015 - MEDIA MARKETPLACE

(Slashed with JMC 50015) Exploring management issues unique to media organizations and the impact of those issues on the organization's structure, economics markets and employees. A GPA of 2.700 is required in the major. Prerequisite: JMC 26001 with a minimum grade of C- (1.700); and minimum 2.000 cumulative GPA; and journalism and mass communication (JMC) major; and senior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

JMC 40016 - LAW OF ADVERTISING AND PUBLIC RELATIONS

(Cross-listed with JMC 50016) Regulation of advertising and corporate speech; first amendment libel and privacy legal problems of new media. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA; and 18 hours of JMC courses all with a grade of C- (1.700) or better; and JMC 31002 or 31003 or 38002 with a grade of C-(1.700) or better; and advertising (ADV) or public relations (PR) majors.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
**JMC 40017 - MEDIA ENTERPRISE**

(Cross-listed with JMC 50017) Explores methods to build and sustain organizations that market and monetize multimedia content to targeted audiences through appropriate distribution streams. Through case studies, examination of evolving best practices in media organizations and elsewhere, students will study and apply enterprise thinking. Prerequisite: JMC 40015 or ENTR 27056.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

**JMC 40020 - AUDIO AND STILL PHOTO PRODUCTION**

(Cross-listed with JMC 50020) Develop skills in telling journalistic stories by producing multimedia news stories through research and planning; reporting using digital cameras and digital audio recorders; editing photos and audio. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA; and minimum grade of C- (1.700) in JMC 22001 and journalism and mass communication (JMC) major and junior or senior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

**JMC 40022 - FILM AS COMMUNICATION**

Study of the relationship of television and theatre films to the mass audience in terms of components and effects. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA; and JMC 20004 with a grade of B- (2.700) or better or JMC 20005 with a grade of C- (1.700) or better.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

**JMC 40023 - NON-TRADITIONAL JOURNALISM**

(Cross-listed with JMC 50023) The study of journalistic writing that goes beyond the inverted pyramid and traditional feature story and has topics traditionally not defined as news. Students will also work as part of a team on multi-part stories. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA; and minimum grade of C- (1.700) in JMC 26007 and journalism and mass communication (JMC) major and junior or senior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department
JMC 40027 - MANAGING MEDIA DIVERSITY

(Cross-listed with JMC 50027) Aspects of diversity and how it changes our environment with emphasis on the field of mass communication. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

JMC 40030 - COLLABORATIVE ONLINE PRODUCING

(Cross-listed with JMC 50030) The use of multimedia and interactive storytelling tools such as video, audio and graphics. Students work in teams to produce packages for online news sites and organizational videos. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA; and minimum grade of C- (1.700) in JMC 40012 and journalism and mass communication (JMC) major and special approval.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Journalism and Mass Comm Department

JMC 40035 - TELEVISION GRAPHICS

(Cross-listed with JMC 50035) Basic design, theory and technique in creating and preparing TV and video graphics. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA; and journalism and mass communication (JMC) major and junior or senior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

JMC 40036 - DIGITAL VIDEO EDITING

Introduction to planning and creating short computer video programs integrating multi-layered digital effects and transitions for application by end users in a variety of current video field formats. A GPA of 2.700 is required in the major. Prerequisite: cumulative GPA of 2.000; and JMC 20011 or JMC 23031 with a grade of C- (1.700) or better; and journalism and mass communication (JMC) major.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Journalism and Mass Comm Department

JMC 40037 - SCRIPTWRITING FOR VIDEO AND FILM
The emphasis of the course is on writing dramatic scripts for broadcast or motion pictures. The course also includes current perspectives on market needs. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA; and JMC 30004 with a grade of C- (1.700) or better; and journalism and mass communication (JMC) major.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

**JMC 40091 - BUSINESS MEDIA SEMINAR**

(Cross-listed with JMC 50091) Study of specialized business media and preparation of portfolio appropriate for these companies. Projects are aligned with student's major. A GPA of 2.700 is required in the major. Prerequisites: 2.000 overall GPA; and JMC 26001 or JMC 20004; and JMC major.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Seminar

Journalism and Mass Comm Department

**JMC 40092 - INTERNSHIP**

(Repeatable for a maximum of 6 credit hours) Experience in a professional setting under professional supervision in student's field of specialization. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA and special approval.

1.000 TO 6.000 Credit hours
10.000 TO 60.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Journalism and Mass Comm Department

Course Attributes:
Experiential Learning Requirem

**JMC 40095 - SPECIAL TOPICS IN JMC**

(Repeatable for credit) Selected topics of special interest not covered in depth in existing courses; offered as resources permit. Prerequisite: none.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

**JMC 40096 - INDIVIDUAL PROJECTS IN MASS COMMUNICATIONS**

(Repeatable for credit) Individual research projects in mass communications. Letter grades and ip permissible. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA; junior or senior standing and special
JMC 40099 - SENIOR HONORS PROJECT

Thesis or other independent study project in mass communication. IP grades permissible. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA; open only to journalism and mass communication (JMC) majors admitted to the Honors College.

Levels: Undergraduate
Schedule Types: Senior Project/Honors Thesis

Journalism and Mass Comm Department

Course Attributes:
Experiential Learning Requirem

JMC 40192 - RADIO-TELEVISION INTERNSHIP

(Repeatable once for credit) Experience, under professional supervision in a radio or television station or other industry using electronic audio or video communications. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA and special approval.

Levels: Undergraduate
Schedule Types: Practicum or Internship

Journalism and Mass Comm Department

Course Attributes:
Experiential Learning Requirem

JMC 40193 - VARIABLE TITLE WORKSHOP IN JMC

(Repeatable for credit) (Cross-listed with JMC 50193) Workshop setting dealing with topics in mass communications. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA and special approval.

Levels: Undergraduate
Schedule Types: Workshop

Journalism and Mass Comm Department

JMC 40196 - INDEPENDENT STUDY IN RADIO AND TELEVISION

(Repeatable for a total of 6 credit hours) Research and writing on topics approved by the students' advisers and study directors. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA; and junior or senior
standing and special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Journalism and Mass Comm Department

**JMC 40295 - SELECTED TOPICS IN JOURNALISM AND MASS COMMUNICATION**

(Repeatable for credit) Selected topics of special interest not covered in depth in existing courses; offered as resources permit. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Journalism and Mass Comm Department

**JMC 41002 - ADVANCED ADVERTISING COPYWRITING**

Advanced copywriting projects in print advertising and corporate communications and execution of the entire print advertising campaigns. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA; and JMC 31002 and 31003 both with a grade of C- (1.700) or better; and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

**JMC 41003 - ADVERTISING ACCOUNT MANAGEMENT**

(Cross-listed with JMC 51003) An introduction to advertising account management including the functions of an account manager, skills required to be an account manager and how to effectively lead a team of professionals. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA and JMC 31002 with a grade of C- (1.700) or better and JMC 31003 with a grade of C- (1.700) or better.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

**JMC 41005 - ADVERTISING CAMPAIGNS**

Analysis of the planning, financing and execution of an advertising campaign through case study methods. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA; and JMC 31002 and 31003 both with a grade of C- (1.700) or better; and a journalism and mass communication (JMC) major.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
**JMC 41075 - POLITICAL ADVERTISING**

Focuses on analyzing the impact of political advertising on key election cohorts. In this course, students will research and profile key demographic cohorts that will substantially impact the outcome of the election and analyze how current political advertising may impact each cohort. This course is a real-time study of key audience groups and in-market advertising and election tactics and as such its focus will change as the issues and population trends change from semester to semester. A 2.70 GPA is required in the major. Prerequisites: JMC 20008 and JMC 21005 with a minimum grade of C- (1.700); and minimum 2.000 cumulative GPA; and advertising (ADV) major or minor.

3.000 Credit hours
3.000 Lecture hours

**Levels:** Undergraduate

**Schedule Types:** Lecture

Jerome and Mass Comm Department

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**JMC 41080 - ACTIVATION ADVERTISING**

Activation advertising, or brand activation, is the activation of the consumer for a brand and driving consumer action, typically by getting consumers to experience the brand. In this course students will begin to understand the consumer path-to-purchase and when a consumer becomes a shopper. Using a variety of resources, students will build strategically sound activation programs based on a big idea and relevant consumer and shopper insights. A 2.70 GPA is required in the major. Prerequisite: JMC 20008 and JMC 21005 with minimum grades of C- (1.700); and minimum 2.000 cumulative GPA; and advertising (ADV) major or minor.

3.000 Credit hours
3.000 Lecture hours

**Levels:** Undergraduate

**Schedule Types:** Lecture

Jerome and Comm Department

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**JMC 41111 - FASHION PUBLISHING**

Introduction to 21st Century Fashion publishing. An overview of the evolution of fashion magazines in print and digital formats, magazine entrepreneurs, the editors role, branding, advertising, circulation, writing and production. A GPA of 2.700 is required in the major. Prerequisites: 2.000 overall GPA; and ENTR 27056 or FDM 35280; and journalism and mass communication (JMC) or fashion merchandising (FM) majors.

3.000 Credit hours
3.000 Lecture hours

**Levels:** Undergraduate

**Schedule Types:** Lecture

Jerome and Comm Department

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**JMC 41150 - GLOBAL ADVERTISING AND PUBLIC RELATIONS**

Offers students the opportunity to learn about and engage in exploring issues related to advertising and public relations in various markets around the world. This course may involve travel to a destination market. A GPA of 2.700 is required in the major. Prerequisites: Minimum 2.000 cumulative GPA; and special approval.

3.000 Credit hours
JMC 41192 - PRACTICUM IN ADVERTISING AND PUBLIC RELATIONS

Designed to provide opportunities for students to engage in applied public relations and advertising projects in collaboration with faculty. This can include such things as competitions and practical experiential learning exercises with on-campus organizations. A 2.700 GPA in the major is required. Prerequisites: Special approval.

3.000 Credit hours
9.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

JMC 42001 - SPORTS PHOTOGRAPHY

Photographing various college events, including action, portraiture and lighting in a variety of outdoor and indoor venues. Photo captioning, image transmission and archiving and ethics. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA; and JMC 22001; minimum grade of C- (1.700) in JMC 22004 and 32001; and journalism and mass communication (JMC) major or minor.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

JMC 42005 - COLOR PHOTOGRAPHY

(Cross-listed with VCD 48005) Nature of color transparency and negative films. Student produces transparencies and prints for assignments. Photojournalism majors must have a 35mm camera photo illustration majors must have a 4x5 camera. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA; and JMC 32001 with a grade of C- (1.700) or better; and journalism and mass communication (JMC) major.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

JMC 42007 - PHOTO-ILLUSTRATION TECHNIQUES

Creative photography for advertising and editorial uses. Assignments made in an art director/photographer relationship. Critique by professionals in addition to academic evaluation. Prerequisite: JMC 32004 and 42005 with a grade of C- (1.700) or better and journalism and mass communication (JMC) major.
3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

Journalism and Mass Comm Department

**JMC 42008 - ADVANCED PHOTO TECHNIQUES**

Discussion of contemporary photojournalists and issues. Production of photo documentary multimedia and illustrations appropriate to photojournalism. Senior portfolio review. A GPA of 2.700 is required in the major.  
Prerequisite: JMC 22004 with a minimum grade of C- (1.700); and minimum 2.000 cumulative GPA.  
3.000 Credit hours  
2.000 Lecture hours  
2.000 Lab hours

Levels: Undergraduate  
Schedule Types: Laboratory, Lecture

Journalism and Mass Comm Department

**JMC 42009 - FASHION PHOTOGRAPHY**

(Cross-listed with VCD 48009) Instruction in studio lighting, filters special effects. Emphasis on editorial and advertising fashion photography. Studio and location assignments. A GPA of 2.700 is required in the JMC major.  
Prerequisite: JMC 22001 or VCD 28000 with a minimum grade of C- (1.700); and minimum 2.000 cumulative GPA; and JMC or VCD major or minor.  
3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

Journalism and Mass Comm Department

**JMC 42092 - PRACTICUM IN PHOTOGRAPHY**

(Repeatable for a total of 10 hours) (Cross-listed with VCD 48092) Individual or group investigation into student selected areas of photographic field. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA; and junior or senior standing and special approval.  
1.000 TO 3.000 Credit hours  
1.000 TO 3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture, Practicum or Internship

Journalism and Mass Comm Department

Course Attributes:  
Experiential Learning Requirem

**JMC 43035 - ADVANCED TELEVISION NEWS PRODUCING**

(Cross-listed with JMC 53035) Advanced understanding of how to produce news content for broadcast and the web. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA; and journalism and mass communication (JMC) major and special approval.
JMC 43036 - RECORD PROMOTION

(Cross-listed with JMC 53036) Class operates as an independent record label to critique, select, promote, publicize and sell original recorded music. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA; and journalism and mass communication (JMC) or communications studies (COMM) major.

Levels: Undergraduate
Schedule Types: Lecture

JMC 43092 - STUDENT MEDIA PRACTICUM IN JOURNALISM

(Repeatable for a maximum of 3 credit hours) Performance of assigned activities in student media under student media supervision. A GPA of 2.700 is required in the major. Prerequisite: JMC 20001 or JMC 20003 with a minimum grade of C- (1.700); and minimum 2.000 cumulative GPA; and special approval.

1.000 TO 3.000 Credit hours
3.000 TO 9.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

JMC 44042 - REMOTE TELEVISION

The study and broadcast of remote events including live sports and other non-scripted shows. A GPA of 2.700 is required in the major. Prerequisites: cumulative GPA of 2.000; and JMC 33042 with a grade of C- (1.700) or better; and journalism and mass communication (JMC) major.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

JMC 44043 - SPORTS FIELD PRODUCTION

Video shooting and editing of sports packages and short documentaries. This includes player and coach profiles, highlights and lead-ins. A GPA of 2.700 is required in the major. Prerequisites: 2.000 overall GPA and JMC 23030 and 23031 with a grade of C- (1.700) or better; and JMC 30004 with a grade of C- (1.700) or better and JMC major. Corequisites: JMC 44042.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Journalism and Mass Comm Department

**JMC 44050 - POST PRODUCTION SOUND**

Creating post production sound for visual productions including digital cinema and television. A GPA of 2.700 is required in the major. Prerequisite: cumulative GPA of 2.000; and JMC 33032 or 33033 with a grade of C- (1.700) or better; and journalism and mass communication (JMC) major.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Journalism and Mass Comm Department

**JMC 44065 - MOBILE MULTIMEDIA**

Developing multimedia content for mobile platforms such as smart phones, tablets or other networked mobile devices. Prerequisite: JMC 20006 or JMC 20009 or DSCI 10310 with a minimum grade of C- (1.700).

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

**JMC 45000 - TELEVISION SPORTS GRAPHICS PRODUCTION**

Techniques in creating and preparing TV and video graphics for live sports events. A GPA of 2.700 is required in the major. Prerequisites: 2.000 overall GPA; and JMC 23030 and 23031 with a grade of C- (1.700) or better; and JMC 30004 as a pre- or co-requisite with a grade of C- (1.700) or better; and JMC major.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

**JMC 45001 - ADVANCED LIGHTING FOR DIGITAL FILM AND TELEVISION**

(Cross-listed with JMC 55001) Introduction to theory and technique of lighting for video production. Course includes critical analysis of video lighting situations, the various tools available to light various production locations including interviews and multi-camera narrative scenes. A GPA of 2.700 is required in the major. Prerequisite: minimum grade of C- (1.700) in JMC 23030; and journalism and mass communication major or minor.

3.000 Credit hours
3.000 Lecture hours
JMC 45005 - HISTORICAL DOCUMENTARY PRODUCTION

(Cross-listed with JMC 55005) Chronicles the evolution of the historical television documentary and demonstrates the step-by-step production process required to create such a program. Students research and assemble a documentary with an overall appreciation of this genre's purpose in both the television industry and the popular culture. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

JMC 45006 - PRODUCING AND DIRECTING LIVE TELEVISION

Class examines the steps to produce and direct live television programming. This includes scripted shows such as news, entertainment, and talk shows as well as unscripted shows such as live sports and remote event productions. For homework students are required to work regular evenings as a producer and or director for TV2. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA; and JMC 33042 and JMC 44042 with a minimum grade of C- (1.700); and JMC major or minor.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

JMC 45007 - PRODUCING AND DIRECTING FOR SINGLE CAMERA

Examination of steps to produce and direct digital film projects shot with a single camera. This includes documentary, narrative fiction, commercial and corporate production styles. For homework, students are required to schedule all day shoots outside of class time. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA; and JMC 33043 and JMC 40036 with a minimum grade of C- (1.700); and journalism and mass communication major.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

JMC 45010 - FEATURE FILM PREPRODUCTION

(Cross-listed with JMC 55010) Gives students practical, hands-on experience in the preproduction of a feature length digital film. Students work on script revising, budgeting, location scouting, casting, developing a script breakdown and developing a daily production schedule for the film. A GPA of 2.700 is required in the major. Prerequisites: cumulative GPA of 2.000; and a minimum grade of C- (1.700) in JMC 23030.

3.000 Credit hours
JMC 45011 - FEATURE FILM PRODUCTION

(Cross-listed with JMC 55011) Provides students with a practical, hands-on experience in the production process of shooting a feature length digital film. Students work on both the organizational aspects as well as the technical aspects of production. This includes production management, craft services, daily call sheets, directing, lighting, cinematography and location sound recording. A GPA of 2.700 is required in the major. Prerequisites: cumulative GPA of 2.000; and JMC 23030 with a grade of C- (1.700) or better.

6.000 Credit hours
2.000 Lecture hours
8.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Journalism and Mass Comm Department

JMC 45013 - FEATURE FILM POST PRODUCTION

(Cross-listed with JMC 55013) Advanced video editing course designed to offer students the experience in the postproduction and finishing of a feature length digital narrative film. Students will refine their technical and aesthetic skills through a combination of practice, reading, presenting, viewing and discussion. Students are assigned specific scenes that they are to complete from string out and assembly cut to fine cut and picture lock. Students then work on sound effects, visual effects, titles or color correction. A GPA of 2.700 is required in the major. Prerequisites: minimum grade of C- (1.700) in JMC 23030.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Journalism and Mass Comm Department

JMC 45020 - AVID EDITOR CERTIFICATION

(Cross-listed with JMC 55020) Prepares students to take the official Avid Media Composer MC 101 certification exam. A GPA of 2.700 is required in the major. Students who pass the exam will be certified as Avid Video editors. Prerequisite: cumulative 2.000 GPA.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

JMC 46000 - NEWSPAPER DESIGN

(Cross-listed with JMC 56000) Design of newspapers from small inside pages to elaborate feature pages. News judgment. Basic information graphics and photo editing. Prerequisite: 2.750 overall GPA; and JMC 26001; and
JMC 20006; and VCD 37000 all with a grade of C- (1.700) or better.

3.000 Credit hours
3.000 Lecture hours
0.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Journalism and Mass Comm Department

JMC 46001 - INFORMATION GRAPHICS

(Slashed with JMC 56001; cross-listed with VCD 43007) Introduction to shapes, color type and combinations of these for computer designed news graphics maps charts graphs and diagrams. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA; and a minimum grade of C- in JMC 26001 and COMM 21000; and a journalism and mass communication (JMC) major.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Journalism and Mass Comm Department

JMC 46003 - PRODUCING TELEVISION NEWS

(Cross-listed with JMC 56003) Introduction to the theory and practice of producing content for TV news and public affairs programs. Emphasis is placed on understanding news philosophies, storytelling story selection and rundown placement. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA; and minimum grade of C- (1.700) in JMC 26008 and a journalism and mass communication (JMC) major.

3.000 Credit hours
2.000 Lecture hours
1.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Journalism and Mass Comm Department

JMC 46006 - EDITORIAL WRITING

(Cross-listed with JMC 56006) Structures and purpose of editorial and column writing; study of editorial section of newspaper practice in writing editorials. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA; and JMC 26007 or 26008 either with a grade of C- (1.700) or better; and a journalism and mass communication (JMC) major.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

JMC 46007 - INVESTIGATIVE REPORTING

(Slashed with JMC 56007) Techniques involved in researching, interviewing and reporting investigative news
JMC 46009 - REPORTING PUBLIC POLICY

(Cross-listed with JMC 56009) Instruction and practice in reporting all areas of public affairs, including government and the courts. Use of precision journalism techniques. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA; and JMC 26007 or 26008 with a grade of C- or better; and journalism and mass communication (JMC) major.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

JMC 46016 - BUSINESS OF PUBLISHING

(Slashed with JMC 56016) Overview of magazine publishing-editorial, advertising, circulation and production. Analysis of magazines. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA; and a grade of C- (1.700) or better in COMM 21000 and JMC 26001; and a journalism and mass communication (JMC) major.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

JMC 46020 - MAGAZINE DESIGN

(Slashed with JMC 56020) Marriage of words and visuals for designing magazine layouts and covers in desktop publishing. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA; and JMC 26001 and JMC 46016 both with a minimum grade of C- (1.700).

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

JMC 46021 - ADVANCED MAGAZINE WRITING

(Slashed with JMC 56021) Research, interviewing writing and marketing of major magazine articles. Also editing techniques for magazines. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA; and JMC 36005 and 36018 both with a grade of C- (1.700) or better.
JMC 46052 - ADVANCED BROADCAST REPORTING

(Slashed with JMC 56052) Advanced study of reporting news stories, newsroom operations, editing and producing broadcast news programs. Advanced projects in broadcast news. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA and JMC 26008 with a grade of C- (1.700) or better.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

JMC 46054 - BROADCAST DOCUMENTARY

(Cross-listed with JMC 56054) Development of documentary form for radio and television. Analysis and production of documentaries. Utilization of audio and video recording and editing. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA; JMC 26008 or two of the following: JMC 33033, JMC 33034, JMC 33042, JMC 33043 all with a grade of C- (1.700) or better.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

JMC 46055 - DOCUMENTARY AND ENTREPRENEURIAL PHOTOGRAPHY

Exploring techniques that allow students desiring to make a difference in the world with their visual story-telling skills and make a living. Students work with local and regional non-profit and non-governmental agencies to develop photo reports and increase visibility and understanding with still and multimedia. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA; and minimum grade of C- (1.700) in JMC 32001 and JMC 32005; and ENTR 27056; and journalism and mass communication (JMC) major or minor.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

JMC 46056 - CYBERMEDIA PRODUCTION

(Slashed with JMC 56056) Prepares journalism students to work on media delivered online or by tablet. Deals with multimedia news, magazines, information design and photojournalism. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA; and a minimum grade of C- (1.700) in JMC 26005; and journalism and mass communication (JMC) major or minor.
JMC 46057 - MOTION GRAPHICS FOR VIDEO EDITING

(Cross-listed with JMC 56057) Covers the creation of motion graphics for video editing from the perspective of a professional editor. Students learn basic video effects such as digital matte creation and layered graphics for video productions. Students also gain a basic understanding of how to convert and compress video files for various deliverable formats. Adobe After Effects is the industry standard software application for creating motion graphics and will be used extensively in the course. A GPA of 2.700 is required in the major.

Prerequisites: cumulative 2.000 GPA; and a minimum grade of C- (1.700) in JMC 22002 and 22003.

JMC 46091 - NEW YORK MEDIA SEMINAR

Introduction of students to the New York media, the thinking of industry professionals and the job opportunities in the city. Students attend presentations by media professionals and seminars to discuss media based in New York City. A GPA of 2.700 is required in the major. Prerequisites: cumulative 2.000 GPA; and sophomore, junior or senior standing in the College of Communication and Information; and special approval.

JMC 46395 - SPECIAL TOPICS IN JOURNALISM PRACTICE

(Repeatable three times for credit) Special topics in journalism practice. Prerequisite: Special approval.

JMC 47003 - TEACHING HIGH SCHOOL JOURNALISM

Methods and materials for teaching journalism in high school. Prerequisite: junior or senior standing and special approval of instructor.
JMC 48001 - MEDIA RELATIONS AND PUBLICITY

(Cross-listed with JMC 58001) Planning and preparation of materials for use by the news media, both on paper and online. The course explores the media relations function along with the uses and limitations of mass media in public relations practice. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA; JMC 26001; and JMC 26007 or 26008; and JMC 38002 all with a grade of C- (1.700) or better; and journalism and mass communication (JMC) major.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

Course Attributes:
Writing Intensive Course

JMC 48002 - PUBLIC RELATIONS TACTICS

Planning and preparation of face-to-face public relations tactics, including spokesperson training for on and off camera appearances special event planning speeches and presentations with visual support and other applications of "writing for the ear." A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA; and JMC 26001 and 38002 both with a grade of C- (1.700) or better.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

JMC 48003 - PUBLIC RELATIONS ONLINE TACTICS

(Cross-listed with JMC 58003) Explore fundamentals of web site planning and design and provides hands-on skills development using the full range of cybermedia techniques. Includes emphasis on writing for online audiences. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA; and JMC 26001 and 28001; and JMC 26007 or 26008; and 38002 all with a grade of C- (1.700) or better.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Journalism and Mass Comm Department

JMC 48006 - PUBLIC RELATIONS PUBLICATIONS

(Cross-listed with JMC 58006) Planning, writing and design of organizational publications including newsletters, brochures, flyers, promotional mailers and web sites. Course also explores the print production process. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA; and JMC 26001 with a grade of C- (1.700) or better; and a journalism and mass communication (JMC) major.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

**JMC 48091 - SEMINAR: PUBLIC RELATIONS CAMPAIGNS**

(Repeatable for credit) This capstone course in the public relations major requires student teams to combine research, planning and execution into a single public relations campaign developed for a real world organization. A GPA of 2.700 is required in the major. Prerequisites: 2.000 overall GPA; and JMC 26007 or 26008; and JMC 38002; and three of these four—JMC 48001 and 48002 and 48003 and 48006—all with a grade of C- (1.700) or better.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

Journalism and Mass Comm Department

**JMC 49005 - MUSIC VIDEO PRODUCTION**

(Cross-listed with JMC 59005) Teaches the process of producing and directing a music video. It covers the history of music videos and how some become movies as well as writing a script, storyboarding, working with rough cuts and shooting a music video. Students also learn how to create and pitch proposals. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

**JMC 49021 - CORPORATE VIDEO**

(Cross-listed with JMC 59021) The use of video in corporate and organizational environments. Emphasis is placed on the structure and function of the medium within each environment. A GPA of 2.700 is required in the major. Prerequisite: 2.000 overall GPA; and two of the following: JMC 33033 and 33042 and 33043 both with a grade of C- (1.700) or better; and a journalism and mass communication (JMC) major.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Journalism and Mass Comm Department

**JMC 49099 - SENIOR DIGITAL MEDIA PRODUCTION PROJECT**

Facilitates the completion of a digital film or television project. A GPA of 2.700 is required in the major. Prerequisites: 2.000 overall GPA; and JMC 45006 or JMC 45007 with a minimum grade of C- (1.700); and journalism and mass communication major or minor.

3.000 Credit hours
3.000 Other hours
Levels: Undergraduate
Schedule Types: Senior Project/Honors Thesis

Journalism and Mass Comm Department

Course Attributes: Experiential Learning Requirem

JMC 50002 - REPORTING FOR MASS MEDIA

Theory and practice in newswriting and reporting; news values and news judgment; lead and story development; techniques of gathering information and dealing with sources of news; writing for deadline. Hours do not count toward degree. Prerequisite: Special approval and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Journalism and Mass Comm Department

JMC 50003 - EDITING FOR MASS MEDIA

Theory and practice in copy editing, headline writing and editing photographs and information graphics for print and on-line publications. Hours do not count toward degree. Prerequisite: JMC 50002 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Journalism and Mass Comm Department

JMC 50004 - COMPUTER-ASSISTED REPORTING

Computer analysis of large data sets focusing on government, court, police records, for preparation of news stories, basics of on-line searching; software and databases. Prerequisite: JMC 50002 and graduate standing.
3.000 Credit hours
3.000 Lecture hours
0.000 Lab hours

Levels: Graduate
Schedule Types: Laboratory, Lecture

Journalism and Mass Comm Department

JMC 50006 - LAW OF MASS COMMUNICATION

Libel and slander; privacy, copyright, obscenity; regulation of advertising and broadcasting; antitrust law and mass media; legal problems reporting courts, legislatures; taxation, licensing. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
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<th>Course Code</th>
<th>Course Title</th>
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<th>Prerequisite</th>
<th>Credit Hours</th>
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<th>Levels</th>
<th>Schedule Types</th>
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<tr>
<td>JMC 50007</td>
<td>REVIEWING THE ARTS</td>
<td>Reviewing and criticism of performing, visual and literary arts. Emphasis on books, film, TV and theater. Prerequisite: Special approval and graduate standing.</td>
<td></td>
<td>2.000</td>
<td>2.000</td>
<td>Graduate</td>
<td>Lecture</td>
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<tr>
<td>JMC 50012</td>
<td>ONLINE JOURNALISM</td>
<td>Study and evaluation of online news and news sites; reporting and writing for online news media; design, production and maintenance of an online news site; ethical, legal and economic issues related to online news.</td>
<td>JMC 50002</td>
<td>3.000</td>
<td>3.000</td>
<td>Graduate</td>
<td>Lecture</td>
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<tr>
<td>JMC 50013</td>
<td>TELEVISION SPORTS PRODUCTION</td>
<td>A comprehensive study of the production of live action television sports coverage. Prerequisite: journalism and mass communication (JMC) major and graduate standing.</td>
<td></td>
<td>3.000</td>
<td>3.000</td>
<td>Graduate</td>
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<tr>
<td>JMC 50015</td>
<td>MEDIA MARKETPLACE</td>
<td>A study of administrative problems, methods, procedures in the management of media corporations. Prerequisite: Graduate standing.</td>
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<td>3.000</td>
<td>3.000</td>
<td>Graduate</td>
<td>Lecture</td>
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<tr>
<td>JMC 50016</td>
<td>LAW FOR ADVERTISING AND PUBLIC RELATIONS</td>
<td>Regulation of advertising and public relations; first amendment; libel and privacy; legal problems of new media; research in persuasive media. Prerequisite: Special approval and graduate standing.</td>
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<td>3.000</td>
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</tbody>
</table>
JMC 50017 - MEDIA ENTERPRISE

(Cross-listed with JMC 40017) Explores methods to build and sustain organizations that market and monetize multimedia content to targeted audiences through appropriate distribution streams. Through case studies, examination of evolving best practices in media organizations and elsewhere, students will study and apply enterprise thinking. Prerequisite: journalism and mass communication (JMC) major; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Journalism and Mass Comm Department

JMC 50020 - AUDIO AND STILL PHOTO PRODUCTION

Develop skills in telling journalistic stories by producing multimedia news stories through research and planning; reporting using digital cameras and digital audio recorders; editing photos and audio. Prerequisite: journalism and mass communication (JMC) major and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Journalism and Mass Comm Department

JMC 50023 - NON-TRADITIONAL JOURNALISM

The study of journalistic writing that goes beyond the inverted pyramid and traditional feature story and has topics traditionally not defined as news. Students will also work as part of a team on multi-part stories. Prerequisite: journalism and mass communication (JMC) major and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Journalism and Mass Comm Department

JMC 50027 - MANAGING MEDIA DIVERSITY

Aspects of diversity and how it changes our environment with emphasis on the field of mass communication. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
**JMC 50030 - COLLABORATIVE ONLINE PRODUCING**

The use of multimedia and interactive storytelling tools such as video, audio and graphics. Students work in teams to produce packages for online news sites and organizational videos. Prerequisite: journalism and mass communication (JMC) major and graduate standing.

3.000 Credit hours  
2.000 Lecture hours  
2.000 Lab hours

Levels: Graduate  
Schedule Types: Lecture

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**JMC 50035 - TELEVISION GRAPHICS**

Basic design, theory and technique in creating and preparing TV and video graphics. Prerequisite: graduate standing.

3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

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**JMC 50036 - DIGITAL VIDEO EDITING**

Focus is on editing workflow and techniques for both non-fiction and fiction video production. Prerequisite: journalism and mass communication (JMC) major; and graduate standing; and special approval.

3.000 Credit hours  
2.000 Lecture hours  
2.000 Lab hours

Levels: Graduate  
Schedule Types: Combined Lecture and Lab

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**JMC 50037 - SCRIPTWRITING FOR VIDEO AND FILM**

The emphasis of the course is on writing dramatic scripts for broadcast or motion pictures. The course also includes current perspectives on market needs. Prerequisite: Special approval and graduate standing.

3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

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**JMC 50091 - BUSINESS MEDIA SEMINAR**

Study of specialized business media and preparation of portfolio appropriate for these companies. Projects will
be aligned with student's graduate concentration. Prerequisites: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Seminar

Journalism and Mass Comm Department

**JMC 50193 - VARIABLE TITLE WORKSHOP IN JOURNALISM AND MASS COMMUNICATION**

(Repeatable for credit) Intensive study of professional issues and problems in various areas of mass communication, utilizing the expertise of faculty and professionals in the field. Prerequisite: Special approval and graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Journalism and Mass Comm Department

**JMC 53035 - ADVANCED TELEVISION NEW PRODUCING**

Advanced understanding of how to produce news content for broadcast and the web. Prerequisite: graduate standing and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Journalism and Mass Comm Department

**JMC 53036 - RECORD PROMOTION**

Class operates as an independent record label to critique, select, promote, publicize and sell original recorded music. Prerequisite: journalism and mass communication (JMC) major and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Journalism and Mass Comm Department

**JMC 53042 - STUDIO TELEVISION**

Study of all positions of a live television program including technical directing, floor directing, graphics, digital playback, and audio engineering. Two hours lecture and two hours lab. Prerequisite: Special approval and graduate standing.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Laboratory, Lecture
JMC 54050 - POST PRODUCTION SOUND

(Cross-listed with JMC 44050) Creating post production sound for visual productions including digital cinema and television. Prerequisite: journalism and mass communication (JMC) major; and graduate standing; and special approval.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

JMC 55001 - ADV LIGHTING DIGITAL FILM/TV

(Cross-listed with JMC 45001) Introduction to theory and technique of lighting for video production. Includes critical analysis of video lighting situations, the various tools available to light various production locations including interviews and multi-camera narrative scenes. Prerequisite: journalism and mass communication (JMC) major; and graduate standing; and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

JMC 55005 - HISTORICAL DOCUMENTARY PRODUCTION

Chronicles the evolution of the historical television documentary and demonstrates the step-by-step production process required to create such a program. Students research and assemble a documentary with an overall appreciation of this genre's purpose in both the television industry and the popular culture. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

JMC 55010 - FEATURE FILM PREPRODUCTION

(Cross-listed with JMC 45010) Gives students practical, hands-on experience in the preproduction of a feature length digital film. Students work on script revising, budgeting, location scouting, casting, developing a script breakdown, and developing a daily production schedule for the film. Graduate students are expected to take a leadership position in the preproduction of the film. Prerequisites: journalism and mass communication major; and graduate standing; and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
JMC 55011 - FEATURE FILM PRODUCTION

(Cross-listed with JMC 45011) Provides students with a practical, hands-on experience in the production process of shooting a feature length digital film. Students will study the theory of film making and work on both the organizational and managerial aspects as well as the technical aspects of production. This includes production management, craft services, daily call sheets, directing, lighting, cinematography and location sound recording. Prerequisite: graduate standing and special approval.

6.000 Credit hours
2.000 Lecture hours
8.000 Lab hours

Levels: Graduate
Schedule Types: Laboratory, Lecture

JMC 55013 - FEATURE FILM POST PRODUCTION

(Cross-listed with JMC 45013) Advanced Video editing course designed to offer students the experience in the postproduction and finishing of a feature length digital narrative film. The students will refine their technical and aesthetic skills through a combination of practice, reading, presenting, viewing and discussion. Students are assigned specific scenes that they are to complete from string out and assembly cut to fine cut and picture lock. Students work on sound effects, visual effects, titles or color correction. In addition, graduate students assume a leadership position. Prerequisites: journalism and mass communication (JMC) major; and graduate standing; and special approval.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Laboratory, Lecture

JMC 55020 - AVID EDITOR CERTIFICATION

Prepares students to take the official Avid Media Composer MC 101 certification exam. Students who pass the exam will be certified as Avid video editors. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

JMC 55051 - REPORTING BROADCAST NEWS

Gathering and preparing broadcast news, with emphasis on unique style and presentation methods of broadcast media. Use of both audio and video recorders and editing equipment. Prerequisite: JMC 50002 and graduate standing.

3.000 Credit hours
3.000 Lecture hours
### JMC 56000 - NEWSPAPER DESIGN
Design of newspapers from small inside pages to elaborate feature pages. News judgment. Basic information graphics and photo editing. Prerequisite: JMC 50003 and graduate standing.

- 3.000 Credit hours
- 3.000 Lecture hours
- 0.000 Lab hours

### JMC 56001 - INFORMATION GRAPHICS
Introduction to shapes, color, type and combinations of these for computer-designed news graphics: maps, charts, graphs and diagrams. Prerequisite: Special approval and graduate standing.

- 3.000 Credit hours
- 3.000 Lecture hours
- 2.000 Lab hours

### JMC 56003 - PRODUCING TELEVISION NEWS
Knowledge of the theory and practice of producing content for TV news and public affairs programs. Emphasis is placed on understanding news philosophies, storytelling story selection and rundown placement. Prerequisite: JMC 55051 and journalism and mass communication (JMC) major and graduate standing.

- 3.000 Credit hours
- 2.000 Lecture hours
- 1.000 Lab hours

### JMC 56006 - EDITORIAL WRITING
Structure and purpose of editorial and column writing; study of editorial page practice in writing editorials. Prerequisite: JMC 50002 and graduate standing.

- 3.000 Credit hours
- 3.000 Lecture hours
### JMC 56009 - REPORTING PUBLIC POLICY

Instruction and practice in reporting all areas of public affairs, including government and the courts. Use of precision journalism techniques. Prerequisite: JMC 50002 and graduate standing.

- 3.000 Credit hours
- 2.000 Lecture hours
- 2.000 Lab hours

Levels: Graduate  
Schedule Types: Combined Lecture and Lab  

Journalism and Mass Comm Department

### JMC 56016 - BUSINESS OF PUBLISHING

Overview of magazine publishing-editorial, advertising, circulation and production. Analysis of magazines. Prerequisite: Special approval and graduate standing.

- 3.000 Credit hours
- 3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture  

Journalism and Mass Comm Department

### JMC 56018 - FEATURE WRITING

Researching, writing and placement of feature stories in publications. Prerequisite: JMC 50002 and graduate standing.

- 3.000 Credit hours
- 3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture  

Journalism and Mass Comm Department

### JMC 56020 - MAGAZINE DESIGN

Marriage of words and visuals for designing magazine layouts and covers in desktop publishing. Prerequisite: JMC 50002 and JMC 50003 and JMC 56016 and graduate standing.

- 3.000 Credit hours
- 3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture  

Journalism and Mass Comm Department

### JMC 56021 - ADVANCED MAGAZINE WRITING

Research, interviewing, writing and marketing of major magazine articles. Also editing techniques for magazines. Prerequisite: JMC 50002 and JMC 50003 and graduate standing.

- 3.000 Credit hours
- 3.000 Lecture hours
JMC 56052 - ADVANCED BROADCAST REPORTING

(Slashed with JMC 46052) Advanced study of reporting news stories, newsroom operations, editing and producing broadcast news programs. Advanced projects in broadcast news. Prerequisites: JMC 55051 or JMC 56054; and graduate standing.
3.000 Credit hours
3.000 Lecture hours

JMC 56054 - BROADCAST DOCUMENTARY

Development of the documentary form for radio/TV; analysis, production of radio/TV documentary; utilization of audio/video recording/editing. Prerequisite: JMC 55051.
3.000 Credit hours
3.000 Lecture hours
0.000 Lab hours

JMC 56056 - CYBERMEDIA PRODUCTION

Prepares journalism students to work on media delivered online or by tablet. Deals with multimedia news, magazines, information design and photojournalism. Prerequisites: journalism and mass communication (JMC) major; and graduate standing.
3.000 Credit hours
3.000 Lecture hours

JMC 56057 - MOTION GRAPHICS FOR VIDEO EDITING

Covers the creation of motion graphics for video editing from the perspective of a professional editor. Students learn basic video effects such as digital matte creation and layered graphics for video productions. Students also gain a basic understanding of how to covert and compress video files for various deliverable formats. Adobe After Effects is the industry standard software application for creating motion graphics and will be used extensively in this course. Prerequisites: journalism and mass communication (JMC) major; and graduate standing.
3.000 Credit hours
3.000 Lecture hours
**JMC 56091 - NEW YORK MEDIA SEMINAR**

Introduction of students to the New York media, the thinking of industry professionals and the job opportunities in the city. Students will attend presentations by media professionals and seminars to discuss media based in New York City. Prerequisite: graduate standing in the College of Communication and Information.

3.000 Credit hours 3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

**JMC 57003 - TEACHING HIGH SCHOOL JOURNALISM**

Methods and materials for teaching journalism in high school. Prerequisite: Graduate standing and special approval.

3.000 Credit hours 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**JMC 58001 - MEDIA RELATIONS AND PUBLICITY**

Planning and preparation of materials for use by news media, both on paper and Online. Analysis of media relations function and media relations strategies. Uses and limitations of mass media in public relations practice. Prerequisite: Special approval and graduate standing.

3.000 Credit hours 3.000 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

**JMC 58002 - PUBLIC RELATIONS TACTICS**

Planning and preparation of face-to-face public relations tactics, including spokesperson training for on- and off-camera appearances, special event planning, speeches and presentations with visual support and other applications of "writing for the ear." Prerequisite: Graduate standing.

3.000 Credit hours 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**JMC 58003 - PUBLIC RELATIONS:ONLINE TACTICS**
Explore fundamentals of web site planning and design and provide hands-on skills development using the full range of cyber media techniques. Includes emphasis on writing for online audiences. Prerequisite: Special approval and graduate standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Journalism and Mass Comm Department

**JMC 58006 - PUBLIC RELATIONS PUBLICATIONS**

Planning, writing and design of organizational publications including newsletters, brochures, fliers and promotional materials. Prerequisite: Special approval and graduate standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Journalism and Mass Comm Department

**JMC 59005 - MUSIC VIDEO PRODUCTION**

(Cross-listed with JMC 49005) Teaches the process of producing and directing a music video. It covers the history and social impact of music videos. It includes some research into this social impact. Also storyboarding, scriptwriting, working with rough cuts, shooting a video, creating and pitching proposals. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Journalism and Mass Comm Department

**JMC 59021 - CORPORATE VIDEO**

The use of video in the legal, medical and corporate environments. Emphasis is placed on the structure and function of the medium within each environment. Prerequisite: Special approval and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Journalism and Mass Comm Department

**JMC 60000 - INTRODUCTION TO GRADUATE STUDIES IN JOURNALISM AND MASS COMMUNICATION**

An introductory survey of the various areas of professional and scholarly concentration in the fields of journalism and mass communication. Consideration of the relationship between professional practice and scholarly activity in those fields. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours
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<tr>
<td>JMC 60001</td>
<td>THEORY OF MASS COMMUNICATION</td>
<td>Introduction to theory of mass communication, with emphasis on the process and effects of mass communication. Prerequisite: Graduate standing.</td>
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<td>JMC 60002</td>
<td>LEGAL PROBLEMS IN MASS COMMUNICATION</td>
<td>Case studies related to the first amendment, libel, invasion of privacy, regulation of broadcasting and new media copyright, and access to information. Course focus will be the theories underlying these issues as well as practical application of the legal concepts. Prerequisite: Special approval and graduate standing.</td>
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<tr>
<td>JMC 60003</td>
<td>ETHICS OF MASS COMMUNICATION</td>
<td>Study of ethical problems of mass media in society; analysis of media policies; performance evaluation. Prerequisite: Journalism and mass communication (JMC) major and graduate standing.</td>
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<tr>
<td>JMC 60004</td>
<td>CYBERMEDIA LAW</td>
<td>Investigates how the law affects those who gather information and publish online, including issues relating to blogging, web site hosting, posting and online journalism, along with a basic ability to apply that knowledge in specific situations. Focus is on both existing law and developing public policy. Prerequisite: graduate standing.</td>
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<tr>
<td>JMC 60007</td>
<td>RESEARCH METHODS IN MASS COMMUNICATION</td>
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Introduction to methods of social science research which are applicable to study of mass communication. Prerequisite: Special approval and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Journalism and Mass Comm Department

**JMC 60009 - SOCIAL ROLE OF THE MASS MEDIA**

Application of professional, theoretical, historical, economic and political perspectives to examine the role of mass media in society both in terms of structure and function. Prerequisite: Journalism and mass communication (JMC) major and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Journalism and Mass Comm Department

**JMC 60010 - QUALITATIVE RESEARCH IN JOURNALISM AND MASS COMMUNICATION: DATA COLLECTION**

Designed to develop skills in qualitative data collection in journalism and mass communication with primary focus on human subjects and textual data. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Journalism and Mass Comm Department

**JMC 60015 - ADVANCED MEDIA MANAGEMENT**

Theory and practice of management operations and problem-solving techniques specifically related to media companies. Emphasis will be using case studies from the media. Prerequisite: JMC 50015 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Journalism and Mass Comm Department

**JMC 60021 - ADVANCED MAGAZINE WRITING**

Course builds on content in JMC 56016 and 50006. Purpose is to refine and hone writing skills for nonfiction magazine stories in print and online. Prerequisite: JMC 56016 and JMC 50005 and graduate standing.
3.000 Credit hours
3.000 Lecture hours
JMC 60040 - QUALITATIVE RESEARCH METHODS IN JOURNALISM AND MASS COMMUNICATION: DATA ANALYSIS

Emphasizes the development of skills in the analysis of data collected through qualitative research methods, particularly interviews and ethnographies. Designed to help prepare graduate students who plan to use qualitative methods in their academic or applied research, particularly those who are adopting these methods for theses or dissertations. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

JMC 60096 - INDIVIDUAL INVESTIGATION IN MASS COMMUNICATION

(Repeatable for a maximum of 6 credit hours) Individual investigation of selected area or problem approved by graduate faculty. Prerequisite: Special approval and graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

JMC 60098 - RESEARCH

(Repeatable for credit) Research or individual investigation for master's level graduate students. Credits earned may be applied toward meeting degree requirements if school approves. Maximum of 3 hours may be applied to degree if school approves. Prerequisite: Special approval and graduate standing.
1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

JMC 60195 - SPECIAL TOPICS SEMINAR

(Repeatable for credit) Study of important topics in mass communication. Offered irregularly in response to existing interests and opportunities. Prerequisite: Special approval and graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours
**JMC 60196 - READINGS IN MASS COMMUNICATIONS**

(Repeatable for credit) Student pursues course of readings approved by instructor to cover subject specialty student cannot obtain from formal course offerings. Prerequisite: Special approval and graduate standing.

- 1.000 TO 3.000 Credit hours
- 1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Journalism and Mass Comm Department

**JMC 60199 - THESIS I**

Thesis students must register for a total of 6 hours, 2 to 6 hours in single semester distributed over several semesters if desired. Prerequisite: Special approval and graduate standing.

- 2.000 TO 6.000 Credit hours
- 2.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Journalism and Mass Comm Department

**JMC 60295 - SPECIAL TOPICS IN COMPUTER LAB**

(Repeatable for credit) Selected topics of special interest not covered in depth in existing courses; offered as resources permit. Prerequisite: Special approval.

- 1.000 TO 3.000 Credit hours
- 1.000 TO 3.000 Lab hours

Levels: Graduate
Schedule Types: Laboratory

Journalism and Mass Comm Department

**JMC 60296 - ADVANCED READINGS IN JOURNALISM AND MASS COMMUNICATION**

(Repeatable for credit) Consolidation and synthesis of learning experiences in the graduate program. Application of graduate study to future professional careers. Updates on latest developments in the fields of JMC and their impact on the future of academic study and professional practice in the discipline. Prerequisite: Graduate standing and special approval.

- 3.000 Credit hours
- 3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Journalism and Mass Comm Department

**JMC 60299 - THESIS II**

Thesis student must continue registration each semester until all degree requirements are met. Prerequisite: JMC 60199 and graduate standing.

- 2.000 Credit hours
- 2.000 Other hours
JMC 60396 - MASTER'S PROFESSIONAL PROJECT
Completion and defense of a substantial professional project in one of the fields of journalism and mass communication. Prerequisite: Special approval and graduate standing.
3.000 Credit hours
3.000 Other hours

JMC 66010 - SPECIALIZED REPORTING
Newsgathering techniques in specialty areas such as politics, labor, medicine, business and technology techniques of team reporting. Prerequisite: JMC 56009 and JMC 55051 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

JMC 66092 - INTERNSHIP IN JOURNALISM AND MASS COMMUNICATION
(Repeatable for credit)Experience in a department or company involving supervised professional responsibilities in journalism and mass communication. Minimum 150 hours of work for each credit hour. Prerequisite: Special approval and graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

JMC 67073 - WEB DEVELOPMENT FOR HIGH SCHOOL JOURNALISM EDUCATORS
Basic terminology and structure of online content management systems and how they can be utilized for online student journalism and media in high school. This course covers system functionality and structure, as well as orientation of students to the management system. Aspects of high school administration and legal issues will be covered along with site design and user experience. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours
**JMC 67075 - TEACHING MULTIMEDIA**

Online introduction to recognizing and producing some of the basic linear and non-linear journalistic multimedia tools used for storytelling for the Web, including audio, video, and photo slideshows. Students will also be introduced to data and mapping visualization tools, timelines and DX codes to enhance storytelling.

Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Journalism and Mass Comm Department

**JMC 67076 - TEACHING BROADCAST JOURNALISM**

Deals with the base knowledge that a teacher needs to begin teaching broadcast journalism. This includes modules on cultivating student broadcast journalism, project-based instruction, as well as one on legalities and ethics along with production skills. While the primary focus is on teaching technique, class participants are given basic journalism content in order to review, learn and or focus on teaching methods for that same material.

Prerequisites: graduate standing and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Journalism and Mass Comm Department

**JMC 67079 - TEACHING PHOTO EDITING**

Utilization of current photo editing software provides users with powerful tools to acquire, manipulate, and output a variety of images, from fine art to instructional and web graphics. The focus of this course is learning the fundamental operations and controls of industry standard photo editing software and dialogue concerning various issues in teaching and learning photo editing software. Prerequisite: graduate standing and special approval.
2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Journalism and Mass Comm Department

**JMC 67083 - TEACHING NEWS DESIGN**

Provides an introduction to the components of news content and design. This includes type and typography, printing processes, photography, illustration, the thought process in creating a news product and further introductions in the developing field of visual journalism. Shows journalism educators how a student media staff can effectively communicate with readers through visual elements. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Journalism and Mass Comm Department
JMC 67085 - TEACHING PHOTOJOURNALISM

Examines the components of photojournalism and prepares instructors to teach those components to their students. In addition to traditional assignments and projects, instructors and students maintain a weekly dialog. Students gain the following skills necessary to teach their classes: basic operation of a digital camera, essential components of good photography, how to capture images that tell a story, strategies for covering news, features and sporting events as well as portraits and group shots, strategies for organizing and archiving images and ethical practices for capturing images and using them in publication work. Prerequisite: graduate standing and special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Journalism and Mass Comm Department

JMC 67087 - ADVISING YEARBOOK

Students gain contextual information regarding yearbook roles in history and memory along with practical skills for recruitment, staff organization, staffing and production, and incorporating the creation of the yearbook into a classroom setting. Prerequisites: graduate standing and special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Journalism and Mass Comm Department

JMC 68000 - PUBLIC RELATIONS THEORY AND PROCESS

Introduces students to the profession of public relations by exploring both the theories and the processes employed by PR practitioners. Course also explores the history and social role of public relations as well as ethics and social responsibility. Prerequisite: Special approval and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Journalism and Mass Comm Department

JMC 68001 - PUBLIC RELATIONS MANAGEMENT

Perspectives, skills needed to manage an organization's PR function, particularly strategic planning, implementation and evaluation. Emphasis on managerial aspects of negotiating organizational relationships with publics. Prerequisite: JMC 68000 and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

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<th>Description</th>
<th>Prerequisites</th>
<th>Credit Hours</th>
<th>Lecture Hours</th>
<th>Levels: Graduate</th>
<th>Schedule Types: Lecture</th>
</tr>
</thead>
<tbody>
<tr>
<td>JMC 68004</td>
<td>SOCIAL MEDIA AND PUBLIC RELATIONS</td>
<td>Provides an in-depth study of social media and public relations, emphasizing how the two are used by organizations to build stronger relations with consumers, media, analysts, and others. Prerequisites: JMC 68000 and JMC 68001; and JMC graduate student.</td>
<td>3.000 Credit hours 3.000 Lecture hours</td>
<td>3.000</td>
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<td>Graduate</td>
<td>Lecture</td>
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<tr>
<td>JMC 68005</td>
<td>STRATEGIC WRITING AND MESSAGING IN PUBLIC RELATIONS</td>
<td>Focuses on public relations writing and strategic messaging, a critical foundational skill. Course content includes skill building in online channels and across traditional mediums. Prerequisites: JMC 68000 and JMC 68001; and JMC graduate standing.</td>
<td>3.000 Credit hours 3.000 Lecture hours</td>
<td>3.000</td>
<td></td>
<td>Graduate</td>
<td>Lecture</td>
</tr>
<tr>
<td>JMC 68006</td>
<td>VALUES AND ETHICS MANAGEMENT IN PUBLIC RELATIONS</td>
<td>Explores the theory and application of ethics in public relations. Examines case studies, ethics theory, values and management thought. Prerequisite: JMC 68000 and 68001; and journalism and mass communication (JMC) major; and graduate standing.</td>
<td>3.000 Credit hours 3.000 Lecture hours</td>
<td>3.000</td>
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<td>Graduate</td>
<td>Lecture</td>
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<tr>
<td>JMC 68008</td>
<td>PUBLIC RELATIONS MEASUREMENT AND RETURN ON INVESTMENT</td>
<td>Examines the strategic and tactical processes for measuring outcomes in public relations campaigns. Prerequisites: JMC 68000 and 68001; and journalism and mass communication (JMC) major; and graduate standing.</td>
<td>3.000 Credit hours 3.000 Lecture hours</td>
<td>3.000</td>
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<td>Graduate</td>
<td>Lecture</td>
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<tr>
<td>JMC 68009</td>
<td>PUBLIC RELATIONS HISTORY AND THE MODERN WORLD</td>
<td>Examines development of Public Relations as a profession, focusing on the Twentieth Century. Detailed study of historical case studies, campaigns and initiatives. Prerequisites: JMC 68000 and JMC 68001; and JMC graduate student.</td>
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</tbody>
</table>
Journalism and Mass Comm Department

**JMC 68010 - PUBLIC RELATIONS INTERNAL COMMUNICATIONS**

Explores strategies and tactics of internal communications. Includes development of organizational intranets and other employee-focused communications channels with special emphasis on social media to communicate public relations messages. Prerequisites: JMC 68000 and JMC 68001 and journalism and mass communication (JMC) major and graduate standing.

Levels: Graduate  
Schedule Types: Lecture

**JMC 68011 - FINANCIAL ISSUES IN PUBLIC RELATIONS**

Focuses on financial topics related to a career in public relations, particularly the role of communicators in the growing field of investor relations. Prerequisites: JMC 68000 and JMC 68001; and JMC graduate student.

Levels: Graduate  
Schedule Types: Lecture

**JMC 80001 - THEORY OF MASS COMMUNICATION**

Introduction to theory of mass communication with emphasis on the process and effects of mass communication. Prerequisite: doctoral standing.

Levels: Graduate  
Schedule Types: Lecture

**JMC 80004 - CYBERMEDIA LAW**

Investigates how the law affects those who gather information and publish online, including issues relating to blogging, web site hosting, posting and online journalism, along with a basic ability to apply that knowledge in specific situations. Focus is on both existing law and developing public policy. Prerequisite: doctoral standing.

Levels: Graduate  
Schedule Types: Lecture
**JMC 80010 - QUALITATIVE RESEARCH IN JOURNALISM AND MASS COMMUNICATION: DATA COLLECTION**

Designed to develop skills in qualitative data collection in journalism and mass communication with primary focus on human subjects and textual data. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**JMC 80040 - QUALITATIVE RESEARCH METHODS IN JOURNALISM AND MASS COMMUNICATION: DATA ANALYSIS**

Emphasizes the development of skills in the analysis of data collected through qualitative research methods, particularly interviews and ethnographies. Designed to help prepare graduate students who plan to use qualitative methods in their academic or applied research, particularly those who will be adopting these methods for theses or dissertations. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**JMC 80195 - SPECIAL TOPICS IN JOURNALISM AND MASS COMMUNICATION**

(Repeatable for credit) Study of important topics in mass communication. Offered irregularly in response to existing interests and opportunities. Prerequisites: doctoral standing and special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**JMC 90001 - Journalism Test Course**

0.000 TO 1.000 Credit hours

Levels: Undergraduate
Schedule Types: Lecture

**KBA 44080 - STUDIO EXPERIENCE IN FINE ARTS**

(Repeatable for credit) Studio exploration of selected concepts in painting, sculpture, printmaking or photography. Content varies with each section offered. Special course fee $22.00 credit/hour. Prerequisite: special approval.

1.000 TO 6.000 Credit hours
### KBA 45080 - STUDIO EXPERIENCE IN CRAFTS

(Repeatable for credit) Studio exploration of selected concepts in ceramics, enameling glass, jewelry, metals or fiber arts. Content varies with each section offered. Special course fee $25.00: credit hour. Prerequisite: special approval.

- **1.000 TO 6.000 Credit hours**
- **1.000 TO 6.000 Other hours**

### KBA 54080 - STUDIO EXPERIENCE IN FINE ARTS

(Repeatable for credit) Studio exploration of selected concepts in painting, sculpture, printmaking or photography. Content varies with each section offered. Prerequisite: special approval and graduate standing.

- **1.000 TO 6.000 Credit hours**
- **1.000 TO 6.000 Other hours**

### KBA 55080 - STUDIO EXPERIENCE IN CRAFTS

(Repeatable for credit) Studio exploration of selected concepts in ceramics, enameling, glass, jewelry, metals or fiber arts. Content varies with each section offered. Prerequisite: special approval and graduate standing.

- **1.000 TO 6.000 Credit hours**
- **1.000 TO 6.000 Other hours**
KBM 40026 - ACCOMPANYING PROJECTS

(Repeatable for a maximum of 8 credit hours) rotating piano assignment among responsibilities in chamber music rehearsals, chamber music preparation, master classes and instrumental private lessons. Individual responsibilities change weekly. Prerequisite: Audition.
2.000 TO 4.000 Credit hours
2.000 TO 4.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Music Department

KBM 40031 - CHAMBER MUSIC

(Repeatable for a maximum of 8 credit hours) rehearsal, coaching and performance of representative chamber repertoire from the baroque era through the twentieth century. Woodwinds, horn, strings and piano. Intensive daily rehearsal and coaching. Prerequisite: Audition.
1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Music Department

KBM 40032 - ORCHESTRAL REPERTOIRE AND TECHNIQUE

(Repeatable for a maximum of 2 credit hours) study and performance of standard orchestral repertoire and common audition requirements. Technical and interpretive approaches relating specifically to orchestral performance. Woodwinds, horn and strings. Prerequisite: Audition.
1.000 Credit hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Music Department

KBM 40093 - VARIABLE TITLE WORKSHOP IN MUSIC

(Repeatable for credit) Offered for specific professional needs. Emphasis on performance and pedagogical skills. Prerequisite: Permission.
1.000 TO 4.000 Credit hours
4.000 Other hours

Levels: Undergraduate
Schedule Types: Workshop

Music Department

KBM 50026 - ACCOMPANYING PROJECTS

(Repeatable for a maximum of 8 credit hours) Rotating piano assignment among responsibilities in chamber music rehearsals, chamber music preparation, master classes and instrumental private lessons. Individual responsibilities change weekly. Prerequisite: Graduate standing and audition.
2.000 TO 4.000 Credit hours
KBM 50031 - CHAMBER MUSIC

(Repeateable for credit) Rehearsal, coaching and performance of representative chamber repertoire from the Baroque Era through the twentieth century. Woodwinds, horn, strings and piano. Intensive daily rehearsal and coaching. Prerequisite: Graduate standing and audition.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Music Department

KBM 50032 - ORCHESTRAL REPERTOIRE AND TECHNIQUE

(Repeatable for a maximum of 2 credit hours) Study and performance of standard orchestral repertoire and common audition requirements. Technical and interpretive approaches relating specifically to orchestral performance. Woodwinds, horn and strings. Prerequisite: Graduate standing and audition.

1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Music Department

KBM 50093 - VARIABLE TITLE WORKSHOP IN MUSIC

(Repeatable for credit) Offered for specific professional needs. Emphasis on performance and pedagogical skills. Prerequisite: Graduate standing and special approval.

1.000 TO 4.000 Credit hours
4.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Music Department

KBM 70026 - ACCOMPANYING PROJECTS

(Repeatable for a maximum of 8 credit hours) Rotating piano assignment among responsibilities in chamber music rehearsals, chamber music preparation, master classes and instrumental private lessons. Individual responsibilities change weekly. Prerequisite: Doctoral standing and special approval.

2.000 TO 4.000 Credit hours
2.000 TO 4.000 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Music Department
KBM 70031 - CHAMBER MUSIC

(Repeatable for credit) Rehearsal, coaching and performance of representative chamber repertoire from the Baroque era through the twentieth century. Woodwinds, brass, strings and piano. Intensive daily rehearsal and coaching. Prerequisite: Doctoral standing and special approval.
1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Music Department

KBM 70032 - ORCHESTRAL REPERTOIRE AND TECHNIQUE

(Repeatable for a maximum of 2 credit hours) Study and performance of standard orchestral repertoire and common audition requirements. Technical and interpretive approaches relating specifically to orchestral performance. Woodwinds, horn and strings. Prerequisite: Doctoral standing and special approval.
1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Music Department

KBM 70093 - VARIABLE TITLE WORKSHOP IN MUSIC

(Repeatable for credit) Offered for specific professional needs. Emphasis on performance and pedagogical skills. Prerequisite: Doctoral standing and special approval.
1.000 TO 4.000 Credit hours
4.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Music Department

KBT 22092 - PRACTICUM I:DESIGN/TECHNOLOGY

(Repeatable for a maximum of 12 credit hours) Practical experience in theatre production under faculty supervision. Available for lower division students only. Prerequisite: Freshman and sophomore standing only.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Theatre and Dance Department

Course Attributes:
Experiential Learning Requirem
(repeatable for a total of 12 hours) practical experience in theatre performance under faculty supervision. Available for lower division students only. Repeatable for a total of 12 hours. Prerequisite: Freshman and sophomore standing only.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Theatre and Dance Department

Course Attributes:
Experiential Learning Requirem

**KBT 41096 - INDIVIDUAL STUDY: THEATRE**

(repeatable for a total of 12 hours) selected research topics in theatre. Prerequisite: Permission.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Theatre and Dance Department

**KBT 41992 - THEATRE PRODUCTION INTERNSHIP**

(Repeatable for a maximum of 12 credit hours) Intensive advanced training in practical aspects of production. Periodic seminars, laboratory sessions and performance in Porthouse Theatre Company. Prerequisite: Junior standing and special approval.
1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Theatre and Dance Department

Course Attributes:
Experiential Learning Requirem

**KBT 42092 - PRACTICUM II: DESIGN TECH**

(Repeatable for a maximum of 12 credit hours) Advanced practical experience in theatre production under faculty supervision. Available for upper division students only. Prerequisite: Junior and senior standing only.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Theatre and Dance Department

Course Attributes:
Experiential Learning Requirem

**KBT 42192 - PRACTICUM II: PERFORMANCE**
(Repeatable for a maximum of 12 credit hours) Advanced practical experience in theatre performance under faculty supervision. Available for upper division students only. Prerequisite: Junior and senior standing.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Theatre and Dance Department

Course Attributes:
Experiential Learning Requirem

**KBT 60199 - M.F.A.. THESIS**

(Repeatable for credit) Students must register for course during the semester of their MFA thesis project. Prerequisite: Special approval of adviser. Graduate standing.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Theatre and Dance Department

**KBT 60992 - PROFESSIONAL THEATRE INTERNSHIP I**

(Cross-listed with THEA 60992) (Repeatable once for credit) Intensive advanced training in practical aspects of production. Periodic seminars, laboratory sessions and performance in the Porthouse Theatre Company. Prerequisite: graduate standing and special approval.

1.000 OR 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Theatre and Dance Department

**KBT 61096 - INDIVIDUAL INVESTIGATION: THEATRE AND DRAMA**

(Repeatable for a maximum of 6 credit hours) Independent study of an area or problem approved by divisional graduate coordinator in consultation with project director. Prerequisite: Special approval and graduate standing.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Theatre and Dance Department

**KBT 61992 - PROFESSIONAL THEATRE INTERNSHIP II**

Intensive advanced training in practical aspects of production. Periodic seminars, laboratory sessions and performance in Porthouse Theatre Company. Satisfactory/unsatisfactory (S/U) graded. In-progress (IP) mark permissible. Prerequisite: special approval and graduate standing.
Levels: Graduate
Schedule Types: Practicum or Internship

Theatre and Dance Department

**KBT 62092 - PRACTICUM:DESIGN/TECHNOLOGY**

(Repeatable for credit) Practical experience for the graduate student in theatre design and technology under faculty supervision. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Theatre and Dance Department

**KBT 62192 - PRACTICUM:PERFORMANCE**

(Repeatable for a maximum of 12 credit hours; cross-listed with THEA 62192) Practical experience for the graduate student in theatre performance under faculty supervision. SU grading, IP permissible. Prerequisite: special approval and graduate standing.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Theatre and Dance Department

**KBT 62992 - THEATRE PRODUCTION INTERNSHIP**

(Repeatable for a maximum of 12 credit hours) Intensive advanced training in practical aspects of production. Periodic seminars, laboratory sessions and performance in Porthouse Theatre Company. Prerequisite: Special approval of adviser. Graduate standing.

1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Theatre and Dance Department

**KBT 72992 - THEATRE PRODUCTION INTERNSHIP**

(Repeatable for a maximum of 12 credit hours) Intensive advanced training in practical aspects of production. Periodic seminars, laboratory sessions and performance in Porthouse Theatre Company. Prerequisite: Special approval of adviser and doctoral standing.

1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship
**LARC 50100 - DESIGN VISUALIZATION**

Demonstration and application of computer software that aids the communication skill of a designer. Prerequisites: landscape architecture (LARC) major and graduate standing.

3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Architecture Department

**LARC 50101 - LANDSCAPE ARCHITECTURE STUDIO I**

Garden Typologies: Beginning studio focused on garden typologies including exploration of small scale design elements and site, with private spaces emphasis. Prerequisites: landscape architecture (LARC) major and graduate standing.

6.000 Credit hours  
12.000 Other hours

Levels: Graduate  
Schedule Types: Studio

Architecture Department

**LARC 50102 - LANDSCAPE ARCHITECTURE STUDIO II**

Neighborhoods: Small scale community design that connects spaces to form neighborhoods and establishes linkages to larger communities. Prerequisites: LARC 50101; and landscape architecture (LARC) major; and graduate standing.

6.000 Credit hours  
12.000 Other hours

Levels: Graduate  
Schedule Types: Studio

Architecture Department

**LARC 60103 - LANDSCAPE ARCHITECTURE STUDIO III**

Systems and Infrastructure: Natural and hybrid ecological design studio with exploration of the role of systems and the integration into suburban and urban infrastructures with a focus on ecological function and services. Prerequisites: LARC 50102; landscape architecture (LARC) major; and graduate standing.

6.000 Credit hours  
12.000 Other hours

Levels: Graduate  
Schedule Types: Studio

Architecture Department

**LARC 60104 - LANDSCAPE ARCHITECTURE STUDIO IV**

Urban Form: Urban design studio at multiple scales to understand the diversity of a city with an emphasis on
the relationships of architecture forms, systems, infrastructures, and landscape architecture functions. Prerequisites: LARC 60103; and landscape architecture (LARC) major; and graduate standing.
6.000 Credit hours
12.000 Other hours

Levels: Graduate
Schedule Types: Studio

Architecture Department

LARC 60105 - LANDSCAPE ARCHITECTURE STUDIO V

Interdisciplinary or Capstone Studio: Option of a studio with graduate CUDC architecture and urban design students or development of an individual studio project with a selected faculty advisor. Prerequisites: LARC 60104; and graduate standing.
6.000 Credit hours
12.000 Other hours

Levels: Graduate
Schedule Types: Studio

Architecture Department

LARC 60106 - LANDSCAPE ARCHITECTURE STUDIO VI

Interdisciplinary or Capstone Studio 2: Option of a studio with graduate CUDC architecture and urban design students or develop individual studio project and select faculty advisor. Prerequisites: LARC 60105 and graduate standing.
6.000 Credit hours
12.000 Other hours

Levels: Graduate
Schedule Types: Studio

Architecture Department

LARC 60111 - LANDSCAPE HISTORY AND THEORY

Presentation of important landscape events, people and places to document and explain the factors that influenced the built and natural environments, with emphasis on cultural theories of design and their influence upon the built and natural environments. Prerequisites: landscape architecture (LARC) major and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Architecture Department

LARC 60301 - SITE ENGINEERING

Examination and application of typical engineering strategies for small and large scale landscape projects with a concentration on sustainable practices. Prerequisites: landscape architecture (LARC) major and graduate standing.
3.000 Credit hours
3.000 Lecture hours
LARC 60401 - LANDSCAPE ARCHITECTURE CONSTRUCTION METHODS

Discussion and application of small and large scale construction techniques that explore materials, construction assemblies, construction methods and construction documentation including investigations of lifecycles and maintenance of design decisions. Prerequisites: landscape architecture (LARC) major and graduate standing.

3.00 Credit hours
3.00 Lecture hours

LARC 60601 - PLANTS AND PLANTED FORM

Plant identification with emphasis on individual plants and plant communities as relate to the built environment; integrated into the application of formal and informal design strategies for landscape planning that explores individual plants, plant communities and ecosystems. Further emphasis is placed on the relationships of architecture and interior design to landscape architecture. Prerequisite: landscape architecture (LARC) major and graduate standing.

3.00 Credit hours
3.00 Lecture hours

LARC 60602 - URBAN ECOLOGICAL SYSTEMS

Study of how ecological systems in highly anthropocentric environments provide necessary ecological services. Emphasized is the role that water plays in activating the supporting, provisioning, regulating and cultural ecosystem services required for human well-being. Prerequisites: landscape architecture (LARC) major and graduate standing.

3.00 Credit hours
3.00 Lecture hours

LARC 60922 - METHODS OF INQUIRY IN ARCHITECTURAL STUDIES

(Cross-listed with AED 60922 + ARCH 60922) Provides comprehensive coverage of design inquiry techniques including qualitative and quantitative research methods and critical thinking skills to help students better conduct and understand research. Prerequisites: landscape architecture (LARC) major and graduate standing.

2.00 Credit hours
2.00 Lecture hours
LARC 60923 - EMPIRICAL RESEARCH IN ENVIRONMENTAL DESIGN
(Cross-listed with AED 60923) Introduces student to faculty-directed research in a field within the environmental design domain. Includes lectures by research faculty, readings from primary and review literature, and regular discussions among students, faculty and other research associates working under the direction of a principal investigator. Prerequisite: landscape architecture (LARC) major and graduate standing. Corequisite: LARC 60922.
1.000 Credit hours
1.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Architecture Department

LARC 65003 - PROFESSIONAL PRACTICE: LEADERSHIP, ETHICS AND OFFICE MANAGEMENT
Discusses issues of professional leadership and examines architectural office structures. Management approaches, professional registration and practice, use of consulting engineers and financial management of an office in the profession as business. Prerequisite: landscape architecture (LARC) major and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Architecture Department

LAT 16201 - ELEMENTARY LATIN I
An introduction to the classical Latin language in the context of ancient Roman culture. Prerequisite: None.
4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

LAT 16202 - ELEMENTARY LATIN II
A continuation of the introduction to the classical Latin language in the context of ancient Roman culture. Prerequisite: LAT 16201.
4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

LAT 26201 - INTERMEDIATE LATIN I:READINGS
Excerpts from Latin literature with emphasis on translation into English. Prerequisite: LAT 16202.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**LAT 26202 - INTERMEDIATE LATIN II: READINGS**

Excerpts from Latin literature with emphasis on both prose (e.g., Caesar, Cicero) and poetry (Vergil, Catullus).
Prerequisite: LAT 26201.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**LAT 36170 - CICERO**

Readings in Cicero's orations and philosophical works, stressing rhetorical techniques. Consideration of Cicero's role in Roman history and his place in Latin literature. Prerequisite: LAT 26202.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**LAT 36171 - VERGIL**

A study of the Latin text of Vergil's Aeneid stressing the poetry of the language. Consideration of entire poem and its impact on Latin literature. Prerequisite: LAT 26202.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**LAT 40393 - VARIABLE TITLE WORKSHOP**

(Repeatable for credit) Workshops individually designed to provide instruction and training in latin studies. Su graded. Prerequisite: Departmental permission.
1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Undergraduate
Schedule Types: Workshop

Modern-Classical Lang Studies Department
LAT 46095 - SELECTED TOPICS IN LATIN
(Repeatable for credit) Topic announced in the schedule of classes. Prerequisite: LAT 36170 or LAT 37171.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

LAT 46096 - INDIVIDUAL INVESTIGATION
(Repeatable for credit) Investigation of problems in Latin literature or linguistics. Prerequisite: minimum 3 hours of coursework at the 40000-level and departmental special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Modern-Classical Lang Studies Department

LAT 46211 - LATIN PROSE COMPOSITION
Analysis of prose models; writing of connected Latin prose with attention to the Latin idiom. Prerequisite: LAT 36170 or LAT 36171.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

LAT 46373 - ADVANCED PROSE AUTHORS
(Repeatable for credit) Consideration of a major prose author such as Pliny the Younger, Livy, Tacitus or Suetonius. Prerequisite: LAT 36170 or LAT 36171.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

LAT 46374 - JUVENAL'S SATIRES AND MARTIAL'S EPIGRAMS
General consideration of Roman satire. Prerequisite: LAT 36170 or LAT 36171.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
LAT 46375 - LUCRETIUS

De Rerum Natura. Prerequisite: LAT 36170 or LAT 36171.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

LAT 50393 - VARIABLE TITLE WORKSHOP IN LATIN

(Repeatable for credit) Workshops individually designed to provide instruction and training in Latin studies. Prerequisite: Special approval and graduate standing.
1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Modern-Classical Lang Studies Department

LAT 56095 - SELECTED TOPICS IN LATIN

(Repeatable for a maximum of 15 credit hours) Topic to be announced in semester schedule of classes. Prerequisite: LAT 37171 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

LAT 56374 - JUVENAL'S SATIRES AND MARTIAL'S EPIGRAMS

General consideration of Roman satire. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

LAT 56375 - LUCRETIUS

De Rerum Natura. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
Modern-Classical Lang Studies Department

**LAT 66199 - THESIS I**

Thesis students must register for a total of 6 hours, 2 to 6 hours in single semester distributed over several semesters if desired. Prerequisite: Graduate standing.
2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Modern-Classical Lang Studies Department

**LAT 66211 - ADVANCED PROSE COMPOSITION**

More thorough training in composition where need is established. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**LAT 66299 - THESIS II**

Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: LAT 66199 and graduate standing.
2.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Modern-Classical Lang Studies Department

**LAT 66372 - LYRIC POETRY**

Readings from the poetry of Catullus and Horace, with considerations of the general genre of lyric; a comparison of style and content of the two poets. Study of Greek and Latin precedents in the genre. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**LAT 66373 - ADVANCED PROSE AUTHORS**

A consideration of selected major prose writers such as Pliny the Younger, Livy, Tacitus, Suetonius. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours
Modern-Classical Lang Studies Department

LAT 66391 - SEMINAR IN CLASSICAL LITERATURE

(Repeatable for credit) Topics to be announced. Prerequisite: Graduate standing.
2.000 OR 3.000 Credit hours
2.000 OR 3.000 Other hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

LAT 66398 - RESEARCH

(Repeatable for credit) Research or individual investigation for master's level graduate students. Credits earned applied toward degree requirements if department approves. Prerequisite: Special approval and graduate standing.
1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Modern-Classical Lang Studies Department

LCDE 37410 - INTRODUCTION TO DISPLAYS AND LIQUID CRYSTAL ELECTRO-OPTICAL DEVICE TECHNOLOGY

How displays and other electro-optical devices work. The science behind these devices. The principles of electro-optical devices, and the challenges to be met by next generation devices. Hands on labs focus on relevant applications (common LCDs, Bistable Cholesteric displays, Guest Host Devices, Tunable Optical Filters, 3D displays). Prerequisites: PHY 23101 and PHY 23102, CHEM 10061 and CHEM 10063, MATH 12002 and MATH 12003
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Applied Eng/Sustainability/Tech Department

LCDE 47410 - INTRODUCTION TO DISPLAY MATERIALS

Materials used in optical displays and devices. It includes an introduction to liquid crystal phases, structure-physical property relationships (dielectric anisotropy, optical birefringence, viscoelastic, switching voltage, etc.) among liquid crystals, polymers, alignment materials, optical films and photolithography. Prerequisite: PHY 23101, and PHY 23102, CHEM 10061 and CHEM 10063, and MATH 12002 and MATH 12003
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
LCDE 47450 - CLEANROOM TECHNIQUES AND LIQUID CRYSTAL DEVICE FABRICATION

Processes and production methods used for liquid crystal devices. Merges the motivation for a process (what it needs to do) with the available techniques (particular processes) to allow students to be able to select the best production method and processes for a particular device. The course makes extensive use of the production equipment available at the LCI. Prerequisites: MATH 12002 and MATH 12003; CHEM 10060 and CHEM 10063; PHY 23101 and PHY 23102.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

LCDE 47560 - FLAT PANEL DISPLAYS: MANUFACTURING, SCIENCE AND TECHNOLOGY

The fundamental of sciences behind each display manufacturing technology: LCDs, OLEDs and FEDs. A comparative analysis of the different displays and manufacturing technologies in which detailed overviews of each technology are linked together so as to provide a comprehensive reference for students and display engineers, alike. Prerequisites: PHY 23101 and PHY 23102; CHEM 10061 and CHEM 10063, and MATH 12002 and MATH 12003; and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

LIB 10010 - INFORMATION FLUENCY FOR COLLEGE SUCCESS

(Cross-listed with LIS 10010) Teaches information and technology skills critical to college success, enabling students to become information fluent--able to find and evaluate information in a variety of contexts and formats, using a variety of technologies, to achieve specific objectives in effective and socially responsible ways. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

University Libraries Department

LIB 30010 - INFORMATION FLUENCY IN THE WORKPLACE AND BEYOND

(Cross-listed with LIS 30010) Teaches information access, technology and media literacy skills, which enables students to become, not only information literate, but also information fluent-able to move seamlessly among multiple information sources and technologies resources to fill their informational needs, whether in the classroom or the workplace. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours
LIS 10010 - INFORMATION FLUENCY

(Cross-listed with LIB 10010) Teaches information and technology skills critical to college success, enabling students to become information fluent—able to find and evaluate information in a variety of contexts and formats, using a variety of technologies, to achieve specific objectives in effective and socially responsible ways. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

LIS 30010 - INFORMATION FLUENCY IN THE WORKPLACE AND BEYOND

(Cross-listed with LIB 30010) Teaches information access, technology, and media literacy skills which enables student to become, not only information literate, but also information fluent - able to move seamlessly among multiple information sources and technologies resources to fill their informational needs, whether in the classroom or the workplace. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

LIS 40655 - COPYRIGHT: UNDERSTANDING USER RIGHTS AND RESPONSIBILITIES

Exploration of advanced copyright topics such as mass digitization, creative arts and other issues in fair use, library, archive and educational uses including the TEACH Act, digital first sale rights, Digital Millennium Copyright Act, and an introduction to copyright reform. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

LIS 40656 - LICENSING OF INFORMATION PRODUCTS AND SERVICES

Topics related to licensing of information products and services including online contract formation, software licenses (End User License Agreements), database and website terms of service, detailed understanding of common terms and conditions in license agreements and an introduction to music licensing and Creative Commons licensing. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours
LIS 40693 - VARIABLE TITLE WORKSHOP IN LIBRARY AND INFORMATION SCIENCE

(Repeatable for credit) Intensive examination of special topics of interest. Prerequisite: Junior or senior standing and special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Workshop

Library and Information Sci Department

LIS 41095 - SELECTED TOPICS IN LIBRARY SCIENCE

(Repeatable for credit) Topics will be announced in schedule of classes. Offered irregularly as resources and opportunities permit. Prerequisite: Permission.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Library and Information Sci Department

LIS 50693 - VARIABLE TITLE WORKSHOP-LIBRARY AND INFORMATION SCIENCE

(Repeatable for credit) Maximum workshop credit accepted for MLIS degree is 4 semester hours. Intensive examination of special topics of interest to practicing librarians. Prerequisite: Graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Library and Information Sci Department

LIS 60000 - TOOLS FOR MASTER OF LIBRARY AND INFORMATION SCIENCE SUCCESS

Provides an overview of the MLIS program and LIS professions. Teaches basic social, communication, and technology skills to succeed in the MLIS program and beyond. Prerequisite: graduate standing.
1.000 Credit hours
1.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

LIS 60001 - ACCESS TO INFORMATION

Examination of information access issues. Topics include discussion of information needs, use of information sources and information access services. Prerequisite: Graduate standing. This course is not open to students in
non-degree programs.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

**LIS 60002 - ORGANIZATION OF INFORMATION**

Introduction to the theory and practice of organizing information in various information environments. Familiarity with principles, standards, tools and current systems relating to organization of information. Prerequisite: Graduate standing. This course is not open to students in non-degree programs.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

**LIS 60003 - INFORMATION TECHNOLOGY FOR LIBRARY AND INFORMATION PROFESSIONALS**

Provides basic information technology concepts and skills necessary for library and information professionals. Topics include computer hardware and software basics; operating systems; file management; software installation and configuration; basic PC applications; information systems concepts, development and evaluation; search skills; Internet and the Web concepts, tools and applications; emerging technologies and skills. Prerequisite: Graduate standing. This course is not open to students in non-degree programs.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

**LIS 60092 - CULMINATING EXPERIENCE INTERNSHIP IN LIBRARY AND INFORMATION SCIENCE**

Under the advisement of a faculty member, students complete a professional-level internship that serves as a culminating experience for the M.L.I.S. degree. A minimum GPA of 3.000 is required for registration in this course. Prerequisites: LIS 60000 and 60001 and 60002 and 60003 and 60600 and 60610; and 24 credit hours completed in the MLIS program; special approval; and graduate standing.
3.000 Credit hours
10.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Library and Information Sci Department

**LIS 60098 - CULMINATING EXPERIENCE RESEARCH PAPER/PROJECT IN LIBRARY AND INFORMATION SCIENCE**

Under the advisement of a faculty member, students complete a research paper or a research project that serves as a culminating experience for the M.L.I.S. degree. A minimum GPA of 3.000 is required for registration in this course. Prerequisites: LIS 60000 and 60001 and 60002 and 60003 and 60600 and and 60604 and
6060; and 24 credit hours completed in the MLIS program; special approval; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Master's Project

Library and Information Sci Department

**LIS 60199 - THESIS I**

Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester, distributed over several semesters if desired. Students must have a minimum cumulative GPA of 3.000 to be eligible for this course. In order to qualify for graduation, graduate students must have a 3.000 cumulative GPA in all graduate courses attempted. Prerequisites: LIS 60001; LIS 60002, LIS 60003, LIS 60600, LIS 60610, and LIS 60604; 24 hours of LIS coursework; special approval; and graduate standing.

2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Library and Information Sci Department

**LIS 60299 - THESIS II**

Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: LIS 60199 and graduate standing.

2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Library and Information Sci Department

**LIS 60600 - FOUNDATIONS OF LIBRARY AND INFORMATION SCIENCE**

Explores the social, philosophical and historical foundations of libraries, librarianship and other information institutions and LIS-related professions. Topics include the impact of technology on society, policy-making and the economy; an overview of types of libraries and services, locally and globally; the nature of information infrastructures; and access to and organization of information. Prerequisite: Graduate standing. This course is not open to students in non-degree programs.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

**LIS 60601 - INFORMATION SOURCES AND REFERENCE SERVICES**

Introduction to use and evaluation of basic sources of reference information, computerized and noncomputerized; reference interview and question-negotiation techniques; administration of reference and information services. Prerequisite: LIS 60001 or 80001; and graduate standing.

3.000 Credit hours
LIS 60602 - CATALOGING AND CLASSIFICATION I

Principles of cataloging with emphasis on Dewey Decimal and Library of Congress Classification systems, Library of Congress subject headings, online cataloging and administration. Prerequisite: LIS 60002 or 80002; and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

LIS 60603 - CATALOGING AND CLASSIFICATION II

Theory and practice of providing description and access to library materials. Examples and assignments will be taken from all types of library materials print and nonprint. Prerequisite: LIS 60002 or 80002; and LIS 60602 or 80602; and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

LIS 60604 - RESEARCH METHODS FOR LIBRARIES AND INFORMATION CENTERS

Focuses on survey and qualitative research methods applicable to libraries and information centers. Explores research techniques, data analysis, proposal development and ethical issues. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

LIS 60607 - SCHOOL LIBRARY MANAGEMENT

(Cross-listed with LIS 80607) Management of school libraries. Prerequisite: Graduate standing and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department
LIS 60608 - THE PUBLIC LIBRARY

Analysis of the historical, sociopolitical, technological, fiscal and organizational factors affecting American public librarianship. Includes evaluation, planning, networking, funding, automation, buildings and censorship. Prerequisite: LIS 60600 or 80600; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

LIS 60609 - MARKETING THE LIBRARY

Introduction to the theory and practice of marketing the library. Topics include the evaluation of customer needs, the marketing mix, merchandising, public relations, relationship marketing, and the design and development of a marketing plan for libraries. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

LIS 60610 - MANAGEMENT OF LIBRARIES AND INFORMATION CENTERS

Identifies and discusses management functions of libraries and related organizations; includes planning and decision-making, human resource management, measurement and evaluation, fiscal and project management. Prerequisite: Graduate standing. This course is not open to students in non-degree programs.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

LIS 60611 - GOVERNMENT INFORMATION SOURCES AND SERVICES

Library treatment of U.S. government publications with brief attention to municipal and state publications, and major documents of Great Britain, Canada and the United Nations. Will not include materials covered in LIS 6/80601. Prerequisite: LIS 60001 or 80001; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

LIS 60612 - LIBRARY MATERIALS AND SERVICES FOR ADULTS

Recent investigations of group and individual reading habits; advisory services in various types of libraries; library programs for adult education; projection of library materials toward community. Prerequisite: Graduate
LIS 60613 - INFORMATION NEEDS, SEEKING AND USE
Surveys theories related to people's interactions with information. The theories covered include information context and situation, information needs, information seeking, exploration of information sources, communication and collaboration in the information search process, information use, and other interactions among people, information, and information systems. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

LIS 60614 - SELECTION AND ACQUISITION OF LIBRARY MATERIALS
Factors affecting selection in public, academic, school and special libraries (reading habits, censorship, publishing trends) community analysis, selection policies and process; selection sources; acquisitions. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

LIS 60615 - THE ACADEMIC LIBRARY
Governance, administration and services of libraries in institutions of postsecondary education. Prerequisite: LIS 60600 or 80600; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

LIS 60616 - THE SPECIAL LIBRARY
The formation of special libraries. Libraries in special subject fields and in organizations: corporations, government agencies, hospitals, etc. Internal organization and administration collection development and services. Prerequisite: LIS 60600 or 80600; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
**LIS 60618 - INFORMATION LITERACY INITIATIVES AND INSTRUCTION**

(Slashed with LIS 80618) Invites information professionals from any library point-of-view (school, public, academic, archives, special, etc.). Topics include definitions and history of information literacy standards and objectives, developing an information literacy agenda, library pedagogy and learning styles, information literacy needs assessment, program development and delivery, and experiential learning in library communities. Prerequisites: LIS 60001 or LIS 80001; and LIS 60600 or LIS 80600; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**LIS 60619 - LEGAL INFORMATION SOURCES AND SERVICES**

(Cross-listed with AS 43001 and AS 53001 and AS 73001 and LIS 80619) Fundamentals of legal research methods and major sources of American legal literature in print and electronic formats as used in other disciplines. Students learn how to formulate a research plan based on legal analysis of issues using relevant, authoritative legal resources. Prerequisites: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**LIS 60620 - HEALTH INFORMATION RESOURCES**

(Cross-listed with LIS 80620) Identifies print and electronic sources of health information with emphasis on electronic sources. Medical patient and consumer health information is presented. This course is designed for the health educator, librarian, nurse or other health care professional. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**LIS 60621 - SOCIAL SCIENCES INFORMATION SOURCES AND SERVICES**

Content, bibliographic structure and communication patterns in the social sciences with emphasis on information sources and services in sociology, history, education, political science, anthropology, related disciplines. Prerequisites: LIS 60001 or 80001; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
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<th>Course Code</th>
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<tr>
<td>LIS 60622</td>
<td>SCIENCE/TECHNOLOGY INFORMATION SOURCES AND SERVICES</td>
<td>Content, bibliographic structure and communication patterns in the sciences with emphasis on pure and applied fields, e.g., mathematics, biology, physics. Prerequisite: LIS 60001 or 80001; and graduate standing.</td>
<td>3.000 Credit hours 3.000 Lecture hours</td>
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<td>LIS 60623</td>
<td>BUSINESS/FINANCE INFORMATION SOURCES AND SERVICES</td>
<td>Historical development; applications to current business, labor, governmental, educational and sociological information needs; interpretation to executives and others; printed sources and databases. Prerequisite: LIS 60001 or 80001; and graduate standing.</td>
<td>3.000 Credit hours 3.000 Lecture hours</td>
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<td>LIS 60624</td>
<td>CATALOGING FOR SCHOOL LIBRARIES</td>
<td>(Cross-listed with LIS 80624) Organization and administration of print and non-print materials in school libraries. Application of appropriate descriptive cataloging rules, subject headings and classification policies for children's, teen and educational materials K-12. Prerequisite: Graduate standing and special approval.</td>
<td>3.000 Credit hours 3.000 Lecture hours</td>
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<td>LIS 60625</td>
<td>LIBRARY MATERIALS AND SERVICES FOR YOUNG CHILDREN</td>
<td>(Cross-listed with LIS 80625) Selection and utilization of materials in relation to needs, abilities and interests of the young child. Prerequisite: Graduate standing.</td>
<td>3.000 Credit hours 3.000 Lecture hours</td>
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<tr>
<td>LIS 60626</td>
<td>LIBRARY MATERIALS AND SERVICES TO TEENS</td>
<td>(Cross-listed with LIS 80626) Selection and utilization of books and materials in relation to needs, abilities and interests of teens. Prerequisite: Graduate standing.</td>
<td>3.000 Credit hours 3.000 Lecture hours</td>
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### LIS 60627 - ART AND STORY: THE STUDY OF CHILDREN'S PICTUREBOOKS

(Cross-listed with LIS 80627) Engages students in the study and application of art and story in children’s picturebooks through the lenses of book history, publishing studies, children’s book illustration and storytelling, visual literacy and visual storytelling. Readers of picturebooks are studied as well, from professional readers, like librarians and book reviewers, to picturebook consumers. Prerequisite: graduate standing.

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Levels: Graduate  
Schedule Types: Lecture

Library and Information Sci Department

### LIS 60628 - HUMANITIES INFORMATION SOURCES AND SERVICES

Philosophy, literature, fine and performing arts. Prerequisite: LIS 60001 or 80001; and graduate standing.

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Levels: Graduate  
Schedule Types: Lecture

Library and Information Sci Department

### LIS 60629 - LIBRARY MATERIALS AND SERVICES FOR SCHOOL-AGE CHILDREN

Selection and utilization of materials in relation to needs, abilities and interests of school age children. Prerequisite: Graduate standing.

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Levels: Graduate  
Schedule Types: Lecture

Library and Information Sci Department

### LIS 60630 - REFERENCE SOURCES AND SERVICES FOR YOUTH

Organization and administration of information sources and information services for children and young adults (K-12). Evaluation selection and utilization of print and electronic sources. Prerequisite: graduate standing and special approval.

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Levels: Graduate  
Schedule Types: Lecture

Library and Information Sci Department
**LIS 60631 - INTRODUCTION TO DIGITAL PRESERVATION**

Approaches and standards for preserving and maintaining access to digitized and born-digital text, images, data, audiovisual information, and web resources. Topics include longevity of digital media, selection for preservation; formats and strategies for preservation; preservation metadata; integrity and authenticity of digital materials; establishment and certification of trustworthy digital repositories; risk management; and policy development. Prerequisites: LIS 60002 or 80002; and graduate standing.

3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Library and Information Sci Department

**LIS 60633 - DIGITAL CURATION**

Management and preservation of digital objects and records throughout their lifecycle. Essential technologies and standards for building and maintaining robust, trusted digital repositories. Emphasizes the use and reuse of scholarly data, business and government records, cultural heritage materials, and other digital objects to create resources supporting communities of practice in their work. Prerequisites: LIS 60631 or 60638 or 80631 or 80638; and graduate standing.

3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Library and Information Sci Department

**LIS 60636 - KNOWLEDGE ORGANIZATION STRUCTURES, SYSTEMS AND SERVICES**

(Slashed with LIS 80636, Cross-listed with IAKM 60002 and IAKM 80002) Introduction to various types of knowledge organization systems, services, and structures (KOS) used in the networked environment. Understanding of the functional philosophical, logical, and linguistic fundamentals of KOS. Explanation of design options, features of KOS, and procedures to be used in the thesaurus, taxonomy and ontology construction. Prerequisite: Graduate standing.

3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Library and Information Sci Department

**LIS 60637 - METADATA ARCHITECTURE AND IMPLEMENTATION**

(Slashed with LIS 80637) Principles and theories of metadata development in the digital environment. Main focus is given to the design and applications of metadata schemas for distinct domains and information communities, issues in metadat interoperability, vocabulary control, quality control and evaluation. examination of international standards, activities and projects with the use of case study approach. Prerequisites: LIS 60002 or LIS 80002 or IAKM 60002 or IAKM 80002; and graduate standing.

3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate
**LIS 60638 - DIGITAL LIBRARIES**

Issues related to the development and maintenance of digital libraries, including technology, collection development and management, project management, digital preservation, user-centered design, public services, rights management and funding. Prerequisite: LIS 60003 or LIS 80003; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

**LIS 60639 - IMPLEMENTATION OF DIGITAL LIBRARIES**

Explores issues related to implementation of digital libraries and provides hands-on experience for student to build digital library prototypes (small-scale) with open source software. Emphasis is on design and implementation of key digital library functions, including building digital collections, defining and creating metadata, indexing, browsing and retrieval, customizing interface, implementing services, encoding and transforming for data exchange, and testing the usability and effectiveness. Prerequisite: LIS 60003 or 80003; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

**LIS 60640 - LIBRARY AUTOMATION**

Analysis, design and selection of automated library systems. Considers system analysis and requirements, networking technologies, database management systems, multimedia and hypermedia, and client-server computing. Also, proposals to vendors, contract negotiation, implementation, staffing, training, system maintenance and evaluation. Prerequisite: LIS 60002 or 80002; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

**LIS 60641 - INFORMATION STORAGE AND RETRIEVAL SYSTEMS**

Fundamentals of information retrieval models and methods, including information storage structures, full-text indexing, structured indexes, search engines and web retrieval, human-computer interaction, and the user’s experience, system performance and evaluation. Prerequisites: LIS 60003 or LIS 80003; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
LIS 60643 - ONLINE INFORMATION SYSTEMS

Use of information technologies to search for and retrieve electronic information, primarily through the Internet. Analysis of database structures and electronic records; search principles and heuristics; database system producers; system interfaces; and evaluation of results. Prerequisite: LIS 60001 or 80001; and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

LIS 60644 - INFORMATION SCIENCE

Focal areas of information science: information retrieval systems, bibliometrics, citation analysis, systems analysis and evaluation, information technologies, information theory, information architecture, knowledge management and user experience. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

LIS 60645 - DATABASE SYSTEMS

Characteristics and concepts of database systems; different types of database models; conceptual database design and implementation; the relational database model and its application in practice: key issues, principles, and techniques; current database technologies. Prerequisites: LIS 60003 or 80003; and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

LIS 60647 - NETWORK AND SOFTWARE RESOURCES FOR INFORMATION SYSTEMS

Study, use and evaluation of current and emerging information technologies; network and software resources for libraries and information centers, including network analysis and management, standards and protocols, and client-server technologies; and techniques for accessing and evaluating such technologies and resources. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
LIS 60648 - WEB SITE DEVELOPMENT, DESIGN AND MANAGEMENT

Students significantly advance both their theoretical knowledge and practical skills by developing and implementing a comprehensive web content strategy. Focus is on developing and maintaining website content, organizing and presenting content, and acquiring skill in the use of web technologies needed by content managers to publish, manage, and disseminate content on the web and in the mobile environment. Prerequisite: LIS 60003 or LIS 80003; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

LIS 60649 - INDEXING AND ABSTRACTING

Principles and methods of manual and computerized indexing and abstracting applied to i&a databases, back of book indexes, website indexes and sitemaps. Techniques of constructing indexing languages using international standards. Theory and practice of index design for specific formats and subjects. Automation and i&a services in networked environments. Prerequisite: LIS 60002 or 80002; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

LIS 60650 - INFORMATION POLICY

Political, economic, cultural and legal issues regarding the production, distribution and use of information (print, electronic and Web). Policy-making process, standards and protocols, intellectual property, information economy, impact of computers on access and policy, privacy rights, transnational flow of information and the Internet and the World Wide Web. Prerequisite: LIS 60600 or 80600; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

LIS 60651 - DIGITAL IMAGE PROCESSING AND COLLECTION MANAGEMENT

This course is designed to introduce students to the fundamental concepts, terminology, techniques and applications of digital imaging as they relate to the development of digital image collections depicting works found in museum collections, archives and special collections in libraries. The students will acquire knowledge and skills necessary to design, create, and manage digital images of text, graphics, slides and reproductions of 3-D objects. They will also be introduced to the principles and issues that pertain to the creation and distribution of digital image archives via image databases and the Web environment. Prerequisite: LIS 60002 or 80002; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
### LIS 60652 - FOUNDATIONS AND ADMINISTRATION OF ARCHIVES

Introduction to the knowledge domains (functions) of modern archival work, including acquisition, appraisal (selection), arrangement, description and access, preservation, reference, records management and outreach. Coverage also includes special media, such as the administration of electronic records, sound recordings and visual materials. A discussion of the role and work of archivists, historical foundations of archives, contemporary issues and conditions and professional needs and opportunities are also included. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

### LIS 60653 - INFORMATION SOURCES AND SERVICES IN LOCAL HISTORY AND GENEALOGY

Introduces primary and secondary resources and materials to promote and perform reference services in Genealogy and Local History through lectures, readings, discussion, and practical exercises. The course will use primary and secondary materials available to librarians and archivists in libraries, archives, historical societies and on the Internet. Prerequisites: LIS 60001; and graduate standing.
3.000 Credit hours
3.000 Lecture hours

### LIS 60654 - PRESERVATION AND CONSERVATION OF HERITAGE MATERIALS

Types and causes of deterioration of various kinds of library, archival, and museum collections; storage and preventive care, preservation through photographic reproduction and digital conversion, and conservation of rare materials. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

### LIS 60655 - COPYRIGHT: UNDERSTANDING USER RIGHTS AND RESPONSIBILITIES

(Slashed with LIS 80655) Exploration of advanced copyright topics such as mass digitization, creative arts and other issues in fair use, library, archive and educational uses including the TEACH Act, digital first sale rights, Digital Millennium Copyright Act, and an introduction to copyright reform. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours
LIS 60656 - LICENSING OF INFORMATION PRODUCTS AND SERVICES

(Slashed with LIS 80656) Topics related to licensing of information products and services including online contract formation, software licenses (End User License Agreements), database and website terms of service, detailed understanding of common terms and conditions in license agreements and an introduction to music licensing and Creative Commons licensing. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

LIS 60661 - TECHNICAL SERVICES

Principles, problems and current issues of acquiring, processing and preserving/conserving materials in libraries and information centers. Prerequisite: LIS 60002 or 80002; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

LIS 60665 - RARE BOOK LIBRARIANSHIP

Study of the theory and practice of rare book librarianship through lectures, readings, discussion and practical exercises. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

LIS 60666 - ETHICAL CONCERNS OF LIBRARY AND INFORMATION PROFESSIONALS

Analysis of ethical concerns of information professionals: codes of ethics, intellectual freedom, free access, privacy, confidentiality, computer issues and relations with management, clients and colleagues. Prerequisite: LIS 60600 or 80600; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

LIS 60668 - INTERNATIONAL AND COMPARATIVE LIBRARIANSHIP
Provides an introduction to international and comparative librarianship. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
Library and Information Sci Department

**LIS 60691 - SEMINAR IN LIBRARY SCIENCE**

(Repeatable for credit) Advanced research by small groups of students who are qualified to examine problems of certain special areas. Prerequisite: Graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Seminar
Library and Information Sci Department

**LIS 60692 - PRACTICUM-LIBRARIES AND INFORMATION CENTERS**

(Repeatable for credit) Supervised library or information center work experience of a professional nature of not less than 100 clock hours, directed readings and preparation of a paper. Prerequisite: Graduate standing and special approval.
2.000 OR 3.000 Credit hours
2.000 OR 3.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship
Library and Information Sci Department

**LIS 60693 - VARIABLE TITLE WORKSHOP-LIBRARY AND INFORMATION SCIENCE**

(Repeatable for credit) Intensive examination of special topics of interest to practicing librarians. May be repeated. Maximum workshop credit accepted for MLIS degree is 4 semester hours. Prerequisite: Graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Workshop
Library and Information Sci Department

**LIS 60700 - FOUNDATIONS OF MUSEUM STUDIES**

Intended for those interested in learning more about museums or specializing in museum studies. The goal is to introduce students to various aspects of all types of museums as dynamic networked systems positioned around objects, people and ideas. Covers history and types of museums, the roles of objects and ideas, structure, function, museum workers and users, and the purpose and future of museums. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours
LIS 60701 - MUSEUM COLLECTIONS
This course introduces students to the organization, care and meaning of objects held in museum collections. Through both theoretical and practical concepts, basic collection management and registration skills are introduced. In conjunction, students explore the meanings made of museum objects. Prerequisite: LIS 60700 or 80700; and graduate standing.
3.000 Credit hours
3.000 Lecture hours

LIS 60702 - MUSEUM COMMUNICATION
Museums communicate to the public in a multitude of ways: interpretation, exhibition, publication, educational programming and using a web presence. This course introduces important concepts, theories, applications, processes and technology used in museum interpretation and communication. Students are provided with a balance of practical techniques with thoughtful conceptual exploration. Prerequisite: LIS 60700 or 80700; and graduate standing.
3.000 Credit hours
3.000 Lecture hours

LIS 60703 - MUSEUM USERS
Families, individuals and students visit museums and community institutions for a variety of purposes including leisure, education and curiosity. Introduction to the research and theory on museum user experience. Inquiry involves examining notions of learning, engagement, and transformative experiences of users, characteristics of users and the social dynamics of the museum experience. In addition, reviews several programmatic techniques and methods used in museums to increase engagement and learning for patrons. Prerequisite: LIS 60700 or 80700; and graduate standing.
3.000 Credit hours
3.000 Lecture hours

LIS 60704 - THE MUSEUM SYSTEM
Museums are by their very nature complex and dynamic systems composed of people, objects and activities. Comprised of an “outer” subsystem and an “inner” subsystem, the museum as a whole functions as an organic body, with all of its parts working together to function successfully. This system exists within a larger landscape, one filled increasingly with new types of interactions, unlimited access and constant feedback. This course explores this holistic system from both practical and conceptual viewpoints, examining the role of
administration throughout the system as well as considering current issues such as sustainability, advocacy and relationships with community and users add to an overall understanding of the museum system. Prerequisites: LIS 60700 or 80700; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

LIS 60792 - CULMINATING EXPERIENCE PRACTICUM IN K-12 LIBRARIES

Under the advisement of a faculty member, students complete a professional-level practicum that serves as a culminating experience for the M.L.I.S. degree. Prerequisite: cumulative minimum GPA of 3.000; 24 hours completed in the MLIS degree program; LIS 60000 and 60001 and 60002 and 60600 and 60607 and 60624; and School Library Media concentration; and graduate standing; and special approval.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Library and Information Sci Department

LIS 60870 - CULMINATING EXPERIENCE FOR DUAL DEGREE

Culminating experience for students pursuing dual degree in M.Ed./MLIS and K-12 School Library Media licensure. Must be in a supervised educational library or information center. Must not be less than 200 hours of professional work. Prerequisites: CI 67330 and 67310; and EPSY 65524; and LIS 60001 and 60002 and 60600 and 60607 and 60624 and 60626 and 60629 and 60630; and SEED 62146; and SPED 63200; and graduate standing; and special approval.

6.000 Credit hours
6.000 Other hours

Levels: Graduate
Schedule Types: Research

Library and Information Sci Department

LIS 61095 - SELECTED TOPICS IN LIBRARY SCIENCE

(Repeatable for credit)Offered irregularly as resources and/or opportunities permit. Topics will be announced in the schedule of classes. Prerequisite: Graduate standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

LIS 61096 - INDIVIDUAL INVESTIGATION

(Repeatable for credit) Research or individual investigation for master's level graduate students. Maximum credit per registration 3 hours. Maximum credit toward master's degree 4 hours. Prerequisite: special approval and graduate standing.
LIS 80001 - ACCESS TO INFORMATION

Examination of information access issues. Topics include discussion of information needs, use of information sources, and information access services. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

LIS 80002 - ORGANIZATION OF INFORMATION

Introduction to the theory and practice of organizing information in various information environments. Familiarity with principles, standards, tools and current systems relating to organization of information. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

LIS 80003 - INFORMATION TECHNOLOGY FOR LIBRARY AND INFORMATION PROFESSIONALS

Provides basic information technology concepts and skills necessary for library and information professionals. Topics include computer hardware and software basics; operating systems; file management; software installation and configuration; basic PC applications; information systems concepts, development, and evaluation; search skills; Internet and web concepts, tools, and applications; emerging technologies and tools. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

LIS 80600 - FOUNDATIONS OF LIBRARY AND INFORMATION SCIENCE

Explores the social, philosophical and historical foundations of libraries, librarianship and other information institutions and LIS-related professions. Topics include the impact of technology on society, policy-making and the economy; an overview of types of libraries and services, locally and globally; the nature of information infrastructures; and access to and organization of information. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisite</th>
<th>Credit Hours</th>
<th>Lecture Hours</th>
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</thead>
<tbody>
<tr>
<td>LIS 80601</td>
<td>INFORMATION SOURCES AND REFERENCE SERVICES</td>
<td>Introduction to use and evaluation of basic sources of reference information, computerized and noncomputerized; reference interview and question-negotiation techniques; administration of reference and information services.</td>
<td>LIS 60001 or 80001; and doctoral standing.</td>
<td>3.000</td>
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</tr>
<tr>
<td>LIS 80602</td>
<td>CATALOGING AND CLASSIFICATION I</td>
<td>Principles of cataloging with emphasis on Dewey Decimal and Library of Congress Classification systems, Library of Congress subject headings, online cataloging and administration.</td>
<td>LIS 60002 or 80002; and doctoral standing.</td>
<td>3.000</td>
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<tr>
<td>LIS 80603</td>
<td>CATALOGING AND CLASSIFICATION II</td>
<td>Theory and practice of providing description and access to library materials. Examples and assignments will be taken from all types of library materials, print and nonprint.</td>
<td>LIS 60002 or 80002; and LIS 60602 or 80602; and doctoral standing.</td>
<td>3.000</td>
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<tr>
<td>LIS 80604</td>
<td>RESEARCH METHODS FOR LIBRARIES AND INFORMATION CENTERS</td>
<td>Focuses on survey and qualitative research methods applicable to libraries and information centers. Explores research techniques, data analysis, proposal development and ethical issues.</td>
<td>doctoral standing.</td>
<td>3.000</td>
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</tbody>
</table>
**LIS 80607 - SCHOOL LIBRARY MANAGEMENT**

(Cross-listed with LIS 60607) Management of school libraries. Prerequisites: doctoral standing and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

**LIS 80608 - THE PUBLIC LIBRARY**

Analysis of the historical, sociopolitical, technological, fiscal and organizational factors affecting American public librarianship. Includes evaluation, planning, networking, funding, automation, buildings and censorship. Prerequisite: LIS 60600 or 80600; and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

**LIS 80609 - MARKETING THE LIBRARY**

Introduction to the theory and practice of marketing the library. Topics include the evaluation of customer needs, the marketing mix, merchandising, public relations, relationship marketing, and the design and development of a marketing plan for libraries. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

**LIS 80610 - MANAGEMENT OF LIBRARY AND INFORMATION CENTERS**

Identifies and discusses management functions of libraries and related organizations; includes planning and decision-making, human resource management, measurement and evaluation, fiscal and project management. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

**LIS 80611 - GOVERNMENT INFORMATION SOURCES AND SERVICES**

Library treatment of U.S. government publications, with brief attention to municipal and state publications, and major documents of Great Britain, Canada and the United Nations. Will not include materials covered in LIS 8/60601. Prerequisite: LIS 60001 or LIS 80001; and doctoral standing.
3.000 Credit hours
LIS 80612 - LIBRARY MATERIALS AND SERVICES FOR ADULTS
Recent investigations of group and individual reading habits; advisory services in various types of libraries; library programs for adult education; projection of library materials toward community. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

LIS 80613 - INFORMATION NEEDS, SEEKING AND USE
Surveys theories related to people's interactions with information. The theories covered include information context and situation, information needs, information seeking, exploration of information sources, communication and collaboration in the information search process, information use, and other interactions among people, information, and information systems. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

LIS 80614 - SELECTION AND ACQUISITION OF LIBRARY MATERIALS
Factors affecting selection in public, academic, school and special libraries (reading habits, censorship, publishing trends); community analysis, selection policies and process; selection sources; acquisitions. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

LIS 80615 - THE ACADEMIC LIBRARY
Governance, administration and services of libraries in institutions of postsecondary education. Prerequisite: LIS 60600 or 80600; and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
### LIS 80616 - THE SPECIAL LIBRARY

The formation of special libraries. Libraries in special subject fields and in organizations: corporations, government agencies, hospitals, etc. Internal organization and administration, collection development and services. Prerequisite: LIS 60600 or 80600; and doctoral standing.

- 3.000 Credit hours
- 3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

### LIS 80618 - INFORMATION LITERACY INITIATIVES AND INSTRUCTION

(Slashed with LIS 60618) Invites information professionals from any library point-of-view (school, public, academic, archives, special, etc.). Topics include definitions and history of information literacy standards and objectives, developing an information literacy agenda, library pedagogy and learning styles, information literacy needs assessment, program development and delivery, and experiential learning for students in library communities. Prerequisites: LIS 60001 or LIS 80001; and LIS 60600 or LIS 80600; and doctoral standing.

- 3.000 Credit hours
- 3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

### LIS 80619 - LEGAL INFORMATION SOURCES AND SERVICES

(Cross-listed with AS 43001 and AS 53001 and AS 73001 and LIS 60619) Fundamentals of legal research methods and major sources of American legal literature in print and electronic formats as used in other disciplines. Students learn how to formulate a research plan based on legal analysis of issues using relevant, authoritative legal resources. Prerequisite: doctoral standing.

- 3.000 Credit hours
- 3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

### LIS 80620 - HEALTH INFORMATION RESOURCES

(Cross-listed with LIS 60620) Identifies print and electronic sources of health information with emphasis on electronic sources. Medical patient and consumer health information is presented. This course is designed for the health educator, librarian, nurse or other health care professional. Prerequisite: doctoral standing.

- 3.000 Credit hours
- 3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisites</th>
<th>Credit Hours</th>
<th>Grade Level</th>
<th>Schedule Types</th>
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</thead>
<tbody>
<tr>
<td>LIS 80621</td>
<td>SOCIAL SCIENCES INFORMATION SOURCES AND SERVICES</td>
<td>Content, bibliographic structure and communication patterns in the social sciences with emphasis on information sources and services in sociology, history, education, political science, anthropology, related disciplines. Prerequisite: LIS 60001 or 80001; and doctoral standing.</td>
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<td>3.000</td>
<td>Graduate</td>
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<tr>
<td>LIS 80622</td>
<td>SCIENCE AND TECHNOLOGY INFORMATION SOURCES AND SERVICES</td>
<td>Content, bibliographic structure and communication patterns in the sciences with emphasis on pure and applied fields, e.g., mathematics, biology, physics. Prerequisite: LIS 60001 or 80001; and doctoral standing.</td>
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<td>3.000</td>
<td>Graduate</td>
<td>Lecture</td>
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<tr>
<td>LIS 80623</td>
<td>BUSINESS AND FINANCE INFORMATION SOURCES AND SERVICES</td>
<td>Historical development; applications to current business, labor, governmental, educational and sociological information needs; interpretation to executives and others; printed sources and databases. Prerequisite: LIS 60001 or 80001; and doctoral standing.</td>
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<td>3.000</td>
<td>Graduate</td>
<td>Lecture</td>
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<tr>
<td>LIS 80624</td>
<td>CATALOGING FOR SCHOOL LIBRARIES</td>
<td>Organization and administration of print and non-print materials in school libraries. Application of appropriate descriptive cataloging rules, subject headings and classification policies for children's, teen and educational materials K-12. Prerequisite: doctoral standing and special approval.</td>
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<td>3.000</td>
<td>Graduate</td>
<td>Lecture</td>
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<tr>
<td>LIS 80625</td>
<td>LIBRARY MATERIALS AND SERVICES FOR YOUNG CHILDREN</td>
<td>Selection and utilization of materials in relation to needs, abilities and interests of the young child. Prerequisite: doctoral standing.</td>
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<td>3.000</td>
<td>Graduate</td>
<td>Lecture</td>
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</tbody>
</table>
LIS 80626 - LIBRARY MATERIALS AND SERVICES TO TEENS
(Cross-listed with LIS 80626) Selection and utilization of books and materials in relation to needs, abilities and interests of teens. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

LIS 80627 - ART AND STORY: THE STUDY OF CHILDREN'S PICTUREBOOKS
(Cross-listed with LIS 60627) Engages students in the study and application of art and story in children’s picturebooks through the lenses of book history, publishing studies, children’s book illustration and storytelling, visual literacy and visual storytelling. Readers of picturebooks are studied as well, from professional readers, like librarians and book reviewers, to picturebook consumers. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

LIS 80628 - HUMANITIES INFORMATION SOURCES AND SERVICES
Philosophy, literature, fine and performing arts. Prerequisite: LIS 60001 or 80001; and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

LIS 80629 - LIBRARY MATERIALS AND SERVICES FOR SCHOOL AGE CHILDREN
Selection and utilization of materials in relation to needs, abilities and interests of school-age children. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours
**LIS 80630 - REFERENCE SOURCES AND SERVICES FOR YOUTH**

Organization and administration of information sources and information services for children and young adults (K-12). Evaluation, selection and utilization of print and electronic sources. Prerequisite: doctoral standing and special approval.

3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Library and Information Sci Department

**LIS 80631 - INTRODUCTION TO DIGITAL PRESERVATION**

Approaches and standards for preserving and maintaining access to digitized and born-digital text, images, data, audiovisual information, and web resources. Topics include longevity of digital media, selection for preservation; formats and strategies for preservation; preservation metadata; integrity and authenticity of digital materials; establishment and certification of trustworthy digital repositories; risk management; and policy development. Prerequisite: LIS 60002 or 80002; and doctoral standing.

3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Library and Information Sci Department

**LIS 80633 - DIGITAL CURATION**

Management and preservation of digital objects and records throughout their lifecycle. Essential technologies and standards for building and maintaining robust, trusted digital repositories. Emphasizes the use and reuse of scholarly data, business and government records, cultural heritage materials, and other digital objects to create resources supporting communities of practice in their work. Prerequisite: LIS 60631 or 60638 or 80631 or 80638; and doctoral standing.

3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Library and Information Sci Department

**LIS 80636 - KNOWLEDGE ORGANIZATION STRUCTURES, SYSTEMS AND SERVICES**

(Slashed with LIS 60636; Cross-listed with IAKM 60002 and IAKM 80002) Introduction to various types of knowledge organization systems, services, and structures (KOS) used in the networked environment. Understanding of the functional philosophical, logical, and linguistic fundamentals of KOS. Explanation of design options, features of KOS, and procedures to be used in the thesaurus, taxonomy and ontology construction. Prerequisite: Doctoral standing.

3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Library and Information Sci Department
LIS 80637 - METADATA ARCHITECTURE AND IMPLEMENTATION

(Slashed with LIS 60637) Principles and theories of metadata development in the digital environment. Main focus is given to the design and applications of metadata schemas for distinct domains and information communities, issues in metadata interoperability, vocabulary control, quality control and evaluation. Examination of international standards, activities and projects with the use of case study approach. Prerequisites: LIS 60002 or 80002 or IAKM 60002 or IAKM 80002; and doctoral standing. 3.000 Credit hours 3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Library and Information Sci Department

LIS 80638 - DIGITAL LIBRARIES

Issues related to the development and maintenance of digital libraries, including technology, collection development and management, project management, digital preservation, user-centered design, public services, rights management and funding. Prerequisite: LIS 60003 or LIS 80003; and doctoral standing. 3.000 Credit hours 3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Library and Information Sci Department

LIS 80639 - IMPLEMENTATION OF DIGITAL LIBRARIES

Explores issues related to implementation of digital libraries and provides hands-on experience for students to build digital library prototypes (small-scale) with open source software. The major emphasis is on design and implementation of key digital library functions, including building digital collections, defining and creating metadata, indexing, browsing and retrieval, customizing interface, implementing services, encoding and transforming for data exchange, and testing the usability and effectiveness. Prerequisite: LIS 60003 or 80003; and doctoral standing. 3.000 Credit hours 3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Library and Information Sci Department

LIS 80640 - LIBRARY AUTOMATION

Analysis, design and selection of automated library systems. Considers system analysis and requirements, networking technologies, database management systems, multimedia and hypermedia, and client-serving computing. Also, proposals to vendors, contract negotiation, implementation, staffing, training, system maintenance and evaluation. Prerequisite: LIS 60002 or 80002; and doctoral standing. 3.000 Credit hours 3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Library and Information Sci Department
**LIS 80641 - INFORMATION STORAGE AND RETRIEVAL SYSTEMS**

Fundamentals of information retrieval models and methods, including information storage structures, full-text indexing, structured indexes, search engines and web retrieval, human-computer interaction, and the user's experience, system performance and evaluation. Prerequisites: LIS 60003 or LIS 80003; and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Library and Information Sci Department

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**LIS 80643 - ONLINE REFERENCE SYSTEMS**

Use of information technologies to search for and retrieve electronic information, primarily through the Internet. Analysis of database structures and electronic records; search principles and heuristics; database system producers; system interfaces; and evaluation of results. Prerequisite: LIS 60001 or 80001; and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Library and Information Sci Department

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**LIS 80644 - INFORMATION SCIENCE**

Focal areas of information science: information retrieval systems, bibliometrics, citation analysis, systems analysis and evaluation, information technologies, information theory, information architecture, knowledge management and user experience. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Library and Information Sci Department

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**LIS 80645 - DATABASE SYSTEMS**

Characteristics and concepts of database systems; different types of database models; conceptual database design and implementation; the relational database model and its application in practice: key issues, principles, and techniques; current database technologies. Prerequisites: LIS 60003 or 80003; and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Library and Information Sci Department

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**LIS 80647 - NETWORK AND SOFTWARE RESOURCES FOR INFORMATION SYSTEMS**

Study, use and evaluation of current and emerging information technologies; network and software resources
for libraries and information centers, including network analysis and management, standards, protocols and client-server technologies; and techniques for accessing and evaluating such technologies and resources.

Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

**LIS 80648 - WEB SITE DEVELOPMENT, DESIGN AND MANAGEMENT**

Students significantly advance both their theoretical knowledge and practical skills by developing and implementing a comprehensive web content strategy. Focus is on developing and maintaining website content, organizing and presenting content, and acquiring skill in the use of web technologies needed by content managers to publish, manage, and disseminate content on the web and in the mobile environment. Prerequisite: LIS 60003 or LIS 80003; and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

**LIS 80649 - INDEXING AND ABSTRACTING**

Principles and methods of manual and computerized indexing and abstracting applied to I&A databases, back-of-book indexes, Web site indexes and sitemaps. Techniques of constructing indexing languages using international standards. Theory and practice of index design for specific formats and subjects. Automation and I&A services in networked environments. Prerequisites: LIS 60002 or 80002; and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

**LIS 80650 - INFORMATION POLICY**

Political, economic, cultural and legal issues regarding the production, distribution, and use of information (print, electronic and Web). Policy-making process, standards and protocols, intellectual property, information economy, impact of computers on access and policy, privacy rights, transnational flow of information and the Internet and the World Wide Web. Prerequisite: LIS 60600 or 80600; and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

**LIS 80651 - DIGITAL IMAGE PROCESSING AND COLLECTION MANAGEMENT**

This course is designed to introduce students to the fundamental concepts, terminology, techniques and
applications of digital imaging as they relate to the development of digital image collections depicting works found in museum collections, archives, and special collections in libraries. The students will acquire knowledge and skills necessary to design, create and manage digital images of text, graphics, slides, and reproductions of 3-D objects. They will also be introduced to the principles and issues that pertain to the creation and distribution of digital-image archives via image databases and the Web environment. Prerequisites: LIS 60002 or 80002; and doctoral standing.

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<tr>
<th>Level</th>
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<tr>
<td>Graduate</td>
<td>3.000</td>
<td>3.000</td>
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</table>

Levels: Graduate  
Schedule Types: Lecture

Library and Information Sci Department

**LIS 80652 - FOUNDATIONS AND ADMINISTRATION OF ARCHIVES**

Introduction to the knowledge domains (functions) of modern archival work, including acquisition, appraisal (selection), arrangement, description and access, preservation, reference, records management, and outreach. Coverage also includes special media, such as the administration of electronic records, sound recordings, and visual materials. A discussion of the role and work of archivists, historical foundations of archives, contemporary issues and conditions, and professional needs and opportunities are also included. Prerequisites: doctoral standing.

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<tr>
<th>Level</th>
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<td>Graduate</td>
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Levels: Graduate  
Schedule Types: Lecture

Library and Information Sci Department

**LIS 80654 - PRESERVATION AND CONSERVATION OF HERITAGE MATERIALS**

Types and causes of deterioration of various kinds of library, archival, and museum collections; storage and preventive care, preservation through photographic reproduction and digital conversion, and conservation of rare materials. Prerequisites: doctoral standing.

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Levels: Graduate  
Schedule Types: Lecture

Library and Information Sci Department

**LIS 80655 - COPYRIGHT: UNDERSTANDING USER RIGHTS AND RESPONSIBILITIES**

(Slashed with LIS 60655) Exploration of advanced copyright topics such as mass digitization, creative arts and other issues in fair use, library, archive and educational uses including the TEACH Act, digital first sale rights, Digital Millennium Copyright Act, and an introduction to copyright reform. Prerequisites: None.

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Levels: Graduate  
Schedule Types: Lecture

Library and Information Sci Department

**LIS 80656 - LICENSING OF INFORMATION PRODUCTS AND SERVICES**
Topics related to licensing of information products and services including online contract formation, software licenses (End User License Agreements), database and website terms of service, detailed understanding of common terms and conditions in license agreements and an introduction to music licensing and Creative Commons licensing. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

LIS 80661 - TECHNICAL SERVICES

Principles, problems and current issues of acquiring, processing and preserving materials in libraries and information centers. Prerequisites: LIS 60002 or 80002; and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

LIS 80665 - RARE BOOK LIBRARIANSHIP

Study of the theory and practice of rare book librarianship through lectures, readings, discussion and practical exercises. Prerequisites: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

LIS 80666 - ETHICAL CONCERNS OF LIBRARY AND INFORMATION PROFESSIONALS

Analysis of ethical concerns of information professionals: codes of ethics, intellectual freedom, free access, privacy, confidentiality, computer issues and relations with management, clients and colleagues. Prerequisites: LIS 60600 or 80600; and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

LIS 80668 - INTERNATIONAL AND COMPARATIVE LIBRARIANSHIP

Provides an introduction to international and comparative librarianship. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
LIS 80691 - SEMINAR IN LIBRARY SCIENCE
Advanced research by small groups of students who are qualified to examine problems of certain special areas. Prerequisites: doctoral standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Seminar

LIS 80694 - COLLEGE TEACHING OF LIBRARY SCIENCE
(Repeatable for credit) Staff training and experience in college teaching. Prerequisites: doctoral standing and special approval.
2.000 OR 3.000 Credit hours
2.000 OR 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

LIS 80695 - SPECIAL PROBLEMS IN LIBRARY SCIENCE
(Repeatable for credit) Individual research at high levels of specialization. Prerequisites: doctoral standing and special approval.
1.000 TO 10.000 Credit hours
1.000 TO 10.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

LIS 80700 - FOUNDATIONS OF MUSEUM STUDIES
Intended for those interested in learning more about museums or specializing in museum studies. The goal is to introduce students to various aspects of all types of museums as dynamic networked systems positioned around objects, people and ideas. Covers history and types of museums, the roles of objects and ideas, structure, function, museum workers and users, and the purpose and future of museums. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

LIS 80701 - MUSEUM COLLECTIONS
Introduction to the organization, care and meaning of objects held in museum collections. Through both theoretical and practical concepts, basic collection management and registration skills are introduced. In conjunction, students explore the meanings made of museum objects. Prerequisite: LIS 60700 or LIS 80700; and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

**LIS 80702 - MUSEUM COMMUNICATION**

Museums communicate to the public in a multitude of ways: interpretation, exhibition, publication, educational programming and using a web presence. Introduces important concepts, theories, applications, processes and technology used in museum interpretation and communication. Students are provided with a balance of practical techniques with thoughtful conceptual exploration. Prerequisite: LIS 60700 or LIS 80700; and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

**LIS 80703 - MUSEUM USERS**

Families, individuals, and students visit museums and community institutions for a variety of purposes including leisure, education, and curiosity. Introduction to the research and theory on museum user experience. Inquiry involves examining notions of learning, engagement, and transformative experiences of users, characteristics of users, and the social dynamics of the museum experience. In addition, reviews several programmatic techniques and methods used in museums to increase engagement and learning for patrons. Prerequisite: LIS 60700 or LIS 80700; doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Library and Information Sci Department

**LIS 80704 - THE MUSEUM SYSTEM**

Museums are by their very nature complex and dynamic systems composed of people, objects and activities. Comprised of an “outer” subsystem and an “inner” subsystem, museum as a whole functions as an organic body, with all of its parts working together to function successfully. This system exists within a larger landscape, one filled increasingly with new types of interactions, unlimited access, and constant feedback. This course explores this holistic system from both practical and conceptual viewpoints, examining the role of administration throughout the system as well as considering current issues such as sustainability, advocacy and relationships with community and users add to an overall understanding of the museum system. Prerequisites: LIS 60700 or 80700; and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
### LIS 81095 - SELECTED TOPICS IN LIBRARY SCIENCE

(Repeatable for credit) Offered irregularly as resources and or opportunities permit. Topics will be announced in the Schedule of Classes. Prerequisites: doctoral standing.

- 1.000 TO 3.000 Credit hours
- 1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

### LIS 81096 - INDIVIDUAL INVESTIGATION

(Repeatable for credit) Research or individual investigation for doctoral level students. Prerequisite: doctoral standing

- 1.000 TO 3.000 Credit hours
- 1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

### MATH 00020 - PRE-ALGEBRA

Properties of whole numbers, fractions, decimals, percents, signed numbers and order of operations. Mental math and elementary algebraic thinking skills are emphasized and use of calculators is not allowed. Course does not count toward graduation. Prerequisite: ALEKS math single assessment score of 0-9.

- 2.000 Credit hours
- 2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Emporium

Mathematics Department

Course Attributes:
- ALEKS

### MATH 00021 - BASIC ALGEBRA I

Includes operations on integers, fractions, decimals and percents, properties of real numbers. Introduction to variables, first degree equations and problem-solving with formulas. Equations and inequalities in one variable, linear equations, rate of change and slope, graphing in the cartesian plane. Course does not count toward graduation. Pre/corequisite: minimum C (2.000) in MATH 00020; or ALEKS math assessment minimum score of 10.

- 2.000 Credit hours
- 2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Emporium

Mathematics Department
MATH 00022 - BASIC ALGEBRA II

Introduction to functions, systems of linear equations, exponents, polynomial operations, scientific notation. Factoring polynomials, solving quadratics by factoring, radicals and rational exponents. Course does not count toward graduation. Prerequisite: minimum C (2.000) grade in MATH 00021; or ALEKS math assessment minimum score of 25.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Emporium

Mathematics Department

Course Attributes: ALEKS

MATH 00023 - BASIC ALGEBRA III

Zeros of functions, rational expressions and equations, problem-solving with rational expressions, intermediate factoring techniques. Quadratics: functions, graphs, equations, inequalities; "quadratic type" equations and problem-solving. Course does not count toward graduation. Prerequisite: minimum C grade in MATH 00006 or MATH 00022; or minimum 35 ALEKS math assessment score.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Emporium

Mathematics Department

Course Attributes: ALEKS

MATH 00024 - BASIC ALGEBRA IV

Advanced factoring techniques, rational functions, radical equations, absolute value equations and inequalities. Exponential and logarithmic functions: introduction, graphing, problem-solving. Course does not count toward graduation. Prerequisite: minimum C (2.000) grade in MATH 00023; or ALEKS math assessment minimum score of 45.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Emporium

Mathematics Department

Course Attributes: ALEKS

MATH 10041 - INTRODUCTORY STATISTICS
An introduction to statistical thinking and statistical methods. Emphasis is on statistical literacy, conceptual understanding and active learning in the classroom. Prerequisite: Minimum 22 math ACT score; or minimum 520 math SAT score; or minimum 35 ALEKS math assessment score; or minimum C grade in MATH 00022; or any higher-level MATH course.

4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Emporium

Mathematics Department

Course Attributes:
Kent Core-Math and Crit Reason

**MATH 10771 - BASIC MATHEMATICAL CONCEPTS I PLUS**

Development of the real number system and its sub-systems, open sentences, numeration systems, modular arithmetic and some number theory concepts. Additional concepts covered: place value, logic, sets, algebra concepts, and problem solving. Students cannot earn credit toward a degree for both this course and MATH 14001. Prerequisite: Minimum 22 ACT mathematics sub score; or minimum 520 SAT mathematics sub score; or minimum ALEKS math placement assessment score of 35; or MATH 00022 with a minimum grade of C (2.000).

5.000 Credit hours
5.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Mathematics Department

Course Attributes:
Kent Core-Math and Crit Reason

**MATH 10772 - MODELING ALGEBRA PLUS**

Study of algebra arising in the context of real-world applications, including linear, polynomial, exponential and logarithmic models. Includes a review of factoring and functions. Intended for students not planning to take calculus. No credit earned for this course if student already earned credit for MATH 11010. Students cannot earn credit toward a degree for both this course and MATH 11009. Prerequisites: Minimum 22 ACT mathematics sub score; or minimum 520 SAT mathematics sub score; or minimum ALEKS math placement assessment score of 35; or a minimum grade of C (2.000) in MATH 00022.

5.000 Credit hours
5.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Mathematics Department

Course Attributes:
Kent Core-Math and Crit Reason

**MATH 10773 - ALGEBRA FOR CALCULUS STRETCH I**

Study of functions in general, factoring, negative and rational exponents; polynomial functions, including quadratic functions; and sequences and series. No credit earned for this course if a student already earned credit for MATH 12001. Students cannot earn credit toward a degree for both this course and either MATH 11010 or MATH 10775. Prerequisite: Minimum 22 ACT mathematics sub score; or minimum 520 SAT
mathematics sub score; or minimum ALEKS math placement assessment score of 35; or MATH 00022 with a minimum grade of C (2.000).
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Mathematics Department

**MATH 10774 - ALGEBRA FOR CALCULUS STRETCH II**

Continuation of Math 10773. Study of rational expressions and functions, exponential and logarithmic functions, and conic sections. No credit earned for this course if student already earned credit for MATH 11011 or MATH 12001. Students cannot earn credit toward a degree for both this course and either MATH 11010 or MATH 10775. Prerequisite: MATH 10773 with a minimum grade of C (2.000).
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Mathematics Department

Course Attributes:
Kent Core-Math and Crit Reason

**MATH 10775 - ALGEBRA FOR CALCULUS PLUS**

Study of elementary functions and graphs, including polynomial, exponential and logarithmic functions, complex numbers; conic sections; arithmetic and geometric sequences. In addition, factoring, negative and rational exponents, and quadratic functions are covered. No credit earned for this course if student has already earned credit for MATH 12001. Students cannot earn credit toward a degree for both this class and either MATH 11010 or MATH 10774 Prerequisite: Math 00023 with a minimum grade of C (2.000); or minimum ALEKS math placement assessment score of 45.
4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Mathematics Department

Course Attributes:
Kent Core-Math and Crit Reason

**MATH 11008 - EXPLORATIONS IN MODERN MATHEMATICS**

Topics from various branches of mathematics will be chosen to introduce the student to the wide varieties of ways in which mathematics affects everyday life. Prerequisite: Math ACT minimum score of 22; or ALEKS math single assessment minimum score of 35; or minimum C (2.000) grade in MATH 00022; or any higher math course (MATH 00023, 00024, 1XXXXX excluding MATH 10004 and MATH 10020 and MATH 10021 and MATH 10031 and MATH 10032).
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
MATH 11009 - MODELING ALGEBRA

Study of algebra arising in the context of real-world applications, including linear, polynomial, exponential and logarithmic models. Intended for students not planning to take calculus. No graduation credit for this course for students who have already passed MATH 11010. Prerequisite: minimum C (2.000) grade in MATH 00007 or MATH 00023; or ALEKS math assessment minimum score of 45.
4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Mathematics Department

Course Attributes:
Kent Core-Math and Crit Reason, LER-Math and Crit Reasoning

MATH 11010 - ALGEBRA FOR CALCULUS

Study of elementary functions and graphs, including polynomial, exponential and logarithmic functions, complex numbers; conic sections; arithmetic and geometric sequences. No credit earned for this course if student earned credit for MATH 12001. Students cannot earn credit for this course and any of MATH 10773, MATH 10774, or MATH 10775. Prerequisite: MATH 00024 or MATH 10773 or MATH 11009 with a minimum C grade; or minimum 55 ALEKS math placement assessment score.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Mathematics Department

Course Attributes:

MATH 11012 - INTUITIVE CALCULUS

Designed to give an overview of differential and integral calculus to business and life-science majors. Does not include trigonometric functions. No credit earned for this course if student earned credit for MATH 12002. Prerequisite: MATH 10774 or MATH 10775 or MATH 11010 with a minimum C grade; or minimum 67 ALEKS math assessment score.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Mathematics Department

Course Attributes:
### MATH 11022 - TRIGONOMETRY
Solution of triangles, trigonometric equations and identities. Prerequisite: MATH 10774 or MATH 10775 or MATH 11010 with a minimum C grade; or minimum 67 ALEKS math placement assessment score.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

Mathematics Department  
Course Attributes:  
Kent Core-Math and Crit Reason, Trnfr Module-Mathematics

### MATH 12001 - ALGEBRA AND TRIGONOMETRY
Introduction to algebra and trigonometry including functions and graphs; polynomial and rational functions; exponential and logarithmic functions; angles and the trigonometric functions; graphs of trigonometric functions; trigonometric identities; inverse circular functions and trigonometric equations; and applications of trigonometry. No credit earned for this course if student earned credit for MATH 10774 or MATH 10775 or MATH 11010 or MATH 11022. Prerequisite: MATH 00024 with a minimum grade of B (3.000); or minimum ALEKS math placement assessment score of 67.
5.000 Credit hours
5.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

Mathematics Department  
Course Attributes:  
Kent Core-Math and Crit Reason, LER-Math and Crit Reasoning

### MATH 12002 - ANALYTIC GEOMETRY AND CALCULUS I
Concepts of limit, continuity and derivative, and the indefinite and definite integral for functions of one real variable. Maximization, related rates, fundamental theorem of calculus. No credit earned for this course if student earned credit for MATH 12011 and 12012. Prerequisite: minimum C (2.000) grade in MATH 11022 or MATH 12001; or ALEKS math upper-level minimum score 70; or ALEKS math single assessment minimum score of 78.
5.000 Credit hours
5.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

Mathematics Department  
Course Attributes:  

### MATH 12003 - ANALYTIC GEOMETRY AND CALCULUS II
Continued study of techniques and applications of integration; trigonometric, logarithmic and exponential
functions; polar coordinates; vectors; parametric equations; sequences and series. Prerequisite: MATH 12002 or MATH 12012 with a minimum grade of C (2.000).

5.000 Credit hours
5.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Mathematics Department

Course Attributes:
TAG - Mathematics

MATH 12011 - CALCULUS WITH PRECALCULUS I

Introduction to differential calculus with a review of algebra and trigonometry. Includes exponents, factoring, functions, graphs, tangent lines, limits, continuity, derivatives and related rates. No credit earned for this course if student earned credit for MATH 12002. Prerequisite: ALEKS math upper-level score 50-69; or ALEKS math single assessment score of 67-77.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Mathematics Department

Course Attributes:

MATH 12012 - CALCULUS WITH PRECALCULUS II

Development of integral calculus and continued study of differential calculus. Includes curve sketching optimization fundamental theorem of calculus areas between curves, exponential and logarithmic functions. No credit earned for this course if student earned credit for MATH 12002. Prerequisite: MATH 12011 with a minimum grade of C (2.000).

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Mathematics Department

Course Attributes:

MATH 12021 - CALCULUS FOR LIFE SCIENCES

Differential and integral calculus using examples and problems in life sciences. Prerequisites: MATH 11022 or MATH 12011 with a minimum grade of C (2.000); or ALEKS Placement score of 78 or higher.

4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
MATH 12022 - PROBABILITY AND STATISTICS FOR LIFE SCIENCES

Probability and statistics with applications in medical and biological sciences. Prerequisite: MATH 12002 or MATH 12012 or MATH 12021 with a minimum grade of C (2.000).
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Mathematics Department

MATH 14001 - BASIC MATHEMATICAL CONCEPTS I

Development of the real number system and its sub-systems, open sentences, numeration systems, modular arithmetic and some number theory concepts. Prerequisite: minimum C (2.000) in MATH 00007 or any math course 00023 and higher; or ALEKS math assessment minimum score of 45.
4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Mathematics Department

Course Attributes:
Kent Core-Math and Crit Reason, LER-Math and Crit Reasoning

MATH 14002 - BASIC MATHEMATICAL CONCEPTS II

Basic concepts of probability, statistics and geometry. Prerequisite: MATH 14001 or MATH 10771 with a minimum grade of C (2.000).
4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Mathematics Department

Course Attributes:
Kent Core-Math and Crit Reason, LER-Math and Crit Reasoning

MATH 19002 - TECHNICAL MATHEMATICS II

Continuation of MATH 19001. Emphasizes advanced topics in algebra and trigonometry, analytic geometry, derivatives and integrals. Prerequisite: MATH 19001.
4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Mathematics Department
MATH 19099 - FIELD EXPERIENCE IN MATHEMATICS INSTRUCTION

(Repeatably for credit) Learning through tutoring. A supervised lab experience in providing explanations of mathematical concepts. Prerequisite: Special approval.
1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Mathematics Department

Course Attributes:
Experiential Learning Requirem

MATH 20095 - SPECIAL TOPICS IN MATHEMATICS

(Repeatably for credit) Various special courses will be announced in the schedule of classes under this course number with different section numbers. Prerequisite: Permission.
1.000 TO 5.000 Credit hours
1.000 TO 5.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Mathematics Department

MATH 21001 - LINEAR ALGEBRA WITH APPLICATIONS

Systems of linear equations and the associated matrix operations, linear transformations, vector spaces, bases, eigenvectors. Prerequisite: MATH 11012 or MATH 12002 with a minimum grade of C (2.000).
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Mathematics Department

Course Attributes:
TAG - Mathematics

MATH 21092 - COMPUTER PRACTICUM

(Repeatably for credit) Supervised work experience in a computer installation. Prerequisite: None.
2.000 Credit hours
2.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Mathematics Department

Course Attributes:
Experiential Learning Requirem
MATH 22005 - ANALYTIC GEOMETRY AND CALCULUS III

Study of functions of several variables, including partial derivatives and multiple integrals. Prerequisite: MATH 12003 with a minimum grade of C (2.000).

4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Mathematics Department

Course Attributes:
TAG - Mathematics

MATH 23022 - DISCRETE STRUCTURES FOR COMPUTER SCIENCE

(Cross-listed with CS 23022) Discrete structures for computer scientists with a focus on: mathematical reasoning, combinatorial analysis, discrete structures, algorithmic thinking, applications and modeling. Specific topics include logic, sets, functions, relations, algorithms, proof techniques, counting, graphs, trees, Boolean algebra, grammars and languages. No credit for MATH 31011. Prerequisite: CS 10051 and a grade of C (2.0) or better in MATH 11010; or a Compass Algebra score of 55 or better and either SAT Math score of 540 or better or ACT Math score 23 or better.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Mathematics Department

MATH 30011 - BASIC PROBABILITY AND STATISTICS

Analysis and representation of data. Controlled experiments and observations. Measurement errors. Correlation and regression. Sampling. Probability models and tests of models. Inference. Prerequisite: MATH 11010 or MATH 10774 or MATH 10775 with a minimum grade of C (2.000).

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Mathematics Department

MATH 30055 - MATHEMATICAL THEORY OF INTEREST

A calculus-based introduction to the mathematics of finance. Limited to deterministic analysis of interest rates annuities bonds and immunization. Emphasizes the mathematical theory of the subject matter. Prerequisite: MATH 12003 with a minimum grade of C (2.000).

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Mathematics Department
MATH 31011 - DISCRETE MATHEMATICS

Discrete mathematical structures including sets, functions, relations, Boolean algebras, elementary combinatorics, discrete probability, and logic. Applications to algorithm complexity analysis and program correctness proof. Prerequisite: MATH 12002 with a minimum grade of C (2.000). Pre/corequisites: MATH 21001 or MATH 32051 with a minimum grade of C (2.000).
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Mathematics Department

MATH 32044 - INTRODUCTION TO ORDINARY DIFFERENTIAL EQUATIONS

An introduction to ordinary differential equations and applications. Topics include solution methods, series solutions and singular points. Laplace transforms and linear systems. Applications include population dynamics, forced oscillations and resonance. Prerequisites: MATH 21001 and MATH 22005 with minimum grades of C (2.000).
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Mathematics Department

Course Attributes:
TAG - Mathematics

MATH 32051 - MATHEMATICAL METHODS IN THE PHYSICAL SCIENCES I

Mathematics background beyond Calculus I and II for upper-division courses in the physical sciences. Topics include complex numbers and arithmetic, linear algebra, partial differentiation and multiple integrals. Prerequisite: MATH 12003 with a minimum grade of C (2.000).
4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Mathematics Department

MATH 32052 - MATHEMATICAL METHODS IN THE PHYSICAL SCIENCES II

Additional mathematics background for upper-division courses in the physical sciences. Topics include vector analysis, Fourier series and transforms ordinary differential equations and partial differential equations. Prerequisites: MATH 22005 with a minimum grade of C (2.000); and MATH 21001 or MATH 32051 with a minimum grade of C (2.000).
4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Mathematics Department
### MATH 34001 - FUNDAMENTAL CONCEPTS OF ALGEBRA

Professionalized course in algebra for prospective secondary teachers. Postulational development of number system of algebra; other systems, related topics, applications. Prerequisite: MATH 12002 with a minimum grade of C (2.000).

3.000 Credit hours  
3.000 Lecture hours

**Levels:** Undergraduate  
**Schedule Types:** Lecture

Mathematics Department

### MATH 34002 - FUNDAMENTAL CONCEPTS OF GEOMETRY

Professionalized course in geometry for secondary school teachers. Origin and development of the geometry of Euclid with modern refinements, topics, approaches. Other geometries, applications. Prerequisite: MATH 12002 with a minimum grade of C (2.000).

3.000 Credit hours  
3.000 Lecture hours

**Levels:** Undergraduate  
**Schedule Types:** Lecture

Mathematics Department

### MATH 40011 - INTRODUCTION TO PROBABILITY THEORY AND APPLICATIONS

Permutations and combinations, discrete and continuous distributions, random variables, conditional probabilities, Baye's formula, mathematical expectation, law of large numbers, normal approximations, basic limit theorems. Prerequisite: MATH 12003 with a minimum grade of C (2.000).

3.000 Credit hours  
3.000 Lecture hours

**Levels:** Undergraduate  
**Schedule Types:** Lecture

Mathematics Department

### MATH 40012 - INTRODUCTION TO STATISTICAL CONCEPTS

Sample spaces, continuous distributions, sampling distributions, point and interval estimation, hypothesis testing, types of error, level and power of tests, sequential and nonparametric methods. Prerequisite: MATH 40011 with a minimum grade of C (2.000).

3.000 Credit hours  
3.000 Lecture hours

**Levels:** Undergraduate  
**Schedule Types:** Lecture

Mathematics Department

### MATH 40051 - TOPICS IN PROBABILITY THEORY AND STOCHASTIC PROCESSES

Topics from conditional expectations, Markov chains, Markov processes, Brownian motion and Martingales and their applications to stochastic calculus. Prerequisite: MATH 40011 with a minimum grade of C (2.000).
MATH 40055 - ACTUARIAL MATHEMATICS I

(Slashed with MATH 50055) Topics from survival models, stochastic analysis of annuities and life insurance and casualty models. Prerequisite: MATH 30055 and MATH 40011 with minimum grades of C (2.000).

4.000 Credit hours
4.000 Lecture hours

MATH 40056 - ACTUARIAL MATHEMATICS II

Benefit premiums, benefit reserves and their analysis, decrement models, joint survivorship, risk models. Prerequisite: MATH 40055 with a minimum grade of C (2.000).

4.000 Credit hours
4.000 Lecture hours

MATH 40059 - STOCHASTIC ACTUARIAL MODELS

(Slashed with MATH 50059) Designed to prepare students for the Society of Actuaries examination on actuarial mathematics. Prerequisite: MATH 40011 with a grade of C (2.000) or higher.

3.000 Credit hours
3.000 Lecture hours

MATH 40093 - VARIABLE TITLE WORKSHOP IN MATHEMATICS

(Repeatable for credit) Studies special topics in mathematics. Not acceptable for credit toward a major or minor in math without approval of student's adviser. S u/graded. Prerequisite: Permission.

1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Undergraduate
Schedule Types: Lecture

Mathematics Department
### MATH 41001 - INTRODUCTION TO MODERN ALGEBRA I

Basic properties of groups, subgroups, factor groups. Basic properties of rings, integral domains, and homomorphisms. Prerequisite: MATH 21001 and MATH 22005 with minimum grades of C (2.000); and MATH 31011 or MATH 41021 or MATH 47011 with a minimum grade of C (2.000).

3.000 Credit hours  
3.000 Lecture hours  

Levels: Undergraduate  
Schedule Types: Lecture  

Mathematics Department  

Course Attributes:  
Experiential Learning Requirem, Writing Intensive Course  

### MATH 41002 - INTRODUCTION TO MODERN ALGEBRA II

A continuation of MATH 41001, emphasizing properties of rings, their ideals, polynomial ring extensions, fields, finite degree extensions, roots of polynomials, constructability. Prerequisite: MATH 41001 with a grade of C (2.000) or better.

3.000 Credit hours  
3.000 Lecture hours  

Levels: Undergraduate  
Schedule Types: Lecture  

Mathematics Department  

Course Attributes:  
Experiential Learning Requirem, Writing Intensive Course  

### MATH 41021 - THEORY OF MATRICES

A rigorous study of the topics introduced in matrix algebra. Topics included are vector space preliminaries, canonical forms of matrices, diagonalizability criteria. Prerequisite: MATH 21001 and MATH 22005 with grades of C (2.000) or better.

3.000 Credit hours  
3.000 Lecture hours  

Levels: Undergraduate  
Schedule Types: Lecture  

Mathematics Department  

### MATH 41038 - INTERMEDIATE LOGIC

(Cross-listed with CS 41038 and MATH 51038 and PHIL 41038 and PHIL 51038) Study of first order predicate calculus with identity and function symbols. Prerequisite: none.

3.000 Credit hours  
3.000 Lecture hours  

Levels: Undergraduate  
Schedule Types: Lecture
Mathematics Department

**MATH 41045 - METALOGIC**

(Cross-listed with CS 41045 and CS 51045 and MATH 51045 and PHIL 41045 and PHIL 51045) May be counted toward B.A. or B.S. mathematics major. Consideration of various metatheorems, including soundness and completeness of propositional and predicate calculus, undecidability of predicate calculus and incompleteness of the theory of arithmetic. Prerequisite: PHIL 41038.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Mathematics Department

**MATH 42001 - INTRODUCTION TO ANALYSIS I**

Topics include basic structure of the real numbers, Cauchy sequences, convergence, completeness of the real numbers, continuity, differentiation and Riemann integration. Prerequisite: MATH 21001 and MATH 22005 with minimum grades of C (2.000).

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Mathematics Department

Course Attributes:
Experiential Learning Requirem, Writing Intensive Course

**MATH 42002 - INTRODUCTION TO ANALYSIS II**

Topics include further development of integration theory, infinite series, uniform convergence, several variable calculus and metric spaces. Prerequisite: MATH 42001 with a minimum grade of C (2.000).

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Mathematics Department

Course Attributes:
Experiential Learning Requirem, Writing Intensive Course

**MATH 42011 - MATHEMATICAL OPTIMIZATION**

Analytic and numerical techniques for location of extreme points of functions and calculus of variations. Both constrained and unconstrained problems are considered. Prerequisite: MATH 21001 and MATH 22005 with minimum grades of C (2.000).

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
**MATH 42021 - GRAPH THEORY AND COMBINATORICS**

Fundamentals and applications of combinatorial mathematics. Topics include traversability, colorability, networks, inclusion and exclusion, matching and designs. Prerequisite: MATH 21001 and MATH 12003 with minimum grades of C (2.000).

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Mathematics Department

**MATH 42024 - NUMBERS AND GAMES**

The study of partisan and impartial combinatorial games; games as numbers; Grundy-Sprague theory. Prerequisite: MATH 21001 with a minimum grade of C (2.000).

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Mathematics Department

**MATH 42031 - MATHEMATICAL MODELS AND DYNAMICAL SYSTEMS**

Formulation and analysis of mathematical models for a variety of phenomena. Mathematical methods from optimization dynamical systems and probability are developed and applied. Modern software tools are utilized. Prerequisite: MATH 32044 or 32052 with minimum grades of C (2.000).

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Mathematics Department

**MATH 42039 - MODELING PROJECTS**

(Slashed with MATH 52039) Individual and small-group projects concerned with the formulation and analysis of mathematical models in a variety of areas. Written and oral reports are required. Prerequisite: MATH 42031 with a minimum grade of C (2.000).

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

Mathematics Department

Course Attributes:
Experiential Learning Requirem, Writing Intensive Course
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisites</th>
<th>Credit Hours</th>
<th>Lecture Hours</th>
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</thead>
<tbody>
<tr>
<td>MATH 42041</td>
<td>ADVANCED CALCULUS</td>
<td>The calculus and applications of scalar and vector functions of several variables. Vector differential and integral calculus. Applications to field theories, electricity and magnetism, and fluid flow. Prerequisite: MATH 21001 and MATH 22005 with minimum grades of C (2.000).</td>
<td>MATH 21001 and MATH 22005 with minimum grades of C (2.000).</td>
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<tr>
<td>MATH 42045</td>
<td>INTRODUCTION TO PARTIAL DIFFERENTIAL EQUATIONS</td>
<td>An introduction to Fourier series, Fourier transforms and partial differential equations. Wave, heat and potential equations of mathematical physics. Additional topics include Green's functions and the Method of Characteristics for wave equations. Prerequisite: MATH 32044 with a minimum grade of C (2.000).</td>
<td>MATH 32044 with a minimum grade of C (2.000).</td>
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<tr>
<td>MATH 42048</td>
<td>INTRODUCTION TO COMPLEX VARIABLES</td>
<td>Algebra of complex numbers, analytic functions, mappings, Cauchy integral theory, residue theory and applications. Prerequisite: MATH 22005 with a minimum grade of C (2.000).</td>
<td>MATH 22005 with a minimum grade of C (2.000).</td>
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<tr>
<td>MATH 42201</td>
<td>INTRODUCTION TO NUMERICAL COMPUTING I</td>
<td>(Slashed with MATH 52201; Cross-listed with CS 42201 and CS 52201). An introduction to numerical methods and software for solving many common scientific computing problems. Linear systems, least-squares data fitting, nonlinear equations and systems, and optimization problems. Prerequisites: MATH 12003 with a minimum grade of C (2.000); MATH 21001 or MATH 32051 with a minimum grade of C (2.000); and CS 10061 or CS 13001 or both CS 13011 and CS 13012 with a minimum grade of C (2.000).</td>
<td>MATH 12003 with a minimum grade of C (2.000); MATH 21001 or MATH 32051 with a minimum grade of C (2.000); and CS 10061 or CS 13001 or both CS 13011 and CS 13012 with a minimum grade of C (2.000).</td>
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<tr>
<td>MATH 42202</td>
<td>INTRODUCTION TO NUMERICAL COMPUTING II</td>
<td>(Cross-listed with CS 42202 and CS 52202 and MATH 52202) A continuation of MATH 42201. Topics include interpolation, numerical differentiation and integration, and numerical solution of ordinary differential equations.</td>
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</tbody>
</table>
Prerequisite: MATH 42201 with a minimum grade of C (2.000); and MATH 32044 or 32052 with a minimum grade of C (2.000).
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Mathematics Department

MATH 45011 - DIFFERENTIAL GEOMETRY

Analytic and metric differential geometry of curves and surfaces. Prerequisite: MATH 22005 with a minimum grade of C (2.000).
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Mathematics Department

MATH 45021 - EUCLIDEAN GEOMETRY

Geometry of Euclid extended to advanced topics of the triangle, quadrilaterals and circles: cross-ratio, groups, constructions, geometric generalizations; inversion. Prerequisite: MATH 21001 with a minimum grade of C (2.000); or special approval of instructor.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Mathematics Department

MATH 45022 - LINEAR GEOMETRY

Using transformations as a tool to study geometry and to differentiate between different kinds of geometry. Linear algebra methods applied to geometry. Prerequisite: MATH 21001 with a minimum grade of C (2.000).
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Mathematics Department

MATH 46001 - ELEMENTARY TOPOLOGY

Metric spaces, introduction to topological spaces, separation axioms. Prerequisite: MATH 22005 with a minimum grade of C (2.000).
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
MATH 47011 - THEORY OF NUMBERS

Divisibility properties of the integers, prime numbers, congruences, quadratic reciprocity, Diophantine equations, number theoretic functions, simple continued fractions, rational approximations. Prerequisite: MATH 12003 with a grade of C (2.00) or better.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Mathematics Department

MATH 47021 - HISTORY OF MATHEMATICS

Survey from Babylonian and Egyptian mathematics to 20th century mathematics with emphasis on the development of algebra, geometry, calculus, number theory. Prerequisite: 3 hours of mathematics beyond MATH 22005 with a minimum grade of C (2.00).
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Mathematics Department

MATH 49995 - SELECTED TOPICS IN MATHEMATICS AND ITS APPLICATIONS

(repeated registration permitted) various special courses will be announced in the schedule of classes under this course number with different section numbers. Prerequisite: Permission.
1.000 TO 4.000 Credit hours
1.000 TO 4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Mathematics Department

MATH 49996 - INDIVIDUAL STUDY

(Repeatable for credit) Prerequisite: special approval.
1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Mathematics Department

MATH 49998 - RESEARCH

(Repeatable for credit) Prerequisite: special approval.
1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours
MATH 50011 - INTRODUCTION TO PROBABILITY THEORY AND APPLICATIONS

Permutations and combinations, discrete and continuous distributions, random variables, conditional probabilities, Baye's formula, mathematical expectation, law of large numbers, normal approximations, basic limit theorems. Prerequisite: MATH 12003 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Mathematics Department

MATH 50012 - INTRODUCTION TO STATISTICAL CONCEPTS

Sample spaces, continuous distributions, sampling distributions, point and interval estimation, hypothesis testing, types of error, level and power of tests, sequential and nonparametric methods. Prerequisite: MATH 4/50011 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Mathematics Department

MATH 50051 - TOPICS IN PROBABILITY THEORY AND STOCHASTIC PROCESSES

Topics from conditional expectations, Markov chains, Markov processes, Brownian Motion and Martingales and their applications to stochastic calculus. Prerequisite: MATH 50011 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Mathematics Department

MATH 50055 - ACTUARIAL MATHEMATICS I

(Slashed with MATH 40055) Topics from survival models, stochastic analysis of annuities and life insurance and casualty models. Prerequisite: MATH 30055 and 50011; graduate standing.
4.000 Credit hours
4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
MATH 50056 - ACTUARIAL MATHEMATICS II

Benefit premiums, benefit reserves and their analysis; decrement models, joint survivorship, risk models. Prerequisite: MATH 50055; graduate standing.

4.000 Credit hours
4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Mathematics Department

MATH 50059 - STOCHASTIC ACTUARIAL MODELS

Designed to prepare students for the Society of Actuaries examination on actuarial mathematics. Prerequisites: MATH 50011 with a minimum grade of C (2.000); and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Mathematics Department

MATH 51001 - INTRODUCTION TO MODERN ALGEBRA I

Basic properties of groups, subgroups, factor groups. Basic properties of rings, integral domains and homomorphisms. Prerequisite: MATH 21001 and 22005. Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Mathematics Department

MATH 51002 - INTRODUCTION TO MODERN ALGEBRA II

A continuation of MATH 51001, emphasizing properties of rings, their ideals, polynomial ring extensions, fields, finite degree extensions, roots of polynomials, constructibility. Prerequisite: MATH 4/51001. Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Mathematics Department

MATH 51021 - THEORY OF MATRICES

A rigorous study of the topics introduced in matrix algebra. Topics included are: canonical forms of matrices, diagonalizability criteria. Prerequisite: MATH 21001 and 22005. Graduate standing.

3.000 Credit hours
3.000 Lecture hours
**MATH 51038 - INTERMEDIATE LOGIC**

(Cross-listed with CS 41038 and MATH 41038 and PHIL 41038 and PHIL 51038) Study of first order predicate calculus with identity and function symbols. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

**MATH 51045 - METALOGIC**

(Cross-listed with CS 41045 and CS 51045 and MATH 41045 and PHIL 41045 and PHIL 51045) Consideration of various metatheorems including soundness and completeness of propositional and predicate calculus, undecidability of predicate calculus, and incompleteness of the theory of arithmetic. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

**MATH 52001 - INTRODUCTION TO ANALYSIS I**

Topics include basic structure of the real numbers, Cauchy sequences, convergence, completeness of the real numbers, continuity, differentiation and Riemann integration. Prerequisite: MATH 21001 and 22005. Graduate standing.
3.000 Credit hours
3.000 Lecture hours

**MATH 52002 - INTRODUCTION TO ANALYSIS II**

Topics include further development of integration theory infinite series, uniform convergence, several variable calculus and metric spaces. Prerequisite: MATH 4/52001 and graduate standing.
3.000 Credit hours
3.000 Lecture hours
MATH 52011 - MATHEMATICAL OPTIMIZATION

Analytical and numerical techniques for location of extreme points of functions and calculus of variations. Both constrained and unconstrained problems are considered. Prerequisite: MATH 21001 and 22005. Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Mathematics Department

MATH 52021 - GRAPH THEORY AND COMBINATORICS

Fundamentals and applications of combinatorial mathematics. Topics include transversability, colorability, networks, inclusion and exclusion, matching and designs. Prerequisite: MATH 12003 and 21001 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Mathematics Department

MATH 52024 - NUMBERS AND GAMES

The study of partisan and impartial combinatorial games; games as numbers; Grundy-Sprague theory. Prerequisite: Special approval of instructor and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Mathematics Department

MATH 52031 - MATHEMATICAL MODELS AND DYNAMICAL SYSTEMS

Formulation and analysis of mathematical models for a variety of phenomena. Mathematical methods from optimization, dynamical systems and probability are developed and applied. Modern software tools are utilized. Prerequisite: MATH 32044 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Mathematics Department

MATH 52039 - MODELING PROJECTS

(Slashed with MATH 42039) (Repeatable for credit) Individual and small-group projects concerned with the formulation and analysis of mathematical models in a variety of areas. Written and oral reports required. Prerequisite: MATH 52031; and graduate standing.
3.000 Credit hours
**MATH 52041 - ADVANCED CALCULUS**

The calculus and applications of scalar and vector functions of several variables. Vector differential and integral calculus. Applications to field theories, electricity and magnetism, and fluid flow. Prerequisite: MATH 21001 and 22205.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Mathematics Department

**MATH 52045 - INTRODUCTION TO PARTIAL DIFFERENTIAL EQUATIONS**

Introduction to Fourier series, Fourier transforms and partial differential equations. Wave, heat and potential equations of mathematical physics. Additional topics include Green’s functions and the Method of Characteristics for wave equations. Prerequisite: MATH 32044 and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Mathematics Department

**MATH 52048 - INTRODUCTION TO COMPLEX VARIABLES**

Algebra of complex numbers, analytic functions, mappings, Cauchy integral theory, residue theory and applications. Prerequisite: MATH 22005 and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Mathematics Department

**MATH 52201 - INTRODUCTION TO NUMERICAL COMPUTING I**

(Cross-listed with CS 42201 and CS 52201 and MATH 42201)An introduction to numerical methods and software for solving many common scientific computing problems. Linear systems, least-square data fitting, nonlinear equations and systems and optimization problems. Prerequisite: MATH 12003, 21001 and CS 23021. Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
**MATH 52202 - INTRODUCTION TO NUMERICAL COMPUTING II**

(Cross-listed with CS 42202 and CS 52202 and MATH 42202) A continuation of MATH 52201. Topics include interpolation, numerical differentiation and integration, and numerical solution of ordinary differential equations. Prerequisite: MATH 32044 and 52201. Graduate standing.

3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Mathematics Department

**MATH 55011 - DIFFERENTIAL GEOMETRY**

Analytic and metric differential geometry of curves and surfaces. Prerequisite: MATH 22005 and graduate standing.

3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Mathematics Department

**MATH 55021 - EUCLIDEAN GEOMETRY**

Geometry of Euclid extended to advanced topics of the triangle, quadrilaterals and circles: crossratio, groups, constructions, geometric generalizations; inversion. Prerequisite: MATH 21001. Graduate standing.

3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Mathematics Department

**MATH 55022 - LINEAR GEOMETRY**

Use of transformations as a tool to study geometry and to differentiate between different kinds of geometry. Linear algebra methods applied to geometry. Prerequisite: MATH 21001 and graduate standing.

3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Mathematics Department

**MATH 56001 - ELEMENTARY TOPOLOGY**

Metric spaces, introduction to topological spaces, separation axioms. Prerequisite: MATH 22005 and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Mathematics Department

**MATH 57011 - THEORY OF NUMBERS**

Divisibility properties of the integers, prime numbers, congruences, quadratic reciprocity, Diophantine equations, number theoretic functions, simple continued fractions, rational approximations. Prerequisite: MATH 12003. Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Mathematics Department

**MATH 57021 - HISTORY OF MATHEMATICS**

Survey from Babylonian and Egyptian mathematics to 20th-century mathematics with emphasis on the development of algebra, geometry, calculus, number theory. Prerequisite: 3 credit hours of mathematics beyond MATH 22005 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Mathematics Department

**MATH 57091 - SELECTED TOPICS IN MATHEMATICS AND ITS APPLICATIONS**

(Repeatable for credit)Various special courses will be announced in the schedule of classes under this course number with different section numbers. Prerequisite: Special approval of instructor and graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Mathematics Department

**MATH 59893 - VARIABLE TITLE WORKSHOP IN MATHEMATICS**

(Repeatable for credit)Studies in special topics in pure and applied mathematics. Prerequisite: Special approval and graduate standing.
1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Mathematics Department
**MATH 60051 - PROBABILITY I**

Distribution functions, measure theory, random variables, expectation, independence, convergence, concepts, law of large numbers. Prerequisite: MATH 4/50011 or 4/52002. Graduate standing.

4.000 Credit hours  
4.000 Lecture hours  

Levels: Graduate  
Schedule Types: Lecture  

Mathematics Department

**MATH 60052 - PROBABILITY II**

Characteristic functions, the central limit problem, conditional expectations, Martingale theory, Brownian motion. Prerequisite: MATH 6/70051 and graduate standing.

3.000 Credit hours  
3.000 Lecture hours  

Levels: Graduate  
Schedule Types: Lecture  

Mathematics Department

**MATH 60061 - MATHEMATICAL STATISTICS I**


4.000 Credit hours  
4.000 Lecture hours  

Levels: Graduate  
Schedule Types: Lecture  

Mathematics Department

**MATH 60062 - MATHEMATICAL STATISTICS II**


3.000 Credit hours  
3.000 Lecture hours  

Levels: Graduate  
Schedule Types: Lecture  

Mathematics Department

**MATH 60070 - FINANCIAL MATHEMATICS**

Topics from replication of trading strategies, arbitrage, completeness, Martingale representation theorem, fundamental theorem of finance, stochastic differential equations, Black and Scholes formula of option pricing. Prerequisite: MATH 50051 and graduate standing.

3.000 Credit hours  
3.000 Lecture hours
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Credits</th>
<th>Lecture Hours</th>
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</thead>
<tbody>
<tr>
<td>MATH 60091</td>
<td>SEMINAR IN STATISTICS &amp; PROBABILITY</td>
<td>(Repeatable for credit) Seminar on current research in statistics and probability. Prerequisite: Special approval and graduate standing.</td>
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<td>1.000 TO 3.000 Credit hours</td>
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<td>1.000 TO 3.000 Other hours</td>
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<tr>
<td>MATH 60093</td>
<td>VARIABLE TITLE WORKSHOP IN MATHEMATICS</td>
<td>(Repeatable for credit) Studies of special topics in mathematics. Not acceptable for credit toward a graduate degree in mathematics without approval of the student's adviser. Prerequisite: Special approval and graduate standing.</td>
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<tr>
<td>MATH 60094</td>
<td>COLLEGE TEACHING OF MATHEMATICS</td>
<td>(Repeatable for credit) Techniques and problems in the teaching of college-level mathematics. Student presentations of mathematical papers and colloquia will be included. Prerequisite: Graduate standing.</td>
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<td>Schedule Types: Lecture</td>
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<tr>
<td>MATH 61051</td>
<td>ABSTRACT ALGEBRA I</td>
<td>Advanced topics in group theory including Sylow Theorems, finite Abelian groups, divisible groups and related concepts. Includes one hour problem session each week. Prerequisite: Special approval and graduate standing.</td>
<td>4.000</td>
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<td>4.000 TO 3.000 Credit hours</td>
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<td>4.000 TO 3.000 Other hours</td>
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<tr>
<td>MATH 61052</td>
<td>ABSTRACT ALGEBRA II</td>
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Advanced topics, commutative ring theory, and field theory including polynomial rings, unique factorization domains, matrix rings, Galois theory. Prerequisite: MATH 6/71051 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Mathematics Department

**MATH 61091 - SEMINAR IN ALGEBRA**

(Repeatable for credit) Seminar on current research in algebra. Prerequisite: Special approval and graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Mathematics Department

**MATH 62041 - METHODS OF APPLIED MATHEMATICS I**

Analysis and applications of ordinary and partial differential equations and related topics. Dimensional analysis (Buckingham Pi Theorem). Perturbation methods (singular perturbations, matched asymptotic expansions, WKB approximation). Variational methods (Euler-Lagrange equations). Prerequisite: MATH 51021 and MATH 52041 and MATH 52045 and MATH 52048 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Mathematics Department

**MATH 62042 - METHODS OF APPLIED MATHEMATICS II**

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Mathematics Department

**MATH 62051 - FUNCTIONS OF A REAL VARIABLE I**

Introduction to modern concepts of real analysis including metric spaces, measure and integration theory. Prerequisite: MATH 4/52002 and graduate standing.
4.000 Credit hours
4.000 Lecture hours
MATH 62052 - FUNCTIONS OF A REAL VARIABLE II
A continuation of MATH 62051/72051. Included are basic topics in functional analysis and Hilbert space theory.
Prerequisite: MATH 62051 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

MATH 62091 - SEMINAR IN REAL ANALYSIS
(Repeatable for credit) Seminar on current research in real analysis. Prerequisite: Special approval and graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

MATH 62151 - FUNCTIONS OF A COMPLEX VARIABLE I
Topological properties of the complex plane; analytic, entire, meromorphic functions; analytic continuation; conformal mappings; Picard's Theorem; Riemann surfaces. Prerequisite: MATH 52002 and graduate standing.
4.000 Credit hours
4.000 Lecture hours

MATH 62152 - FUNCTIONS OF A COMPLEX VARIABLE II
Topological properties of the complex plane; analytic, entire, meromorphic functions; analytic continuation; conformal mappings; Picard's Theorem; Riemann surfaces. Prerequisite: MATH 62151 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

MATH 62191 - SEMINAR IN COMPLEX ANALYSIS
(Repeatable for credit) Seminar on current research in complex analysis. Prerequisite: Special approval and
graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Seminar
Mathematics Department

**MATH 62203 - COMPUTATIONAL FINANCE**

Basic numerical methods, (numerical linear algebra, nonlinear equations, curve fitting, ODEs, integration, Monte-Carlo methods), numerical solution of PDEs (stability, convergence, Black-Scholes, American options, SDEs) probabilistic methods. Prerequisite: MATH 22005 and MATH 21001 and MATH 32044 and CS 10061 and graduate standing.
3.000 Credit hours
3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture
Mathematics Department

**MATH 62251 - NUMERICAL ANALYSIS I**

(Cross-listed with CS 62251 and CS 72251 and MATH 72251) Floating point computation, rounding error analysis, conditioning, interpolation (polynomial, trigonometric, spline). Numerical quadrature (Newton-Cotes, Gauss), extrapolation, Romberg integration. Prerequisite: MATH 4/52002 and graduate standing.
4.000 Credit hours
4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
Mathematics Department

**MATH 62252 - NUMERICAL ANALYSIS II**

(Cross-listed with CS 62252 and CS 72252 and MATH 72252) Numerical solution of linear systems of equations (LU factorization, error analysis). Least squares, orthogonalization methods. Algebraic eigenvalue problems, QR algorithm, singular value decomposition. Prerequisite: MATH 4/51021 and 6/72251 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
Mathematics Department

**MATH 62261 - NUMERICAL SOLUTION OF ORDINARY DIFFERENTIAL EQUATIONS**

(Cross-listed with CS 62261 and CS 72261 and MATH 72261) Discretization methods for ordinary differential equations and systems. Initial value and boundary value problems. Numerical implementation software and analysis. Prerequisite: MATH 32044 and MATH 4/52202 and graduate standing.
3.000 Credit hours
3.000 Lecture hours
MATH 62262 - NUMERICAL SOLUTION OF PARTIAL DIFFERENTIAL EQUATIONS

(Cross-listed with CS 62262 and CS 72262 and MATH 72262) Derivation and analysis of discrete methods (finite differences, finite elements) for the numerical solution of elliptic, hyperbolic and parabolic partial differential equations. Prerequisites: MATH 42045 or 52045; and MATH 42202 or 52202; and graduate standing.
3.000 Credit hours
3.000 Lecture hours

MATH 62263 - NUMERICAL SOLUTION OF LARGE SPARSE LINEAR SYSTEMS

3.000 Credit hours
3.000 Lecture hours

MATH 62264 - NUMERICAL SOLUTION OF NONLINEAR SYSTEMS

(Cross-listed with CS 62264 and CS 72264 and MATH 72264) Construction and analysis of numerical methods for systems of nonlinear algebraic equations and optimization problems. Numerical implementation and software. Prerequisites: MATH 42041 or MATH 52041; and MATH 42202 or MATH 52202; and graduate standing.
3.000 Credit hours
3.000 Lecture hours

MATH 62291 - SEMINAR IN NUMERICAL ANALYSIS

(Repeatable for credit) Seminar on current research in numerical analysis. Prerequisite: Special approval and graduate standing.
1.000 TO 3.000 Credit hours
3.000 Other hours
MATH 62391 - SEMINAR IN MEASURE THEORY

(Repeatable for credit) Seminar on current research in measure theory. Prerequisite: Special approval and graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Mathematics Department

MATH 62491 - SEMINAR IN NONLINEAR ANALYSIS

(Repeatable for credit) Seminar on current research in nonlinear analysis. Prerequisite: Special approval and graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Mathematics Department

MATH 62591 - SEMINAR IN OPERATOR THEORY

(Repeatable for credit) Seminar on current research in operator theory. Prerequisite: Special approval and graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Mathematics Department

MATH 62691 - SEMINAR IN HARMONIC ANALYSIS

(Repeatable for credit) Seminar on current research in harmonic analysis. Prerequisite: Special approval and graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Mathematics Department

MATH 63291 - SEMINAR IN APPLIED MATHEMATICS

(Repeatable for credit) Seminar on current research in applied mathematics. Prerequisite: Special approval and graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisites</th>
<th>Credits</th>
<th>Lecture Hours</th>
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<tbody>
<tr>
<td>MATH 64091</td>
<td>Seminar in Mathematics Education</td>
<td>Studies in geometry, algebra, mathematics for junior and senior high school.</td>
<td>Mathematics content professionalized for teachers. Prerequisite: MATH 34001 and graduate standing.</td>
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<tr>
<td>MATH 66051</td>
<td>Introduction to Topology I</td>
<td>Set theory, topological spaces, continuity, product spaces, quotient spaces, separation axioms, compactness and metrizability. Prerequisite: Special approval and graduate standing.</td>
<td>4.000 Credit hours 3.000 Lecture hours</td>
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<tr>
<td>MATH 66052</td>
<td>Introduction to Topology II</td>
<td>Geometric topology, including connectedness, continua, homotopy, the plane and 2 manifolds. Prerequisite: MATH 6/76051 and graduate standing.</td>
<td>3.000 Credit hours 3.000 Lecture hours</td>
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<tr>
<td>MATH 66091</td>
<td>Seminar in Topology</td>
<td>(Repeatable for credit) Seminar on current research in topology. Prerequisite: Special approval and graduate standing.</td>
<td>1.000 TO 3.000 Credit hours 1.000 TO 3.000 Other hours</td>
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<tr>
<td>MATH 67091</td>
<td>Seminar in Number Theory</td>
<td>(Repeatable for credit) Seminar on current research in number theory. Prerequisite: Graduate standing and</td>
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special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Mathematics Department

**MATH 67098 - RESEARCH**

(Repeatable for credit) Research or individual investigation. Credits are applied toward degree requirements with approval if letter grade of "S" is given. Prerequisite: Graduate standing.

1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

Mathematics Department

**MATH 67199 - THESIS I**

Thesis student must register for a total of 6 hours, 2 to 6 hours in a single semester distributed over several semesters if desired. Prerequisite: Graduate standing.

2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Mathematics Department

**MATH 67299 - THESIS II**

Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: MATH 67199 and graduate standing.

2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Mathematics Department

**MATH 70051 - PROBABILITY I**

Distribution functions, measure theory, random variables, expectation, independence, convergence, concepts, law of large numbers. Prerequisite: MATH 4/50011 or 4/52002; and doctoral standing.

4.000 Credit hours
4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Mathematics Department
### MATH 70052 - PROBABILITY II

Characteristic functions, the central limit problem, conditional expectations, Martingale theory, Brownian motion. Prerequisite: MATH 6/70051 and doctoral standing.

<table>
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<tr>
<th>Credit hours</th>
<th>Lecture hours</th>
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Levels: Graduate  
Schedule Types: Lecture

Mathematics Department

### MATH 70061 - MATHEMATICAL STATISTICS I


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<tr>
<th>Credit hours</th>
<th>Lecture hours</th>
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Levels: Graduate  
Schedule Types: Lecture

Mathematics Department

### MATH 70062 - MATHEMATICAL STATISTICS II


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<th>Credit hours</th>
<th>Lecture hours</th>
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Levels: Graduate  
Schedule Types: Lecture

Mathematics Department

### MATH 70070 - FINANCIAL MATHEMATICS

Topics from replication of trading strategies, arbitrage completeness, Martingale representation theorem, fundamental theorem of finance, stochastic differential equations, Black and Scholes formula of option pricing. Prerequisite: MATH 50051 and doctoral standing.

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<tr>
<th>Credit hours</th>
<th>Lecture hours</th>
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Levels: Graduate  
Schedule Types: Lecture

Mathematics Department

### MATH 70091 - SEMINAR IN STATISTICS & PROBABILITY

(Repeatable for credit) Seminar on current research in statistics and probability. Prerequisite: Special approval and doctoral standing.

<table>
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<tr>
<th>Credit hours</th>
<th>Other hours</th>
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Levels: Graduate  
Schedule Types: Lecture

Mathematics Department
**MATH 70094 - COLLEGE TEACHING OF MATHEMATICS**

(Repeatable for credit) Techniques and problems in the teaching of college-level mathematics. Student presentations of mathematical papers and colloquia will be included. Prerequisite: Doctoral standing.

1.000 Credit hours
1.000 Lecture hours

**MATH 70095 - SELECTED TOPICS IN STATISTICS AND PROBABILITY**

(Repeatable for credit) Contents will vary with each offering and will complement topics covered in MATH 6/70051, 6/70052 and MATH 6/70061, 6/70062. Prerequisite: Doctoral standing and special approval.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

**MATH 71001 - STRUCTURE OF RINGS AND ALGEBRAS I**

Advanced topics in ring theory, including Artinian rings, Noetherian rings, advanced commutative ring theory. Prerequisite: Special approval and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

**MATH 71002 - STRUCTURE OF RINGS AND ALGEBRAS II**

Advanced topics in ring theory including an introduction to homological algebra. Includes Dedekind domains, regular rings, torsion theory. Prerequisite: MATH 71001 and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

**MATH 71011 - ADVANCED GROUP THEORY**

Advanced topics in group theory. Topics include permutation arguments, coprime actions, transfer theorems,
nonsimplicity criteria. Properties of families of groups: solvable, p solvable, nilpotent, p groups. Prerequisite: MATH 6/71051 and MATH 6/71052 and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Mathematics Department

**MATH 71012 - CHARACTERS OF FINITE GROUPS**

Development of characters of finite groups, their properties, orthogonality relations, integrality conditions. Applications include Burnside's paqb theorem and existence of Frobenius kernels in Frobenius groups. Prerequisite: MATH 6/71051 and MATH 6/71052 and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Mathematics Department

**MATH 71051 - ABSTRACT ALGEBRA I**

Advanced topics in group theory including Sylow theorems, finite Abelian groups, divisible groups and related concepts. Includes one-hour problem session each week. Prerequisite: Special approval and doctoral standing.

4.000 Credit hours
4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Mathematics Department

**MATH 71052 - ABSTRACT ALGEBRA II**

Advanced topics, commutative ring theory, and field theory including polynomial rings, unique factorization, domains, matrix rings, Galois theory. Prerequisite: MATH 6/71051 and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Mathematics Department

**MATH 71091 - SEMINAR IN ALGEBRA**

(Repeatable for credit) Seminar on current research in algebra. Prerequisite: Permission and doctoral standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Mathematics Department
MATH 71095 - SELECTED TOPICS IN ALGEBRA

(Repeatable for credit) Contents will vary with each offering and will complement topics covered in MATH 6/71051, 6 71052 71001 and 71002. Prerequisite: Permission and doctoral standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Mathematics Department

MATH 72002 - FUNCTIONAL ANALYSIS II

A study of principles of linear analysis in the setting of normed linear spaces and topological vector spaces. Prerequisite: MATH 72001 and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Mathematics Department

MATH 72041 - METHODS OF APPLIED MATHEMATICS I

Analysis and applications of ordinary and partial differential equations and related topics. Dimensional analysis (Buckingham Pi Theorem). Perturbation methods (singular perturbations, matched asymptotic expansions, WKB approximation). Variational methods (Euler-Lagrange equations). Prerequisite: MATH 51021 and MATH 52041 and MATH 52045 and MATH 52048 and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Mathematics Department

MATH 72042 - METHODS OF APPLIED MATHEMATICS II

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Mathematics Department

MATH 72051 - FUNCTIONS OF A REAL VARIABLE I

Introduction to modern concepts of real analysis including metric spaces, measure and integration theory.
MATH 72052 - FUNCTIONS OF A REAL VARIABLE II

A continuation of MATH 62051/72051. Included are basic topics in functional analysis and Hilbert space theory. Prerequisite: MATH 6/72051 and doctoral standing.

Levels: Graduate
Schedule Types: Lecture

MATH 72091 - SEMINAR IN REAL ANALYSIS

(Repeatable for credit) Seminar on current research in real analysis. Prerequisite: Special approval and doctoral standing.

Levels: Graduate
Schedule Types: Seminar

MATH 72095 - SELECTED TOPICS IN REAL ANALYSIS

(Repeatable for credit) Contents will vary with each offering and will implement topics covered in MATH 6/72051, 6/72052 and 6/72002. Prerequisite: Special approval and doctoral standing.

Levels: Graduate
Schedule Types: Lecture

MATH 72151 - FUNCTIONS OF A COMPLEX VARIABLE I

(Slashed with MATH 62151) Topological properties of the complex plane; analytic, entire, meromorphic functions; analytic continuation; conformal mappings; Picard's Theorem; Riemann surfaces. Prerequisite: MATH 52002; and doctoral standing.

Levels: Graduate
Schedule Types: Lecture
### MATH 72152 - FUNCTIONS OF A COMPLEX VARIABLE II

(Slashed with MATH 62152) Topological properties of the complex plane; analytic, entire, meromorphic functions; analytic continuation; conformal mappings; Picard's theorem; Riemann surfaces. Prerequisites: MATH 72151; and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Mathematics Department

### MATH 72191 - SEMINAR IN COMPLEX ANALYSIS

(Repeatable for credit) Seminar on current research in complex analysis. Prerequisite: Special approval and doctoral standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Mathematics Department

### MATH 72195 - SELECTED TOPICS IN COMPLEX ANALYSIS

(Repeatable for credit) Contents will vary with each offering and will complement topics covered in MATH 6/72151, 6/72152 and 72021. Prerequisite: Special approval and doctoral standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Mathematics Department

### MATH 72203 - COMPUTATIONAL FINANCE

Basic numerical methods, (numerical linear algebra, nonlinear equations, curve fitting, ODEs, integration, Monte-Carlo methods) numerical solution of PDEs (stability, convergence, Black-Scholes, American options, SDEs) probabilistic methods. Prerequisite: MATH 22005 and MATH 21001 and MATH 32044 and CS 10061 and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Mathematics Department

### MATH 72251 - NUMERICAL ANALYSIS I

(Cross-listed with CS 62251 and CS 72251 and MATH 62251) Floating point computation, rounding error analysis, conditioning, interpolation (polynomial, trigonometric spline). Numerical quadrature (Newton-Cotes,
Gauss), extrapolation, Romberg integration. Prerequisite: MATH 4/52002 and doctoral standing.

4.000 Credit hours
4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Mathematics Department

**MATH 72252 - NUMERICAL ANALYSIS II**


3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Mathematics Department

**MATH 72261 - NUMERICAL SOLUTION OF ORDINARY DIFFERENTIAL EQUATIONS**


3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Mathematics Department

**MATH 72262 - NUMERICAL SOLUTION OF PARTIAL DIFFERENTIAL EQUATIONS**

(Cross-listed with CS 62262 and CS 72262 and MATH 62262) Derivation and analysis of discrete methods (finite differences, finite elements) for the numerical solution of elliptic, hyperbolic and parabolic partial differential equations. Prerequisites: MATH 42045 or 52045; and MATH 42202 or 52202; and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Mathematics Department

**MATH 72263 - NUMERICAL SOLUTION OF LARGE SPARSE LINEAR SYSTEMS**


3.000 Credit hours
3.000 Lecture hours
MATH 72264 - NUMERICAL SOLUTION OF NONLINEAR SYSTEMS

(Cross-listed with CS 62264 and CS 72264 and MATH 72264) Construction and analysis of numerical methods for systems of nonlinear algebraic equations and optimization problems. Numerical implementation and software. Prerequisites: MATH 4/52041 and MATH 4/52202 and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

MATH 72291 - SEMINAR IN NUMERICAL ANALYSIS

(Repeatable for credit) Seminar on current research in numerical analysis. Prerequisite: Special approval and doctoral standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

MATH 72295 - SELECTED TOPICS IN NUMERICAL ANALYSIS

(Repeatable for credit) Contents will vary with each offering and will complement topics covered in MATH 6/72251-6/72252 and MATH 72201. Prerequisite: Special approval and doctoral standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

MATH 72391 - SEMINAR IN MEASURE THEORY

(Repeatable for credit) Seminar on current research in measure theory. Prerequisite: Special approval and doctoral standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

MATH 72491 - SEMINAR IN NONLINEAR ANALYSIS
(Repeatable for credit) Seminar on current research in nonlinear analysis. Prerequisite: Special approval and doctoral standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Mathematics Department

**MATH 72591 - SEMINAR IN OPERATOR THEORY**

(Repeatable for credit) Seminar on current research in operator theory. Prerequisite: Special approval and doctoral standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Mathematics Department

**MATH 72691 - SEMINAR IN HARMONIC ANALYSIS**

(Repeatable for credit) Seminar on current research in harmonic analysis. Prerequisite: Special approval and doctoral standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Mathematics Department

**MATH 73291 - SEMINAR IN APPLIED MATHEMATICS**

(Repeatable for credit) Seminar on current research in applied mathematics. Prerequisite: Special approval and doctoral standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Mathematics Department

**MATH 76051 - INTRODUCTION TO TOPOLOGY I**

Set theory, topological spaces, continuity, product spaces, quotient spaces separation axioms, compactness and metrizability. Prerequisite: Special approval and doctoral standing.
4.000 Credit hours
4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
MATH 76052 - INTRODUCTION TO TOPOLOGY II

Geometric topology, including connectedness, continua, homotopy, the plane and 2 manifolds. Prerequisite: MATH 6/76051 and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Mathematics Department

MATH 76091 - SEMINAR IN TOPOLOGY

(Repeatable for credit) Seminar on current research in topology. Prerequisite: Permission and doctoral standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Mathematics Department

MATH 76095 - SELECTED TOPICS IN TOPOLOGY

(Repeatable for credit) Contents will vary with each offering and will complement topics covered in MATH 6/76051, 6 76052 76001 and 76002. Prerequisite: Permission and doctoral standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Mathematics Department

MATH 77011 - ALGEBRAIC NUMBER THEORY

Number fields and Dedekind domains; conjugates, norm and trace, discriminant,integral bases; arithmetic or quadraic and cyclotomic number fields; theory of ideals and class group; Dirichlet's thoerem on units.
Prerequisite: MATH 57011 and MATH 6/71052 and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Mathematics Department

MATH 77012 - ANALYTIC NUMBER THEORY

Multiplicative functions and summatory functions, Riemann's Zeta function and the prime number theorem, L-functions and Dirichlet's theorem on primes in arithmetic progressions, asymptotic formula for partitions.
Prerequisite: MATH 57011 and MATH 6/72151.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Mathematics Department

**MATH 77091 - SEMINAR IN NUMBER THEORY**

(Repeatable for credit) Seminar on current research in number theory. Prerequisite: Doctoral standing and special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Mathematics Department

**MATH 77095 - SELECTED TOPICS IN MATHEMATICS**

(Repeatable for credit) Contents will vary with each offering. Prerequisite: Permission.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Mathematics Department

**MATH 77098 - RESEARCH**

(Repeatable for credit) Research or individual investigation. Credits are applied toward degree requirements with approval if letter grade of "S" is given. Prerequisite: Doctoral standing.
1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

Mathematics Department

**MATH 77195 - SELECTED TOPICS IN NUMBER THEORY**

(Repeatable for credit) Content varies with each offering and complements topics covered in MATH 77011 and MATH 77012. Prerequisite: Doctoral standing and special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Mathematics Department

**MATH 87098 - RESEARCH**
(Repeatable for credit) Research or individual investigation for doctoral students who have not yet passed their candidacy examinations. Credits earned may be applied toward degree if department approves. Prerequisite: Doctoral standing.

1.00 TO 15.00 Credit hours
1.00 TO 15.00 Other hours

Levels: Graduate
Schedule Types: Research

Mathematics Department

**MATH 87199 - DISSERTATION I**

(Repeatable for credit) Doctoral dissertation, for which registration in at least two semesters is required first of which will be semester in which dissertation work is begun and continuing until the completion of 30 hours. Prerequisite: Admission to doctoral candidacy and doctoral standing.

15.00 Credit hours
15.00 Other hours

Levels: Graduate
Schedule Types: Dissertation

Mathematics Department

**MATH 87299 - DISSERTATION II**

(Repeatable for credit) Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. Prerequisite: MATH 87199 and doctoral standing.

15.00 Credit hours
15.00 Other hours

Levels: Graduate
Schedule Types: Dissertation

Mathematics Department

**MCED 30001 - TEACHING MATHEMATICS IN MIDDLE CHILDHOOD I**

Examine issues and trends in mathematics and mathematics education. Theories of the teaching and learning of mathematics will be addressed within the context of problem solving, communications, reasoning and connections with other disciplines. Prerequisite: EPSY 29525; and MATH 14001 and MATH 14002; and admission to advanced study.

3.00 Credit hours
3.00 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**MCED 30002 - INTEGRATED SOCIAL STUDIES AND SCIENCE IN MIDDLE CHILDHOOD**

Introductory methods course integrating social studies and science. Emphasis on principles of teaching and learning as applied to teaching to social issues and problems appropriate for middle childhood students. Prerequisite: Admission to advanced study.

3.000 Credit hours
**MCED 31000 - TEACHING AND LEARNING IN MIDDLE CHILDHOOD**

Theories of learning and classroom management and their application to teaching in grades 4-9 classrooms with diverse learners. 15 credit hours of field experience in grades 4-5. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school/agency before the first day of the semester in which student teaching/internship will take place. Prerequisite: Admission to advanced study and middle childhood education (MCED) major.

- **3.000 Credit hours**
- **3.000 Lecture hours**

**Levels:** Undergraduate  
**Schedule Types:** Lecture

Teaching Learning and Curricul Department

**MCED 40001 - TEACHING MATHEMATICS IN MIDDLE CHILDHOOD II**

To develop knowledge of the theories, materials and methods used to teach mathematics in the contemporary classroom for grades 4-9 and develop skill in their use. Prerequisite: MCED 30001 and admission to advanced study.

- **3.000 Credit hours**
- **3.000 Lecture hours**

**Levels:** Undergraduate  
**Schedule Types:** Lecture

Teaching Learning and Curricul Department

**MCED 40002 - TEACHING SCIENCE IN THE MIDDLE CHILDHOOD II**

Individual and group work develop effective techniques of teaching science concepts to 8-14 year olds. Attention given to methods equipment safety and planning. This course includes 40 field clinical hours. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school/agency before the first day of the semester in which student teaching/internship will take place. Prerequisite: MCED 30002 and admission to advanced study.

- **3.000 Credit hours**
- **3.000 Lecture hours**

**Levels:** Undergraduate  
**Schedule Types:** Lecture

Teaching Learning and Curricul Department

**MCED 40003 - TEACHING SOCIAL STUDIES IN MIDDLE CHILDHOOD II**

Advanced methods course. Examines the purpose of citizenship education and understanding the role of history and the social sciences. Applying the principles of powerful teaching. Includes a major field experience at the student teaching site. Students are required to complete Bureau of Criminal Investigation and Identification
(BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school/agency before the first day of the semester in which student teaching/internship will take place. Prerequisite: MCED 30002 and admission to advanced study.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**MCED 40005 - EFFECTIVE USE OF PHONICS IN READING**

The influence of theoretical perspectives on word identification instruction, an examination of the role of phonics in reading and writing strategies for effective phonics instruction and assessment. Prerequisite: Advanced study.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**MCED 40006 - READING AND WRITING IN MIDDLE CHILDHOOD**

Understanding of literacy learning in the middle childhood (ages 8-14) with emphasis on the development of reading and writing processes, strategies for text learning, literacy in electronic environments, authentic assessment and teaching children who struggle as readers. Prerequisite: Advanced study.

6.000 Credit hours
6.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

Course Attributes:
Writing Intensive Course

**MCED 40007 - TEACHING READING WITH LITERATURE IN MIDDLE CHILDHOOD**

The study of the teaching of reading with literature with middle childhood students within an integrated language arts approach in a comprehensive literature program. Prerequisite: MCED 40006 and admission to advanced study.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**MCED 40045 - TEACHING MATHEMATICS IN THE INTERMEDIATE YEARS, GRADES 4-5**

To develop knowledge of the theories, materials and methods used to teach mathematics in the contemporary classroom for grades 4-5 and develop skill in their use. Prerequisite: ECED 40147 with a minimum grade of C.
MCED 41000 - CURRICULUM AND ORGANIZATION IN MIDDLE CHILDHOOD

History, philosophy, curricula and organization of schools serving early adolescents in grades 4-9. Emphasis on development of programs and curricula and early adolescent development. 15 credit hours of field experience in grades 6-9. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school/agency before the first day of the semester in which student teaching/ internship will take place. Prerequisite: Admission to advanced study and middle childhood education (MCED) major and MCED 31000.

Levels: Undergraduate
Schedule Types: Lecture

MCED 42358 - STUDENT TEACHING IN MIDDLE CHILDHOOD

Full-time student teaching for sixteen weeks in two selected concentrations (mathematics, science, language arts, social studies) and reading in grades 4-5 or grades 6-7-8. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school-agency before the first day of the semester in which student teaching internship will take place. Prerequisite: MCED 41000 and MCED 40007 and admission to advanced study; and Official valid certification of Child Safety Training, approved Basic Life Support and A.L.I.C.E. Training must be presented to the campus office of clinical experience or designated faculty/staff at Regional campuses as prerequisite for student teaching. Corequisite: MCED 49525.

Levels: Undergraduate
Schedule Types: Practicum or Internship

MCED 46645 - CRITICAL INQUIRY AND INTEGRATION: SCIENCE AND SOCIAL STUDIES, GRADE 4

Introduces students to fourth grade content using an interdisciplinary, inquiry approach to teaching and learning in science and social studies. Prerequisite: special approval.

Levels: Undergraduate
Schedule Types: Lecture
MCED 47745 - CRITICAL INQUIRY AND INTEGRATION: SCIENCE AND SOCIAL STUDIES, GRADE 5

Engages students in the use and development of pedagogical content knowledge for teaching grade 5 using an interdisciplinary, inquiry approach to teaching and learning in science and social studies. Prerequisite: special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

MCED 49525 - INQUIRY INTO PROFESSIONAL PRACTICE: MIDDLE CHILDHOOD

A seminar linked to student teaching with an emphasis on action research as professional development; completion of professional portfolios; professional ethics; and legal, medical and ethical issues in teaching. Prerequisite: MCED 41000 and MCED 40007. Corequisite: MCED 42358.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

MCED 50002 - TEACHING SCIENCE IN MIDDLE CHILDHOOD II

Individual and group work develop effective techniques of teaching science concepts to 8-14 year olds. Attention given to methods, equipment safety and planning. This course includes 40 field/clinical hours. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school/agency before the first day of the semester in which student teaching/internship will take place. Prerequisite: MCED 30002 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

MCED 50003 - TEACHING SOCIAL STUDIES IN MIDDLE CHILDHOOD II

Advanced methods course. Examines the purpose of citizenship education and understanding the role of history and the social sciences. Applying the principles of powerful teaching. Includes a major field experience at the student teaching site. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school/agency before the first day of the semester in which student teaching/internship will take place. Prerequisite: MCED 30002 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department
MCED 50005 - EFFECTIVE USE OF PHONICS IN READING

The influence of theoretical perspectives on word identification instruction, an examination of the role of phonics in reading and writing, strategies for effective phonics instruction and assessment. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

MCED 50006 - READING AND WRITING IN MIDDLE CHILDHOOD

Understanding of literacy learning in the middle childhood (classrooms grades 4-9) with emphasis on the development of reading and writing processes, strategies for text learning, literacy in electronic environments, authentic assessment and teaching children who struggle as readers. Prerequisite: Graduate standing.
6.000 Credit hours
6.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

MCED 50007 - TEACHING READING WITH LITERATURE IN MIDDLE CHILDHOOD

The study of the teaching of reading with literature with middle childhood students within an integrated language arts approach in a comprehensive literature program. Prerequisite: MCED 50006 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

MCED 50045 - TEACHING MATHEMATICS IN THE INTERMEDIATE YEARS, GRADES 4-5

To develop knowledge of the theories, materials and methods used to teach mathematics in the contemporary classroom for grades 4-5 and develop skill in their use. Prerequisites: ECED 40147 with a minimum grade of C; and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

MCED 52358 - STUDENT TEACHING IN MIDDLE CHILDHOOD

Full-time student teaching for sixteen weeks on an interdisciplinary team in two selected concentrations
(mathematics, language arts, social studies, science) and reading in grades 4-9. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school-agency before the first day of the semester in which student teaching internship will take place. Prerequisite: graduate standing; and Official valid certification of Child Safety Training, approved Basic Life Support and A.L.I.C.E. Training must be presented to the campus office of clinical experience or designated faculty-staff at Regional campuses as prerequisite for student teaching. Corequisite: MCED 59525.

9.000 Credit hours
9.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Teaching Learning and Curricul Department

**MCED 56645 - CRITICAL INQUIRY AND INTEGRATION: SCIENCE AND SOCIAL STUDIES, GRADE 4**

Introduces students to fourth grade content using an interdisciplinary, inquiry approach to teaching and learning in science and social studies. Prerequisite: special approval and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**MCED 57745 - CRITICAL INQUIRY AND INTEGRATION: SCIENCE AND SOCIAL STUDIES, GRADE 5**

Engages students in the use and development of pedagogical content knowledge for teaching grade 5 using an interdisciplinary, inquiry approach to teaching and learning in science and social studies. Prerequisite: graduate standing and special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**MCED 59525 - INQUIRY INTO PROFESSIONAL PRACTICE MIDDLE CHILDHOOD**

A seminar linked to student teaching with an emphasis on action research as professional development, completion of professional portfolios, professional ethics and legal, medical and ethical issues in teaching. Prerequisite: Minimum grade of C (2.000) in CI 67107 and in MCED 50007 and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**MCLS 10001 - INTRODUCTION TO STRUCTURAL CONCEPTS FOR LANGUAGE STUDENTS**

Prepares students for successful study of a foreign language; includes introduction to basic grammatical concepts such as use of verb tenses, personal pronouns, etc., as well as strategies for learning a foreign
language efficiently. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**MCLS 10095 - SPECIAL TOPICS IN ELEMENTARY FOREIGN LANGUAGE STUDY**

(Repeatable for credit) Study of a foreign language at the elementary level (Elementary I or II) or intermediate level (Intermediate I or II) as determined appropriate by the department. No proficiency needed for work at the Elementary I level; proficiency equivalent of Elementary I for work at the Elementary II level, at Elementary II for the Intermediate I level, and at Intermediate I for the Intermediate II level. Prerequisite: special approval.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**MCLS 20000 - GLOBAL LITERACY AND CULTURAL AWARENESS**

Introduction to dimensions of cultural identity and parameters of cultural expression, with a focus on fostering cultural awareness skills. By exploring the ways in which culture shapes us, students gain a better understanding of the dynamics shaping their world, the world of others, and their respective places in it. Discussion of real-world critical incidents, authentic cultural ethnographies, and case studies provide students with concrete examples and contexts to solve problems linked to encounters with persons of different linguistic and cultural backgrounds. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**MCLS 20091 - VARIABLE CONTENT SEMINAR IN GLOBAL LITERACY: CASE STUDIES**

(Repeatable for credit) In-depth study of the interaction between two or more cultures of the world, focusing on the impact of linguistic and other cultural differences. Topics will vary. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Seminar

Modern-Classical Lang Studies Department

**MCLS 21417 - MULTICULTURALISM IN TODAY'S GERMANY**

This course examines how issues of diversity have shaped German culture and traces the country's transformation into a postnational, multicultural society. Taught in English; knowledge of German not necessary. Prerequisite: None.

3.000 Credit hours
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisite</th>
<th>Credit Hours</th>
<th>Lecture Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCLS 22217</td>
<td>DIVERSITY IN TODAY’S RUSSIA</td>
<td>This course examines how issues of diversity have shaped Russian culture and traces Russia's attempts at transition to a postnational, multicultural society. Taught in English; knowledge of Russian not necessary.</td>
<td>None</td>
<td>3.000</td>
<td>3.000</td>
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<tr>
<td>MCLS 23217</td>
<td>THE FRANCOPHONE EXPERIENCE</td>
<td>An introduction to various aspects of contemporary society and culture in countries where French is spoken. Taught in English; knowledge of French not necessary.</td>
<td>None</td>
<td>3.000</td>
<td>3.000</td>
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<tr>
<td>MCLS 28404</td>
<td>THE LATIN AMERICAN EXPERIENCE</td>
<td>An introduction to various aspects of contemporary Latin American societies and cultures. Taught in English; knowledge of a foreign language is not necessary.</td>
<td>None</td>
<td>3.000</td>
<td>3.000</td>
</tr>
</tbody>
</table>
MCLS 28405 - THE SPANISH EXPERIENCE

An introduction to aspects of contemporary Spanish culture that examines how issues of diversity have shaped today's multicultural, multilingual society. Taught in English; knowledge of Spanish not necessary. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

Course Attributes:
Diversity Course-Global

MCLS 30420 - FOREIGN LANGUAGES AND CULTURE STUDIES

Examines the anthropological, linguistic and cultural dimensions involved in language interactions. Students acquire the skills necessary to analyze language and culture “in action” from verbal and non-verbal perspectives, and to identify and reflect on the distinctive viewpoints of other cultures and speakers of other languages. Interactive lectures, discussions and application activities build on students’ current linguistic and cultural competence. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

MCLS 30660 - ORIENTATION TO SECOND LANGUAGE PEDAGOGY

Theories of human development and learning, second language acquisition research and second language methodology form the basis for classroom practices. Peer-teaching and 30 hours of field experience required. Prerequisite: Special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

MCLS 39597 - INTRADEPARTMENTAL COLLOQUIUM

(Repeatable for credit)Permits students to explore areas of special interest not usually covered in standard departmental courses, e.g. movies and literature, women in literature. Prerequisite: None.
1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Undergraduate
Schedule Types: Colloquium

Modern-Classical Lang Studies Department

MCLS 40093 - VARIABLE TITLE WORKSHOP IN MODERN AND CLASSICAL LANGUAGE STUDIES
Workshops individually designed to provide instruction and training in specific areas of modern and classical language studies. Prerequisite: Departmental special approval.

1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Undergraduate
Schedule Types: Workshop

Modern-Classical Lang Studies Department

**MCLS 40095 - SELECTED TOPICS**

(Repeatable for credit when topic varies) Topic to be announced in the schedule of classes. Prerequisite: Senior standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**MCLS 40525 - INQUIRY INTO PROFESSIONAL PRACTICE**

Foreign language teaching as a profession and the teacher as disciplined investigator. The final seminar of four it is conducted during the student teaching semester with emphasis on collaborative and individual classroom problem solving. Prerequisite: Special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**MCLS 40654 - COMPUTERS IN SECOND LANGUAGE TEACHING**

(Cross-listed with ENG 41002+ ENG 63035+MCLS 50654) Designed for future teachers of language and culture, this course explores the availability of technology, its implementation in the classroom and its integration with second language skills. Prerequisite: MCLS 30660.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**MCLS 40657 - STUDENT TEACHING OF A SECOND LANGUAGE**

Supervised practicum in the teaching of a second language, grades K-12. Prerequisite: Special approval; and Official valid certification of Child Safety Training, approved Basic Life Support and A.L.I.C.E. Training must be presented to the campus office of clinical experience or designated faculty/staff at Regional campuses as prerequisite for student teaching.

3.000 TO 9.000 Credit hours
3.000 TO 9.000 Other hours
MCLS 40660 - METHODS OF TEACHING FOREIGN LANGUAGE

Theoretical bases, approaches, methods, materials and techniques of foreign language instruction at the elementary and secondary levels. Peer-teaching and 30 hours of field experience required. Prerequisite: MCLS 30660 and special approval.

3.000 Credit hours
3.000 Lecture hours

MCLS 50093 - VARIABLE TITLE WORKSHOP IN MODERN AND CLASSICAL LANGUAGE STUDIES

(Repeatable for credit) Workshops individually designed to provide instruction and training in specific areas of modern and classical language studies. Prerequisite: Special approval and graduate standing.

1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

MCLS 50095 - SELECTED TOPICS

(Repeatable for credit when topic varies) Topic to be announced in the schedule of classes. Prerequisite: Graduate standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

MCLS 50654 - COMPUTERS IN SECOND LANGUAGE TEACHING

(Cross-listed with ENG 41002 + ENG 63035+ MCLS40654) Designed for teachers of language and culture, this course explores the availability of technology, its implementation in the classroom and its integration with foreign language skills. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours
MCLS 50660 - METHODS OF TEACHING FOREIGN LANGUAGES
Theoretical bases, approaches, methods, materials and techniques of foreign language instruction at the elementary and secondary levels. Peer teaching 30 hours of field experience and curriculum guide required. Prerequisite: Special approval and graduate standing.
3.000 Credit hours
3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture

MCLS 60020 - SEMEIOISTICS
(Cross-listed PHIL 61055) An introduction to contemporary theories of semiotics and to the application of those theories to linguistics, literature, translation and technology. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture

MCLS 60094 - COLLEGE TEACHING OF FOREIGN LANGUAGES
(Repeatable for credit) An introduction to current principles and issues in the teaching of foreign languages at the college elementary and intermediate levels. Required of departmental teaching assistants. Prerequisite: Graduate standing.
1.000 Credit hours
1.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture

MCLS 60601 - LINGUISTICS FOR THE LANGUAGE PROFESSIONS
(Cross-listed with ENG 63040) Students will be introduced to basic linguistic issues and how these relate to the language professions. Course focuses on functional principles, especially on options to express textual, interpersonal and ideational/experiential meaning. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture

MCLS 60621 - THE PRAGMATICS OF CONVERSATION
(Cross-listed with ENG 63037) Theories of pragmatics, conversational structure and strategies with practical
applications for teaching conversation strategies to foreign/second language learners. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**MCLS 60622 - TEACHING LITERATURE AND CULTURE**

(Cross-listed with ENG 63038) Students will explore theories of literature and culture teaching as well as strategies for teaching literature and culture. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**MCLS 60623 - SOCIOCULTURAL THEORY AND FOREIGN AND SECOND LANGUAGE ACQUISITION**

The foundations of sociocultural theory and its applications to the second and foreign language classroom. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**MCLS 60624 - HERITAGE LANGUAGES AND SECOND LANGUAGE LEARNING**

(Cross-listed with ENG 63047) Theory and practice in language education of heritage language speakers. Ethnic, minority, ancestral, and community languages and language practices will be explored with implications for second and additional language learning in English, foreign language, bilingual education. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**MCLS 60661 - THEORIES IN SECOND LANGUAGE ACQUISITION**

(Cross-listed with ENG 63033 + ENG 73033) This course surveys the major theoretical approaches to language acquisition, concentrating on second language acquisition and the relationship between acquisition/learning research and second language teaching approaches. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
MCLS 60663 - SECOND LANGUAGE CURRICULUM AND TESTING

(Cross-listed with ENG 63039) Students will study second language curriculum and testing design and current issues, including oral proficiency testing. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

MCLS 60664 - SECOND LANGUAGE READING

(Cross-listed with ENG 63044) This course addresses a wide variety of topics related to second language reading, including theoretical perspectives, the process of learning to read, models of how reading happens, comprehension, fluency, discourse structures, strategy use, and vocabulary acquisition. Teaching issues related to second language reading will also be addressed directly, namely assessment and curriculum building. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Seminar

MCLS 60665 - SECOND LANGUAGE WRITING

(Cross-listed with ENG 63043) Theory and practice in teaching second language writing. Topics will include current and historic approaches to second language writing, approaches to tutoring international students in writing centers, teacher and peer response, error correction and technology in second language writing instruction. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

MCLS 60698 - SECOND LANGUAGE RESEARCH METHODS

(Cross-listed with ENG 63098) Students learn how second language research influences their teaching practices by studying research texts and recent journal articles and conducting a research project. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Research
### MERT 12000 - ENGINEERING DRAWING

Engineering drawing principles and techniques: orthographic projection, sketching, sections, auxiliary views, dimensioning and conventional practices. Prerequisite: None.

3.000 Credit hours  
3.000 Lecture hours  

Levels: Undergraduate  
Schedule Types: Lecture  

Regional College Department

### MERT 12001 - COMPUTER-AIDED DRAFTING

Builds on skills learned in MERT 12000 Engineering Drawing. Teaches students how to construct multi-view drawings and how to create sets of mechanical component drawings, including assembly and detail sheets. Prerequisite: MERT 12000.

3.000 Credit hours  
2.000 Lecture hours  
2.000 Lab hours  

Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab  

Regional College Department  

Course Attributes:  
CTAG - Mech Engineering Tech, TAG - Engineering Technology

### MERT 12004 - MANUFACTURING PROCESSES

Introduces students to the various manufacturing processes such as extrusion, molding, forging, casting, stamping, piercing, joining and finishing. Investigates the various ways parts are made from the vast array of materials available. Prerequisite: none.

3.000 Credit hours  
2.000 Lecture hours  
2.000 Lab hours  

Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab  

Regional College Department  

Course Attributes:  
CTAG - Mech Engineering Tech, TAG - Engineering Technology

### MERT 12005 - PROPERTIES OF MATERIALS

Covers the chemical and physical properties of engineering materials such as metals (ferous and non-ferous), polymers, ceramics and composites. Students learn the mechanical and physical properties of materials, and the effects that manufacturing processes have on the material's properties. Prerequisite: none.

3.000 Credit hours  
2.000 Lecture hours  
2.000 Lab hours  

Levels: Undergraduate
### MERT 21096 - INDIVIDUAL INVESTIGATION IN MECHANICAL ENGINEERING TECHNOLOGY

(Repeatable for credit) Independent, in depth research of a mechanical engineering technology topic supervised and coordinated by an engineering technology faculty member. Prerequisite: Permission.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

**Levels:** Undergraduate  
**Schedule Types:** Individual Investigation

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### MERT 22003 - COMPUTER-AIDED TOOL DESIGN

Tool design practices and procedures including materials, commercial standards, cutting tools, drill jigs, fixtures, dies and gauges using computer-aided design. Prerequisite: MERT 12001.

3.000 Credit hours  
3.000 Lecture hours

**Levels:** Undergraduate  
**Schedule Types:** Lecture

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### MERT 22004 - MECHANICS AND MACHINE DESIGN

Machine design procedures including static and dynamic stresses, stress concentrations, design considerations. Design of keys, pins, fasteners, welds, power transmission devices and related components. Prerequisite: none.

3.000 Credit hours  
3.000 Lecture hours

**Levels:** Undergraduate  
**Schedule Types:** Lecture

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### MERT 22005 - STATICS

Basic vector mechanics, calculation of reactions from applied forces, drawing free body diagrams, working with equations of equilibrium, analysis of simple structures, calculating mass properties and forces due to friction. Prerequisite: MATH 19001. Corequisite: MATH 19002.

3.000 Credit hours  
3.000 Lecture hours

**Levels:** Undergraduate  
**Schedule Types:** Lecture
Course Attributes:
TAG - Engineering Technology

**MERT 22007 - STRENGTH OF MATERIALS**

Covers taking the stresses induced into members due to applied loading, and coupled with mass properties of the sections, designing members to safely carry the loads. Types of stresses considered are tensile, compressive, shear, bending, torsional and combined. Prerequisite: MERT 22005.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

Course Attributes:
TAG - Engineering Technology

**MERT 22009 - ENGINEERING TECHNOLOGY PROJECT**

A practical, hands-on experience which emphasizes the integration of analytical and design skills acquired in companion courses. Students will work in teams under direct faculty supervision. Engineering communication such as reports and oral presentations are covered. The capstone design projects include creative and challenging projects within the engineering discipline. Prerequisite: EERT 22014.

2.000 Credit hours
1.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

Course Attributes:
TAG - Engineering Technology

**MERT 22012 - FLUID POWER**

Fluid properties, kinematics of fluid flow, momentum, viscosity, conservation of energy in fluid flow, industrial hydraulics and gas laws. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

Course Attributes:
TAG - Engineering Technology

**MERT 22095 - SPECIAL TOPICS IN MECHANICAL ENGINEERING TECHNOLOGY**

(Repeatable for credit) Special topics in mechanical engineering technology. Prerequisite: Permission.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
MERT 42000 - THERMODYNAMICS FOR ENGINEERING TECHNOLOGY

Includes the study of the first and second laws of thermodynamics with a detailed study of various types of heat engines. Additional topics include principles of heat transfer and energy management. Prerequisites: PHY 13001 and 13002 or PHY 13011 and 13012.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

MERT 43001 - DYNAMICS FOR ENGINEERING TECHNOLOGY

Kinematics and kinetics of particles; Newton's laws; energy and momentum methods; system of particles; kinematics and kinetics of planar motions of rigid bodies; plane motion of rigid bodies; mechanical vibrations. Prerequisites: PHY 13002 or PHY 13012.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

MERT 43092 - ENGINEERING TECHNOLOGY PRACTICUM

(Repeatable for a maximum to 6 credit hours) Supervised work experience. One credit hour for 50 work hours. Prerequisite: none.

1.00 TO 3.00 Credit hours
3.33 TO 10.00 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Course Attributes:
Experiential Learning Requirem

MFGT 12010 - SAFETY IN THE WORKPLACE

Topics include Ohio general industry safety requirements. Discussion will include all workshops and factories, metal casting, steel mills, and rubber and plastic industries. Prerequisite: None.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department
MFGT 13001 - COMPUTER NUMERICAL CONTROL PROGRAMMING


3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

MFGT 21001 - STANDARD DESIGN PRACTICE FOR MANUFACTURING TECHNOLOGY

Analysis of fundamental machine design components. Discussion will include keys, fasteners, pulleys, gears, chains, bearings, power transmission equipment and associated topics. Prerequisite: EERT 22002 and MERT 12001 and MERT 12005.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

MFGT 22014 - ADVANCED INDUSTRIAL ELECTRONICS

Advanced course in PLC program design and implementation. Emphasis on Boolean logic. Project definition and completion. Prerequisite: EERT 22013.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

MFGT 23001 - COMPUTER-AIDED MANUFACTURING

Theory and application of computer-aided manufacturing. Generation of CNC code using CAM applications both from CAD drawings and directly from CAM package. Prerequisite: MFGT 13001 and MERT 12001.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

MIS 24053 - INTRODUCTION TO COMPUTER APPLICATIONS

(Equivalent to COMT 11000) Develop competency in the operation of contemporary software and hardware applications. To develop an appreciation for the contribution of computers, software and the Internet to society. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours
MIS 24056 - FUNDAMENTALS OF BUSINESS STATISTICS

(Equivalent to BMRT 21004) Introduction to concepts in statistical methods and their applications to real world problems. Examines both the theoretical and practical side of the different methods. Prerequisite: MATH 11010 or MATH 11012 or MATH 12002.
3.000 Credit hours
3.000 Lecture hours

MIS 24065 - WEB PROGRAMMING

Principles of visual design as applied to Web site interface development. The course exposes students to the basics of programming and relational database and how to develop a Web-based database driven interactive information system. Prerequisite: MIS 24053.
3.000 Credit hours
2.000 Lecture hours
1.000 Lab hours

MIS 24093 - VARIABLE TITLE WORKSHOP IN MANAGEMENT AND INFORMATION SYSTEMS

(Repeatable for credit) Special workshop in management and information systems. Credits depend on scope of project. Prerequisite: Permission.
1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

MIS 24163 - PRINCIPLES OF MANAGEMENT

(Equivalent to BMRT 11009) Introductory course in management and organizational design. The leading contributions in the area are reviewed and practical implications are developed. The course covers the principles that most management professors have come to expect in an introductory course: planning, organizing, leading, and controlling. In addition, the students need to be aware of critical issues managers must be aware
of to succeed: diversity, globalization, ethics, technology, among them. The course serves as an introduction to many upper level business courses. Prerequisite: minimum sophomore standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Management Information Systems Department

**MIS 34032 - DATA AND FILE TECHNOLOGY**

An introduction to file architecture and data base management systems. The application of these technologies is detailed. Prerequisites: MIS 24060.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Management Information Systems Department

**MIS 34036 - ENTERPRISE SYSTEMS**

Introduction to the structure and use of Enterprise Computer Systems. Course topics include Networking, Telephony and VoIP, Mainframe and ClientServer, Virtualization, Database, Security, Collaboration and Social Networking and Datacenter Operations. Prerequisites: minimum cumulative 2.500 GPA; and MIS 24053 with a minimum C (2.000) grade; and MIS 24065.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Management Information Systems Department

**MIS 34045 - SMALL SYSTEMS TECHNOLOGY**

An examination of the role of small computer systems within an organization's information systems environment. Prerequisites: MIS 24060.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Management Information Systems Department

**MIS 34053 - DATA INTEGRATION**

This course mixes concepts of data and information with hands-on applications with popular business software and the migration of the information to the Internet as well as Intranets. This course is only open to CIS minors. CIS majors will not receive credit. Prerequisite: MIS 24060; not open to computer information systems (CIS) majors.

3.000 Credit hours
3.000 Lecture hours
MIS 34054 - USING INFORMATION SYSTEMS FOR SOLVING BUSINESS PROBLEMS

Examine key concepts about information systems that are relevant for business managers. The focus will be on promoting an understanding of the use of IS in solving business problems. There will also be hands-on assignments. Prerequisites: Cumulative 2.500 GPA; and MIS 24053 or COMT 11000. Course not open to computer information systems (CIS) majors.

3.000 Credit hours
3.000 Lecture hours

MIS 34055 - COMPUTER DECISION MODELING

Introduces students to the scientific decision-making tools of operations research and management science, and also to the use of spreadsheet modeling for problem formulation and solution without the need for mathematics. The concepts of modeling and better decision making are stressed along with illustrations from the various functional areas of business. Prerequisites: Cumulative 2.500 GPA; and MIS 24053 or COMT 11000; and MIS 24056 or MATH 10041 or BMRT 21004. Course not open to computer information systems (CIS) majors.

3.000 Credit hours
3.000 Lecture hours

MIS 34059 - SERVICE OPERATIONS MANAGEMENT

Provide students with the concepts and tools necessary to effectively manage service operations and to prepare students for management opportunities in service firms that represent the fastest-growing sector of the economy. The service management will be presented from an integrated viewpoint with a focus on customer satisfaction. The course materials are organized around four modules (1) understanding services (2) designing the service enterprise, (3) managing service operations and (4) toward world class-service. Prerequisites: Cumulative 2.500 GPA and MIS 34060.

3.000 Credit hours
3.000 Lecture hours

MIS 34060 - OPERATIONS MANAGEMENT

A survey course in operations management that covers the managerial concepts and the quantitative tools used in the design, planning operation and control of operations systems. Prerequisites: MIS 24053 or COMT 11000; and MIS 24056 or MATH 10041 or BMRT 21004.

3.000 Credit hours
MIS 34064 - MANUFACTURING RESOURCE PLANNING

Introduce students to the basic tools operations managers use to inform their decisions on a daily basis. The course involves hands-on coverage of manufacturing resource planning tools, including forecasting and master production schedules, bill of materials structuring, order entry and purchasing, capacity requirements planning, routing, costing, customer service, shipping, invoicing and using an enterprise resource planning (ERP) software. Prerequisites: Cumulative 2.500 GPA; and MIS 34060.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Management Information Systems Department

MIS 34065 - QUALITY ASSURANCE

Introduction to importance of quality assurance and tools used to accomplish better quality in goods and services. Topics TQM, Six Sigma, quality philosophies, sampling plans and statistical process control, ISO, quality competition and awards. Prerequisites: Cumulative 2.500 GPA; and MIS 34060.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Management Information Systems Department

MIS 34068 - SYSTEMS ANALYSIS AND DESIGN

This is an introductory course in Systems Analysis and Design. Students will be presented with the concepts, techniques, and methodologies that are required for the successful development of information systems. Application of methods and concepts to real-world problems will be emphasized. Prerequisites: minimum cumulative 2.500 GPA; and MIS 24053 or COMT 11000 with a minimum grade of C (2.000); and minimum C (2.000) grade in MIS 24065, ENG 21011, COMM 15000 and MATH 11010.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Management Information Systems Department

MIS 34070 - PROGRAMMING THEORY AND APPLICATIONS

Programming in a strongly-typed language environment with an emphasis on problem-solving. Prerequisite: minimum cumulative 2.500 GPA; and MIS 24053 with a minimum C (2.000) grade; and MIS 24065 with a minimum C (2.000) grade.

3.000 Credit hours
3.000 Lecture hours
Management Information Systems Department

**MIS 34080 - COMPUTER PROGRAMMING FOR BUSINESS I**

Introduces a programming language currently used in business and industry for data processing, decision making and other information systems applications. Prerequisite: MIS 34070.

3.000 Credit hours
3.000 Lecture hours

Management Information Systems Department

**MIS 34092 - PRACTICUM IN CAREER DEVELOPMENT**

In-depth training and development course designed to prepare students for resume presentation, job search, interviewing, participation in the internship and career launching. Prerequisites: minimum 2.500 cumulative GPA; and junior standing.

3.000 Credit hours
1.000 Lecture hours
2.000 Other hours

Management Information Systems Department

Course Attributes:
Experiential Learning Requirem

**MIS 34157 - INTRODUCTION TO HEALTHCARE SYSTEMS MANAGEMENT**

Provides an overview of the management, economic and policy issues facing the healthcare, pharmaceutical, biotechnology and medical device industries. The course perspective is global, with emphasis on the U.S. as the largest and most profitable market. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Management Information Systems Department

**MIS 34158 - MANAGERIAL AND TECHNOLOGICAL ASPECTS OF HEALTHCARE SYSTEMS MANAGEMENT**

Introduce the main components of health care information technology, with emphasis on the components that distinguish the health care delivery system from other business enterprises. Prepares students as clinical managers and consultants who must rely upon or manage information technology to accomplish their objectives. Prerequisite: MIS 34157.

3.000 Credit hours
3.000 Lecture hours
Management Information Systems Department

**MIS 34159 - MANAGING HEALTHCARE SYSTEMS OPERATIONS**

Operational process management, cost-control and productivity is critical to cost-effective healthcare. Covers topics in improving operations such as patient flow, quality (concepts and mechanics) and process improvement. Students become familiar with methods and resources for implementing change in a health care setting, such as a hospital or outpatient clinic. Provides skills to assess current hospital operations and to identify the appropriate tools to address various functional areas, useful for managers, consultants, clinical providers and others. Process improvement methods such as lean thinking, six sigma, statistical tools, flowcharting, queuing models and other tools are covered. Health care settings beyond the hospital, such as outpatient clinics, are included. Prerequisite: MIS 34157.

3.000 Credit hours
3.000 Lecture hours

Management Information Systems Department

**MIS 34165 - DYNAMICS OF LEADERSHIP**

This course discusses management and leadership concepts and does so by blending theory and practice. Cases studies, practical application approaches, personal assessment and opportunities to develop individual and group leadership skills are possible. In addition, many organizational behavior concepts are blended throughout the course. Students that have already passed MIS 34175 will not receive graduation credit for MIS 34165. Prerequisites: MIS 24163 or BMRT 11009.

3.000 Credit hours
3.000 Lecture hours

Management Information Systems Department

**MIS 34175 - LEARNING TO LEAD**

This is a hands-on learning and leadership course. Classroom time occurs over 4 days at a residential camp before the semester begins. Students learn about leadership from professors, experts in the field, and each other through interactive discussions and activities. During the semester students continue their leadership development working with a personal mentor, and practice their skills through community service projects. Students that have already passed MIS 34165 will not receive graduation credit for MIS 34175. Prerequisite: special approval.

3.000 Credit hours
1.000 Lecture hours
2.000 Other hours

Management Information Systems Department

**MIS 34180 - HUMAN RESOURCE MANAGEMENT**
Focuses on the importance of the management of human resources for any organization, its employees, customers, shareholders, and the community where it is located. The topic helps students understand the important issues that derive from managing people at work and the changing environment organizations face. Students will learn the integral role human resources management plays to the success or failure of an organization. Both practical and theoretical perspectives are presented. Prerequisites: Cumulative 2.500 GPA; and MIS 24163 or BMRT 11009.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Management Information Systems Department

**MIS 34185 - INDIVIDUAL AND GROUP BEHAVIOR IN ORGANIZATIONS**

Determinants of individual and group behavior within work organizations. Topics covered include, motivation, job design, learning, decision making, leadership and group behavior as they relate to performance and other outcomes in work organizations. Prerequisite: MIS 24163 or BMRT 11009.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Management Information Systems Department

**MIS 34280 - SOCIAL RESPONSIBILITY IN THE WORKPLACE**

Using a case-based approach to learning, this course provides information on what constitutes appropriate business behavior by examining the major business and nonbusiness factors that influence business policies and practices. Prerequisites: Cumulative 2.500 GPA; and MIS 24163 or BMRT 11009.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Management Information Systems Department

**MIS 44007 - PROJECT MANAGEMENT AND TEAM DYNAMICS**

Overview of the principles, tools, and techniques of project management in organizations, with emphasis on practical aspects of initiating, planning, executing, and costing information systems related projects. Practical examples of computer information systems projects will be used to illustrate these principles and techniques. Prerequisites: minimum cumulative 2.500 GPA; and MIS 24053 with a minimum C (2.000) grade; and MIS 24065.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Management Information Systems Department

**MIS 44009 - THE BUSINESS CASE FOR SUSTAINABILITY**
MIS 44033 - ADVANCED COMPUTER PROGRAMMING FOR BUSINESS

Covers Java programming language, including applications and applets, with emphasis on object-oriented programming. The course also emphasizes problem solving, developing systems, structured programming and programming style conventions. Prerequisite: minimum cumulative 2.500 GPA; and MIS 24053 with a minimum grade of C (2.000); and MIS 24065 and MIS 34070.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Management Information Systems Department

MIS 44042 - NETWORK THEORY AND APPLICATIONS

Presentation of current and emerging network technologies and services, including business applications and performance issues. Topics include transmission media, modulation and signaling schemes, switching and multiplexing techniques, local and wide area network protocols and standards, and internetworking devices. Prerequisite: minimum cumulative 2.500 GPA; and MIS 24053 with minimum C (2.000) grade; and MIS 24065.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Management Information Systems Department

MIS 44043 - DATABASE MANAGEMENT SYSTEMS

Development of skills and knowledge associated with the utilization, design, implementation, and administration of database management systems in organizations. Emphasis is on enterprise-level database systems. Prerequisites: minimum cumulative 2.500 GPA; and 24053 with a minimum C (2.000) grade; and MIS 24065.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Management Information Systems Department

MIS 44044 - SYSTEMS ANALYSIS II
Physical system implementation: mapping logical data models and process models to physical data bases and system design; system coding, testing, installation, conversion, training and automated tools. Prerequisites: MIS 24060.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Management Information Systems Department

MIS 44045 - INFORMATION SYSTEMS MANAGEMENT

Management of information systems resources in organizations of all types and sizes; IT best practices; the effective and efficient use of IS in support of the organization’s mission and to achieve competitive advantage in today’s global economy; the impact of IT on enterprises, users, customers, society, and the environment. Prerequisites: senior standing; and minimum cumulative 2.500 GPA; and MIS 24053 with a minimum C (2.000) grade; and MIS 24065.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Management Information Systems Department

MIS 44048 - SOFTWARE INTEGRATION

The design and implementation of information systems. Traditional and alternative development strategies are investigated from a theoretical and applied perspective. Group project to implement information system with software packages. Prerequisites: Cumulative 2.500 GPA; minimum grade of C (2.000) in MIS 24053; and MIS 24065; and senior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Management Information Systems Department

Course Attributes:
Experiential Learning Requirem, Writing Intensive Course

MIS 44049 - NETWORK MANAGEMENT AND SYSTEMS ADMINISTRATION

Explore the technologies and business issues related to computer networking and systems administration within an organization. An emphasis will be placed on the design and management of network topologies using various media, Ethernet switches and IP routers. Emphasis is placed on understanding the protocols used in modern business networking, especially Ethernet and TCPIP. Microsoft Windows and LinuxUnix will be used to illustrate concepts of network operating systems, directory services and server management. System security issues, such as viruses, encryption, intrusion detection, and firewalls, will be covered. Students will get hands on experience through laboratory exercises and virtual machines.. Prerequisites: minimum cumulative 2.500 GPA; and MIS 24053 with a minimum grade of C (2.000); and MIS 24065 and MIS 44042.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
MIS 44061 - OPERATIONS MANAGEMENT AND CONTROL

Introduces the student to the key functions of an operations planning and control system. Operations planning and control systems provide information for the efficient flow of materials, the effective utilization of people and equipment and the proper coordination of internal activities with suppliers and customers. Prerequisites: Cumulative 2.500 GPA; and MIS 34061.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

MIS 44062 - SUPPLY CHAIN MANAGEMENT

Students learn the basic analytical tools needed to coordinate business operations across the value chain. Course involves hands-on coverage of supply chain management with emphasis on supplier partnering and development, customer relations management, strategic sourcing and pricing, e-business, measuring supply chain performance, mass customization, planning supply and demand coordination in the supply chain. Prerequisite: minimum 2.500 GPA and junior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

MIS 44065 - STRATEGIES IN PRODUCTION AND OPERATIONS MANAGEMENT

Senior project in industrial management. Applies concepts from all prior coursework to the solution of real and simulated operating problems. Prerequisites: Cumulative 2.500 GPA; and MIS 44064.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Course Attributes:
Writing Intensive Course

MIS 44091 - SEMINAR IN HUMAN RESOURCE MANAGEMENT

(Repeatable for credit) In-depth readings, discussion projects and presentations in a specialized area of human resource management. Prerequisites: minimum 2.500 cumulative GPA; and MIS 24053 or COMT 11000; and MIS 34180 or BMRT 21006.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Seminar
MIS 44093 - VARIABLE TITLE WORKSHOP IN MANAGEMENT AND INFORMATION SYSTEMS

(Repeatable for credit) Variable title workshop courses offered under management and information sciences. Prerequisite: Cumulative 2.500 GPA.
1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Undergraduate
Schedule Types: Workshop

MIS 44095 - SPECIAL TOPICS IN MIS

(Repeatable for credit) Offered on a semester basis with different topics and different faculty involved each time the course is offered. Prerequisite: Cumulative 2.500 GPA; and junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

MIS 44096 - INDIVIDUAL INVESTIGATION IN MANAGEMENT

(Repeatable for credit) Presents opportunity to undertake research. Approval of topic and agreement to work with student must be secured from faculty member and the chairperson of the department prior to registration. Prerequisite: Special approval.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

MIS 44152 - COLLABORATIVE PROJECT MANAGEMENT

Overview of the concepts, procedures and fundamental processes related to managing international projects. Introduction to the principles, tools and techniques of integrated project management. Emphasizes project management as primary means for implementing strategic initiatives and prepares students for certification as a Project Management Professional (PMP). Prerequisites: Minimum cumulative 2.500 GPA and junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

MIS 44163 - GLOBAL BUSINESS MANAGEMENT
Provides an overview of contemporary issues and theoretical frameworks in the field of international strategic management using traditional lecture and practical application cases. Prerequisites: senior standing and minimum 2.50 cumulative GPA; and minimum C (2.00) in ENG 21011, COMM 15000 and MATH 11010.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Management Information Systems Department

Course Attributes:
Writing Intensive Course

**MIS 44183 - DEVELOPING AND TRAINING HUMAN RESOURCES IN ORGANIZATIONS**

Course focus is quality training design, based upon theory and empirical research. Implications for practice and current challenges in employee training and development are also highlighted. Prerequisites: Cumulative 2.500 GPA; and MIS 34180 or BMRT 21006l.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Management Information Systems Department

**MIS 44191 - SENIOR RESEARCH SEMINAR IN MANAGEMENT**

(Repeatable for credit) Combination of individual or group research and class discussion for superior students. Investigations in administration and organization conducted in accordance with scholarly interests of participants. Prerequisite: Special approval.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

Management Information Systems Department

**MIS 44192 - INTERNSHIP IN MANAGEMENT**

(Repeatable for credit) A supervised field experience requiring a minimum of 120 hours of work at a cooperating organization. Requires regular contact with instructor and preparation of an internship report connecting academic coursework to on the job experiences. Prerequisite: Special approval.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Management Information Systems Department

Course Attributes:
Experiential Learning Requirem

**MIS 44195 - ADVANCED TOPICS IN HUMAN RESOURCE MANAGEMENT**
(Repeatable for a total of 6 credit hours) Advanced topics course that are offered on a yearly basis. Topics can span the full range of HR functions. This course can also have a practicum format. Prerequisites: minimum 2.500 cumulative GPA; and MIS 34180 or BMRT 21006.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Management Information Systems Department

**MIS 44285 - INTEGRATED BUSINESS POLICY AND STRATEGY**

Integration of the functional areas of business in the formulation and implementation of policy. Projects and case analyses of business situations provide students with the opportunity to apply analytical and creative problem solving skills. Prerequisites: ACCT 23020 and ACCT 23021; and ECON 22060 and ECON 22061; and MKTG 25010; and MIS 24053, MIS 24163, MIS 24056 and MIS 34060; and FIN 26074 and FIN 36053; and minimum cumulative GPA of 2.500; and major within the College of Business Administration; and senior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Management Information Systems Department

**MIS 44292 - BUSINESS EXPERIENCE AND INTERNSHIP**

(Repeatable for credit) Learning by experience by performing activities related to the information systems profession in a cooperating organization. Prerequisites: minimum 2.500 cumulative GPA; and MIS 24053 with a minimum grade of C (2.000); and MIS 24065.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Management Information Systems Department

Course Attributes:
Experiential Learning Requirem

**MIS 44293 - WORKSHOP IN PROFESSIONAL IS CERTIFICATION**

Supervised workshop in which students are coached with the objective of passing a commercial certification exam to obtain Microsoft, Cisco, or other vendor's Information Technology credential. Prerequisite: minimum cumulative 2.500 GPA; and MIS 24053 with a minimum C (2.000) grade; MIS 24065.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Workshop

Management Information Systems Department
MIS 44295 - SPECIAL TOPICS IN INFORMATION SYSTEMS

(Repeatable for credit) Learn about the newest advances in Information Systems technology and how they support business activity. The content of the course changes with each presentation. Prerequisites: minimum cumulative 2.500 GPA; and MIS 24053 with a minimum grade of C (2.000); and MIS 24065.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Management Information Systems Department

MIS 44392 - BUSINESS CONSULTING AND PRACTICUM

Provides decision-making tools for solving real-world problems by building synergies in prior knowledge to create a synthesis of real life solutions delivery mechanisms underpinning them to pressing problems of the local and international community. The practicum component includes consulting experience with both for profit and not-for-profit business clients. Prerequisites: minimum 2.500 cumulative GPA; and junior standing.

3.000 Credit hours
1.000 Lecture hours
2.000 Other hours

Levels: Undergraduate
Schedule Types: Lecture, Practicum or Internship

Management Information Systems Department

Course Attributes:
Experiential Learning Requirem

MIS 64005 - STATISTICS FOR MANAGEMENT

This course uses computer capabilities to use and understand a variety of statistical techniques and applies these techniques to business problems. Prerequisite: admission to M.B.A. program and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Management Information Systems Department

MIS 64011 - SYSTEMS SIMULATION

Techniques and applications of computer simulation of existing or proposed real-world systems. Use of simulation language, simulations studies, analysis of interpretation and of results. Prerequisite: graduate standing and special approval of instructor.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Management Information Systems Department
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
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<tbody>
<tr>
<td>MIS 64013</td>
<td>NONPARAMETRIC AND ROBUST STATISTICS</td>
<td>A presentation of statistically sound techniques for those who need to be able to use nonparametric or robust methods to deal with non-normal distributions or outliers (common problems) in their data. Prerequisite: MIS 64005 or 74005; and graduate standing.</td>
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<tr>
<td>MIS 64017</td>
<td>MULTIVARIATE STATISTICS</td>
<td>This course is devoted to a study of multivariate statistical methods. Topics include multivariate analysis of variance, canonical correlation, principal component analysis, discriminant analysis, cluster analysis, and factor analysis. Prerequisite: MIS 64023 or 74023; and graduate standing.</td>
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<tr>
<td>MIS 64018</td>
<td>MATHEMATICAL PROGRAMMING</td>
<td>Advanced techniques including interior-point methods in linear programming; branch-and-bound and cutting-plane methods; traveling salesman and knapsack models in integer programming. Prerequisite: graduate standing.</td>
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<tr>
<td>MIS 64019</td>
<td>RESEARCH SEMINAR IN SUPPLY CHAIN MANAGEMENT</td>
<td>Research seminar designed primarily for students who seek an in-depth understanding of the current research literature in supply chain management and who are interested in doing research in supply chain management. Students study the academic literature with emphasis on the development and use of analytical tools and models to solve supply chain management problems. Specifically, the course will address quantitative modeling to support operational, tactical, and strategic decision-making in supply chain management. Prerequisite: MIS 64015 or 74015; and graduate standing.</td>
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<tr>
<td>MIS 64020</td>
<td>ADVANCED STATISTICAL MODELS</td>
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This is a special focus course for which the topics will vary. It will generally include sampling techniques, experimental designs, similar statistical methods, internal and external validity and reliability issues. Prerequisite: MIS 64023 or 74023; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Management Information Systems Department

**MIS 64023 - LINEAR STATISTICAL MODELS AND APPLICATIONS**

Models and applications of simple and multiple regression, correlation and analysis of variance. Prerequisite: MIS 64005 or 74005; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Management Information Systems Department

**MIS 64026 - GLOBAL SUPPLY CHAIN MANAGEMENT AND SUSTAINABLE STRATEGIES**

Introduces the knowledge base needed to coordinate business operations across global supply chains. Addresses how to integrate traditional business operations so as to align them in support of inter-firm collaboration required to compete globally. Investigates specific topics relevant to supply chain management and offers a managerial orientation towards supporting global supply chain operations. Immerises students into responsible supply chain practices around the globe with strong emphasis and orientation towards sustainable (green) supply chains. Prerequisites: MIS 64041; and enrolled in the MBA program; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Management Information Systems Department

**MIS 64028 - GLOBAL SUPPLY CHAIN BUSINESS MODELS**

Focus on modeling techniques for supporting decision making in supply chain management. Introduces students to the problems facing a global supply chain manager and the implementation of spreadsheet-based models for solving problems that arise in the operation of a supply chain. Emphasis is placed on model formulation and interpretation in support of decisions to coordinate and improve supply chain operations. Prerequisites: MIS 64026 and 64041; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Management Information Systems Department

**MIS 64029 - SUPPLY CHAIN AND VENDOR MANAGEMENT STRATEGIES**

Building global "relationships" are central pillars to effective supply chain management. There are strategic
relationships, tactical relationships, transactional relationships, internal relationships, and of course, relationships with the government. As supply chains become global, managers have to consider cultural, regulatory, and communication differences to create and operate within the global village. Students learn how to deal with a rapidly changing landscape and understand how to deal with distributed resources, vendors, and people across cultures and convictions. Prerequisites: MIS 64041; must be enrolled in the MBA program; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Management Information Systems Department

MIS 64041 - OPERATIONS AND SUPPLY CHAIN MANAGEMENT

Develops a framework for analysis of operating problems. Uses computer, quantitative and behavioral models to develop operating plans consistent with organizations' competitive (or service) strategy. Prerequisite: MIS 64005; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Management Information Systems Department

MIS 64042 - GLOBALIZATION AND TECHNOLOGY STRATEGY

(Cross-listed with MIS 74042) Focus is on the strategic issues around how a firm should manage its technology in a global market. Strategic issues include understanding the technological and competitive landscape, innovations, competitive advantages in the high-tech marketplace, outsourcing and information ethics. The core emphasis is on integrated decision-making in the age of globalization. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Management Information Systems Department

MIS 64047 - MANUFACTURING TECHNOLOGY AND STRATEGY

This course provides the student with an introduction to modern techniques in manufacturing and the necessary strategic concepts to implement them. A similar discussion of service industries is also included. Prerequisite: graduate standing and special approval of instructor.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Management Information Systems Department

MIS 64080 - EMERGING HARDWARE AND SOFTWARE TECHNOLOGIES

Investigation of selected emerging hardware and software technologies such as parallel processing systems,
computer languages and operation systems, artificial intelligence, neural networks and chaos theory.
Prerequisite: graduate standing and special approval of instructor.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Management Information Systems Department

**MIS 64081 - DATA COMMUNICATIONS AND NETWORKING IN BUSINESS**

An introduction to telecommunications and computer networks. Topics include telecommunications technologies and services communication standards and protocols local area networks and network management.
Prerequisite: graduate standing and special approval of instructor.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Management Information Systems Department

**MIS 64082 - DATABASE MANAGEMENT SYSTEMS**

In-depth investigation of intelligent database management systems in support of business decision making. An understanding of relational databases is assumed. Object-oriented and semantic database will be explored.
Prerequisite: graduate standing and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Management Information Systems Department

**MIS 64083 - INFORMATION SECURITY: A MANAGERIAL PERSPECTIVE**

Introduction to the information security areas that managers must understand in order to deal with today's security threat-laden environment. The emphasis is on the important principals and concepts that managers utilize to develop effective security risk management programs. Prerequisite: Admission to MBA program or admission to MS IAKM program; and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Management Information Systems Department

**MIS 64108 - APPLIED TOPICS IN HUMAN RESOURCE MANAGEMENT**

Course provides students an opportunity to learn about human resource management through an application of the material to real-world problems. Topics covered may include but not be limited to job analysis, selection methods, employee training, and performance evaluation. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours
MIS 64158 - LEADERSHIP AND MANAGERIAL ASSESSMENT

Develop understanding and skills in self management and team leadership using assessment instruments, role playing and organizational incidents. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

MIS 64160 - LEADERSHIP AND ORGANIZATIONAL CHANGE

Course provides students in-depth knowledge of leading organization change. Covers analysis of existing conditions, drivers of change and readiness for change along with methods of change and change implementation. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

MIS 64185 - BUSINESS STRATEGY

Integrative approach to the study of policy formulation and implementation. Formalized planning systems reviewed; case analysis of actual business situations helps student further develop analytical and communication skills. Prerequisite: Completion of 24 credit hours of graduate courses from the College of Business Administration and graduate standing.

3.000 Credit hours
3.000 Lecture hours

MIS 64263 - EMPLOYEE SELECTION AND APPRAISAL

This course will focus primarily on issues associated with the person/job matching process in modern organizations related to the selection and appraisal of employees. Prerequisite: Graduate standing and MIS 64271.

3.000 Credit hours
3.000 Lecture hours
MIS 64270 - ORGANZATIONAL ANALYSIS AND DESIGN

Course provides students an in-depth examination of all of the factors influencing human behavior at work. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Management Information Systems Department

MIS 64271 - HUMAN RESOURCE MANAGEMENT

Explores the management of a firm's human resources from practical and theoretical perspectives of managing people at work. Prerequisite: Admission to M.B.A. program and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Management Information Systems Department

MIS 64275 - STRATEGIC GLOBAL MANAGEMENT

Strategic global management explores micro-level concepts and strategic managerial alternatives within the context of current global business operations in the political, economic and cultural environment facing today’s manager. Prerequisite: Completion of 24 credit hours of graduate courses from the College of Business Administration and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Management Information Systems Department

MIS 74005 - STATISTICS FOR MANAGEMENT I

This course uses computer capabilities to use and understand a variety of statistical techniques and applies these techniques to business problems. Prerequisite: admission to MBA program; and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Management Information Systems Department

MIS 74013 - NONPARAMETRIC AND ROBUST STATISTICS

(Cross-listed with MIS 64013) A presentation of statistically sound techniques for those who need to be able to use nonparametric or robust methods to deal with non-normal distributions or outliers (common problems) in their data. Prerequisite: MIS 64005 or 74005; and doctoral standing.
3.000 Credit hours
MIS 74017 - MULTIVARIATE STATISTICS
This course is devoted to a study of multivariate statistical methods. Topics include multivariate analysis of variance, canonical correlation, principal component analysis, discriminant analysis, cluster analysis and factor analysis. Prerequisite: MIS 64023 or 74023; and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Management Information Systems Department

MIS 74018 - MATHEMATICAL PROGRAMMING
Advanced techniques including interior-point methods in linear programming; branch-and-bound and cutting-plane methods; traveling salesman and knapsack models in integer programming. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Management Information Systems Department

MIS 74019 - RESEARCH SEMINAR IN SUPPLY CHAIN MANAGEMENT
Research seminar designed primarily for students who seek an in-depth understanding of the current research literature in supply chain management and who are interested in doing research in supply chain management. Students study the academic literature with emphasis on the development and use of analytical tools and models to solve supply chain management problems. Specifically, the course will address quantitative modeling to support operational, tactical and strategic decision-making in supply chain management. Prerequisite: MIS 64015 or 74015; and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Seminar

Management Information Systems Department

MIS 74020 - ADVANCED STATISTICAL MODELS
This is a special focus course for which the topics will vary. It will generally include sampling techniques, experimental designs, similar statistical methods, internal and external validity, and reliability issues. Prerequisite: MIS 64023 or 74023; and doctoral standing.
3.000 Credit hours
3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture

Management Information Systems Department

**MIS 74023 - LINEAR STATISTICAL MODELS AND APPLICATIONS**

Models and applications of simple and multiple regression, correlation and analysis of variance. Prerequisite: MIS 64005 or 74005; and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Management Information Systems Department

**MIS 74041 - OPERATIONS MANAGEMENT**

Develops a framework for analysis of operating problems. Uses computer quantitative and behavioral models to develop operating plans consistent with organizations' competitive (or service) strategy. Prerequisite: MIS 64005 or 74005; and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Management Information Systems Department

**MIS 74042 - GLOBALIZATION AND TECHNOLOGY STRATEGY**

(Cross-listed with MIS 64042) Focus is on the strategic issues around how a firm should manage its technology in a global market. Strategic issues include understanding the technological and competitive landscape, innovations, competitive advantages in the high-tech marketplace, outsourcing and information ethics. The core emphasis is on integrated decision-making in the age of globalization. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Management Information Systems Department

**MIS 74047 - MANUFACTURING TECHNOLOGY AND STRATEGY**

This course provides the student with an introduction to modern techniques in manufacturing and the necessary strategic concepts to implement them. A similar discussion of service industries is also included. Prerequisite: doctoral standing and special approval of instructor.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Management Information Systems Department
MIS 74080 - EMERGING HARDWARE AND SOFTWARE TECHNOLOGIES

Investigation of selected emerging hardware and software technologies such as parallel processing systems, computer languages and operation systems, artificial intelligence, neural networks and chaos theory. Prerequisite: doctoral standing and special approval of instructor.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
Management Information Systems Department

MIS 74081 - DATA COMMUNICATIONS AND NETWORKING IN BUSINESS

An introduction to telecommunications and computer networks. Topics include telecommunications technologies and services, communication standards and protocols, local area networks and network management. Prerequisite: doctoral standing and special approval of instructor.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
Management Information Systems Department

MIS 74082 - DATABASE MANAGEMENT SYSTEMS

In-depth investigation of intelligent database management systems in support of business decision making. An understanding of relational databases is assumed. Object oriented and semantic database will be explored. Prerequisite: doctoral standing and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
Management Information Systems Department

MIS 74160 - LEADERSHIP AND ORGANIZATIONAL CHANGE

Develop understanding of the theories and techniques needed for the successful management of significant organizational change with emphasis on discussion, exercises and case studies. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
Management Information Systems Department

MIS 74185 - BUSINESS STRATEGY

Integrative approach to the study of policy formulation and implementation. Formalized planning systems reviewed case analysis of actual business situations helps student further develop analytical and communication skills. Prerequisite: special approval and doctoral standing.
MIS 74263 - EMPLOYEE SELECTION AND APPRAISAL

This course will focus primarily on issues associated with the person/job matching process in modern organizations related to the selection and appraisal of employees. Prerequisite: doctoral standing.

Levels: Graduate
Schedule Types: Lecture

Management Information Systems Department

MIS 74270 - ORGANIZATIONAL ANALYSIS

Theoretical basis and research findings are discussed, permitting the student to analyze and understand complex work organizations. Data provided prepares the student to analyze, design and solve organizational problems within the work environment. Prerequisite: special approval and doctoral standing.

Levels: Graduate
Schedule Types: Lecture

Management Information Systems Department

MIS 74275 - STRATEGIC GLOBAL MANAGEMENT

Strategic global management explores micro-level concepts and strategic managerial alternatives within the context of current global business operations in the political, economic and cultural environment facing today's manager. Prerequisite: special approval and doctoral standing.

Levels: Graduate
Schedule Types: Lecture

Management Information Systems Department

MIS 84007 - PHILOSOPHY OF SCIENCE AND BUSINESS MODELS

Introductory seminar for understanding the forms and the process of business research. Its major objective is to help seminar participants understand the various philosophies that drive business research in an academic community, and introductory methods of social science research. Additionally, the seminar seeks to develop participant motivation to become a contributor to the organizational sciences communities by examining: 1. The research process, methodologies and strategies. 2. Research Paradigms, Modes and Contexts of Inquiry. 3. The nature of organizational sciences research. 4. The major streams of business research. 5. Understanding ontological choice of constructs and defining epistemic relationships between constructs. 6. Building hypotheses and socio-technical models. 7. Research design, data requirements and collection techniques, ethics and philosophies. Prerequisite: doctoral standing.
MIS 84011 - SYSTEMS SIMULATION

Techniques and applications of computer simulation of existing or proposed real-world systems. Use of simulation language, simulation studies, analysis of interpretation and of results. Prerequisites: special approval and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Management Information Systems Department

MIS 84012 - SCHEDULING AND PLANNING

Course is a doctoral seminar on scheduling and planning models that are used in operations and production management. The goal is to expose students to a portfolio of scheduling and planning models to stimulate research ideas in scheduling and planning models that will lead to the development of a research program for your doctoral research. Prerequisite: doctoral standing in the College of Business Administration.

3.000 Credit hours
3.000 Lecture hours

Management Information Systems Department

MIS 84015 - STOCHASTIC MODELS

Mathematical modeling of systems involving one or more random variables, and stochastic processes: basic probability theory; Poisson process, Markov chain and Markov process with applications to production, inventory, reliability and queueing systems. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Management Information Systems Department

MIS 84045 - SOCIAL ISSUES IN INFORMATION SYSTEMS

Social issues in information systems arise at the interface between information systems and individuals, groups and society. The course will begin with a broad exposure to current social issues, moving to an examination of specific issues in detail with issues chosen by student interest and instructor consent. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours
Management Information Systems Department

**MIS 84047 - VALUE AND SUPPLY CHAIN MANAGEMENT**

This course is a doctoral seminar for students who seek an in-depth understanding of the current research literature in supply chain management. The seminar is designed into three modules. The first module covers the conceptual foundation for understanding value and supply chains from an interdisciplinary perspective. The second module focuses on the basis of supply chain modeling using optimization and simulation. The third module serves to integrate the previous modules with the objective of the student producing a research paper for journal submission. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Management Information Systems Department

**MIS 84080 - INNOVATION, ADOPTION, DIFFUSION**

Provides students with theoretical foundations of adoption and diffusion of technological innovations in organizations and society. Topics include: determinants of organizational innovation by acquisition; individual- and organizational-level technology adoption; diffusion of technologies through social systems; and the infusion and assimilation of technologies in organizations. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Management Information Systems Department

**MIS 84081 - INFORMATION SYSTEMS STRATEGY AND INNOVATION**

This course explores the basis of strategy, deployment and competition in high-technology industries. It introduces conceptual frameworks based on cutting-edge research in economics and strategy. The frameworks may seem abstract at first, but we will focus on mastering them will gain an in-depth understanding of how high-technology industries work and how to develop strategies for managing firms in such industries. Students will learn how to develop and apply such frameworks in their research. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Management Information Systems Department

**MIS 84082 - DATABASE MANAGEMENT SYSTEMS**

In-depth investigation of intelligent database management systems in support of business decision-making. An understanding of relational databases is assumed. Object-orientation and other advanced database concepts will be explored. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture

Management Information Systems Department

**MIS 84108 - HUMAN CAPITAL SYSTEMS AND SHARED VALUE CREATION**

Course provides a foundation for understanding human capital issues as seen through the lens of sustainability. Students will learn how to articulate the paradigm of sustainability and apply it to a wide range of organizational capacities including embedding sustainability within an organization and enabling an organization to pursue value that is shared across economic, social and environmental domains. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Management Information Systems Department

**MIS 84112 - RESEARCH METHODOLOGY**

The objectives of this course are: to formulate a research problem and develop testable research hypotheses; develop research skills by learning the different research methods and techniques; explain information contained in research statistical outputs such as SAS and SPSS enable students to conduct meaningful and high quality research in their specific field of interest. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Management Information Systems Department

**MIS 84261 - STRATEGIC DECISION-MAKING AND HUMAN RESOURCE MANAGEMENT**

Provides a first graduate-level introduction to the fundamental concepts of HRM/OB and strategic decision-making. Prerequisite: doctoral standing and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Management Information Systems Department

**MIS 84262 - BUSINESS AND ORGANIZATIONAL STRATEGY**

Course focuses on developing a deep understanding of modern strategic theory in relation to other allied fields. Students will review fundamental concepts of strategic thinking and theory development and then move to contemporary theoretical issues including transaction-cost economics, the resource-based view, the emerging theories of real options and of dynamic capabilities, strategic optimization and constraint theory, and dealing with uncertainty through scenario-driven planning. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
MIS 84263 - HUMAN RESOURCE MANAGEMENT
Course focuses on research theories, methods and issues in human resource management. Designed to develop in students an appreciation for the existing state of research in human resource management and to begin to articulate major issues and challenges in this field. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture

MIS 84266 - DIRECTED RESEARCH
Survey of the leading writers and research studies in the area of management systems. The course addresses methodologies, major theoretical developments and practical applications. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture

MIS 84275 - CORPORATE AND GLOBAL STRATEGY
Focuses on review and integration of the several streams of literature dealing with strategy for, and management of, the product-diversified and/or internationally-diversified firm. Also, in order to complement the emphasis of other doctoral offerings on strategy formulation topics, this seminar places a special emphasis on strategy process, organizational structure, and administrative mechanisms. In particular, it explores the foundations as well as current research on corporate governance, broadly define. This includes (I) the set of mechanisms available to align the interest of top managers to those of shareowners, as well as (II) the mechanisms available to motivate and control middle managers so that their decisions and behaviors are aligned with intended corporate and/or international strategy and goals. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture

MIS 84277 - ORGANIZATIONAL BEHAVIOR AND THEORY
An examination of theory and research on individual and group behavior in organizations. Special attention is given to theories of motivation, job satisfaction, goal setting, task design, feedback systems, group dynamics, power and teams. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture
MIS 84285 - TECHNOLOGY MANAGEMENT AND ENTREPRENEURSHIP
Covers topics pertaining to innovation management at micro-level (entrepreneurship, corporate entrepreneurship), meso-level (networks), and macro-level (cross-country and within-country comparisons). Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture

MIS 84291 - SEMINAR IN MANAGEMENT SYSTEMS
(Repeatable for credit) Intensive investigation of selected topics in organization and strategic management. Student will be expected to undertake research on a topic determined in joint consultation with the instructor. Prerequisite: doctoral standing and special approval of instructor.
3.000 Credit hours
3.000 Other hours
Levels: Graduate
Schedule Types: Seminar

MKTG 25010 - PRINCIPLES OF MARKETING
(Equivalent to BMRT 21050) An overview of the processes, activities, and problems associated with the conception, planning, and execution of the pricing, promotion, and distribution of ideas, goods and services to create exchange values in the market. Offered both as an in-class and online course. Prerequisite: ECON 22060.
3.000 Credit hours
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture

MARKETING APPLICATIONS
Students learn and apply strategic and financial analysis skills to make real-world marketing decisions. Emphasis on marketing planning and core strategic decisions in marketing, including segmentation, targeting and positioning. Prerequisites: MKTG 25010 must be completed with a minimum C (2.000) grade; and minimum cumulative GPA of 2.500; and marketing (MKTG) major.
3.000 Credit hours
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture
MKTG 35035 - CONSUMER BEHAVIOR

Focus is on the decision-making processes of the individual consumer and the psychological, sociological, cultural and economic factors that influence those choices. Understanding why consumers behave in the way that they do is the heart of the study of consumer behavior and informs the formulation of marketing strategy. Periodically offered as an online course. Prerequisite: MKTG 25010.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

MKTG 35050 - MARKETING RESEARCH

Focus is on the collection and analysis of new marketing data, both for exploratory and for decision-making purposes. Students work individually and in teams developing and communicating responses to managerial questions. Prerequisites: MKTG 25010 and MIS 24056; and minimum cumulative GPA of 2.500; and marketing (MKTG) major.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

MKTG 35056 - SOCIAL MEDIA MARKETING

Explore the various opportunities and risks that social media marketing holds for firms. During the course students will learn about topics such as social media's effect on marketing, creating and managing brand presences on social media, creating and marketing a branded viral video, identifying online influencers, analyzing. Prerequisites: MKTG 25010; minimum GPA 2.500 and junior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

MKTG 45045 - ADVERTISING AND PROMOTION MANAGEMENT

Increases students' understanding of advertising concepts as well as structure and functions of different "players" within the industry. Integrates marketing and advertising theory with application in advertising decision-making. Periodically offered as an online course. Prerequisite: MKTG 25010 or BMRT 21050.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
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<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Description</th>
<th>Prerequisites</th>
<th>Credit Hours</th>
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<th>Levels</th>
<th>Schedule Types</th>
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<tbody>
<tr>
<td>MKTG 45046</td>
<td>PERSONAL SELLING</td>
<td>Introduces students to effective communication, successful selling and persuasion techniques, building customer relationships, ethics, the buying and selling process, and developing professional sales calls. Prerequisite: MKTG 25010 or BMRT 21050 or MKTG 35035.</td>
<td>3.000 Credit hours, 3.000 Lecture hours</td>
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<tr>
<td>MKTG 45047</td>
<td>ADVANCED PROFESSIONAL SELLING</td>
<td>Builds on the foundation established in Personal Selling and Sales Management (MKTG 45046) by applying sales concepts, participating in live sales calls with Business Partner Company Sales Reps, spending highly focused time in role plays with immediate feedback from the instructors, interacting with guest speakers who are experts in sales, and studying advanced sales and persuasion techniques. Experiential course that requires some flexibility with scheduling for the shadow experiences. Prerequisites: MKTG 45046 or MMTG 45026 or ENTR 37045; and a minimum cumulative GPA of 2.500.</td>
<td>3.000 Credit hours, 2.000 Lecture hours, 1.000 Lab hours</td>
<td>Undergraduate</td>
<td>Combined Lecture and Lab</td>
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<td>Undergraduate</td>
<td>Combined Lecture and Lab</td>
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<tr>
<td>MKTG 45060</td>
<td>INTERNATIONAL MARKETING</td>
<td>Examination of international marketing in terms of global markets and trade. Emphasizes differences among markets caused by geography, politics, economics, culture, commercial policy and trade practices. Periodically offered as an online course. Prerequisite: MKTG 25010 or BMRT 21050 or MKTG 35035.</td>
<td>3.000 Credit hours, 3.000 Lecture hours</td>
<td>Undergraduate</td>
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<td>MKTG 45082</td>
<td>SERVICE, RETAIL AND WEB-BASED MARKETING</td>
<td>Survey of the fields of service, retail and web-based marketing. Analysis of critical marketing mix decisions pertaining to services, retailing and cyberspace marketing. Processes for building and managing customer relationships and loyalty are addressed. Prerequisites: MKTG 25010 and minimum cumulative GPA of 2.500.</td>
<td>3.000 Credit hours, 3.000 Lecture hours</td>
<td>Undergraduate</td>
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MKTG 45084 - MARKETING POLICIES AND STRATEGIES

Capstone course for marketing majors. Course deals with marketing policies and strategies with emphasis on managerial decision-making case approach. Prerequisites: minimum cumulative 2.500 GPA; and MKTG 35030 with a minimum C (2.000) grade; and marketing (MKTG) major; and senior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Marketing and Entrepreneurship Department

Course Attributes:
Experiential Learning Requirem, Writing Intensive Course

MKTG 45091 - MARKETING SEMINAR

(Repeatable for credit)Current topics in marketing. Certain sections of this variable topic seminar may require instructor special approval or have further prerequisites. See current schedule of classes. Prerequisite: MKTG 25010 or BMRT 21050 or MKTG 35035; and minimum cumulative GPA of 2.500.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

Marketing and Entrepreneurship Department

MKTG 45095 - SPECIAL TOPICS IN MARKETING

(Repeatable for credit) Special Topics in Marketing permits the exploration of topics that are not covered, or not covered in as much depth, in scheduled courses. Credit hours depend on the scope of the project. Prerequisite: minimum cumulative 2.500 GPA and special approval.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Marketing and Entrepreneurship Department

MKTG 45096 - INDIVIDUAL INVESTIGATION IN MARKETING

(Repeatable for credit) Independent investigation of appropriate problem undertaken by a senior marketing major. Prerequisite: special approval.

1.000 TO 3.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Marketing and Entrepreneurship Department

MKTG 45192 - SALES INTERNSHIP

Supervised practical experience in sales with a business. Prerequisite: MKTG 45046.
### MKTG 45292 - MARKETING INTERNSHIP

(Repeatable for credit) Preparation of research report concurrent with on-the-job experience with cooperating business or other organization. Prerequisites: MKTG 25010 or BMRT 21050 or MKTG 35035; and special approval.

<table>
<thead>
<tr>
<th>Levels: Undergraduate</th>
<th>Schedule Types: Practicum or Internship</th>
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<td>Marketing and Entrepreneurship Department</td>
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Course Attributes:
Experiential Learning Requirem

### MKTG 65050 - MODERN ENTREPRENEURIAL MANAGEMENT

Analysis and application of the key elements of both entrepreneurship (new business starts) and entrepreneurship in existing companies. Prerequisite: Completion of 24 credit hours of business administration (BAD) courses and graduate standing.

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<th>Levels: Graduate</th>
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<td>Marketing and Entrepreneurship Department</td>
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### MKTG 65051 - MARKETING MANAGEMENT

Analysis of marketing management at a level appropriate to students with limited background in the subject. Course encompasses lecture discussion problems and cases. Prerequisite: graduate standing.

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<td>Marketing and Entrepreneurship Department</td>
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### MKTG 65053 - PROMOTION MANAGEMENT

All elements of the promotional mix-advertising, sales, promotion, publicity, public relations and personal selling-will be considered as part of an integrated communications strategy. Primary emphasis will be placed on advertising. A comprehensive set of analytical frameworks will be developed covering a range of topics from the
firm's marketing strategy to the message strategy embodied in a single advertisement. These analytic frameworks will be applied to a series of case studies throughout the course. Prerequisite: MKTG 65051 and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Marketing and Entrepreneurship Department

**MKTG 65054 - INTERNATIONAL MARKETING**

This course focuses on the types of marketing decisions facing the international marketing manager or vice president in the multinational firm. Prerequisite: MKTG 65051 and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Marketing and Entrepreneurship Department

**MKTG 65057 - MARKETING RESEARCH**

Examination of the research process as applied to decision making. Course focuses on steps in problem formulation the research process application of techniques and basis data analysis using SPSS-PC. Prerequisite: MKTG 65051; graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Marketing and Entrepreneurship Department

**MKTG 65060 - MARKETING STRATEGY AND PLANNING**

Focuses on integration of marketing planning into the strategic planning process. Deals mostly with marketing strategy at the level of senior management rather than operations. Prerequisite: MKTG 65051; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Marketing and Entrepreneurship Department

**MKTG 65064 - BUYER BEHAVIOR**

An analysis of the concepts of buyer/consumer behavior, focusing on the behavioral sciences theories underlying marketing models and their application to marketing strategies. Prerequisite: BAD 65051 or 75051; and graduate standing.

3.000 Credit hours
3.000 Lecture hours
### MKTG 65184 - INTERNATIONAL BUSINESS

Study of the business firm in a global context. Application of theory and practice of American business administration to international operations of firms. Prerequisite: ECON 62021 and graduate standing.

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### MKTG 75050 - MODERN ENTREPRENEURIAL MANAGEMENT

Analysis and application of the key elements of both entrepreneurship (new business starts) and entrepreneurship in existing companies. Prerequisite: special approval and doctoral standing.

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### MKTG 75051 - MARKETING MANAGEMENT

Analysis of marketing management at a level appropriate to students with limited background in the subject. Course encompasses lecture discussion problems and cases. Prerequisite: doctoral standing.

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### MKTG 75053 - PROMOTION MANAGEMENT

All elements of the promotional mix—advertising, sales, promotion, publicity, public relations and personal selling—will be considered as part of an integrated communications strategy. Primary emphasis will be placed on advertising. A comprehensive set of analytical frameworks will be developed covering a range of topics from the firm's marketing strategy to the message strategy embodied in a single advertisement. These analytic frameworks will be applied to a series of case studies throughout the course. Prerequisite: MKTG 65051 or 75051; and doctoral standing.

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3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture

Marketing and Entrepreneurship Department

**MKTG 85063 - ANALYTICAL METHODS IN MARKETING RESEARCH**
Application of multivariant statistical techniques in marketing research. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture

Marketing and Entrepreneurship Department

**MKTG 85064 - BUYER BEHAVIOR**
An analysis of extant and emerging theories, models and concepts of buyer consumer behavior and their development and testing. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture

Marketing and Entrepreneurship Department

**MKTG 85066 - MARKETING THEORY**
The central objective of the course is to develop the doctoral student's background in marketing theory, theory construction and the creation of marketing knowledge. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture

Marketing and Entrepreneurship Department

**MKTG 85091 - ADVANCED INTERNATIONAL MARKETING SEMINAR**
(Repeatable for credit) Covers the theoretical research development of the field of international marketing. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Other hours
Levels: Graduate
Schedule Types: Seminar

Marketing and Entrepreneurship Department

**MKTG 85097 - SEMINAR IN MARKETING AND ENTREPRENEURSHIP**
(Repeatable for a maximum of 6 credit hours) This course is designed to provide doctoral students with a broad exposure to a current and substantive topic area in either marketing or entrepreneurship. This course will expose students to classic and new ideas, help them critically analyze these ideas, and provide them with the opportunity to relate these ideas to their own research interests. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Colloquium

Marketing and Entrepreneurship Department

**MKTG 85098 - RESEARCH IN MARKETING**

(Repeatable for credit) Designed to assist students in developing dissertation topics or to provide an opportunity to study material or topic not covered elsewhere in the program. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Research

Marketing and Entrepreneurship Department

**MMTG 35011 - MARKETING TOOLS**

Provides an overview of the analytical, communication, and decision-making skills that students will need to succeed in subsequent coursework and as a marketing professional. Topics include strategic analysis, financial analysis, case analysis, marketing decision-making, and persuasive communications. Prerequisites: Minimum C (2.00) in ENG 21011, COMM 15000, MATH 11010; MIS 24053 or COMT 11000; MKTG 25010 or BMRT 21050 with minimum C; minimum cumulative 2.500 GPA; and Managerial Marketing (MMTG) major.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Marketing and Entrepreneurship Department

Course Attributes:
Writing Intensive Course

**MMTG 35021 - RESEARCH FOR MARKETING DECISIONS**

Focuses on the effective collection, organization, evaluation, and use of data to make marketing decisions. Emphasis on methods for collecting, analyzing, interpreting, and communicating data in the context of marketing decision-making. Prerequisites: minimum C (2.00) grade in MMTG 35011; and minimum cumulative GPA of 2.500; and managerial marketing (MMTG) major; and minimum C (2.00) grade in ENG 21011, COMM 15000 and MATH 11010.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Marketing and Entrepreneurship Department
**MMTG 35023 - CUSTOMER ANALYSIS**

Focuses on the methods marketers use to analyze and understand their customers. Incorporates market segmentation and targeting, understanding consumer and buyer decision-making, and customer relationship management. Students will complete a segmentation plan for a client firm. Prerequisites: minimum C (2.000) grade in ENG 21011, COMM 15000, MATH 11010 and MMTG 35011; and minimum cumulative GPA of 2.500; a managerial marketing (MMTG) major.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Marketing and Entrepreneurship Department

**MMTG 35024 - MARKETING TOOLS LABORATORY**

Extended practice and use of software to enhance financial analysis and communication skills. Emphasizes the use of Microsoft Office software to enhance marketing decision-making and persuasive presentation skills. Incorporates professional development skills and opportunities. Should be taken concurrently with the Marketing Tools (MMTG 35011) course. Prerequisites: ENG 21011, COMM 15000, MATH 11010; and MIS 24053 or COMT 11000; and MKTG 25010 or BMRT 21050 with minimum C (2.00); minimum cumulative GPA of 2.500; and Managerial Marketing (MMTG) major.

1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Marketing and Entrepreneurship Department

**MMTG 35026 - MARKETING RESEARCH LABORATORY**

Extended practice and use of software to enhance data analysis and communication skills. Emphasizes the collection and analysis of research data for marketing decision-making. Incorporates the use of data analysis software. Should be taken concurrently with the Research for Marketing Decisions (MMTG 35021) course. Prerequisite: a minimum C (2.000) grade in MMTG 35011; and minimum cumulative GPA of 2.500; and managerial marketing (MMTG) major.

1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Marketing and Entrepreneurship Department

**MMTG 45020 - COMPETITIVE MARKET ANALYSIS**

Focuses on establishing and maintaining a competitive market position through product and pricing strategies driven by industry and competitive analysis. Students will participate in a marketing simulation where they will make marketing decisions and strive to compete effectively. Prerequisites: MMTG 35021 and 35023; and minimum cumulative GPA of 2.500; and managerial marketing (MMTG) major.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
**MMTG 45026 - MARKETING COMMUNICATIONS LABORATORY**

Extended practice and use of software to enhance marketing communications skills. Emphasizes the use of software to develop and execute specific marketing communications tools. Incorporates traditional and contemporary communications tools with a focus on tools that are typically created in-house by marketers. Prerequisites: MMTG 35021 and 35023; and minimum cumulative GPA of 2.500; and managerial marketing (MMTG) major.

1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

**MMTG 45030 - SALES AND SALES MANAGEMENT**

Focuses on the fundamentals of selling and sales management with emphasis on persuasive communication and understanding others’ perspectives to reach a “win-win” outcome. Incorporates sales management strategies and the planning and leadership skills of a sales manager. Students will engage in one-on-one role playing and simulated selling scenarios. Prerequisites: MMTG 35021 and MMTG 35023; and minimum cumulative GPA of 2.500; and managerial marketing (MMTG) major.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**MMTG 45039 - PROMOTION MANAGEMENT**

Focuses on the use of promotional tools to communicate marketing strategies to customers. Emphasis on both traditional and contemporary promotional tools, including new technologies in marketing communications. Considers the selection, planning, and implementation of promotional tools. Students will complete a communications plan for a client firm. Prerequisites: MMTG 45020 and 45030; and minimum cumulative GPA of 2.500; and managerial marketing (MMTG) major.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**MMTG 45040 - INTEGRATED MARKETING STRATEGY**

Capstone course for managerial marketing majors. Emphasis is on the integration of marketing concepts, methods, and skills from prior coursework to make sound marketing decisions. Students will complete a marketing plan for a client firm. Prerequisites: MMTG 45020 and MMTG 45030; and minimum cumulative GPA of 2.500; and managerial marketing (MMTG) major.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
MMTG 45195 - SPECIAL TOPICS IN MANAGERIAL MARKETING

Special Topics in Managerial Marketing permits the exploration of topics not covered, or are not covered in as much depth, in scheduled courses. Hours of credit depend on scope of project. Prerequisite: special approval; and minimum cumulative 2.500 GPA.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

MSCI 10180 - INTRODUCTION TO LEADERSHIP I

Introduces the student to the concept of leadership in the military and in democratic society in general. Examines leadership characteristics principles and styles. Students must participate in outdoor character-building exercises. Corequisite: MSCI 10191 (ROTC only).

1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Military Science Department

MSCI 10185 - INTRODUCTION TO LEADERSHIP II

Introduces the student to techniques and methods that leaders must employ. Examines time management, stress management, staff/group dynamics, problem solving process and leadership climate. Corequisite: MSCI 10191 (ROTC only).

1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Military Science Department

MSCI 10191 - LEADERSHIP SEMINAR I

(Repeatable for a total of 2 credit hours)Instructional program preparing individuals to undertake the broad range of tasks associated with the dimensions of leadership. Stresses decision-making roles of leaders in planning and executing organizational programs. Corequisite: MSCI 10180 or MSCI 10185.

1.000 Credit hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Field Experience, Seminar
**MSCI 20180 - SURVEY OF AMERICAN MILITARY HISTORY**

Traces North American military history, theory, doctrine, strategy and tactics from the pre-Revolutionary period to the present. Prerequisite: none.
1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**MSCI 20181 - LEADERSHIP ASSESSMENT I**

Interdisciplinary study of organizational leadership and group dynamics through assessment of sixteen behavioral dimensions. Provides practical application and assessment of leadership skills in formal organizations. Corequisite: MSCI 20190 (ROTC only).
2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**MSCI 20183 - LEADERSHIP ASSESSMENT II**

Interdisciplinary study of organizational leadership and group dynamics through assessment of 16 behavioral dimensions. Provides practical application and assessment of leadership skills in formal organizations. Corequisite: MSCI 20191 (ROTC only).
2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**MSCI 20191 - LEADERSHIP SEMINAR II**

(Repeatable for a total of 2 credit hours) Instructional program preparing individuals to undertake the broad range of tasks associated with the dimensions of leadership. Stresses decision-making roles of leaders in planning and executing organizational programs. Corequisite: MSCI 20180 or MSCI 20181 or MSCI 20183.
1.000 Credit hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Field Experience, Seminar

**MSCI 20196 - INDIVIDUAL RESEARCH**

(Repeatable for credit) Individual research projects in leadership, management techniques and mode program.
Used only for selected personnel for entry into the advanced program. Prerequisite: Sophomore standing and special approval.
1.000 OR 2.000 Credit hours
1.000 OR 2.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Military Science Department

### MSCI 30160 - LEADERSHIP DEVELOPMENT

Develops managerial skills with emphasis on group dynamics, leadership theory and practical leadership experiences. Integrates communication skills, decision-making and group motivation. Prerequisite: special approval. Corequisite: MSCI 30191.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Military Science Department

### MSCI 30170 - ORGANIZATIONAL LEADERSHIP

Application of management fundamentals, decision theory and leadership principles to organizations. Emphasis in coordinating, directing and controlling organizations. Prerequisite: special approval. Corequisite: MSCI 30191.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Military Science Department

### MSCI 30183 - LEADERSHIP PRACTICUM

Practical application of leadership in the military team. Prerequisite: Special approval.

1.000 TO 4.000 Credit hours
7.000 TO 28.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Military Science Department

### MSCI 30191 - LEADERSHIP SEMINAR III

(Repeatable for credit) Instructional program preparing individuals to undertake the broad range of tasks associated with the dimensions of leadership. Stresses decision-making roles of leaders in planning and executing organizational programs. Corequisite: MSCI 30160 or MSCI 30170.

1.000 Credit hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Field Experience, Seminar
Military Science Department

**MSCI 40160 - MILITARY MANAGEMENT AND ETHICS**

Professional ethics and responsibilities of military leaders. Development of interpersonal and managerial communicative skills. Prerequisite: special approval. Corequisite: MSCI 40191.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Military Science Department

**MSCI 40170 - THE PROFESSIONAL MILITARY OFFICER, MANAGEMENT, AND LAW**

Studies in professional officer development, military justice system and the management of personnel resources. Prerequisite: special approval. Corequisite: MSCI 40191.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Military Science Department

**MSCI 40191 - LEADERSHIP SEMINAR IV**

(Repeatable for credit) Instructional program preparing individuals to undertake the broad range of tasks associated with the dimensions of leadership. Stresses decision-making roles of leaders in planning and executing organizational programs. Corequisite: MSCI 40160 or MSCI 40170.

1.000 Credit hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Field Experience, Seminar

Military Science Department

**MSCI 40196 - INDIVIDUAL INVESTIGATION**

(Repeatable for credit) Individual research projects, reports and readings. Prerequisite: Special approval and advanced program standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Military Science Department

**MUS 11110 - MUSIC FUNDAMENTALS**

Introduction to the pitch and rhythmic aspects of music. Emphasis on aural skills and music notation. Prepares students for MUS11111, Music Rudiments. No credit toward graduation for music majors or minors.
Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Music Department

**MUS 11111 - MUSIC RUDIMENTS**

Introduction to the pitch and rhythmic aspects of music. Emphasis on aural/oral skills and music notation. No credit toward graduation for music majors or minors. Prerequisite: Music Theory Placement Test, score of 01.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Music Department

**MUS 11121 - THEORY I**

Basic elements of music--harmonic, melodic, rhythmic--studied through analysis, composition, keyboard and ear training. Diatonic materials emphasized. Prerequisite: Music Theory Placement Test, score of 02.
4.000 Credit hours
3.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Music Department

**MUS 11122 - THEORY II**

Continuation of basic elements of music--harmonic, melodic, rhythmic--studied through analysis, composition, keyboard, singing and ear training. Chromatic materials emphasized. Prerequisite: MUS 11121 with a grade of C (2.00) or better.
4.000 Credit hours
3.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Music Department

**MUS 17011 - PIANO CLASS FOR NONMUSIC STUDENTS**

Development of basic skills required in playing piano, including familiarity with the keyboard and music notation. Prerequisite: None.
2.000 Credit hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory
**MUS 17012 - PIANO CLASS FOR NONMUSIC STUDENTS**

Development of basic skills required in playing piano, including familiarity with the keyboard and music notation. Prerequisite: MUS 17011.

- 2.000 Credit hours
- 3.000 Lab hours

Levels: Undergraduate  
Schedule Types: Laboratory

**MUS 17111 - PIANO CLASS**

Preparatory piano. Piano literature and functional elements of sight-reading, transposition, harmonization, and improvisation. Prerequisite: Special approval.

- 1.000 Credit hours
- 2.000 Lab hours

Levels: Undergraduate  
Schedule Types: Laboratory

**MUS 17112 - PIANO CLASS**

Preparatory piano. Piano literature and functional elements of sight-reading, transposition, harmonization, and improvisation. Prerequisite: MUS 17111 with a grade of C (2.000) or better; and special approval.

- 1.000 Credit hours
- 2.000 Lab hours

Levels: Undergraduate  
Schedule Types: Laboratory

**MUS 18611 - SINGER'S DICTION I**

Foundational training and performance practice in phonetics and singing diction for the English, American, Ecclesiastical Latin and Italian vocal repertoire. Prerequisite: Music (MUS) or music education (MUED) major.

- 1.000 Credit hours
- 1.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

**MUS 18612 - SINGER'S DICTION II**

Foundational training and performance practice in phonetics and singing diction for the vocal repertoire of French, German and selected other languages. Prerequisite: Music (MUS) major and MUS 18611 with a grade of C (2.000) or better.
MUS 20295 - SPECIAL TOPICS IN MUSIC

(Repeatable for credit) Academic study in areas not offered adequately in the music curriculum. Topic areas are of special interest to the faculty member. Prerequisite: Music (MUS) major.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Music Department

MUS 21111 - THEORY III

Study of Western art music from the sixteenth through eighteenth centuries. Emphasis on analytical, aural, compositional, and keyboard components of music theory. Prerequisite: minimum C (2.000) grade in MUS 11122.
4.000 Credit hours
3.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Music Department

MUS 21112 - THEORY IV

Study of Western art music from the nineteenth and early twentieth centuries. Emphasis on analytical, aural, compositional and keyboard components of music theory. Prerequisite: minimum C (2.000) grade in MUS 21111.
4.000 Credit hours
3.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Music Department

MUS 21113 - MUSIC PRODUCTION I

A practical introduction to digital audio production, study of basic computer assisted recording, editing and music production. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
MUS 2114 - MUSIC PRODUCTION II

A practical study of computer assisted composition and arranging covering MIDI, sequencing, synthesis, sampling and video synchronization. Prerequisite: MUS 21113 and 21221 with minimum C (2.000) grade.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

MUS 21121 - MUSIC THEORY TO 1750

Study of Western musical style from Gregorian chant through the Baroque period. Emphasis on aural, compositional, written and keyboard approaches as appropriate to medieval, Renaissance and Baroque music. Prerequisite: MUS 11122 with a grade of C (2.000) or better.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

MUS 21122 - MUSIC THEORY FROM 1750 TO 1900

Study of Western musical style from the early classical to the late Romantic period. Emphasis on aural, compositional, written and keyboard approaches as appropriate to classical and Romantic music. Prerequisite: MUS 21121 with a grade of C (2.000) or better.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

MUS 21211 - INTRODUCTION TO COMPOSITION

Introduction to beginning concepts involved with composing for band and orchestral instruments, voice, and piano. Prerequisite: none.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

MUS 21221 - AUDIO RECORDING I

A study of basic live and studio recording fundamentals and techniques, including signal flow, microphones and
recording equipment. Prerequisite: minimum grade of C (2.000) in MUS 21113.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Music Department

**MUS 21222 - AUDIO RECORDING II**

A study of multi-track miking and recording techniques, session setup and management, and elements required for the reference mix. Prerequisite: MUS 21221 with minimum C (2.000) grade.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Music Department

**MUS 21341 - COMMERCIAL MUSIC THEORY AND COMPOSITION**

Application of the knowledge gained from Music Theory (MUS 11121 and 11122) to the study of popular music through practical applications, particularly with regard to composition and improvisation. Prerequisites: Minimum grade of C (2.000) in MUS 11121 and 11122.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Music Department

**MUS 22111 - THE UNDERSTANDING OF MUSIC**

A listening approach for the understanding of Western art music, folk and jazz. Particular attention is paid to musical styles forms and compositional techniques as related to music history. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Music Department

Course Attributes:
Kent Core-Fine Arts, LER-Fine Arts, Trnfr Module-Fine Arts

**MUS 22121 - MUSIC AS A WORLD PHENOMENON**

An introduction to music as a world phenomenon. Study of selected art, folk and popular musics from world cultures through live performances, tapes, films, video tapes and readings. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
**MUS 22131 - SURVEY OF ROCK MUSIC HISTORY**

A survey of Rock Music History from the 1950s through the twentieth century to today. Emphasis is on recognizing music literature, prominent artists and music styles, as well as related cultural events. Modern media, especially the Internet, is an integral component of the course. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Music Department

Course Attributes:
Diversity Course-Global, Kent Core-Fine Arts, LER-Fine Arts, Trnfr Module-Fine Arts

**MUS 23241 - MUSIC TEACHING AS A PROFESSION**

Basic teaching strategies and techniques; an overview of music teaching as a career; diversity, integration, curriculum technology, classroom management, legal issues, personal skills and portfolio. Twenty (20) field hours required. Prerequisite: Music (MUS) or music education (MUED) major.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Music Department

**MUS 25011 - UNIVERSITY CHORUS**

(Repeatable for credit) Choral ensemble which studies and performs sacred and secular music for mixed voices. Activities include performance on and off campus. Prerequisite: Special approval.

1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Music Department

Course Attributes:
TAG - Arts/Humanities

**MUS 25225 - UNIVERSITY BAND**

(Repeatable for credit) Study and performance of music literature for wind band appropriate for music majors and non-majors. Prerequisite: None.

1.000 Credit hours
1.000 Lab hours
**MUS 25311 - CHAMBER MUSIC**

(Repeatable for credit) The study and performance of music for small ensembles. Prerequisite: Permission.
1.000 Credit hours
1.000 Lab hours

**MUS 25312 - WORLD MUSIC ENSEMBLE**

(Repeatable for credit) The World Music Ensemble teaches performance and cultural etiquette associated with traditional and popular world music genres, e.g., African drumming. Specific traditions studied include areas of specialization of instructors and/or advanced student participants. Prerequisite: none.
1.000 Credit hours
2.000 Other hours

**MUS 27111 - PIANO CLASS**

Continuation of piano classes. Credit acceptable on music major and minor sequences. Prerequisite: MUS 17112 with a grade of C (2.000) or better.
2.000 Credit hours
2.000 Lab hours

**MUS 27112 - PIANO CLASS**

Continuation of piano classes. Credit acceptable on music major and minor sequences. Prerequisite: MUS 27111 with a minimum grade of C (2.000).
2.000 Credit hours
2.000 Lab hours

**MUS 31111 - ADVANCED SIGHT SINGING**
Advanced sight singing and ear training. Sight singing in five clefs emphasizing vocal and instrumental works from various periods including contemporary. Prerequisite: MUS 21122.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Music Department

**MUS 31113 - MUSIC PRODUCTION III**

Continuation of Music Production II. Advanced sequencing, synthesis and audio editing techniques as applied to music production. Focus is on arranging. Prerequisite: Minimum grade of C (2.000) in 21114; and music technology (MUST) major.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Music Department

**MUS 31114 - MUSIC PRODUCTION IV**

Continuation of Music Production III. Arranging for acoustic and electronic instruments as applied to music production. Development of MIDI programming skills and use of sample sets. Prerequisite: Minimum grade of C (2.000) in MUS 31113; and music technology (MUST) major.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Music Department

**MUS 31121 - WESTERN MUSIC SINCE 1900**

Class meets three hours per week. The study of western art music since 1900 from historical and theoretical viewpoints. Emphasis on aural listening music composition and written skills as well as intellectual understanding. Prerequisite: MUS 21122 and MUS 32212, both with C (2.000) minimum grade.

2.000 Credit hours
2.000 Lecture hours
0.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Music Department

**MUS 31211 - COMPOSITION**

(Repeated for credit) original composition for instrumental and vocal solos and small ensembles using shorter musical forms. Prerequisite: music (MUS) or music education (MUED) major.

2.000 Credit hours
2.000 Other hours
Music Department

**MUS 31221 - AUDIO RECORDING III**

A study of the elements, functions and techniques of digital audio multi-track mixing. Prerequisite: Minimum grade of C (2.000) in MUS 21222; and music technology (MUST) major.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Music Department

**MUS 31222 - AUDIO RECORDING IV**

A detailed study of the tools, techniques and critical listening decisions required in creating a professional digital audio mix. Prerequisite: Minimum grade of C (2.000) in MUS 31221; and music technology (MUST) major.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Music Department

**MUS 32211 - MUSIC HISTORY I**

A survey of Western music history from early Christian chants through the Baroque style. Prerequisite: MUS 22111 (music major section) with a grade of C (2.000) or better; and junior standing.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Music Department

**MUS 32212 - MUSIC HISTORY II**

A survey of Western music history of the 18th and 19th centuries. Prerequisite: MUS 22111 (music major section); and MUS 32211 with a grade of C (2.000) or better and junior standing.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Music Department

Course Attributes:
Writing Intensive Course
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisites</th>
<th>Credit Hours</th>
<th>Lecture Hours</th>
<th>Lab Hours</th>
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</thead>
<tbody>
<tr>
<td>MUS 33211</td>
<td>ELEMENTARY AND SECONDARY GENERAL MUSIC</td>
<td>Kodaly, Orff, Dalcroze and current strategies appropriate for early childhood K-12 general music classrooms. Emphasis on teaching diverse learners, including special student populations. Clinical experience in the teaching of general music in the schools. Forty (40) field hours required. Prerequisites: grade of C (2.000) or better in MUS 23241; and music (MUS) or music education (MUED) major; and junior standing.</td>
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<td>4.000</td>
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<tr>
<td>MUS 33212</td>
<td>TEACHING SKILLS IN MUSIC EDUCATION:GENERAL/INSTRUMENTAL</td>
<td>Clinical experience in the teaching of general and instrumental music. Fifteen field hours required. Prerequisite: Music (MUS) major and junior standing. Corequisite: MUS 33211 or MUS 43231.</td>
<td>Music (MUS) major and junior standing. Corequisite: MUS 33211 or MUS 43231.</td>
<td>1.000</td>
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<tr>
<td>MUS 33213</td>
<td>TEACHING SKILLS IN MUSIC EDUCATION:CHORAL/ORCHESTRAL</td>
<td>Clinical experience in the teaching of choral and instrumental music. Fifteen field hours required. Prerequisites: MUS 33212; and music (MUS) or music education (MUED) major; and junior standing. Corequisite: MUS 33231 or MUS 43211.</td>
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<tr>
<td>MUS 33214</td>
<td>MUSIC TECHNOLOGY FOR MUSIC EDUCATORS</td>
<td>The application of technologies specific to music instruction and learning for music education majors. Emphasis is placed on project-based instruction focusing on the practical uses of technology in school settings. Prerequisite: music education (MUED) major.</td>
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<tr>
<td>MUS 33231</td>
<td>ELEMENTARY AND SECONDARY CHORAL MUSIC</td>
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</table>
Methods, materials, and literature used in elementary and secondary choral music programs; designing a choral curriculum, advocacy and assessment, lesson planning, program organization, budget. Clinical experience in the teaching of choral music. Forty (40) field hours required. Prerequisites: grade of C (2.000) or better in MUS 23241 and 34111; and junior standing.

4.000 Credit hours
3.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Music Department

**MUS 34111 - ELEMENTARY CONDUCTING**

Introduction to and study of conducting: beat patterns, baton techniques, score reading, analysis and interpretive elements. Six field/clinical hours are required. Prerequisite: MUS 21121 with a minimum grade of C (2.000).

2.000 Credit hours
4.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Music Department

**MUS 34211 - ELEMENTARY AND SECONDARY GENERAL MUSIC**

Kodaly, Orff, Dalcroze, and current strategies appropriate for early childhood K-12 general music classrooms. Emphasis on teaching diverse learners, including special student populations. Clinical experience in the teaching of general music in the schools. Thirty (30) field hours required. Prerequisites: minimum C (2.000) grade in MUS 23241; and music (MUS) or music education (MUED) major; and junior standing.

2.000 Credit hours
1.000 Lecture hours
4.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Music Department

**MUS 34212 - ELEMENTARY AND SECONDARY CHORAL MUSIC**

Methods, materials, and literature used in elementary and secondary choral music programs; designing a choral curriculum, advocacy and assessment, lesson planning, program organization, budget. Clinical experience in the teaching of choral music. Thirty (30) field hours required. Prerequisites: minimum C (2.000) grade in MUS 23241 and 34111; and junior standing.

2.000 Credit hours
1.000 Lecture hours
4.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Music Department
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Credit Hours</th>
<th>Other Hours</th>
<th>Levels</th>
<th>Schedule Types</th>
<th>Course Attributes</th>
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</thead>
<tbody>
<tr>
<td>MUS 35213</td>
<td>MUS 35213 - STUDIO ENSEMBLE</td>
<td>Development of ensemble skills through small group experience performing diverse popular styles from notation, developing improvisation skills and creating arrangements from lead charts. Students must audition for the director prior to registration for the course. Prerequisite: special approval.</td>
<td>1.000</td>
<td>2.000</td>
<td>Undergraduate</td>
<td>Studio</td>
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<tr>
<td>MUS 36011</td>
<td>MUS 36011 - APPLIED MUSIC - JAZZ</td>
<td>Private instrumental instruction in Jazz techniques. Prerequisite: audition and special approval.</td>
<td>2.000</td>
<td>0.500 TO 1.000</td>
<td>Undergraduate</td>
<td>Private Lesson</td>
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<tr>
<td>MUS 36111</td>
<td>MUS 36111 - APPLIED MUSIC-PIANO</td>
<td>A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisite: Music (MUS), music technology (MUST) or music education (MUED) major.</td>
<td>2.000 OR 4.000</td>
<td>1.500 OR 2.000</td>
<td>Undergraduate</td>
<td>Private Lesson, Studio</td>
<td>Arts/Humanities</td>
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<tr>
<td>MUS 36311</td>
<td>MUS 36311 - APPLIED MUSIC-VOICE</td>
<td>A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisite: Music (MUS), music technology (MUST) or music education (MUED) major.</td>
<td>2.000 OR 4.000</td>
<td>1.000</td>
<td>Undergraduate</td>
<td>Private Lesson, Studio</td>
<td>Arts/Humanities</td>
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<tr>
<td>Course Code</td>
<td>Course Name</td>
<td>Description</td>
<td>Prerequisites</td>
<td>Credit Hours</td>
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<tr>
<td>MUS 36411</td>
<td>APPLIED MUSIC-VIOLIN</td>
<td>(Repeatable for credit) A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Prerequisite: Music (MUS), music technology (MUST) or music education (MUED) major.</td>
<td>2.000 OR 4.000 Credit hours</td>
<td>2.000 OR 4.000</td>
<td>1.000 Other hours</td>
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<tr>
<td>MUS 36412</td>
<td>APPLIED MUSIC-VIOLA</td>
<td>(Repeatable for credit) A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisite: Music (MUS), music technology (MUST) or music education (MUED) major.</td>
<td>2.000 OR 4.000 Credit hours</td>
<td>2.000 OR 4.000</td>
<td>1.000 Other hours</td>
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<tr>
<td>MUS 36413</td>
<td>APPLIED MUSIC-CELLO</td>
<td>(Repeatable for credit) A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisite: Music (MUS), music technology (MUST) or music education (MUED) major.</td>
<td>2.000 OR 4.000 Credit hours</td>
<td>2.000 OR 4.000</td>
<td>1.000 Other hours</td>
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<tr>
<td>MUS 36414</td>
<td>APPLIED MUSIC-D Double BASS</td>
<td>(Repeatable for credit) A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisite: Music (MUS), music technology (MUST) or music education (MUED) major.</td>
<td>2.000 OR 4.000 Credit hours</td>
<td>2.000 OR 4.000</td>
<td>1.000 Other hours</td>
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</tbody>
</table>

Levels: Undergraduate
Schedule Types: Private Lesson, Studio

Music Department
Course Attributes: TAG - Arts/Humanities
MUS 36511 - APPLIED MUSIC-FLUTE

(Repeatable for credit) A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisite: Music (MUS), music technology (MUST) or music education (MUED) major.
2.000 OR 4.000 Credit hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Private Lesson, Studio

MUS 36512 - APPLIED MUSIC-OBOE

(Repeatable for credit) A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisite: Music (MUS), music technology (MUST) or music education (MUED) major.
2.000 OR 4.000 Credit hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Private Lesson, Studio

MUS 36513 - APPLIED MUSIC-CLARINET

(Repeatable for credit) A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisite: Music (MUS), music technology (MUST) or music education (MUED) major.
2.000 OR 4.000 Credit hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Private Lesson, Studio

MUS 36514 - APPLIED MUSIC-BASSOON
A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisite: Music (MUS), music technology (MUST) or music education (MUED) major.

2.000 OR 4.000 Credit hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Private Lesson, Studio

Music Department

Course Attributes:
TAG - Arts/Humanities

MUS 36515 - APPLIED MUSIC-SAXOPHONE

A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisite: Music (MUS), music technology (MUST) or music education (MUED) major.

2.000 OR 4.000 Credit hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Private Lesson, Studio

All Sections for this Course

Music Department

Course Attributes:
TAG - Arts/Humanities

MUS 36611 - APPLIED MUSIC-TRUMPET

A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisite: Music (MUS), music technology (MUST) or music education (MUED) major.

2.000 OR 4.000 Credit hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Private Lesson, Studio

Music Department

Course Attributes:
TAG - Arts/Humanities

MUS 36612 - APPLIED MUSIC-HORN

A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisite: Music (MUS), music technology (MUST) or music education (MUED) major.

2.000 OR 4.000 Credit hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Private Lesson, Studio
MUS 36613 - APPLIED MUSIC-TROMBONE

(Repeatable for credit) A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisite: Music (MUS), music technology (MUST) or music education (MUED) major.
2.000 OR 4.000 Credit hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Private Lesson, Studio

MUS 36614 - APPLIED MUSIC-EUPHONIUM

(Repeatable for credit) A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisite: Music (MUS), music technology (MUST) or music education (MUED) major.
2.000 OR 4.000 Credit hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Private Lesson, Studio

MUS 36615 - APPLIED MUSIC-TUBA

(Repeatable for credit) A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisite: Music (MUS), music technology (MUST) or music education (MUED) major.
2.000 OR 4.000 Credit hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Private Lesson, Studio

MUS 36711 - APPLIED MUSIC-PERCUSSION

(Repeatable for credit) A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisite:
MUS 36912 - APPLIED MUSIC-GUITAR

(Repeatable for credit) A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisite: Music (MUS), music technology (MUST) or music education (MUED) major.

2.000 OR 4.000 Credit hours
1.500 OR 2.000 Other hours

Levels: Undergraduate
Schedule Types: Private Lesson, Studio

Music Department

Course Attributes:
TAG - Arts/Humanities

MUS 36913 - APPLIED STUDIO MUSICIANSHP

(Repeatable for a maximum of 16 credit hours) Development of performance proficiency in contemporary popular music styles appropriate for the performance idiom through individual instruction. Students must audition for the director prior to registration for the course. Prerequisite: special approval.

2.000 TO 4.000 Credit hours
2.000 TO 4.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Music Department

MUS 37111 - FUNCTIONAL PIANO

Development of keyboard facility for practical purposes in classroom. Prerequisite: MUS 21122 with a minimum C (2.000) grade.

2.000 Credit hours
4.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Music Department

MUS 37113 - PIANO SKILLS FOR THE CHORAL/GENERAL MUSIC EDUCATOR

Development of keyboard skills for practical purposes in the classroom and ensemble rehearsals. Prerequisites: MUS 11122 and 36111 with a minimum grade of C (2.000).
MUS 37114 - PIANO SKILLS FOR THE INSTRUMENTAL MUSIC EDUCATOR

Development of keyboard skills for practical purposes in the classroom and ensemble rehearsals. Prerequisites: 11122 with a minimum grade of C (2.000); and MUS 17112 with a minimum grade of C (2.000) or minimum score of 80 on piano placement test.

1.000 Credit hours
2.000 Lab hours

MUS 40092 - MUSIC TECHNOLOGY INTERNSHIP

(Repeatable for a maximum of 4 credit hours) On-the-job experience with cooperating business in the field of music technology and preparation of a final report or an applicable project. Prerequisites: Minimum grade of C (2.000) in MUS 31114 or 31222; and a cumulative 2.250 GPA; and music technology (MUST) major and special approval.

2.000 Credit hours
15.000 Other hours

MUS 40295 - SPECIAL TOPICS IN MUSIC

(repeatable for a total of 12 hours) Academic study in areas not offered adequately in the music curriculum. Topic areas are of special interest to the faculty member. Prerequisite: None.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

MUS 40296 - INDEPENDENT STUDY: MUSIC

(Repeatable for credit) Individual investigation in music topics not offered as either regular coursework or beyond the scope of existing music major courses. Prerequisite: Music (MUS) or music education (MUED) major and special approval.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours
**MUS 41111 - PRACTICUM IN MUSIC THEORY**

Ear training, sight singing and analysis in preparation for graduate level music theory course work. Prerequisite: Permission.

2.000 Credit hours
2.000 Other hours

**MUS 41112 - WESTERN MUSIC SINCE 1945**

The study of Western art music since 1945 from historical and theoretical viewpoints. Emphasis on analysis, composition, listening and intellectual understanding. Prerequisites: minimum C (2.000) grade in MUS 21112 and MUS 32212.

1.000 Credit hours
2.000 Lab hours

**MUS 41113 - MUSIC PRODUCTION V**

Continuation of Music Production IV, advanced sequencing, synthesis and audio editing techniques as applied to music production. Focus is on original music. Prerequisite: Minimum grade of C (2.000) in MUS 31114; and music technology (MUST) major.

3.000 Credit hours
3.000 Lecture hours

**MUS 41114 - MUSIC PRODUCTION VI**

Continuation of Music Production V, create music to accompany a visual medium by learning fundamental to more advanced film scoring techniques. Prerequisite: Minimum grade of C (2.000) in MUS 41113.

3.000 Credit hours
3.000 Lecture hours
**MUS 41131 - KEYBOARD HARMONY**

Theoretical skills demonstrated at the keyboard: harmonization of melodies in homophonic style, realization of figured bass, score reading, modulation and improvisation. Prerequisite: MUS 21122 with a minimum grade of C (2.000).

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Music Department

**MUS 41141 - SIXTEENTH-CENTURY COUNTERPOINT**

Two-, three - and four part vocal counterpoint in 16th century style. Prerequisite: MUS 21122 with a minimum grade of C (2.000).

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Music Department

**MUS 41151 - EIGHTEENTH-CENTURY COUNTERPOINT**

Technique of writing counterpoint in 18th-century style, especially that of J. S. Bach. Prerequisite: MUS 21122 with a minimum grade of C (2.000).

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Music Department

**MUS 41161 - ADVANCED MUSICAL ANALYSIS**

A study of 20th-century approaches to tonal and nontonal musical analysis. Emphasis on familiarity with styles, nomenclature and appropriate graphic techniques. Prerequisite: MUS 31121 with a minimum grade of C (2.000).

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Music Department

**MUS 41181 - ACOUSTICS AND TECHNOLOGY IN MUSIC**

An introduction to acoustics and psychoacoustics in direct relationship to music, and an introduction to uses of technology in music composition, performance, notation, theory, history and pedagogy. Prerequisite: music technology (MUST) major.

2.000 Credit hours
2.000 Lecture hours
MUS 41199 - SENIOR PROJECT: MUSIC THEORY

(Repeatable for credit) Preparation and presentation of a senior thesis in the student's area of expertise. Prerequisite: Permission.
3.000 Credit hours
3.000 Other hours

MUS 41211 - COMPOSITION

Study of the materials and techniques of musical composition culminating in original works based upon observable principles of unity and variety. Prerequisite: Composition (COMP) or music (MUS) or music education (MUED) major.
2.000 OR 4.000 Credit hours
2.000 OR 4.000 Other hours

MUS 41221 - AUDIO RECORDING V

A detailed study in digital audio production techniques and procedures, including project management, final product editing and assembly, and digital audio mastering. Prerequisite: Minimum grade of C (2.000) in MUS 31222; and music technology (MUST) major.
3.000 Credit hours
3.000 Lecture hours

MUS 41222 - AUDIO RECORDING VI

A comprehensive project experience in digital audio from pre-production through the recording, mixing, mastering, assembly and post-production of a complete audio project. Prerequisite: minimum grade of C (2.000) in MUS 41221.
3.000 Credit hours
3.000 Lecture hours
Music Department

**MUS 41299 - SENIOR PROJECT: MUSIC COMPOSITION**

(Repeatable for credit) The final composition experience prior to graduation: a recital of individually composed works must be presented. Prerequisite: MUS 41211 with a minimum grade of C (2.000).

2.000 Credit hours
2.000 Other hours

Levels: Undergraduate
Schedule Types: Senior Project/Honors Thesis

Music Department

Course Attributes: Experiential Learning Requirem

**MUS 41321 - ORCHESTRATION**

Ranges, tonal possibilities, technical limitations and transpositions for all orchestral instruments. Scoring techniques and analysis of representative instrumental ensemble repertoire. Prerequisite: MUS 21122 with a minimum grade of C (2.000).

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Music Department

**MUS 41341 - JAZZ IMPROVISATION I**

(Repeatable for a total of 4 credit hours) A beginner's introduction to Jazz improvisation. Theory and daily playing will be enhanced by ear training. Prerequisite: special approval.

2.000 Credit hours
2.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Music Department

**MUS 41342 - JAZZ COMPOSING AND ARRANGING**

(Repeatable for a maximum of 4 credit hours) Composing and arranging for the large and small jazz ensemble. Prerequisite: special approval.

2.000 Credit hours
2.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Music Department

**MUS 41351 - JAZZ IMPROVISATION II**
The presentation of a methodical approach to learning standard Jazz repertoire. Prerequisite: MUS 41341 with a minimum grade of C (2.000) or special approval via audition.

2.000 Credit hours
1.000 Lecture hours
1.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Music Department

**MUS 42101 - ROOTS OF ROCK**

Roots of Rock is a comprehensive survey of the various genres of American music in the 20th century that contributed to the development of rock music. Important performers in various styles and their contributions to the art form are explored. Pioneers in the fields of recording, artist management and production are studied. Rock music’s contributions to the emergence of American culture are viewed in the context of social, racial and political changes. The impact of technological advances in radio, recording and television are also studied.

Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Music Department

**MUS 42111 - AFRICAN MUSIC AND CULTURES**

African music as related to social sciences and humanities. Oral traditions. Use of music recordings, tapes, musical instruments, participation in performance and group work involvement. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Music Department

**MUS 42131 - AMERICA'S MUSIC**

Historical survey of music in America from new England psalmody to present-day compositional trends.

Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Music Department

**MUS 42141 - FOLK AND TRADITIONAL MUSIC OF WESTERN CONTINENTS**

Study of selected music cultures of Eastern and Western Europe, and South, Central and North America.

Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours
Music Department

**MUS 42151 - ASIAN MUSICS**

Survey of Asian musics. Emphasis on art, folk and popular musics and relationships of these musics to their respective cultures. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Music Department

**MUS 42161 - HISTORY OF JAZZ**

The evolution of jazz from its origin to present. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Music Department

**MUS 42181 - POPULAR WORLD MUSIC**

A survey of popular world music genres from North America, the Caribbean, South America, Europe, Africa and Asia. Emphasis is on recognizing music literature, prominent artists and music styles, as well as related cultural events. Modern media, especially the Internet, is an integral component of the course. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Music Department

Course Attributes:
Diversity Course-Domestic

**MUS 42221 - SYMPHONIC LITERATURE**

Historical and stylistic survey of music for large instrumental ensemble. Prerequisite: MUS 21122 with a minimum grade of C (2.000).
3.000 Credit hours
3.000 Lecture hours

Music Department

Course Attributes:
Diversity Course-Global
MUS 42232 - PIANO LITERATURE I

Survey of keyboard suites, sonatas and concerti from the 16th century to the present. Emphasis on performing, listening, and analysis. Prerequisite: music (mus) major.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

MUS 42241 - PIANO LITERATURE

Survey of keyboard and piano literature from the 16th century to the present; study of related forms and styles. Emphasis on performing, listening and analysis. Prerequisite: Special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

MUS 42242 - PIANO LITERATURE II

Survey of character pieces and variations from the 16th century to the present. Emphasis on performing, listening, and analysis. Prerequisite: music (MUS) major.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

MUS 42251 - SONG LITERATURE

A study of vocal literature from the 16th century to the present. Emphasis upon the style, interpretation and presentation of solo materials for all voice classifications. Prerequisite: MUS 22111 minimum grade of C (2.000) grade; and junior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

MUS 42261 - OPERA LITERATURE

The historical development of opera from the 17th century to the present. Detailed analysis of representative works. Prerequisite: MUS 22111 with a minimum C (2.000) grade; and junior standing.

3.000 Credit hours
### MUS 42271 - CHORAL LITERATURE I

Study of Western European choral literature from approximately 1450 to the early nineteenth century, i.e., Renaissance, Baroque and Classical periods. Prerequisites: MUS 31121 with a minimum grade of C (2.000) and special approval of instructor.

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<th>3.000 Credit hours</th>
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### MUS 42272 - CHORAL LITERATURE II

Choral Literature II, a continuation of Choral Literature I, is a study of Western European and North American choral music of the early nineteenth century to the present (roughly 1830 to the present). Prerequisites: MUS 31121 with a minimum grade of C (2.000); and special approval from the instructor.

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<th>3.000 Credit hours</th>
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<tbody>
<tr>
<td>3.000 Lecture hours</td>
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</table>

### MUS 42357 - STUDENT TEACHING

Provides a 16-week student teaching experience. Off-campus arrangements are handled by the College of Education, Health and Human Services and the School of Music. Prerequisite: Music education (MUED) major and special approval; and Official valid certification of Child Safety Training, approved Basic Life Support and A.L.I.C.E. Training must be presented to the campus office of clinical experience or designated faculty/staff at Regional campuses as prerequisite for student teaching. Corequisite: MUS 49525.

<table>
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<th>9.000 Credit hours</th>
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<td>9.000 Other hours</td>
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### MUS 43211 - INSTRUMENTAL METHODS II

Secondary instrumental instruction; program organization, budget, advocacy, assessment, rehearsal planning, literature and teaching techniques. Clinical experience in the teaching of music. Forty (40) field hours required. Prerequisites: grade of C (2.000) or better in MUS 23241 and 34111 and 43231; and 3 credits with a C (2.000) or better in MUS 47411 or 47511 or 47611 or 47711; and junior standing.
MUS 43231 - INSTRUMENTAL METHODS I

Elementary and middle school instrumental instruction, program organization, rehearsal teaching techniques, lesson plans, literature, assessment, scheduling, recruiting, modeling and interactive teaching. Clinical experience in the teaching of music. Forty (40) field hours required. Prerequisites: grade of C (2.000) or better in MUS 23241; and 2 credits with a C or better in MUS 47411 or 47511 or 47611 or 47711; music (MUS) or music education (MUED) major; and junior standing.

MUS 43241 - MARCHING BAND TECHNIQUES AND LITERATURE

Organization, administration and techniques of marching bands in the schools. Topics covered include musical styles, literature and show design. Prerequisite: music education (MUED) major and sophomore standing.

MUS 43242 - JAZZ ENSEMBLE TECHNIQUES AND LITERATURE

Study of the curriculum for the jazz ensemble, including organizational and administrative procedures. Emphasis on music interpretation jazz styles and rehearsal techniques taught through laboratory experience. Prerequisite: special approval.

MUS 43243 - VOCAL JAZZ AND MUSICAL THEATRE IN THE SCHOOLS

History, vocal technique, style characteristics and repertoire necessary for teaching vocal jazz and African-American spirituals. Repertoire organization and publicity for school productions of American musical theatre. Prerequisite: Music (MUS) major and junior standing.
MUS 43245 - JAZZ ENSEMBLE TECHNIQUES AND LITERATURE

(Slashed with MUS 53245) Study of the curriculum for the jazz ensemble, including organizational and administrative procedures. Emphasis on music interpretation of jazz styles and rehearsal techniques taught through laboratory experiences. One hour of field observation is required. Prerequisite: special approval.
1.000 Credit hours
3.000 Lab hours

MUS 44111 - CHORAL CONDUCTING AND ARRANGING

Continued development of conducting technique, score reading analysis, styles, interpretation, rehearsal procedure, language pronunciation and arranging for voices and instruments. Six field/clinical hours are required. Prerequisite: MUS 34111 with a minimum C (2.000) grade.
3.000 Credit hours
4.000 Other hours

MUS 44121 - INSTRUMENTAL CONDUCTING AND ARRANGING

Continued development of conducting technique, score reading analysis, styles, interpretation, rehearsal procedure and arranging for instrumental organizations. Twelve field/clinical hours are required. Prerequisite: MUS 34111 with a minimum grade of C (2.000).
3.000 Credit hours
4.000 Other hours

MUS 44211 - INSTRUMENTAL METHODS I

Elementary and middle school instrumental instruction, program organization, rehearsal teaching techniques, lesson plans, literature, assessment, scheduling, recruiting, modeling and interactive teaching. Clinical experience in the teaching of music. Thirty (30) field hours required. Prerequisites: minimum C (2.000) grade in MUS 23241; and 2 credits from MUS 47412, MUS 47512, MUS 47513, MUS 47612 or MUS 47712 with a minimum C (2.000) grade; and music (MUS) or music education (MUED) major; and junior standing.
2.000 Credit hours
1.000 Lecture hours
4.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Music Department

**MUS 44212 - INSTRUMENTAL METHODS II**

Secondary instrumental instruction; program organization, budget, advocacy, assessment, rehearsal planning, literature and teaching techniques. Clinical experience in the teaching of music. Thirty (30) field hours required. Prerequisites: minimum C (2.000) grade in MUS 23241, MUS 34111 and MUS 44211; and minimum C (2.000) grade in either MUS 47412, MUS 47512, MUS 47512, MUS 47612 or MUS 47712; and junior standing.

2.000 Credit hours
1.000 Lecture hours
4.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Music Department

**MUS 45111 - UNIVERSITY CHOIR**

(Repeatable for credit) Study and performance of choral music from Renaissance through contemporary styles, large and small forms with appropriate accompaniment. Prerequisite: Special approval.

1.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Music Department

Course Attributes:
TAG - Arts/Humanities

**MUS 45121 - KENT CHORUS**

(Repeatable for credit) Study and performance of choral music from Renaissance through contemporary styles, large and small forms with appropriate accompaniment. Prerequisite: Special approval.

1.000 Credit hours
2.500 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Music Department

Course Attributes:
TAG - Arts/Humanities

**MUS 45131 - OPERA: SINGER-ACTOR TECHNIQUES**

(Repeatable for credit) Training in methods and skills necessary to the art of the singer-actor. Opera performed and prepared via study observation and rehearsal. Prerequisite: Audition.

1.000 Credit hours
9.500 Other hours

Levels: Undergraduate
MUS 45141 - KENT STATE UNIVERSITY CHORALE

(Repeatable for credit) Study and performance of literature for vocal chamber ensemble from medieval through contemporary styles with appropriate accompaniment sung in the original language. An audition is required before registering for this course. Prerequisite: special approval.

1.000 Credit hours
4.500 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Music Department

Course Attributes:
TAG - Arts/Humanities

MUS 45142 - MEN'S CHORUS

(Repeatable for credit) A chorus of male voices. Emphasis on music literacy, vocal production instruction study and performance of music written for male voices. All western music periods are represented. Experience with mixed voice choirs also occurs. Prerequisite: special approval.

1.000 Credit hours
1.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Music Department

Course Attributes:
TAG - Arts/Humanities

MUS 45143 - WOMEN'S CHORUS

(Repeatable for credit) A chorus of women's voices. Emphasis on music literacy, vocal production instruction study and performance of music written for women's voices. All western music periods are represented. Experience with mixed voice choirs also occurs. Prerequisite: special approval.

1.000 Credit hours
1.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Music Department

Course Attributes:
TAG - Arts/Humanities

MUS 45151 - KENT STATE UNIVERSITY GOSPEL CHOIR

(Repeatable for credit) Study and performance of choral music in the gospel tradition, including works by contemporary artists. One weekly rehearsal and a minimum of one concert per semester. Off-campus concerts are possible. Prerequisite: None.
MUS 45212 - ORCHESTRA

(Repeatable for credit) A select group of instrumentalists for the purpose of studying and performing music written specifically for chamber orchestra including works of the 17th, 18th and 20th centuries. An audition is required before registering for this course. Prerequisite: special approval.

1.000 Credit hours
5.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Music Department
Course Attributes:
TAG - Arts/Humanities

MUS 45221 - CONCERT BAND

(Repeatable for credit) Study and performance of music literature for wind band. Prerequisite: Audition.

1.000 Credit hours
4.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Music Department
Course Attributes:
TAG - Arts/Humanities

MUS 45222 - MARCHING BAND

(Repeatable for credit) Study and performance of literature and maneuvers for marching band. Prerequisite: Audition.

1.000 Credit hours
6.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Music Department
Course Attributes:
TAG - Arts/Humanities
MUS 45223 - WIND ENSEMBLE

(Repeatable for credit) A select concert ensemble that performs the finest in wind instrument literature with emphasis on major original works. An audition is required before registering for this course. Prerequisite: special approval.
1.000 Credit hours
2.500 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Music Department

Course Attributes:
TAG - Arts/Humanities

MUS 45224 - FLASHER BRASS

(Repeatable for credit) Study and performance of music for Flasher Brass. Prerequisite: Audition.
1.000 Credit hours
4.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Music Department

MUS 45225 - UNIVERSITY BAND

(Repeatable for credit) Study and performance of music literature for wind band appropriate for non-music majors, and for music education majors performing on secondary instruments. Prerequisite: None.
1.000 Credit hours
1.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Music Department

Course Attributes:
TAG - Arts/Humanities

MUS 45231 - JAZZ ENSEMBLE

(Repeatable for credit) Study and performance of music literature in the jazz idiom. Prerequisite: Audition.
1.000 Credit hours
7.500 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Music Department

MUS 45241 - TROMBONE ENSEMBLE

(Repeatable for credit) A thorough study of trombone performance in various sized ensembles. Emphasis on original literature from over four centuries. Prerequisite: Audition.
MUS 45251 - PERCUSSION ENSEMBLE

(Repeatable for credit) A comprehensive study of percussion performance in various-sized ensembles. Use of keyboard percussion instruments along with drums and accessories. Study of percussion ensemble literature. Prerequisite: Audition.

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

MUS 45261 - BASSOON ENSEMBLE

(Repeatable for credit) Study and performance of music for multiple bassoons; emphasis upon refined ensemble playing interpretation leadership skills and arranging techniques. Prerequisite: Permission audition.

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

MUS 45271 - NEW MUSIC ENSEMBLE

(Repeatable for credit) Study and performance of 20th-century chamber music with an emphasis on works by contemporary composers. Prerequisite: Permission.

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

MUS 45281 - FLUTE ENSEMBLE

(Repeatable for credit) Study and performance of music for multiple flutes; emphasis upon all aspects of ensemble playing and style considerations will be addressed in both chamber and conducted formats. Prerequisite: Permission audition.
### MUS 45311 - CHAMBER MUSIC

(Repeatable for credit) The study and performance of music for small ensembles. Prerequisite: Permission.  
1.000 OR 2.000 Credit hours  
2.000 OR 4.000 Other hours  

Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab  

Music Department

### MUS 45312 - JAZZ COMBO DEVELOPMENT

(Repeatable for a total of 8 credit hours) The study of Jazz combo performance through rehearsal. Prerequisite: special approval.  
1.000 Credit hours  
1.000 Lab hours  

Levels: Undergraduate  
Schedule Types: Laboratory  

Music Department

### MUS 45321 - ACCOMPANYING

(Repeatable for credit) Accompanying instrumental and vocal soloists; piano ensemble works. Credit counted toward ensemble requirements. One hour credit for two hours of assigned accompanying weekly. Prerequisite: Permission.  
1.000 OR 2.000 Credit hours  
1.000 OR 2.000 Other hours  

Levels: Undergraduate  
Schedule Types: Private Lesson, Studio  

Music Department

### MUS 46111 - APPLIED MUSIC-PIANO

(Repeatable for credit) A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisite: Music (MUS) or music education (MUED) major.  
2.000 OR 4.000 Credit hours  
1.500 OR 2.000 Other hours  

Levels: Undergraduate  
Schedule Types: Private Lesson, Studio  

Music Department

### MUS 46311 - APPLIED MUSIC-VOICE

(Repeatable for credit) A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisite: Music (MUS) or music education (MUED) major.  
2.000 OR 4.000 Credit hours
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<th>Course Code</th>
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<tr>
<td>MUS 46411</td>
<td>APPLIED MUSIC-VIOLIN</td>
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<td>MUS 46412</td>
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<td>APPLIED MUSIC-CELLO</td>
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<td>MUS 46414</td>
<td>APPLIED MUSIC-DOUBLE BASS</td>
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1.000 Other hours
Levels: Undergraduate
Schedule Types: Private Lesson, Studio

Music Department

### MUS 46411 - APPLIED MUSIC-VIOLIN
(Repeatable for credit) A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisite: Music (MUS) or music education (MUED) major.
2.000 OR 4.000 Credit hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Private Lesson, Studio

Music Department

### MUS 46412 - APPLIED MUSIC-VIOLA
(Repeatable for credit) A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisite: Music (MUS) or music education (MUED) major.
2.000 OR 4.000 Credit hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Private Lesson, Studio

Music Department

### MUS 46413 - APPLIED MUSIC-CELLO
(Repeatable for credit) A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisite: Music (MUS) or music education (MUED) major.
2.000 OR 4.000 Credit hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Private Lesson, Studio

Music Department

### MUS 46414 - APPLIED MUSIC-DOUBLE BASS
(Repeatable for credit) A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisite: Music (MUS) or music education (MUED) major.
2.000 OR 4.000 Credit hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Private Lesson, Studio

Music Department
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<th>Credit Hours</th>
<th>Schedule Types</th>
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<tr>
<td>MUS 46511</td>
<td>APPLIED MUSIC-FLUTE</td>
<td>(Repeatable for credit) A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisite: Music (MUS) or music education (MUED) major and special approval.</td>
<td>2.000 OR 4.000</td>
<td>Private Lesson, Studio</td>
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<tr>
<td>MUS 46512</td>
<td>APPLIED MUSIC-OBOE</td>
<td>(Repeatable for credit) A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisite: Music (MUS) or music education (MUED) major and special approval.</td>
<td>2.000 OR 4.000</td>
<td>Private Lesson, Studio</td>
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<tr>
<td>MUS 46513</td>
<td>APPLIED MUSIC-CLARINET</td>
<td>(Repeatable for credit) A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisite: Music (MUS) or music education (MUED) major and special approval.</td>
<td>2.000 OR 4.000</td>
<td>Private Lesson, Studio</td>
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<tr>
<td>MUS 46514</td>
<td>APPLIED MUSIC-BASSOON</td>
<td>(Repeatable for credit) A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisite: Music (MUS) or music education (MUED) major and special approval.</td>
<td>2.000 OR 4.000</td>
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<td>MUS 46515</td>
<td>APPLIED MUSIC-SAXOPHONE</td>
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(Repeatable for credit) A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisite: Music (MUS) or music education (MUED) major and special approval.
2.000 OR 4.000 Credit hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Private Lesson, Studio

Music Department

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<td>MUS 46611</td>
<td>APPLIED MUSIC-TRUMPET</td>
<td>(Repeatable for credit) A comprehensive study of performance, technique and</td>
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<td>MUS 46612</td>
<td>APPLIED MUSIC-HORN</td>
<td>(Repeatable for credit) A comprehensive study of performance, technique and</td>
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<td>APPLIED MUSIC-TROMBONE</td>
<td>(Repeatable for credit) A comprehensive study of performance, technique and</td>
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<td>MUS 46614</td>
<td>APPLIED MUSIC-EUPHONIUM</td>
<td>(Repeatable for credit) A comprehensive study of performance, technique and</td>
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**MUS 46615 - APPLIED MUSIC-TUBA**

(Repeatable for credit) A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisite: Music (MUS) or music education (MUED) major.

2.000 OR 4.000 Credit hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Private Lesson, Studio

Music Department

**MUS 46711 - APPLIED MUSIC-PERCUSSION**

(Repeatable for credit) A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisite: Music (MUS) or music education (MUED) major.

2.000 OR 4.000 Credit hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Private Lesson, Studio

Music Department

**MUS 46912 - APPLIED MUSIC-GUITAR**

(Repeatable for credit) A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisite: Music (MUS) or music education (MUED) major.

2.000 OR 4.000 Credit hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Private Lesson, Studio

Music Department

**MUS 47012 - FOLK GUITAR CLASS I**

Development of basic folk guitar performance skills. Prerequisite: None.

2.000 Credit hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Music Department
MUS 47013 - FOLK GUITAR CLASS II

Continued development of acoustic guitar performance skills, study of performance related theory and related topics such as open tuning and slide guitar. Prerequisite: MUS 47012.
2.000 Credit hours
2.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Music Department

MUS 47014 - FOLK GUITAR FOR THE MUSIC EDUCATOR

Development of basic folk guitar performance skills for music education majors. Prerequisite: Music education (MUED) major.
1.000 Credit hours
2.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Music Department

MUS 47311 - VOICE CLASS FOR THE INSTRUMENTALIST

Class instruction in the fundamentals of correct breathing, tone production and diction. Prerequisite: Music (MUS) or Music Education (MUED) major.
1.000 Credit hours
2.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Music Department

MUS 47312 - VOICE CLASS FOR NON-MUSIC STUDENTS

Class instruction in the fundamentals of correct breathing, tone production and diction. Prerequisite: none.
1.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Music Department

MUS 47411 - STRING CLASS

Class lessons in basic playing skills, methodology, teaching materials and maintenance of string instruments to enable the student to teach string classes in public schools. Prerequisite: Music (MUS) or music education (MUED) major.
1.000 Credit hours
2.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab
**MUS 47412 - STRING CLASS**

A discussion and practice of basic principles of classroom string playing, instrumental pedagogy, and group process as applied to public school music settings. This course is devoted to string teaching and learning in pre-service music education training. Prerequisite: music (MUS) or music education (MUED) major.

1.000 Credit hours  
3.000 Lab hours

Levels: Undergraduate  
Schedule Types: Laboratory

Music Department

**MUS 47511 - WOODWIND CLASS**

Study of fundamental principles of performance on woodwind instruments; methods and materials for class and private instruction. Prerequisite: Music (MUS) or music education (MUED) major.

1.000 Credit hours  
2.000 Other hours

Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab

Music Department

**MUS 47512 - WIND TECHNIQUES - FRENCH HORN AND DOUBLE REEDS**

The study of the fundamental principles of playing and teaching French horn, oboe, and bassoon. Content includes performance skill development, and a survey of materials and method books suitable for class and private instruction. The overall objective is to develop an elementary skill level of performance on the instruments and the pedagogical knowledge necessary to teach the instruments in elementary through secondary levels. Prerequisite: Music (MUS) or Music Education (MUED) major.

1.000 Credit hours  
3.000 Lab hours

Levels: Undergraduate  
Schedule Types: Laboratory

Music Department

**MUS 47513 - WIND TECHNIQUES - FLUTE, CLARINET, SAXOPHONE**

The study of the fundamental principles of playing and teaching flute, clarinet, and saxophone. Content includes performance skill development, and a survey of materials and method books suitable for class and private instruction. The overall objective is to develop an elementary skill level of performance on the instruments and the pedagogical knowledge necessary to teach the instruments in elementary through secondary levels. Prerequisite: music (MUS) or music education (MUED).

1.000 Credit hours  
3.000 Lab hours

Levels: Undergraduate  
Schedule Types: Laboratory

Music Department
MUS 47611 - BRASS CLASS

Study of fundamental principles of playing and teaching brass instruments. Survey of materials and method books suitable for class and private instruction. Prerequisite: Music (MUS) or music education (MUED) major.

1.000 Credit hours
2.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Music Department

MUS 47612 - WIND TECHNIQUES - TRUMPET AND LOW BRASS

The study of the fundamental principles of playing trumpet, trombone, tuba, and euphonium. Content includes performance skill development, and a survey of materials and method books suitable for class and private instruction. The overall objective is to develop an elementary skill level of performance on the instruments and the pedagogical knowledge necessary to teach the instruments in elementary through secondary school levels. Prerequisite: Music (MUS) or Music Education (MUED) major.

1.000 Credit hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Music Department

MUS 47711 - PERCUSSION CLASS

Study of various percussion instruments (mallets, snare drum, timpani and auxiliary) and techniques of performance. Designed for music educator with no previous percussion experience. Prerequisite: Music (MUS) or music education (MUED) major.

1.000 Credit hours
2.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Music Department

MUS 47712 - PERCUSSION CLASS

Study of various percussion instruments (mallets, snare drum, timpani and auxiliary) and techniques of performance. Designed for music educator with no previous percussion experience. Prerequisite: music (MUS) or music education (MUED) major.

1.000 Credit hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Music Department

MUS 47811 - INSTRUMENT CLASS FOR THE CHORAL/GENERAL MUSIC EDUCATOR

Class instruction in the basic playing skills of band and orchestral instruments intended to provide familiarity
with the common school instruments for the choral/general music major. Prerequisite: Music (MUS) or music education (MUED) major.
1.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Music Department

MUS 47812 - INSTRUMENT CLAS FOR THE CHORAL GENERAL MUSIC EDUCATOR

Class instruction in the basic playing skills of band and orchestral instruments intended to provide familiarity with the common school instruments for the choral/general music major. Prerequisite: music (MUS) or music education (MUED) major.
1.000 Credit hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Music Department

MUS 48211 - INTRODUCTION TO PIANO PEDAGOGY

Observation and teaching of individual and class lessons, children and adults. Study and performance of preparatory materials, elementary through intermediate piano literature. Prerequisite: Music (MUS) or music education (MUED) and junior standing.
2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Music Department

MUS 48221 - ELEMENTS OF ACCOMPANYING I

Techniques of accompanying; selected overview of art song literature including Italian, German, French and English songs development of playing at sight skills. Prerequisite: Special approval.
2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Music Department

MUS 48222 - ELEMENTS OF ACCOMPANYING II

Continuation of accompanying techniques including opera accompanying, orchestral reductions and selected overview of literature for solo instrument and piano; continuation of playing-at-sight skills. Prerequisite: MUS 48221 with a minimum grade of C (2.000).
2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Music Department

**MUS 48231 - INSTRUMENTAL PEDAGOGY FOR THE CHORAL GENERAL MUSIC EDUCATOR**

Knowledge and techniques for building and maintaining an instrumental music program within the K-12 school setting for the choral general music education major. Twenty (20) hours of field experience required. Prerequisites: MUS 47812 with a minimum C (2.000) grade; and music education (MUED) major.

2.000 Credit hours
1.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Music Department

**MUS 48232 - GENERAL MUSIC PEDAGOGY FOR THE INSTRUMENTALIST**

General music pedagogy techniques for the instrumental music education major. Clinical experiences in the teaching of general music. Ten (10) field hours required. Prerequisite: minimum C (2.000) grade in MUS 37114; and music education (MUED) major.

1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Music Department

**MUS 48233 - CHORAL MUSIC PEDAGOGY FOR THE INSTRUMENTALIST**

Choral pedagogy techniques and choral program development for the instrumental music education major. Clinical experiences in the teaching of choral music. Ten (10) field hours required. Prerequisite: minimum C (2.000) grade in MUS 47311; and music education (MUED) major.

1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Music Department

**MUS 48241 - VOICE PEDAGOGY**

Survey of techniques, practices and materials of teaching voice. Prerequisite: Permission.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Music Department

**MUS 48251 - PEDAGOGY OF MUSIC THEORY**
The principles and techniques of teaching music theory. Prerequisite: MUS 21122 with a minimum grade of C (2.000).
2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Music Department

MUS 48257 - PEDAGOGY-INSTRUMENTAL

Principles and techniques of instruction. Literature survey. Analysis of instrumental problems and performance practice. Offered as needed for strings woodwinds brass percussion organ, or guitar. Prerequisite: Permission.
2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Music Department

MUS 48311 - PIANO PEDAGOGY I

Individual and group piano teaching including teaching methods and the history of piano pedagogy. Prerequisite: music (MUS) or music education (MUED) major; and junior standing.
2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Music Department

MUS 48312 - PIANO PEDAGOGY II

Individual and group piano teaching. Building an independent studio and career networking. Prerequisite: minimum C (2.000) grade in MUS 48311; and music (MUS) major.
2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Music Department

MUS 48393 - VARIABLE TITLE WORKSHOP IN MUSIC

(Repeatable for credit) Offered for specific professional needs. Emphasis on performance and pedagogical skills. S/U graded. Prerequisite: Permission.
1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Undergraduate
Schedule Types: Workshop
### MUS 48512 - IMPROVISATION
The development of musical improvisation skills not tied to any particular music style. Students will perform on their own applied instrument(s). Prerequisite: MUS 21121 with a minimum grade of C (2.000).

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<th>Credit hours</th>
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Levels: Undergraduate  
Schedule Types: Lecture

### MUS 48598 - MUSIC RESEARCH
(repeated registration permitted) research or individual investigation for undergraduate students. Prerequisite: Permission.

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<tr>
<th>Credit hours</th>
<th>Other hours</th>
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Levels: Undergraduate  
Schedule Types: Research

### MUS 49525 - SEMINAR FOR STUDENT TEACHING
A capstone discussion of principles of music teaching and pragmatic understanding of school music settings. Seminar serves as the companion course to Student Teaching for the purpose of self-observation, reflection, and analysis. Development of Teacher Work Sample and portfolio. Prerequisite: Music education (MUED) major and senior standing. Corequisite: MUS 42357.

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<th>Credit hours</th>
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Levels: Undergraduate  
Schedule Types: Lecture

### MUS 50295 - SPECIAL TOPICS IN MUSIC
(Repeatable for credit) Academic study in areas not offered adequately in the music curriculum. Topic areas are of special interest to the faculty member. Prerequisite: Music (MUS) major and graduate standing.

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Levels: Graduate  
Schedule Types: Lecture
MUS 50296 - INDEPENDENT STUDY: MUSIC

(Repeatable for credit) Individual investigation in music topics not offered as either regular coursework or beyond the scope of existing music major courses. Prerequisite: Graduate standing and music (MUS) major and special approval.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Music Department

MUS 51131 - KEYBOARD HARMONY

Theoretical skills demonstrated at the keyboard. Harmonization of melodies in homophonic style, realization of figured bass, score reading, modulation and improvisation. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department

MUS 51141 - 16TH-CENTURY COUNTERPOINT

Two-, three- and four-part vocal counterpoint in 16th century style. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department

MUS 51151 - 18TH-CENTURY COUNTERPOINT

Technique of writing counterpoint in 18th-century style especially that of J. S. Bach. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department

MUS 51161 - ADVANCED MUSICAL ANALYSIS

A study of 20th-century approaches to tonal and nontonal musical analysis. Emphasis on familiarity with styles, nomenclature and appropriate graphic techniques. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours
Music Department

**MUS 51211 - COMPOSITION**

(Repeatable for credit) Study of the materials and techniques of composition culminating in original compositions based upon observable principles of unity and variety. Prerequisite: graduate standing.

- 2.000 Credit hours
- 2.000 Other hours

Levels: Graduate
Schedule Types: Lecture

**MUS 51321 - ORCHESTRATION**

Ranges, tonal possibilities, technical limitations and transpositions for all orchestral instruments. Scoring techniques and analysis of representative instrumental ensemble repertoire. Prerequisite: Graduate standing.

- 3.000 Credit hours
- 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**MUS 51341 - JAZZ IMPROVISATION**

The development of the art of jazz improvisation through performance and analysis. Prerequisite: Graduate standing.

- 2.000 Credit hours
- 2.000 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

**MUS 51342 - JAZZ ARRANGING**

Arranging for the large and small jazz ensemble. Prerequisite: Graduate standing.

- 2.000 Credit hours
- 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**MUS 52111 - AFRICAN MUSIC AND CULTURES**

African music as related to social sciences and humanities. Oral traditions. Use of music recordings, tapes, musical instruments. Participation in performance and group work involvement. Prerequisite: Graduate
standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department

**MUS 52131 - AMERICA'S MUSIC**

Historical survey of music in America from New England psalmody to present-day compositional trends. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department

**MUS 52141 - FOLK AND TRADITIONAL MUSIC OF WESTERN CONTINENTS**

Study of selected music cultures of Eastern and Western Europe, and South, Central and North America. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department

**MUS 52151 - ASIAN MUSICS**

Survey of Asian musics. Emphasis on art, folk and popular musics and relationships of these musics to their respective cultures. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department

**MUS 52161 - HISTORY OF JAZZ**

The evolution of jazz from its origins to the present. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department
MUS 52171 - MUSIC FROM WORLD CULTURES

Study of selected art, folk and popular music from world cultures with emphasis on listening skills, cultural context, function, organology and technical matters of style. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department

MUS 52181 - POPULAR WORLD MUSIC

A survey of popular world music genres from North America, the Caribbean, South America, Europe, Africa, and Asia. Emphasis is on recognizing music literature, prominent artists and music styles, as well as related cultural events. Graduate level introduces cultural theory related to popular studies. Modern media, especially the Internet, is an integral component of the course. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department

MUS 52221 - SYMPHONIC LITERATURE

Historical and stylistic survey of music for large instrumental ensemble. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department

MUS 52241 - PIANO LITERATURE I

Survey of keyboard and piano suites, sonatas and concerti from the 16th century to the present. Emphasis on performing, listening and analysis. Prerequisite: graduate standing.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department

MUS 52242 - PIANO LITERATURE II

Survey of character pieces and variations from the 16th century to the present. Emphasis on performing, listening and analysis. Prerequisite: graduate standing.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
MUS 52251 - SONG LITERATURE

A study of vocal literature from the 16th century to the present. Emphasis upon the style, interpretation and presentation of solo materials for all voice classifications. Prerequisite: Graduate standing.
3.00 Credit hours
3.00 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department

MUS 52261 - OPERA LITERATURE

The historical development of opera from the 17th century to the present. Detailed analysis of representative works. Prerequisite: Graduate standing.
3.00 Credit hours
3.00 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department

MUS 52271 - CHORAL LITERATURE I

Study of Western European choral literature from approximately 1450 to early nineteenth century, i.e., Renaissance, Baroque, and Classical periods. Prerequisite: Graduate standing.
3.00 Credit hours
3.00 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department

MUS 52272 - CHORAL LITERATURE II

Choral Literature II, a continuation of Choral Literature I, is a study of Western European and North American choral music of the early nineteenth century to the present (roughly 1830 to present). Prerequisite: graduate standing.
3.00 Credit hours
3.00 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department

MUS 53241 - MARCHING BAND TECHNIQUES AND LITERATURE

Organization, administration and techniques of marching bands in the schools. Topics covered include musical
styles, literature and show design. Prerequisite: Graduate standing and special approval.
1.000 Credit hours
1.000 Lecture hours
1.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Music Department

**MUS 53242 - JAZZ ENSEMBLE TECHNIQUES**

Study of the curriculum for the jazz ensemble, including organizational and administrative procedures. Emphasis on music interpretation, jazz styles and rehearsal techniques taught through laboratory experience. Prerequisite: graduate standing.
2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department

**MUS 53243 - VOCAL JAZZ AND MUSICAL THEATRE IN THE SCHOOLS**

Basic techniques and materials for teaching vocal jazz and musical theatre in the schools. Administration, organization and publicity for productions as well as literature for these performing groups will be explored. Prerequisite: Graduate standing.
2.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Music Department

**MUS 53245 - JAZZ ENSEMBLE TECHNIQUES AND LITERATURE**

(Slashed with MUS 43245) Study of the curriculum for the jazz ensemble, including organizational and administrative procedures. Emphasis on music interpretation, jazz styles, and rehearsal techniques taught through laboratory experience. One hour of field observation is required. Prerequisite: special approval and graduate standing.
1.000 Credit hours
3.000 Lab hours

Levels: Graduate
Schedule Types: Laboratory

Music Department

**MUS 55121 - KENT CHORUS**

(Repeatable for credit) Study and performance of choral music from Renaissance through contemporary styles, large and small forms with appropriate accompaniment. Prerequisite: Graduate standing.
1.000 Credit hours
2.500 Other hours
MUS 55131 - OPERA: SINGER-ACTOR TECHNIQUES

(Repeatable for credit) A course designed to give the young singing actor practical operatic experience in the performance of portions of or complete operas. Prerequisite: graduate standing.
1.000 Credit hours
9.500 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Music Department

MUS 55141 - KENT STATE UNIVERSITY CHORALE

(Repeatable for credit) Study and performance of literature for vocal chamber ensemble from medieval through contemporary styles sung in the original language with appropriate accompaniment. An audition is required before registering for this course. Prerequisite: Special approval and graduate standing.
1.000 Credit hours
4.500 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Music Department

MUS 55142 - MEN'S CHORUS

(Repeatable for credit) A chorus of male voices. Emphasis on music literacy, vocal production, instruction, study and performance of music written for male voices. All western music periods are represented. Experience with mixed-voice choirs also occurs. Prerequisite: graduate standing.
1.000 Credit hours
1.000 Lab hours

Levels: Graduate
Schedule Types: Laboratory

Music Department

MUS 55143 - WOMEN'S CHORUS

(Repeatable for credit) A chorus of women's voices. Emphasis on music literacy, vocal production, instruction, study and performance of music written for women's voices. All Western music periods are represented. Experience with mixed-voice choirs also occurs. Prerequisite: graduate standing.
1.000 Credit hours
1.000 Lab hours

Levels: Graduate
Schedule Types: Laboratory

Music Department
**MUS 55151 - KENT STATE UNIVERSITY GOSPEL CHOIR**

(Repeatable for credit) Study and performance of choral music in the gospel tradition, including works by contemporary artists. One weekly rehearsal and a minimum of one concert per semester. Off-campus concerts are possible. Prerequisite: Graduate standing.

1.000 Credit hours  
2.000 Other hours  

Levels: Graduate 
Schedule Types: Combined Lecture and Lab  

Music Department

**MUS 55212 - KENT STATE UNIVERSITY ORCHESTRA**

(Repeatable for credit) A select group of instrumentalists for the purpose of studying and performing music written specifically for chamber orchestra including works of the 17th, 18th and 20th centuries. An audition is required before registering for this course. Prerequisite: Special approval and graduate standing.

1.000 Credit hours  
5.000 Other hours  

Levels: Graduate 
Schedule Types: Combined Lecture and Lab  

Music Department

**MUS 55221 - CONCERT BAND**

(Repeatable for credit) Study and performance of music literature for wind band. Prerequisite: graduate standing.

1.000 Credit hours  
4.000 Other hours  

Levels: Graduate 
Schedule Types: Combined Lecture and Lab  

Music Department

**MUS 55222 - MARCHING BAND**

(Repeatable for a maximum of 6 credit hours) Study and performance of literature and maneuvers for marching band. Prerequisite: graduate standing.

1.000 Credit hours  
6.000 Other hours  

Levels: Graduate 
Schedule Types: Combined Lecture and Lab  

Music Department

**MUS 55223 - WIND ENSEMBLE**

(Repeatable for credit) A select concert ensemble that performs the finest in wind instrument literature with emphasis on major original works. An audition is required before registering for this course. Prerequisite: Special approval and graduate standing.

1.000 Credit hours  
2.500 Other hours  

Levels: Graduate 
Schedule Types: Combined Lecture and Lab  

Music Department
Levels: Graduate
Schedule Types: Combined Lecture and Lab

Music Department

**MUS 55231 - JAZZ ENSEMBLE**

(Repeatable for credit) Study and performance of music literature in the jazz idiom. Prerequisite: graduate standing.
1.000 Credit hours
7.500 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Music Department

**MUS 55241 - TROMBONE ENSEMBLE**

(Repeatable for credit) A thorough study of trombone performance in various size ensembles. Emphasis on original literature from over four centuries. Prerequisite: graduate standing.
1.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Music Department

**MUS 55251 - PERCUSSION ENSEMBLE**

(Repeatable for credit) A comprehensive study of percussion performance in various size ensembles. Use of keyboard percussion instruments along with drums and accessories. Study of percussion ensemble literature. Prerequisite: graduate standing.
1.000 Credit hours
5.000 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Music Department

**MUS 55261 - BASSOON ENSEMBLE**

(Repeatable for credit) Study and performance of music for multiple bassoons; emphasis upon refined ensemble playing, interpretation, leadership skills and arranging techniques. Prerequisite: graduate standing.
1.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Music Department

**MUS 55271 - NEW MUSIC ENSEMBLE**
Study and performance of 20th-century chamber music with an emphasis on works by contemporary composers. Prerequisite: graduate standing.
1.000 Credit hours
4.000 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Music Department

**MUS 55281 - FLUTE ENSEMBLE**

(Repeatable for credit) Study and performance of music for multiple flutes; emphasis upon all aspects of ensemble playing and style considerations will be addressed in both chamber and conducted formats. Prerequisite: graduate standing.
1.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Music Department

**MUS 55311 - CHAMBER MUSIC**

(Repeatable for credit) The study and performance of music for small ensembles. Prerequisite: graduate standing.
1.000 OR 2.000 Credit hours
2.000 OR 4.000 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Music Department

**MUS 55312 - WORLD MUSIC ENSEMBLE**

(Course is repeatable for a maximum of 8 credit hours) The World Music Ensemble teaches performance and cultural etiquette associated with traditional and popular world music genres, e.g., African drumming. Specific traditions studied include areas of specialization of instructors and/or advanced student participants. Prerequisite: graduate standing.
1.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Studio

Music Department

**MUS 55321 - ACCOMPANYING**

(Repeatable for credit) Accompanying instrumental and vocal soloists; piano ensemble works. Credit counted toward ensemble requirements. One hour credit for two hours of assigned accompanying weekly. Prerequisite: graduate standing.
1.000 OR 2.000 Credit hours
1.000 OR 2.000 Other hours
### MUS 58221 - ELEMENTS OF ACCOMPANYING I

Techniques of accompanying; selected overview of art song literature including Italian, German, French and English songs; development of playing at sight skills. Prerequisite: graduate standing.

2.000 Credit hours  
2.000 Lecture hours

### MUS 58241 - VOICE PEDAGOGY

Survey of techniques, practices and materials of teaching voice. Prerequisite: graduate standing.

2.000 Credit hours  
2.000 Lecture hours

### MUS 58251 - PEDAGOGY OF MUSIC THEORY

The principles and techniques of teaching music theory. Prerequisite: Graduate standing.

2.000 Credit hours  
2.000 Lecture hours

### MUS 58257 - PEDAGOGY-INSTRUMENTAL

Principles and techniques of instruction. Literature survey. Analysis of instrumental problems and performance practice. Offered as needed for strings, woodwinds, brass, percussion, organ or guitar. Prerequisite: graduate standing.

2.000 Credit hours  
2.000 Lecture hours

### MUS 58393 - VARIABLE TITLE WORKSHOP IN MUSIC

(Repeatable for credit) Offered for specific professional needs. Emphasis on performance and pedagogical skills. Prerequisite: graduate standing.
1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Music Department

**MUS 61121 - HISTORY OF MUSIC THEORY**

(Cross-listed with MUS 71121) A study of the history of Western music theory from the ancient Greeks to the twentieth century. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department

**MUS 61131 - SCHENKERIAN ANALYSIS**

An introduction to musical analysis according to the principles expounded by Heinrich Schenker and later exponents of his ideas. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department

**MUS 61170 - MUSIC ANALYSIS**

Selected analytical techniques applied to music from the tonal and post-tonal repertoire. Emphasis on the development of harmonic language and overall formal structures. Prerequisite: Music Education (MUED) major and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department

**MUS 61171 - ANALYTICAL TECHNIQUES I**

The application of standard analytical techniques to works of various style periods. Prerequisite: Graduate standing.

2.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department
**MUS 61172 - ANALYTICAL TECHNIQUES II**

The application of standard analytical techniques to works of various style periods. Prerequisite: graduate standing.
2.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture  

Music Department

**MUS 61173 - WORLD MUSIC ANALYSIS**

Analysis of world music traditions. Analyze and articulate knowledge regarding musical elements, such as timbre, tuning, improvisation, sound patterns, compositional form, and performance techniques of music genres studied. Development of listening and transcription skills as they relate to world music. Prerequisite: graduate standing.
2.000 Credit hours  
3.000 Lecture hours  
3.000 Lab hours

Levels: Graduate  
Schedule Types: Lecture  

Music Department

**MUS 61181 - POST-TONAL THEORY**

A study of the analysis, theories, and compositional strategies applied to the music composed after 1900. Prerequisite: graduate standing.
3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture  

Music Department

**MUS 61191 - SEMINAR IN MUSIC SINCE 1900**

(Cross-listed with MUS 71191) (Course is repeatable for a maximum of 6 credit hours) Study of analytical techniques and procedures appropriate for the major musical styles of the period. Study of representative compositions through applied analysis. Individual projects in areas of particular interest to the student. Prerequisite: graduate standing.
3.000 Credit hours  
3.000 Other hours

Levels: Graduate  
Schedule Types: Seminar  

Music Department

**MUS 61211 - COMPOSITION**

(Repeatable for credit) Original composition using longer forms of music for diverse media including multimedia
and electronic composition. Prerequisite: graduate standing.
2.000 OR 4.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Private Lesson, Studio

Music Department

**MUS 61331 - BAND ARRANGING**
Arranging in traditional and contemporary styles for the wind ensemble, concert band and/or marching band. Prerequisite: MUS 51331 and graduate standing.
2.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department

**MUS 62281 - SEMINAR IN MUSIC HISTORY AND LITERATURE**
(Repeatable for credit) Selected problems of research in music history and literature. Each student will be responsible for presenting papers for discussion. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Music Department

**MUS 62411 - MUSIC BIBLIOGRAPHY AND RESEARCH METHODS**
Study of techniques of music research and creative musical writing including special projects, reports and readings. This course is a hybrid course consisting of both in-class meetings and discussions, as well as online interaction and discussion boards. Prerequisite: graduate standing.
2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department

**MUS 62412 - INTRODUCTION TO ETHNOMUSICOLOGY**
A study of the history, concepts and methods of ethnomusicology, techniques of field research, transcription, analysis and bibliography. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department
MUS 62413 - ADVANCED FIELD AND LAB METHODS IN ETHNOMUSICOLOGY
Development of professional level research skills in all media of field documentation, transcription, analysis and scholarly writing. Study of current related issues in ethnomusicology. Prerequisite: MUS 62412.
3.000 Credit hours
3.000 Lab hours
Levels: Graduate
Schedule Types: Laboratory
Music Department

MUS 62414 - ISSUES AND TRENDS IN ETHNOMUSICOLOGY
This course studies various issues and trends in the field of ethnomusicology, from its inception to present. The focus centers on intensive discussion of theories, philosophies and paradigms that have dominated the scrutiny of music over the decades and their application in analysis, fieldwork and lab method. Prerequisite: MUS 62412 and graduate standing.
2.000 Credit hours
3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture
Music Department

MUS 62451 - INTRODUCTION TO MUSICOLGY
Techniques of music research and creative musical writing including special projects, reports and readings. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture
Music Department

MUS 62511 - MUSIC HISTORY I
A study of Western music history from Jewish and medieval Roman practices through Josquin, as well as selected common-practice period applications. Prerequisite: Graduate standing.
2.000 Credit hours
3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture
Music Department

MUS 62521 - MUSIC HISTORY II
A study of Western music history from the Reformation and Counter-Reformation through Bach and Handel. Prerequisite: Graduate standing.
2.000 Credit hours
MUS 62531 - MUSIC HISTORY III
A study of Western music history in the Rococo, Classical, and Romantic periods through Brahms and Wagner. Prerequisite: Graduate standing.
2.000 Credit hours
3.000 Lecture hours

MUS 62541 - MUSIC HISTORY IV
A study of Western music from Debussy and Mahler through the major trends and composers of the recent past. Prerequisite: Graduate standing.
2.000 Credit hours
3.000 Lecture hours

MUS 62602 - SEMINAR IN MUSICS OF THE AMERICAS
Specialized investigation of music cultures of the Americas. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Other hours

MUS 62603 - SEMINAR IN MUSICS OF THE MIDDLE EAST
Specialized investigation of music cultures of the Middle East. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Other hours

MUS 62604 - SEMINAR IN MUSICS OF EAST ASIA
Specialized investigation of music cultures of East Asia. Prerequisite: graduate standing.
MUS 62606 - SEMINAR IN MUSICS OF SOUTHEAST ASIA

Specialized investigation of music cultures in Southeast Asia. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Music Department

MUS 63198 - CAPSTONE PROJECT

(Repeatable for credit) Working under the supervision of a capstone advisor, students demonstrate synthesis of knowledge through the development of curricular project applicable to student's area of teaching. Prerequisite: graduate standing.
4.000 Credit hours
4.000 Other hours

Levels: Graduate
Schedule Types: Research

Music Department

MUS 63241 - INQUIRY IN MUSIC TEACHING I

Conducting and presenting assessment, evaluation, and research of music teaching and learning with emphasis on quantitative methodologies. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department

MUS 63242 - INQUIRY IN MUSIC TEACHING AND LEARNING II

Conducting and presenting assessment, evaluation and research of music teaching and learning with emphasis on qualitative methodologies. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department
MUS 63261 - ADVANCED STUDIES IN TEACHING CHORAL MUSIC

Development of teaching materials, an annotated choral repertory list and instructional strategies for choral music with emphasis on rehearsal procedures and analytical techniques. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department

MUS 63262 - ADVANCED STUDIES IN TEACHING INSTRUMENTAL MUSIC

Development of teaching materials, an annotated instrumental repertory list and instructional strategies for instrumental music with emphasis on rehearsal procedures and analytical techniques. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department

MUS 63263 - ADVANCED STUDIES IN TEACHING GENERAL MUSIC

Program development, inclusion, instructional materials and innovative teaching techniques for general music programs. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department

MUS 63272 - LEARNING THEORIES IN MUSIC

Application of current theories of learning to the teaching and learning of music. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department

MUS 63273 - PSYCHOLOGY OF MUSIC

The study of music's effect on human behavior including physiological and affective responses. Applications of music psychology to the teaching and learning of music will be explored. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
**MUS 63274 - FOUNDATIONS OF MUSIC EDUCATION**

Study of the field of music education from perspectives of sociology, psychology, philosophy, curriculum, history and comparative curricula. Prerequisite: graduate standing.

- 3.000 Credit hours
- 3.000 Lecture hours

**Levels:** Graduate
**Schedule Types:** Lecture

**Music Department**

**MUS 63283 - RESEARCH IN MUSIC EDUCATION**

Introduction to research techniques in music education including topic selection, data collection analysis and interpretation, and presentation of information in written form. Prerequisite: Graduate standing.

- 3.000 Credit hours
- 3.000 Lecture hours

**Levels:** Graduate
**Schedule Types:** Lecture

**Music Department**

**MUS 63284 - HISTORY OF MUSIC EDUCATION**

Study of historical approaches to music education with emphasis on significant people, places and events that have influenced music teaching and learning music. Prerequisite: MUS 63274 and graduate standing.

- 3.000 Credit hours
- 3.000 Lecture hours

**Levels:** Graduate
**Schedule Types:** Lecture

**Music Department**

**MUS 63285 - PHILOSOPHY OF MUSIC EDUCATION**

Study of the philosophical foundations of music education with emphasis on the application of aesthetics to teaching and experiencing music. Prerequisite: MUS 63274 and graduate standing.

- 3.000 Credit hours
- 3.000 Lecture hours

**Levels:** Graduate
**Schedule Types:** Lecture

**Music Department**

**MUS 63286 - SOCIOLOGY OF MUSIC EDUCATION**

Sociology in Music Education focuses on sociocultural issues in music teaching and learning. Students consider contexts of society, background, race, ethnicity, culture, diversity, and pluralism as applicable in music
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<th>Prerequisites</th>
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<tr>
<td>MUS 64111</td>
<td>CONDUCTING PROJECTS: CHORAL</td>
<td>3.000</td>
<td>Seminar</td>
<td>Prerequisite: graduate standing.</td>
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<tr>
<td>MUS 64121</td>
<td>CONDUCTING PROJECTS: BAND</td>
<td>2.000 OR 4.000</td>
<td>Private Lesson</td>
<td>Prerequisite: graduate standing.</td>
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<tr>
<td>MUS 64131</td>
<td>CONDUCTING PROJECTS: ORCHESTRA</td>
<td>2.000 OR 4.000</td>
<td>Private Lesson</td>
<td>Prerequisite: graduate standing.</td>
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<tr>
<td>MUS 66111</td>
<td>APPLIED MUSIC-GRADUATE PIANO</td>
<td>2.000 OR 4.000</td>
<td>Private Lesson, Studio</td>
<td>Music major and graduate standing.</td>
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<td>1.500 OR 2.000</td>
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MUS 66191 - SEMINAR IN ACCOMPANYING

(Repeatable for credit) Studio performances of standard repertoire for piano and voice or instruments; investigation of other topics relating to the accompanying of the repertoire. Prerequisite: graduate standing.
2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Music Department

MUS 66311 - APPLIED MUSIC-GRADUATE VOICE

(Repeatable for credit) A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisite: Music major and special approval. Graduate standing.
2.000 OR 4.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Private Lesson, Studio

Music Department

MUS 66411 - APPLIED MUSIC-GRADUATE VIOLIN

(Repeatable for credit) A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisite: Music major and special approval. Graduate standing.
2.000 OR 4.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Private Lesson, Studio

Music Department

MUS 66412 - APPLIED MUSIC-GRADUATE VIOLA

(Repeatable for credit) A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisites: music major and graduate standing.
2.000 OR 4.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Private Lesson, Studio

Music Department

MUS 66413 - APPLIED MUSIC-GRADUATE CELLO

(Repeatable for credit) A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisite:
MUS 66414 - APPLIED MUSIC-GRADUATE DOUBLE BASS

(Repeatable for credit) A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisite: Music major and special approval. Graduate standing.
2.000 OR 4.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Private Lesson, Studio

Music Department

MUS 66511 - APPLIED MUSIC-GRADUATE FLUTE

(Repeatable for credit) A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisites: music major and graduate standing.
2.000 OR 4.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Private Lesson, Studio

Music Department

MUS 66512 - APPLIED MUSIC-GRADUATE OBOE

(Repeatable for credit) A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisites: music major and graduate standing.
2.000 OR 4.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Private Lesson, Studio

Music Department

MUS 66513 - APPLIED MUSIC-GRADUATE CLARINET

(Repeatable for credit) A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisites: music major and graduate standing.
2.000 OR 4.000 Credit hours
1.000 Other hours

Levels: Graduate
MUS 66514 - APPLIED MUSIC-GRADUATE BASSOON

(Repeatable for credit) A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisites: music major and graduate standing.
2.000 OR 4.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Private Lesson, Studio

MUS 66515 - APPLIED MUSIC-GRADUATE SAXOPHONE

(Repeatable for credit) A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisites: music major and graduate standing.
2.000 OR 4.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Private Lesson, Studio

MUS 66611 - APPLIED MUSIC-GRADUATE TRUMPET

(Repeatable for credit) A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisites: music major and graduate standing.
2.000 OR 4.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Private Lesson, Studio

MUS 66612 - APPLIED MUSIC-GRADUATE HORN

(Repeatable for credit) A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisites: music major and graduate standing.
2.000 OR 4.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Private Lesson, Studio

Music Department
### MUS 66613 - APPLIED MUSIC-GRADUATE TROMBONE

(Repeatable for credit) A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisites: music major and graduate standing.

- 2.000 OR 4.000 Credit hours
- 1.000 Other hours

Levels: Graduate
Schedule Types: Private Lesson, Studio

Music Department

### MUS 66615 - APPLIED MUSIC-GRADUATE TUBA

(Repeatable for credit) A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisites: music major and graduate standing.

- 2.000 OR 4.000 Credit hours
- 1.000 Other hours

Levels: Graduate
Schedule Types: Private Lesson, Studio

Music Department

### MUS 66711 - APPLIED MUSIC-GRADUATE PERCUSSION

(Repeatable for credit) A comprehensive study of performance, technique and repertoire appropriate to music majors and minors. Individual study. Students must audition to be accepted into this course. Prerequisites: music major and graduate standing.

- 2.000 OR 4.000 Credit hours
- 1.000 Other hours

Levels: Graduate
Schedule Types: Private Lesson, Studio

Music Department

### MUS 67243 - TECHNOLOGY FOR MUSIC TEACHING

Study of a variety of music software and hardware; students design and implement a project pertaining to their professional interest. Prerequisite: graduate standing.

- 3.000 Credit hours
- 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department

### MUS 68199 - THESIS I

Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester distributed over several semesters if desired. Prerequisite: Graduate standing.

- 2.000 TO 6.000 Credit hours
- 2.000 TO 6.000 Other hours
**MUS 68214 - PIANO PEDAGOGY I**

Individual and group piano teaching, including teaching methods and the history of piano pedagogy. Prerequisite: graduate standing.

- 2.000 Credit hours
- 2.000 Lecture hours

**MUS 68215 - PIANO PEDAGOGY II**

Individual and group piano teaching. Building an independent studio and career networking. Prerequisite: graduate standing.

- 2.000 Credit hours
- 2.000 Lecture hours

**MUS 68299 - THESIS II**

Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: MUS 68199 and graduate standing.

- 2.000 Credit hours
- 2.000 Other hours

**MUS 68598 - RESEARCH**

(Repeatable for credit) Research or individual investigation for master's level graduate students. Prerequisite: Graduate standing.

- 1.000 TO 15.000 Credit hours
- 1.000 TO 15.000 Other hours

**MUS 68687 - RECITAL**
Required of all performance majors and music education majors who choose performance option. Prerequisite: Graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Studio

Music Department

**MUS 68698 - ESSAY**

(Repeatable for credit) Required of performance majors and music education majors who choose the recital and essay option. Prerequisite: Graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Research

Music Department

**MUS 71121 - HISTORY OF MUSIC THEORY**

A study of the history of Western music theory from the ancient Greeks to the twentieth century. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department

**MUS 71131 - SCHENKERIAN ANALYSIS**

An introduction to musical analysis according to the principles expounded by Heinrich Schenker and later exponents of his ideas. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department

**MUS 71141 - 16TH-CENTURY COUNTERPOINT**

Two-, three- and four-part vocal counterpoint in 16th century style. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department
MUS 71151 - 18TH-CENTURY COUNTERPOINT
Technique of writing counterpoint in 18th-century style especially that of J. S. Bach. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department

MUS 71171 - ANALYTICAL TECHNIQUES I
The application of standard analytical techniques to works of various style periods. Prerequisite: Doctoral standing.
2.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department

MUS 71172 - ANALYTICAL TECHNIQUES II
The application of standard analytical techniques to works of various style periods. Prerequisite: Doctoral standing.
2.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department

MUS 71181 - POST-TONAL THEORY
A study of the analysis, theories, and compositional strategies applied to the music composed after 1900. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department

MUS 71191 - SEMINAR IN MUSIC SINCE 1900
(Repeatable for a maximum of 6 credit hours) Study of analytical techniques and procedures appropriate for the major musical styles of the period. Study of representatives compositions through applied analysis. Individual projects in areas of particular interest to the student. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Other hours
MUS 71195 - SPECIAL PROJECTS IN THEORETICAL STUDIES

(Repeatable for credit) Individual and class investigation into specific methods of analysis and their application to music in various styles. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

MUS 71331 - BAND ARRANGING

Arranging in traditional and contemporary styles for the wind ensemble, concert band and/or marching band. Prerequisite: MUS 51331 and doctoral standing.
2.000 Credit hours
3.000 Lecture hours

MUS 72281 - SEMINAR IN MUSIC HISTORY AND LITERATURE

(Repeatable for credit) Selected problems of research in music history and literature. Each student will be responsible for presenting papers for discussion. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Other hours

MUS 72412 - INTRODUCTION TO ETHNOMUSICOLOGY

A study of the history, concepts and methods of ethnomusicology, techniques of field research, transcription analysis and bibliography. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

MUS 72413 - ADVANCED FIELD AND LAB METHODS IN ETHNOMUSICOLOGY

Development of professional level research skills in all media of field documentation, transcription analysis and
scholarly writing. Study of current related issues in ethnomusicology. Prerequisite: MUS 62412 and doctoral standing.  
3.000 Credit hours  
3.000 Lab hours  

Levels: Graduate  
Schedule Types: Laboratory  

Music Department  

**MUS 72451 - INTRODUCTION TO MUSICOLOGY**  
Techniques of music research and creative musical writing including special projects, reports and readings.  
Prerequisite: Doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  

Levels: Graduate  
Schedule Types: Lecture  

Music Department  

**MUS 72511 - MUSIC HISTORY I**  
A study of Western music history from Jewish and medieval Roman practices through Josquin, as well as selected common-practice period applications. Prerequisite: Doctoral standing.  
2.000 Credit hours  
3.000 Lecture hours  

Levels: Graduate  
Schedule Types: Lecture  

Music Department  

**MUS 72521 - MUSIC HISTORY II**  
A study of Western music history from the Reformation and Counter-Reformation through Bach and Handel.  
Prerequisite: Doctoral standing.  
2.000 Credit hours  
3.000 Lecture hours  

Levels: Graduate  
Schedule Types: Lecture  

Music Department  

**MUS 72531 - MUSIC HISTORY III**  
A study of Western music history in the Rococo, Classical, and Romantic periods through Brahms and Wagner.  
Prerequisite: Doctoral standing.  
2.000 Credit hours  
3.000 Lecture hours  

Levels: Graduate  
Schedule Types: Lecture  

Music Department
### MUS 72541 - MUSIC HISTORY IV

A study of Western music from Debussy and Mahler through the major trends and composers of the recent past. Prerequisite: Doctoral standing.

- 2.000 Credit hours
- 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department

### MUS 72602 - SEMINAR IN MUSICS OF THE AMERICAS

Specialized investigation of music cultures of the Americas. Prerequisite: doctoral standing.

- 3.000 Credit hours
- 3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Music Department

### MUS 72604 - SEMINAR IN MUSICS OF EAST ASIA

Specialized investigation of music cultures of East Asia. Prerequisite: doctoral standing.

- 3.000 Credit hours
- 3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Music Department

### MUS 72691 - SEMINAR IN ETHNOMUSICOLOGY

(Repeatable for credit) Specialized topics in ethnomusicology for advanced students. Prerequisite: Doctoral standing.

- 3.000 Credit hours
- 3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Music Department

### MUS 73261 - ADVANCED STUDIES IN SECONDARY CHORAL AND GENERAL MUSIC

Review curriculum in secondary general music and development of innovative teaching materials and strategies. Analytical techniques, rehearsal procedures, repertory suitable for secondary school choral ensembles. Prerequisite: Doctoral standing.

- 3.000 Credit hours
- 3.000 Lecture hours

Levels: Graduate
**MUS 73262 - ADVANCED STUDIES IN INSTRUMENTAL MUSIC**

Study of curriculum, method techniques and materials in school instrumental music education. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department

**MUS 73263 - ADVANCED STUDIES IN GENERAL MUSIC FOR CHILDREN**

Study of trends in philosophy, curriculum and program development, instructional materials and innovative teaching techniques for elementary school and early childhood general music. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department

**MUS 73272 - LEARNING THEORIES IN MUSIC**

Application of current theories of learning to the teaching and learning of music. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department

**MUS 73273 - PSYCHOLOGY OF MUSIC**

The study of music's effect on human behavior including physiological and affective responses. Applications of music psychology to the teaching and learning of music will be explored. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department

**MUS 73274 - FOUNDATIONS OF MUSIC EDUCATION**

Study of the influences on the field of music education, including sociology, psychology, philosophy, curriculum and history. Prerequisite: Doctoral standing.
MUS 73283 - RESEARCH IN MUSIC EDUCATION

Introduction to research techniques in music education including topic selection, data collection analysis and interpretation and presentation of information in written form. Prerequisite: Doctoral standing.

Levels: Graduate
Schedule Types: Lecture

Music Department

MUS 73284 - HISTORY OF MUSIC EDUCATION

Study of historical approaches to music education with emphasis on significant people, places and events that have influenced teaching and learning music. Prerequisite: MUS 73274 and doctoral standing.

Levels: Graduate
Schedule Types: Lecture

Music Department

MUS 73285 - PHILOSOPHY OF MUSIC EDUCATION

Study of the philosophical foundations of music education with emphasis on the application of aesthetics to teaching and experiencing music. Prerequisite: MUS 63274 and doctoral standing.

Levels: Graduate
Schedule Types: Lecture

Music Department

MUS 73286 - SOCIOLOGY OF MUSIC EDUCATION

Sociology in Music Education focuses on sociocultural issues in music teaching and learning. Students consider contexts of society, background, race, ethnicity, culture, diversity and pluralism as applicable in music education situations. Prerequisite: doctoral standing.

Levels: Graduate
Schedule Types: Seminar

Music Department
**MUS 73295 - SPECIAL TOPICS IN MUSIC EDUCATION**

(Repeatable for credit) Advanced study in selected topics that will vary from semester to semester depending on needs and interests of students. Prerequisite: Doctoral standing.

3.000 Credit hours  
3.000 Other hours  

Levels: Graduate  
Schedule Types: Seminar  

Music Department

**MUS 73381 - ADVANCED RESEARCH IN MUSIC EDUCATION**

The design, implementation and reporting of research studies that illustrate a variety of methodological and statistical plans for research in music education. Prerequisite: MUS 6/73283 and doctoral standing.

3.000 Credit hours  
3.000 Lecture hours  

Levels: Graduate  
Schedule Types: Lecture  

Music Department

**MUS 74111 - CONDUCTING PROJECTS: CHORAL**

(Repeatable for credit) Choral conducting techniques, score analysis, rehearsal procedures and study of musical style. Prerequisite: doctoral standing.

2.000 OR 4.000 Credit hours  
1.000 Other hours  

Levels: Graduate  
Schedule Types: Private Lesson  

Music Department

**MUS 74121 - CONDUCTING PROJECTS: BAND**

(Repeatable for credit) Band conducting techniques, score analysis, rehearsal procedures and study of musical style. Prerequisite: doctoral standing.

2.000 OR 4.000 Credit hours  
1.000 Other hours  

Levels: Graduate  
Schedule Types: Private Lesson  

Music Department

**MUS 74131 - CONDUCTING PROJECTS: ORCHESTRA**

(Repeatable for credit) Orchestra conducting techniques, score analysis rehearsal procedures and study of musical style. Prerequisite: doctoral standing.

2.000 OR 4.000 Credit hours  
1.000 Other hours  

Levels: Graduate
**MUS 75131 - OPERA: SINGER-ACTOR TECHNIQUES**

(Repeatable for credit) A course designed to give the young singing actor practical operatic experience in the performance of portions of or complete operas. Prerequisite: doctoral standing.

1.000 Credit hours
9.500 Other hours

Levels: Graduate
Schedule Types: Studio

**MUS 75141 - KENT STATE UNIVERSITY CHORALE**

(Repeatable for credit) Study and performance of literature for vocal chamber ensemble from medieval through contemporary styles sung in the original language with appropriate accompaniment. An audition in required before registering for this course. Prerequisite: Special approval and doctoral standing.

1.000 Credit hours
4.500 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

**MUS 75212 - KENT STATE UNIVERSITY ORCHESTRA**

(Repeatable for credit) A select group of instrumentalists for the purpose of studying and performing music written specifically for chamber orchestra including works of the 17th, 18th and 20th centuries. An audition in required before registering for this course. Prerequisite: Special approval and doctoral standing.

1.000 Credit hours
5.000 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

**MUS 75223 - WIND ENSEMBLE**

(Repeatable for credit) A select concert ensemble that performs the finest in wind instrument literature with emphasis on major original works. An audition in required before registering for this course. Prerequisite: Special approval and doctoral standing.

1.000 Credit hours
2.500 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

**MUS 75231 - JAZZ ENSEMBLE**
(Repeatable for credit) Study and performance of music literature in the jazz idiom. Prerequisite: doctoral standing.
1.000 Credit hours
7.500 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Music Department

**MUS 75271 - NEW MUSIC ENSEMBLE**

(Repeatable for credit) Study and performance of 20th-century chamber music with an emphasis on works by contemporary composers. Prerequisite: doctoral standing.
1.000 Credit hours
4.000 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Music Department

**MUS 75311 - CHAMBER MUSIC**

(Repeatable for credit) The study and performance of music for small ensembles. Prerequisite: doctoral standing.
1.000 OR 2.000 Credit hours
2.000 OR 4.000 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Music Department

**MUS 78251 - PEDAGOGY OF MUSIC THEORY**

(Cross-listed with MUS 58251) The principles and techniques of teaching music theory. Prerequisite: doctoral standing.
2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Music Department

**MUS 78393 - VARIABLE TITLE WORKSHOP IN MUSIC**

(Repeatable for credit) Offered for specific professional needs. Emphasis on performance and pedagogical skills. Prerequisite: doctoral standing.
1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Graduate
Schedule Types: Workshop
### MUS 81196 - INDIVIDUAL INVESTIGATION IN MUSIC THEORY

(Repeatable for credit) Intensive research or readings on selected topic beyond normal course coverage. Prerequisite: Doctoral standing.
1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

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### MUS 81211 - COMPOSITION

(Repeatable for credit) Refinement of compositional techniques culminating in large-scale works for media of student's choice. Prerequisite: Doctoral standing.
2.000 OR 4.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Private Lesson, Studio

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### MUS 82291 - SEMINAR IN MUSICOLOGY

(Repeatable for credit) Examination into primary sources, treatises and writings in selected areas in Western music. Topics selected range from medieval period to present. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

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### MUS 82396 - INDIVIDUAL INVESTIGATION IN MUSICOLOGY

(Repeatable for credit) Intensive research or readings on selected topic beyond normal course coverage. Prerequisite: Doctoral standing and special approval.
1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

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### MUS 82696 - INDIVIDUAL INVESTIGATION IN ETHNOMUSICOLOGY

(Repeatable for credit) Intensive research or readings on selected topic beyond normal course coverage. Prerequisite: Doctoral standing.
1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours
Music Department

**MUS 83196 - INDIVIDUAL INVESTIGATION IN MUSIC EDUCATION**

(Repeatable for credit) Intensive research or readings on selected topic beyond normal course coverage. Prerequisite: doctoral standing.
1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Music Department

**MUS 83211 - SEMINAR IN TEACHER EDUCATION IN MUSIC**

Investigation of the role of curriculum, accreditation and certification in music teacher education. Procedures related to teaching methods courses and to the student teaching program. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Music Department

**MUS 86001 - SEMINAR IN MUSIC EDUCATION I**

This course prepares students for doctoral study in music education. Topics include understanding tasks and skills necessary for PhD study in music education, along with navigating this study at Kent State. Students interact in seminar format as part of a cohort of students pursuing the study of music teaching and learning. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Seminar

Music Department

**MUS 86002 - SEMINAR IN MUSIC EDUCATION II**

This doctoral level course is designed to ready students for final activities of PhD study in music education. Goals include preparation for qualifying exams, understanding of the research proposal process, and exploration of advanced research methodologies and protocols necessary to undertake a dissertation and or significant research project. Prerequisite: MUS 86001, CI 87000 and EVAL 75510; doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Seminar

Music Department
MUS 88199 - DISSERTATION I

(Repeatable for credit) Doctoral dissertation for which registration in at least two semesters is required, first of which will be semester in which dissertation work is begun and continuing until the completion of 30 hours. Prerequisite: Pass candidacy examination and doctoral standing.
15.000 Credit hours
15.000 Other hours

Levels: Graduate
Schedule Types: Dissertation

Music Department

MUS 88299 - DISSERTATION II

(Repeatable for credit) Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. Prerequisites: MUS 88199 and doctoral standing.
15.000 Credit hours
15.000 Other hours

Levels: Graduate
Schedule Types: Dissertation

Music Department

MUS 88598 - RESEARCH

(Repeatable for credit) Research or individual investigation for doctoral students who have not yet passed their candidacy examinations. Prerequisite: Doctoral standing.
1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

Music Department

NRST 10001 - FOUNDATIONS OF NURSING AGENCY

Development of basic nursing skills and physical assessment. The student will begin implementation of the nursing process using universal self-care requisites as an organizational framework. Prerequisite: nursing technology (NRST) major and admission to technical study.
5.000 Credit hours
2.000 Lecture hours
4.670 Lab hours
4.330 Other hours

Levels: Undergraduate
Schedule Types: Clinic, Combined Lecture and Lab

Regional College Department

Course Attributes:
CTAG - Nursing/ADN
NRST 10003 - NURSING AGENCY I

Emphasizes broad concepts common to nursing practice. Increasingly complex skills are introduced. Care focuses on simple therapeutic self-care demands. Prerequisites: Minimum C grade in BSCI 20020 and NRST 10001 and NRST 10010 and US 10097; and CHEM 10054 or CHEM 10050; and minimum 2.000 cumulative GPA; and nursing technology (NRST) major.

6.000 Credit hours
3.500 Lecture hours
3.000 Lab hours
4.500 Other hours

Levels: Undergraduate
Schedule Types: Clinic, Combined Lecture and Lab
All Sections for this Course

Regional College Department

Course Attributes:
CTAG - Nursing/ADN

NRST 10006 - LPN TO ASSOCIATE DEGREE IN NURSING TRANSITION

Course is designed for the LPN's advanced placement to the nursing program. It includes content areas from all first year nursing courses and will have both a theory and a campus lab. Orem's theory is introduced emphasizing the assessment of the client's self-care assets and self-care deficits. Prerequisite: minimum 2.700 cumulative GPA; and nursing technology (NRST) major; and admission to technical study.

3.000 Credit hours
2.000 Lecture hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Regional College Department

NRST 10008 - PARAMEDIC TO ASSOCIATE DEGREE IN NURSING TRANSITION

Serves to validate prior learning, update and enhance the student's knowledge, begin the process of role transition, and prepare the student for advanced placement into the ADN program. Prerequisite: minimum 2.700 cumulative GPA; and nursing technology (NRST) major; and admission to technical study.

5.000 Credit hours
3.500 Lecture hours
1.830 Lab hours
2.670 Other hours

Levels: Undergraduate
Schedule Types: Clinic, Lecture

Regional College Department

NRST 10009 - BASIC PRINCIPLES OF PHARMACOLOGY

Identify and apply the basic principles of pharmacology to client care. Explore pharmaceutics, pharmacokinetics, pharmacodynamics, pharmacology-related math, drug classification, and safe preparation and administration of medications. Prerequisite: Nursing (A.D.N.) (NRST), Nursing (B.S.E.) (NURS), Occupational Therapy Assistant Technology (OCAT), Physical Therapist Assistant Technology (PTST), Radiologic Technology (RADT) or Respiratory Therapy Technology (RTT) major or permission of instructor.

2.000 Credit hours
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Focus</th>
<th>Prerequisites</th>
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</thead>
<tbody>
<tr>
<td>NRST 10010</td>
<td>THERAPEUTIC USE OF SELF</td>
<td>Focus is on the self-care of individuals with emphasis on understanding human relationships in the promotion of self-care. Culture, values and past experiences as factors in communication are explored.</td>
<td>NRST 10001 with a minimum grade of C (2.000); admission to the nursing technology (NRST) major; and minimum 2.000 cumulative GPA.</td>
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<tr>
<td>NRST 20205</td>
<td>PSYCHOSOCIAL SELF CARE DEFICITS</td>
<td>Focus is on providing mental health nursing care utilizing the nursing process for the emotionally ill client, family, and community with psychiatric mental health needs. Emphasis is placed on understanding holistic human needs and promotion of the professional therapeutic nurse-client relationship.</td>
<td>minimum C grade in NRST 10003 and NRST 10010 and PSYC 11762; and NUTR 23511 or NUTR 33512; and minimum 2.000 cumulative GPA; and nursing technology (NRST) major.</td>
</tr>
<tr>
<td>NRST 20206</td>
<td>NURSING AGENCY II</td>
<td>Nursing care of adults with intermediate therapeutic self-care demands. Emphasis is placed on the nurse as a provider of care.</td>
<td>minimum C grade in BSCI 20021 and NRST 10003 and NRST 10010 and PSYC 11762; and NUTR 23511 or NUTR 33512; and minimum 2.000 cumulative GPA; and nursing technology (NRST) major.</td>
</tr>
<tr>
<td>NRST 20207</td>
<td>PSYCHOSOCIAL SELF-CARE DEFICITS</td>
<td>Focus is on providing mental health nursing care utilizing the nursing process for the emotionally ill client, family, and community with psychiatric mental health needs. Emphasis is placed on understanding holistic human needs and promotion of the professional therapeutic nurse-client relationship.</td>
<td>minimum C grade in NRST 10003 and NRST 10010 and PSYC 11762; and NUTR 23511 or NUTR 33512; and minimum 2.000 cumulative GPA; and nursing technology (NRST) major.</td>
</tr>
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family, and community with psychiatric mental health needs. Emphasis is place on understanding holistic human needs and promotion of the professional therapeutic nurse-client relationships. Prerequisite: minimum C grade in NRST 10003 and NUTR 33512 and PSYC 11762; and minimum 2.000 cumulative GPA; and nursing technology (NRST) major.

4.000 Credit hours
3.000 Lecture hours
0.333 Lab hours
2.667 Other hours

Levels: Undergraduate
Schedule Types: Clinic, Lecture

Regional College Department

NRST 20208 - NURSING AGENCY III

Nursing care of individuals with complex therapeutic self-care demands. Emphasis is placed on the nurse as provider and manager of patient care. Prerequisite: minimum C grade in NRST 20205 and NRST 20206 and NURS 20950; and minimum 2.000 cumulative GPA; and nursing technology (NRST) major.

4.000 Credit hours
2.500 Lecture hours
0.500 Lab hours
4.000 Other hours

Levels: Undergraduate
Schedule Types: Clinic, Combined Lecture and Lab

Regional College Department

NRST 20209 - MATERNAL/NEWBORN DEVELOPMENT SELF-CARE

Nursing care of the expectant and newly-delivered family. The nursing approach acknowledges the mother's self-care abilities and dependent care agent role. Health deviations related to childbearing are incorporated. Prerequisites: Minimum grade of C (2.000) in NRST 10003 and NRST 10010 and BSCI 20021 and PSYC 11762 and NURS 20950; and NUTR 23511 or NUTR 33512; and cumulative GPA of 2.000 or higher; and nursing technology (NRST) majors.

2.000 Credit hours
1.000 Lecture hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Clinic, Laboratory, Lecture

Regional College Department

NRST 20210 - CHILD AND FAMILY DEVELOPMENT SELF-CARE

Family-centered nursing care of children. Developmental self-care requisites and common health deviations are emphasized. Prerequisites: minimum C grade in NRST 20205 and NRST 20206 and NURS 20950; and minimum 2.000 cumulative GPA.

2.000 Credit hours
1.000 Lecture hours
0.400 Lab hours
2.600 Other hours

Levels: Undergraduate
Schedule Types: Clinic, Combined Lecture and Lab
NRST 20212 - PRACTICUM

Practicum experience that allows the student to work one on one with an approved preceptor for advance clinical skills during the final semester of the ADN program. The course also includes a leadership and management component. Prerequisite: minimum C grade in NRST 20208; and minimum 2.000 cumulative GPA; and nursing technology (NRST) major.

2.000 Credit hours
0.500 Lecture hours
4.500 Other hours

Levels: Undergraduate
Schedule Types: Lecture, Practicum or Internship

All Sections for this Course

NRST 21095 - SPECIAL TOPICS

(Repeatable for credit) Scheduled topic of interest to students and faculty. Prerequisite: none.

2.000 TO 4.000 Credit hours
2.000 TO 4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

NRST 21096 - INDIVIDUAL INVESTIGATION IN NURSING

(Repeatable for a total of 18 hours) Readings and/or investigation of nursing topics supervised by nursing faculty. Prerequisite: special approval.

1.000 TO 3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Regional College Department

NSE 10095 - NATIONAL STUDENT EXCHANGE

(Repeatable for credit) This is not a real academic course but a means of holding out of state students awaiting their transfer back to Kent. For record keeping only.

0.000 TO 20.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

University College Department

Course Attributes:
Experiential Learning Requirem, Residence Eligible
NURS 10060 - INTRODUCTION TO PROFESSIONAL NURSING PRACTICE

Focus on nursing’s development as a discipline and profession. The art and science of nursing including the Scope and Standards of Practice, nursing theory, evidence based practice, and therapeutic communication will be explored. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Nursing Department

NURS 20010 - INTERPERSONAL AND COMMUNICATION SKILLS FOR HEALTH CARE PROFESSIONALS

A skill-development course, with readings, experiential learning activities and oral and written communication assignments. It is designed to help students enhance their self-confidence in interacting with other people, individually or in groups, and develop their capabilities in writing, leading groups and presenting information. Assertiveness techniques, presentation of self, critical thinking and collaboration skills complement the development of interpersonal and communication competencies. Active learning methods are used to facilitate growth at any level of current student development. Prerequisite: nursing (NURS) major and sophomore standing.
2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Nursing Department

NURS 20020 - FOUNDATIONS OF ASSESSMENT AND COMMUNICATION IN NURSING

Individuals are assessed as members of families and community members. Communication in nursing is explored. Prerequisite: Special approval.
3.000 Credit hours
2.000 Lecture hours
1.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Nursing Department

NURS 20025 - PHARMACOLOGY AND ALTERATIONS IN PHYSIOLOGICAL FUNCTIONING I

(Repeatable for credit) This course provides nursing students with an introduction to the basic principles of pathophysiology and pharmacology. It offers a general understanding of pathophysiologic processes of body systems and the major classes of pharmacotherapeutic agents that are used to treat these pathophysiologic processes. The course focuses on mechanisms of action, effects of medications, pharmacodynamics, pharmacokinetics, as well as principles that guide the administration of medications, dosage, and nursing responsibilities. Age and cultural differences related medication administration will be addressed throughout the course. Prerequisite: sophomore standing; and nursing (NURS) major. Corequisite: NURS 20020.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
Nursing Department

**NURS 20030 - FOUNDATIONS OF NURSING INTERVENTIONS**

Foundations of nursing interventions focuses on selected aspects of nursing care to improve the health of individuals within families and groups. Utilizes principles of the interpersonal process, nursing process and professional nursing. Prerequisite: NURS 20010 and NURS 20020 with a grade of C (2.00) or better.

5.000 Credit hours
2.000 Lecture hours
3.000 Lab hours
6.000 Other hours

Levels: Undergraduate
Schedule Types: Clinic, Laboratory, Lecture

Nursing Department

**NURS 20950 - HUMAN GROWTH AND DEVELOPMENT FOR HEALTH PROFESSIONALS**

Examines theoretical principles and concepts of human growth and development throughout the life cycle applicable to personal and professional activities essential to the accurate assessment of human needs and understanding human behaviors. Prerequisite: PSYC 11762 and sophomore standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Nursing Department

Course Attributes:
CTAG - Nursing/ADN

**NURS 21095 - SPECIAL TOPICS IN NURSING**

(Repeatable for credit)Scheduled topics of interest to faculty and students. Prerequisite: Sophomore standing.

2.000 TO 4.000 Credit hours
2.000 TO 4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Nursing Department

**NURS 21096 - INDIVIDUAL INVESTIGATION IN NURSING**

(Repeatable for credit)Designed for the student interested in exploration and research of material not covered in required nursing courses. Prerequisite: Sophomore standing and special approval.

2.000 TO 4.000 Credit hours
2.000 TO 4.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Nursing Department
**NURS 25010 - INTRODUCTION TO ACCELERATED NURSING**

Focus is on nursing’s development as a discipline and a profession. Students use group process in developing the necessary oral and written communication skills needed for practicing nurses. Provides students the tools to succeed in an accelerated BSN program. Topics covered include time management, study skills, test taking strategies, critical thinking and self care. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Nursing Department

**NURS 25020 - INTRODUCTION TO PROFESSIONAL NURSING AND INTERPERSONAL AND COMMUNICATION SKILLS: LPN TRANSITION**

Required for all LPN transition nursing undergraduate students. Focus is on the development of nursing as a discipline and as a profession. Also a skill development course, with readings, experiential learning activities, and oral and written communication assignments. Designed to help students enhance their self-confidence in interacting with others, groups and presenting information. Assertiveness techniques, presentation of self, critical thinking, and collaboration skills complement the development of interpersonal and communication competencies. Active learning methods are used. Prerequisite: nursing (NURS) major; and special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Nursing Department

**NURS 25030 - LPN 20020 PREPARATION COURSE-FOUNDATIONS OF NURSING PRACTICE AND COMMUNICATION**

Designed to assist the licensed practical nurse who is enrolled in the KSU Baccalaureate Nursing (BSN) Program of study. Reviews the nursing concepts of the professional nurse for LPNs in preparation for taking the CLEP exam before they transition into the BSN nursing curriculum. Content includes therapeutic and interpersonal communication, critical thinking and concept mapping, the nursing process, evidence-based practice, and client education. Offered in a hybrid format with students having in-class, multipurpose lab, as well as web-based assignments. Students have the option of practice in the lab and perform physical assessment skills. Prerequisite: nursing (NURS) major.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Nursing Department

**NURS 25040 - LPN 20030 PREPARATION COURSE-FOUNDATIONS OF NURSING INTERVENTIONS**

Designed to assist the licensed practical nurse enrolled in the KSU Baccalaureate Nursing (BSN) Program of study. The specific content includes: health, wellness, safety and mobility issues; infection control; care of the surgical client; electrolyte and acid-base imbalances; and sensory, sleep and cognition issues. Students have optional practice in the nursing lab and perform selected nursing skills, including physical assessment and medication calculations. Prerequisite: nursing (NURS) major and special approval.

2.000 Credit hours
2.000 Lecture hours
**NURS 30010 - PARENT AND NEWBORN NURSING**

A study of nursing assessment, need identification and evaluation for individuals and families during the child bearing cycle. Prerequisites: NURS 20030 and NURS 20950 with minimum C (2.000) grade. Corequisite: NURS 30020.

4.000 Credit hours
2.000 Lecture hours
2.000 Other hours

**NURS 30015 - PHARMACOLOGY FOR INFANTS, CHILDREN AND MATERNAL CHILD HEALTH**

(Repeatable for credit) Provides additional information to better understand the complexity of pediatric medications and their safe delivery to pediatric patients of all ages. Also, identifies safe practices for medication administration to mothers and their newborns. Pre/corequisite: NURS 30010 or NURS 30020.

3.000 Credit hours
3.000 Lecture hours

**NURS 30020 - HEALTH CARE OF CHILDREN**

Nursing process in family-centered care of children including health and developmental promotion and illness and restorative intervention. Prerequisites: NURS 20020 and NURS 20030 with minimum C (2.000) grade. Corequisite: NURS 30010.

4.000 Credit hours
2.000 Lecture hours
2.000 Other hours

**NURS 30025 - PHARMACOLOGY AND ALTERATIONS IN PHYSIOLOGICAL FUNCTIONING II**

(Repeatable for credit) This course is a continuation of the study of pathophysiology and pharmacology for nursing students. It provides a deeper understanding of pathophysiologic processes of body systems, the management of disease states, interpretation of lab values, and the analysis of symptomology and nursing indicators to allow students to initiate appropriate nursing actions as related to pharmacology and pathophysiology. This course explores assessment of therapeutic effects, side effects, and adverse reactions of medications and presents teaching skills needed to enhance patient education and pharmacologic literacy. Prerequisite: sophomore standing; and nursing (NURS) major. Corequisite: NURS 20030.
NURS 30030 - NURSING OF ADULTS

Emphasizes health promotion and prevention of episodic illness and maintenance of health status. Utilizes nursing process as foundation to provide nursing care composed of clinical experience in acute care settings. Prerequisites: NURS 20030 and NURS 20950 and BSCI 30030 with minimum C (2.000) grade. Corequisite: NURS 30040.

Levels: Undergraduate
Schedule Types: Lecture

Nursing Department

NURS 30035 - NURSING OF ADULTS ACROSS THE LIFESPAN

(Repeatable for credit) Emphasizes the care of adults, focused on health promotion, prevention of episodic illness, and maintenance of health status. Gerontologic changes and rehabilitation needs will be addressed. Utilizes nursing process as a foundation to provide nursing care. Course is composed of classroom and clinical experience in the acute, chronic, and rehabilitation care settings. Prerequisite: minimum C (2.000) grade in NURS 20020, NURS 20030, NURS 20950 and BSCI 30030.

Levels: Undergraduate
Schedule Types: Clinic, Lecture

Nursing Department

NURS 30040 - NURSING OF ADULTS WITH REHAB NEEDS AND/OR GERONTOLOGIC CHANGES

This course encompasses care of persons and families dealing with gerontologic changes and/or rehabilitation needs. Prerequisites: NURS 20030 with minimum C (2.000) grade. Corequisite: NURS 30030.

Levels: Undergraduate
Schedule Types: Clinic, Lecture

Nursing Department

NURS 30050 - BASIC NURSING INFORMATICS

Focuses on the use of nursing informatics for clinical nursing practice, inquiry and communication. Prerequisite: NURS 20020 with a grade of C (2.000) or better.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Nursing Department

**NURS 30060 - BASIC PHARMACOLOGY FOR NURSING PRACTICE**

Introduction to general principles of pharmacology. Major classes of pharmacotherapeutic agents, mechanisms of action, pharmacokinetics, dosage and administration; effects and nursing responsibilities. Prerequisites: NURS 20020 with minimum C grade.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Nursing Department

**NURS 30070 - HEALTH CARE POLICY**

This course looks at the organizational and societal context in which health care is delivered in the U.S. A historical perspective is developed early in the semester. Building on this, the course explores existing health care policy early in the semester. Building on this, the course explores existing health networks, forms of care delivery, consumer needs and economics and funding. Prerequisite: NURS 20030 with a minimum C (2.000) grade.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Nursing Department

Course Attributes:
Writing Intensive Course

**NURS 31010 - APPLICATION OF STATISTICAL FINDINGS FOR EVIDENCE - BASED PRACTICE IN NURSING**

This is a three credit course focusing on an introduction to statistical techniques with an emphasis on application in the health care setting. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Nursing Department

**NURS 31095 - SPECIAL TOPICS IN NURSING**

(Repeatable for credit) Scheduled topics of interest to faculty and students. Prerequisite: NURS 20950.

2.000 TO 4.000 Credit hours
2.000 TO 4.000 Lecture hours
NURS 31096 - INDIVIDUAL INVESTIGATION

( Repeatable for credit ) Designed for the student interested in exploration and research of material not covered in required nursing courses. Prerequisite: special approval.

2.000 TO 4.000 Credit hours
2.000 TO 4.000 Other hours

NURS 35020 - TRANSCULTURAL NURSING AND HEALTH CARE

Provides students with the opportunity to explore and understand the role of the transcultural nurse in the care of patients from multiple and diverse cultural groups. Prerequisite: junior standing.

3.000 Credit hours
3.000 Lecture hours

NURS 35030 - PATHOPHYSIOLOGY: ANALYSIS AND APPLICATION OF THE NURSING PROCESS

Enhances the understanding of pathophysiologic processes, the management of disease states, and analysis of related concepts of pharmacology, symptomology and lab interpretation of data for the purpose of identification of priority nursing diagnosis and formulation of care plans appropriate for individual disease processes. Prerequisite: minimum grade of C (2.000) in NURS 20020 and 20030 and 30030 and 30040 and 30060; nursing (NURS) major; and junior or senior standing.

3.000 Credit hours
3.000 Lecture hours

NURS 35040 - COMPLEMENTARY AND INTEGRATIVE HEALTH

( Repeatable for credit ) Explores and critically analyzes complementary and integrative health therapies, products, and supplements primarily being used in the United States through the review of evidenced based research and case studies. Synthesizing the exploration of complementary and integrative health practices that are often used in conjunction with traditional Western medicine, students examine the evolving Integrative Health, which has also been called Integrative Medicine, or Complementary and Alternative Medicine. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours
Nursing Department

**NURS 35050 - ADVANCED MEDICAL SURGICAL SIMULATION**

Provides students opportunities for critical thinking and decision making through the use of human patient simulation. Theory, content and hands on application advance students’ clinical judgement and competence in caring for patients of advancing complexity and those in crisis situations. Prerequisites: NURS 30030 and NURS 30040 with a minimum C (2.000) grade.

3.000 Credit hours  
1.500 Lecture hours  
1.500 Lab hours

Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab

Nursing Department

**NURS 35060 - CRITICAL THINKING AND TEST TAKING SKILLS**

(Repeatable once for credit) The focus of this course is to understand the art of analyzing and evaluating one’s thinking. The focus is on how a person thinks and how they can improve their thinking. This course is designed for nursing students seeking to expand their critical thinking ability and improve studying and test taking skills. This course promotes analysis and evaluation of problem solving abilities and requires self-directed, self-disciplined and corrective thinking. The student will explore and develop individual plans with the course faculty person to improve their studying and test taking skills. Prerequisite: enrolled in the College of Nursing.

2.000 Credit hours  
2.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

Nursing Department

**NURS 35065 - STUDENTS HELPING STUDENTS: A STUDENT MENTORING COURSE**

(Repeatable once for credit) This course is designed for the junior or senior student that has demonstrated a strong understanding of one or more course topics and who desires to function in the role of a mentor or tutor. Throughout the course the student will utilize skills learned in the course while engaging in a mentortutor relationship with students of a lower class rank in need of mentoring and/or tutoring. Prerequisite: junior or senior standing; and nursing (NURS) major.

2.000 Credit hours  
2.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

Nursing Department

**NURS 40003 - COMPARATIVE HEALTH CARE: NURSING IN NORTHERN IRELAND**

Includes a 2 week intensive study abroad that is conducted in Northern Ireland and includes seminars at the University of Ulster and in select clinical settings. Students examine the cultural, political and economic forces influencing health care and nursing needs; status of nursing education, licensure and practice; and health disparities in Northern Ireland and compare them to the United States. An additional 1 credit hour web-based option is offered the week immediately following the 2 weeks in Northern Ireland for students who choose the 3 credit hour option. Prerequisite: 2.750 cumulative GPA; and special approval.
NURS 40005 - PROFESSIONAL NURSING DEVELOPMENT

Course focuses on professional development and the transition from student to graduate nurse, including interviewing techniques and resume preparation. Explores health care economics and policy, political activism, cultural competence, nursing theory, leadership of meetings and managing group dynamics, the future of nursing and health care, nursing practice opportunities, role development, professional nursing organizations, graduate education and specialty certification. Professional skill development continues from NURS 20010. Students have the opportunity to attend a professional nursing organization meeting. Prerequisites: NURS 20010 or NURS 25010 and NURS 30010 and NURS 30030 and NURS 30040 and NURS 30050 and NURS 30060 - all with a minimum C grade.

Levels: Undergraduate
Schedule Types: Clinic, Seminar

Nursing Department

NURS 40010 - NURSING OF THE CRITICALLY ILL

Holistic approach to assessing, intervening and evaluating critically ill persons. Nursing practice in critical care settings with diverse populations. Prerequisites: NURS 30010 and NURS 30030 and NURS 30040 and NURS 30050 and NURS 30060 - all with minimum C (2.000) grade.

Levels: Undergraduate
Schedule Types: Lecture

Nursing Department

NURS 40020 - COMMUNITY HEALTH NURSING

Concepts of community health nursing with emphasis on health promotion and prevention of population-based health problems. Students are responsible for their transportation to field experience. Prerequisites: NURS 30010 and NURS 30020 and NURS 30030 and NURS 30040 and NURS 30050 and NURS 30060 - all with minimum C grade. Corequisite: NURS 40030.

Levels: Undergraduate
Schedule Types: Clinic, Lecture

Nursing Department
NURS 40030 - PSYCHIATRIC NURSING AND MENTAL HEALTH NURSING CARE

Focuses on the development of therapeutic relationships with individuals, families and vulnerable populations across the lifespan who have potential and or identified mental health needs. Students will learn and apply theory about mental health and illness. Prerequisites: NURS 30010 and NURS 30020 and NURS 30030 and NURS 30040 and NURS 30050 and NURS 30060 - all with minimum C grade.

4.000 Credit hours
2.000 Lecture hours
2.000 Other hours

Levels: Undergraduate
Schedule Types: Clinic, Lecture

Nursing Department

NURS 40045 - INTEGRATION OF LEADERSHIP AND MANAGEMENT IN NURSING

Course provides students with the knowledge and skills for a beginning leadership position (team leader, module leader and primary nurse), applicable to the care of patients in a health care environment. Course provides students with opportunities to synthesize their nursing knowledge and collaborate with their clinical preceptor in preparation for their professional nursing role. Prerequisites: NURS 30020 and NURS 30030 and NURS 30040 - all with minimum C (2.000) grade; and senior standing.

6.000 Credit hours
2.000 Lecture hours
4.000 Other hours

Levels: Undergraduate
Schedule Types: Clinic, Lecture

Nursing Department

Course Attributes:
Experiential Learning Requirem

NURS 40075 - INFORMATION AND PATIENT CARE TECHNOLOGY FOR HEALTHCARE PROFESSIONALS

(Cross-listed with RSPC 40075). Focuses on the use of information management and information systems, technology and the human technology interface utilized in healthcare. Students taking this course must be registered nurses. Prerequisite: nursing (NURS) major.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Nursing Department

NURS 40085 - INQUIRY AND RESEARCH FOR PROFESSIONAL NURSING PRACTICE

Introduction to clinical inquiry and research for the professional nurse. Theoretical frameworks appropriate to nursing are addressed in relation to research development. A nursing Evidence Based Practice project is developed. Pre/corequisite: MATH 10041 or PSYC 21621; or SOC 32220 and 32221; GEOG 39002, BMRT 21004, MATH 30011, MIS 24056 and PH 30002; and nursing (NURS) major.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
NURS 40872 - INTRODUCTION TO EVIDENCE BASED PRACTICE

This course introduces the student to the process of identifying quality research studies and applying the findings to nursing practice to improve patient outcomes. Prerequisites: PSYC 21621 or SOC 32200 or PH 30002 or NURS 31010.
3.000 Credit hours
3.000 Lecture hours
0.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

NURS 41000 - CONCEPTS AND ISSUES FOR PROFESSIONAL NURSING PRACTICE

Focuses on nursing concepts and theory, nursing process and the history of nursing as it relates to the development of professional nursing and the role of the professional nurse. Students taking this course must be registered nurses. Prerequisite: nursing (NURS) major.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

NURS 41095 - SPECIAL TOPICS

(Repeatable for credit) Scheduled topics of interest to faculty and students. Topics to be announced when scheduled. Prerequisite: none.
2.000 TO 4.000 Credit hours
2.000 TO 4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

NURS 41096 - INDIVIDUAL INVESTIGATION

(Repeatable for credit) Designed for the student interested in exploration and research of material not covered in required nursing courses. Prerequisite: none.
2.000 TO 4.000 Credit hours
4.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

NURS 42000 - LEADERSHIP AND MANAGEMENT FOR PROFESSIONAL NURSING PRACTICE
Allows the registered nurse (RN) to utilize personal and professional knowledge and experiences in the study of leadership and management. Facilitates discovery of how nursing and leadership theories define and enhance practice. Assists the RN in analyzing the relationship between nursing, the professional nurse’s leadership/management roles, and the articulation between nursing research and practice. Students taking the course must be registered nurses. Prerequisite: nursing (NURS) major.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Nursing Department

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<tr>
<th>COURSE</th>
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<th>DESCRIPTION</th>
<th>PREREQUISITES</th>
<th>CREDIT HOURS</th>
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<tr>
<td>NURS 43000</td>
<td>HEALTH PROMOTION IN PROFESSIONAL NURSING PRACTICE</td>
<td>Utilizes the nursing process to explore health promotion and disease prevention across the lifespan and health care settings. Theories and models are used to understand health behaviors. Includes role of the nurse; national health objectives (Health People 2010); health literacy, education and counseling; transcultural considerations; factors affecting health promotion; and specific health promotion strategies. Students taking this course must be registered nurses. Prerequisite: BSCI 20020 and 20021 and CHEM 10050 and 10052 and nursing (NURS) major.</td>
<td>3.000 Credit hours 3.000 Lecture hours</td>
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<td>NURS 44000</td>
<td>POPULATION-BASED NURSING FOR PROFESSIONAL NURSING PRACTICE</td>
<td>Focuses on concepts of population-based nursing practice with emphasis on improving the health of communities and populations. Students taking the course must be registered nurses. Prerequisites: BSCI 20020 and BSCI 20021 and CHEM 10050 and CHEM 10052 and nursing (NURS) major.</td>
<td>3.000 Credit hours 2.000 Lecture hours 6.000 Other hours</td>
<td>3.000 Credit hours 2.000 Lecture hours 6.000 Other hours</td>
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<td>NURS 44002</td>
<td>GLOBAL HEALTH IMMERSION: GENEVA, SWITZERLAND</td>
<td>(Slashed with NURS 54002) Participants explore a number of health concerns, policies, and challenges with global importance and implications. Students will investigate current global health policies and themes, and become familiar with experts in global health including governmental and nongovernmental organizations and multinational agencies. Presentation are given by experts currently working in various regions of the world to solve global problems such as HIV AIDS, post-war trauma, tuberculosis, and non-communicable disease prevention, and environmental contamination. Prerequisite: sophomore standing in the Nursing (NURS) major; and special approval.</td>
<td>3.000 Credit hours 3.000 Lecture hours</td>
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NURS 45000 - HEALTH MAINTENANCE AND RESTORATION FOR PROFESSIONAL NURSING PRACTICE

Focuses on issues related to health maintenance and restoration for individuals and families experiencing illness. Students taking this course must be registered nurses. Prerequisites: BSCI 20020 and 20021 and CHEM 10050 and 10052 and nursing (NURS) major. 
3.000 Credit hours
3.000 Lecture hours

NURS 45010 - HEALTHCARE POLICY AND DELIVERY SYSTEMS

Web-based course looks at the organizational and societal context in which health care is delivered in the U.S. An historical perspective is developed early in the semester. Building on this, the course explores existing health care policy and delivery systems, including legislation, the professional disciplines, organizations and health networks, forms of care delivery, consumer needs, and economics and funding. The ability of the current health care system to serve all segments of the U.S. population is examined in depth. Global health needs are examined as a minor theme. Ends with a focus on future forms of delivery that would improve the health care status of the American population as a whole. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

NURS 45020 - CRITICAL APPLICATION OF NURSING IN PHARMACOLOGY

Enhances application and analysis of pharmacology in nursing. Explores assessment of therapeutic effect, side effects and adverse reactions of medications. Analyzes pathophysiologic symptoms, lab values and nursing indicators in order to allow students to initiate appropriate nursing actions as related to pharmacology. Further, course presents teaching skills needed to enhance patient education and pharmacologic literacy. Prerequisites: NURS 20020 and 20030 and 30060; and nursing (NURS) major; and junior or senior standing.
3.000 Credit hours
3.000 Lecture hours

NURS 45030 - PROFESSIONAL LITERACY: SKILLS TO CAREER ADVANCEMENT

Explores career and professional growth through processes such as writing, publishing, presenting and portfolio development. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours
NURS 45060 - NCLEX REVIEW PREPARATION

(Repeatable for a maximum of 6 credit hours) This course reviews nursing concepts and content important for a registered nurse to make safe clinical judgments. Specific study strategies for passing the national licensure exam will be reviewed. Students will practice answering NCLEX style questions. Prerequisite: senior standing. 2.000 TO 3.000 Credit hours 2.000 TO 3.000 Lecture hours

NURS 46000 - HEALTH CARE POLICY

Examines the organizational and societal context in which health care is delivered. Existing health care policy and delivery systems are examined, including historical perspectives, legislation, professional disciplines, organizations, health networks, forms of care delivery, consumer needs and economics and funding. The ability of the current health care system to serve all segments of the U.S. population is examined in depth as well as future forms of health care delivery. Global perspectives are also studied. Prerequisite: junior level standing. 3.000 Credit hours 3.000 Lecture hours

NURS 47000 - CAPSTONE CLINICAL FOR PROFESSIONAL NURSING PRACTICE

Allows RNs to apply previously learned nursing theory and clinical knowledge with their baccalaureate education in the identification and implementation of a scholarly nursing project. This project utilizes, but is not limited to, previously learned knowledge of leadership skills, principles of teaching/learning, health care policy, change process, group process, team building, collaboration, healthcare policy and delivery systems, quality improvement, evidence-based care, diversity, nursing roles, information technology and systems, population-based care and ethical/legal issues. Students taking this course must be registered nurses. Prerequisites: NURS 40075 and 41000. Pre/corequisites: NURS 40085 and 42000 and 43000 and 44000 and 45000 and 46000 and nursing (NURS) major. 3.000 Credit hours 2.000 Lecture hours 1.000 Other hours

NURS 50003 - COMPARATIVE HEALTH CARE: NURSING IN NORTHERN IRELAND
Includes a 2 week intensive study abroad that is conducted in Northern Ireland and includes seminars at the University of Ulster and in select clinical settings. Students examine the cultural, political and economic forces influencing health care and nursing needs; status of nursing education, licensure and practice; and health disparities in Northern Ireland and compare them to the United states. An additional 1 credit hour web-based option is offered the week immediately following the 2 weeks in Northern Ireland for students who choose the 3 credit hour option. Prerequisite: 3.000 cumulative GPA; graduate standing; and special approval.

2.000 TO 3.000 Credit hours
2.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Clinic, Seminar

Nursing Department

**NURS 50093 - VARIABLE TOPIC WORKSHOP IN NURSING**

(Repeatable 15 times for credit) Topics of special interest to intensify knowledge in a particular area of graduate nursing. Prerequisite: graduate standing and special approval.

1.000 TO 5.000 Credit hours
1.000 TO 5.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Nursing Department

**NURS 54002 - GLOBAL HEALTH IMMERSION: GENEVA, SWITZERLAND**

(Slashed with NURS 44002) Participants explore a number of health concerns, policies and challenges with global importance and implications. Students investigate current global health policies and themes, and become familiar with experts in global health including governmental and nongovernmental organizations, and multinational agencies. Presentations are given by experts working in various regions of the world to solve global problems such as HIV/AIDS, post-war trauma, tuberculosis, refugee health, non-communicable disease prevention, and environmental contamination. Prerequisite: Nursing graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

**NURS 60006 - INTRODUCTION TO FAMILY ASSESSMENT AND COUNSELING IN NURSING**

Study of theoretical approaches to counseling interventions with families and couples. Current status of research and evaluation of care is examined. Only students admitted to the family NP, Women's Health NP and Pediatric NP concentrations or post-master's certificate programs may register for this course. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department
NURS 60007 - ADVANCED ASSESSMENT ACROSS THE LIFESPAN

Advanced health assessment across the lifespan includes foundational skills including the comprehensive history, physical, and psychological assessment of the patient. The course will address skills of effective communication and patient interaction which serve as a basis for further clinical experiences. Prerequisite: graduate standing. Pre/Corequisite: NURS 60045.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

NURS 60008 - ADVANCED HEALTH ASSESSMENT ACROSS THE LIFESPAN LABORATORY

This course is the laboratory application of concepts introduced Advanced Health Assessment Across the Lifespan. Prerequisite: graduate standing. Pre/Corequisite: NURS 60045. Corequisite: NURS 60007.

1.000 Credit hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Laboratory

Nursing Department

NURS 60011 - ADVANCED ASSESSMENT ACROSS THE LIFESPAN LABORATORY FOR ADVANCE PRACTICE REGISTERED NURSES

This laboratory course will augment the objectives for Advanced Assessment Across the Lifespan didactic course. A hands-on approach to mastering skills necessary for thorough physical and functional examinations and patient interviewing techniques. Prerequisites: graduate standing. Corequisite: NURS 60007

1.000 Credit hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Laboratory

Nursing Department

NURS 60012 - ADVANCED MENTAL HEALTH ASSESSMENT AND PSYCHOPATHOLOGY ACROSS THE LIFESPAN

Focuses on developing skills related to conducting a holistic mental health assessment and making psychiatric diagnoses. Develops understanding of psychopathology, which is integral to assessment and diagnosis processes. Prerequisite: graduate standing; and nursing [NURS] major.

4.000 Credit hours
4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

NURS 60013 - ADVANCED HEALTH AND PHYSICAL ASSESSMENT ACROSS THE LIFESPAN LABORATORY FOR FAMILY ADV PRACTICE RN
This laboratory course will augment the objectives for Advanced Assessment Across the Lifespan didactic course. Prerequisites: graduate standing; and Advanced Practice Registered Nurse: Nurse Practitioner Family [APNF] or Psychiatric Mental Health Nursing Family Nurse Practitioner [PMNF] concentration. Corequisite: NURS 60007.

1.000 Credit hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Laboratory

Nursing Department

**NURS 60015 - ADVANCED HEALTH ASSESSMENT**

Advanced Health Assessment comprises foundational skills including the comprehensive history, physical and psychological assessment of the patient. Students apply the diagnostic reasoning process to develop a comprehensive plan of care for patients in a variety of settings. Pre/corequisite: NURS 60045. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

**NURS 60030 - HEALTH PROMOTION ACROSS THE LIFESPAN FOR FAMILY PRACTICE**

This course augments the Advanced Health Assessment course. Focus is on anticipatory guidance and health promotional activities which are age- and developmentally-appropriate across the lifespan. Prerequisites: graduate standing. Corequisite: NURS 60015.

1.000 Credit hours
1.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

**NURS 60045 - PATHOPHYSIOLOGY FOR THE ADVANCED PRACTICE REGISTERED NURSE**

Provides graduate nursing students with a theoretic foundation of human physiology and the phenomena that produce alterations or pathology in human physiologic function; and an understanding of the basis of disease processes across the lifespan. Prerequisite: graduate standing in nursing. Prerequisite: graduate standing; and nursing (NURS) major.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

**NURS 60050 - PHARMACOLOGY FOR WOMEN'S HEALTH NURSE PRACTITIONERS**

Web-based course focuses on pharmacology related specifically to women throughout their lifespan. Prepares Advanced Nurse Practitioners to meet the pharmacological healthcare needs of women in primary healthcare...
settings. Prerequisite: NURS 60340, 60441 and 63492 and graduate standing. Corequisites: NURS 60440 and NURS 64892.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

**NURS 60051 - NEUROBIOLOGY AND PSYCHOPHARMACOLOGY OF MAJOR PSYCHIATRIC DISORDERS ACROSS THE LIFESPAN**

Focuses on the neurobiology of severe and persistent psychiatric disorders. Addresses fundamental principles underlying psychopharmacology related to these disorders. Prerequisite: graduate standing in the nursing [NURS] major.
4.000 Credit hours
4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

**NURS 60101 - THEORETICAL BASIS FOR NURSING PRACTICE I**

This course will be used to study concepts and theories common to all specialty areas of nursing. It provides a firm basis for advanced clinical nursing practice. Progress in theory development for nursing practice is addressed. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

**NURS 60110 - ADULT GERONTOLOGY CLINICAL NURSE SPECIALIST I**

Introduction to the clinical nurse specialist role with adults and older adults experiencing common health and illness conditions. The focus is on developing a foundation for evidence-based, patient-centered advanced nursing care, including teaching, coaching and identification and management of symptoms, functional problems and risk behaviors. The scientific and theoretical basis for interventions to achieve clinical outcomes in health promotion and illness care for adults and older persons across the care continuum are explored. This course is taken concurrently with NURS 61192 for clinical application. Prerequisites: NURS 60015, NURS 60403; and graduate standing in adult gerontology clinical nurse specialist (AGCN) concentration or adult-gerontology clinical nurse specialist (C844) certificate. Pre/Corerequisite: NURS 60441. Corequisites: NURS 61192.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

**NURS 60120 - PRIMARY CARE I: ADULTS ACROSS THE LIFESPAN**
Introduction to the care of adult-gero primary care patients. Identification and examination of evidence-based primary health care problems, needs, and interventions. The course will focus on biological and behavioral parameters at primary, secondary and tertiary levels of prevention. Prerequisites: graduate standing; and NURS 60015 and NURS 60441. Corequisite: NURS 61292.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

NURS 60125 - ADVANCED PRACTICE REGISTERED NURSE ROLE

This course continues to develop competencies of the Family and Adult-Gero Nurse Practitioner including requirements for practice, and prescribing. Quality of health care delivery is examined. Prerequisites: graduate standing; and NURS 60120 and NURS 61292. Corequisite: NURS 61892.

1.000 Credit hours
1.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

NURS 60130 - ADULT GERONOTLOGY ACUTE CARE NURSE PRACTITIONER ROLE

This course introduces the acute care nurse practitioner student to the role of inpatient medical management, utilizing evidence based practice, and working with interdisciplinary team members. The student will also have an experience caring for the under-served in the hospital and/or community setting. Additionally, the student will participate in a simulation workshop, demonstrating common inpatient procedures. The student will also be introduced to the role of the nurse practitioner, the professional responsibilities and stewardship. Prerequisites: NURS 60120, NURS 60441 and NURS 61292; graduate standing. Corequisite: NURS 61392.

1.000 Credit hours
1.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

NURS 60140 - WOMEN'S HEALTH CARE NURSE PRACTITIONER I

Development of foundational basis for competent clinical practice in women's health is the basis for this course. Emphasis is placed on the menstrual cycle, fertility control, and normal and abnormal gynecological conditions. Course also emphasizes the coordination of care needed within the clinical setting through the diagnostic, planning and evaluational components pertinent to clinical practice. Prerequisites: graduate standing. Pre/corequisite: NURS 60015. Corequisite: NURS 61492.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

NURS 60151 - PSYCHIATRIC MENTAL HEALTH ADVANCED PRACTICE NURSE I: INDIVIDUAL
PSYCHOTHERAPY ACROSS THE LIFESPAN

Basic elements related to individual psychotherapy, as well as various theoretical approaches to individual psychotherapy are examined. Prerequisites: NURS 60012 and NURS 60051; and graduate standing; and nursing [NURS] major. Corequisite: NURS 61592.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

NURS 60160 - PRIMARY CARE PEDIATRICS

Addresses the care of pediatric patients in a primary care setting. Focus is on the acute illnesses and management of age and developmentally appropriate anticipatory guidance for infants and children. Prerequisites: graduate standing; and NURS 60015 and NURS 60441. Corequisite: NURS 61692.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

NURS 60170 - PEDIATRIC ASSESSMENT FOR ADVANCED PRACTICE NURSE

Initial pediatric assessment course emphasizes primary care of the infants, children and teens with a holistic approach to well child development, health promotion, illness prevention, and management of developmental challenges with a family centered approach. Prerequisite: graduate standing. Pre/corequisite: NURS 80015. Corequisite: NURS 61792.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

NURS 60199 - THESIS I

Thesis students must register for a total of 6 credit hours, 2 to 6 hours in a single semester distributed over several semesters if desired. Guidelines are established by the College of Nursing. Prerequisites: special approval; and graduate standing.

2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Nursing Department

NURS 60201 - THEORIES FOR ADVANCED PSYCHIATRIC MENTAL HEALTH NURSING

Major theories of historical importance to psychiatric nursing are studied. Significant relationships between various theories are examined and related to psychiatric nursing practice. Only students admitted to the
Psychiatric Mental Health NP or CNS concentrations or post-master's certificate programs may register. Prerequisite: Nursing (NURS) major and graduate standing.

**NURS 60205 - INTRODUCTION TO APPLIED EPIDEMIOLOGY**

Seminar on basic epidemiology principles, concepts and procedures for disease surveillance and investigation. Prerequisite: Graduate standing.

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Levels: Graduate
Schedule Types: Lecture

Nursing Department

**NURS 60210 - ADULT GERONTOLOGY CLINICAL NURSE SPECIALIST II**

Application and further development of the clinical nurse specialist (CNS) role introduced in NURS60110, with continued emphasis on direct care competencies for adults and older adults experiencing common health and illness conditions in a variety of settings. Evaluation of care outcomes including quality and safety are examined. This course is taken concurrently with NURS62192 for clinical application. Prerequisites: graduate standing; and NURS 60110 and 61192. Corequisite: NURS 62192.

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Levels: Graduate
Schedule Types: Lecture

Nursing Department

**NURS 60220 - PRIMARY CARE II: CHRONICALLY ILL ADULTS ACROSS THE LIFESPAN**

Focus of this course is to establish a knowledge base of appropriate collaboration and consultation within a multidisciplinary approach to maximize the effectiveness of health care systems and community services in the health care of adults. Prerequisites: NURS 60125 and NURS 61892; and graduate standing. Corequisite: NURS 62292.

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Levels: Graduate
Schedule Types: Lecture

Nursing Department

**NURS 60230 - ADULT GERONTOLOGY ACUTE CARE NURSE PRACTITIONER I**

The student will apply techniques for critical care evaluation and treatment for the adult gerontology patient, specifically, in the acute care setting. The student will be instructed about pharmacotherapeutic and non-pharmacotherapeutic treatment for acute, acute on chronic and chronic illness. This will be accomplished via classroom lecture, case studies and simulation case studies. Prerequisites: NURS 60130 and NURS 61392; and
NURS 60240 - WOMEN'S HEALTH CARE NURSE PRACTITIONER II

The primary purpose of Women's Health Care Nurse Practitioner II is the application of evidence-based practice and research by advanced practice nurses in the promotion of health and wellness of women during the reproductive years. The emphasis is on normal pregnancy focusing on prevention and health promotion as well as the management of deviations from normal. Clinical assessment skills, including diagnosis, nursing intervention, treatment, and evaluation, will be emphasized and the student is expected to concentrate efforts in attainment and safe execution of skills pertinent to the women during the reproductive years. Prerequisite: NURS 60140, NURS 61492 and NURS 60441; and graduate standing. Corequisite: NURS 62492.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

NURS 60251 - PSYCHIATRIC MENTAL HEALTH APN ADULT II: FAMILY AND GROUP PSYCHOTHERAPY ACROSS THE LIFESPAN

Study of theoretical approaches to advanced psychiatric mental health nursing practice with individuals who are experiencing identified mental health problems. Basic elements related to family and group psychotherapy are examined. Prerequisites: NURS 62592 and graduate standing. Corequisite: NURS 63592.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

NURS 60270 - PEDIATRIC NURSE PRACTITIONER I

Emphasizes the development of competent advanced practice nursing skills and comprehensive knowledge of acute physical and psychosocial illnesses in children including diagnoses, management and evaluation in primary care. Prerequisites: NURS 60015, NURS 60170 and NURS 61792; and graduate standing. Corequisite: NURS 62792.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

NURS 60272 - PEDIATRIC CLINICAL NURSE SPECIALIST I

Focuses on the complex physical and psychological needs of hospitalized acutely ill children and their families.
Analysis and synthesis of holistic assessment serve as conceptual framework for advanced practice nursing interventions. Prerequisites: graduate standing; and Pediatric Clinical Nurse Specialist (PCNS) concentration; and NURS 60007, 60170 and NURS 61792 with a minimum B (3.000) grade. Corequisite: NURS 62992.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

**NURS 60299 - THESIS II**

Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: NURS 60199; and graduate standing and special approval.

2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Nursing Department

**NURS 60310 - ADULT GERONTOLOGY CLINICAL NURSE SPECIALIST III**

Development of clinical nurse specialist (CNS) competencies in the organizational sphere of influence, including analysis of health promotion and care delivery models and their impact on patient health and organizational outcomes. CNS leadership competencies involving consultation, mentoring, coaching, role modeling and education with the interdisciplinary health care team are developed. Strategies for developing and evaluating programs of care based on analysis of professional standards, clinical outcomes and cost effectiveness are addressed. This course is taken concurrently with NURS63192 for clinical application. Prerequisites: NURS 60210 and NURS 62192. Corequisite: NURS 63192.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

**NURS 60314 - INTERNSHIP IN HEALTH CARE MANAGEMENT**

Provides an opportunity for students to gain practical experience and be exposed to processes of strategy creation, policy development, decision-making and patient care with the health care industry. Prerequisites: NURS 65092 and BAD 64271 and BAD 6404 and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

**NURS 60315 - BUDGETARY AND FISCAL MANAGEMENT FOR NURSES**

Examines management of fiscal resources in nursing service settings. Prerequisite: graduate standing.

3.000 Credit hours
### NURS 60320 - COMPREHENSIVE PRIMARY CARE III: ADULTS ACROSS THE LIFESPAN

Synthesizes an understanding of the transition to the professional role of the primary care nurse practitioner. Integration of practice, theory, leadership and evidence-based practice will all be applied to primary care. Prerequisites: graduate standing; and NURS 60220 and 62292. Corequisite: NURS 63692.

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### NURS 60325 - PRIMARY CARE: FAMILY HEALTH AND CHRONIC ILLNESS ACROSS THE LIFESPAN

The content of this course is organized around common health issues, needs and problems of women and children. Additional focus is placed on health promotion and disease detection as related to pediatric primary care, preconception, pregnancy, and post-partum patients. Prerequisites: NURS 60220 and NURS 62292; and graduate standing. Corequisite: NURS 63292.

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### NURS 60330 - ADULT GERONTOLOGY ACUTE CARE NURSE PRACTITIONER II

The student will apply therapeutic measures for patients with specialty needs as it relates to acute, acute on chronic and chronic illness. Additionally, the student will review therapeutic conversation with patient and patient's family via case studies and role-play. Students will synthesize information on billing, coding, credentialing and certification requirements. Prerequisites: NURS 60230 and NURS 62392; and graduate standing. Corequisite: NURS 63392.

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### NURS 60340 - WOMEN'S HEALTH CARE NURSE PRACTITIONER III

Focus on the legal and business aspects associated with refinement of women's health nurse practitioner skills and expansion of knowledge related to women's health in selected areas of concentration. Prerequisites: NURS 60240, NURS 62492 and NURS 60506; and graduate standing. Corequisite: NURS 63492.

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**NURS 60353 - PSYCHIATRIC MENTAL HEALTH ADVANCED PRACTICE NURSE III: ORGANIZATION AND COMM ASSESS AND CONSULTATION**

(Cross-listed with NURS 80353) Study of the theoretical approaches to psychiatric mental health advanced practice nursing with organizations and communities. Emphasis is on learning consultation and liaison skills. Students will develop skills in performing a community needs assessment and organizational analysis. Prerequisites: NURS 60251; and graduate standing. Pre/Corequisite: NURS 63592.

3.000 Credit hours
3.000 Lecture hours

**NURS 60355 - PRIMARY HEALTH CARE CONCEPTS FOR THE PSYCHIATRIC MENTAL HEALTH ADVANCE PRACTICE NURSE**

Study of common co-morbid illnesses encountered with individuals experiencing severe mental illness. Issues related to diagnosis, treatment, and referral are emphasized. Prerequisites: NURS 60012, NURS 60015 and NURS 60051; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

**NURS 60370 - PEDIATRIC NURSE PRACTITIONER II**

Focuses on continued development of advanced practice nursing assessment skills for well and-or acute care of infants, children and adolescents. Prerequisites: NURS 60270 and NURS 62792. Corequisite: NURS 63792.

1.000 Credit hours
1.000 Lecture hours

**NURS 60372 - CARE OF THE CHRONICALLY ILL CHILD FOR ADVANCE PRACTICE NURSE**

Emphasizes the development of competent advanced practice nursing skills and comprehensive knowledge of chronic illness-conditions in children, including diagnoses, management and evaluation in primary care. Concepts of chronic illness and interventions for families are explored. Prerequisites: NURS 60370 and NURS 63792; and graduate standing. Corequisite: NURS 63992.

3.000 Credit hours
3.000 Lecture hours
NURS 60392 - INTERNSHIP IN HEALTH AND PUBLIC ADMINISTRATION

(Repeatable for credit) Provides an opportunity for students to gain practical experience and be exposed to processes of public decision-making and policy development within the health care sector. Prerequisite: Enrollment in MSN/MPA program. Graduate standing.

3.000 Credit hours
1.000 Lecture hours
6.000 Other hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

NURS 60403 - METHODS OF INQUIRY

(Cross-listed with NURS 80403) Surveys types of research designs and methods that produce evidence contributing to positive patient outcomes. For each design the student learns essential elements, appropriate use and the criteria for rigor within the context of patient outcomes. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

NURS 60440 - WOMEN'S HEALTH CARE NURSE PRACTITIONER IV

Further development of a foundation for competent clinical practice within a health care setting. Introduces the student to the practice of primary health care of women including premenopausal and menopausal women. Included are principles of growth and development, health promotion, disease prevention and management of common acute and chronic health problems. Emphasis is placed on the biological, psychological and sociocultural aspects of care. Pathophysiology, assessment and diagnostic techniques specific to acute and common problems are stressed. Nursing strategies related to health problems used to enhance, maintain and restore health are emphasized. Also emphasized are the coordination of care needed within the clinical setting, collaboration and use of community resources. Prerequisites: NURS 60340 and NURS 63492; and graduate standing. Corequisite: NURS 60050 and NURS 64892.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

NURS 60441 - PHARMACOLOGY FOR ADVANCED PRACTICE NURSING

A survey course addressing the fundamental principles of medication prescribing and administration necessary for nurses in advanced practice. Course addresses pharmacodynamics, pharmacokinetics and pharmacotherapeutics. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours
### NURS 60450 - ETHICAL AND CULTURAL ISSUES FOR HEALTH PROFESSIONALS

This course will examine varying cultural perspectives, including one's own and critical ethical issues faced by today's health care providers. Prerequisite: Graduate standing.

- **2.000 Credit hours**
- **2.000 Lecture hours**

### NURS 60451 - HEALTH POLICY AND DELIVERY SYSTEMS FOR HEALTH CARE PROFESSIONALS

This course focuses on health care policy, financing, and delivery systems. Students explore the political, social, economic, and scientific bases of health policy formation, primarily in the U.S.; opportunity exists for individual exploration of international health concerns of importance. "State of the science" assignments concern current research findings related to the health care delivery systems, and health policy and outcomes. Economic drivers, and public and private funding for health services, are examined in all topic areas throughout the course. Students will research a health policy or health care delivery issue of interest. Prerequisite: Graduate standing.

- **2.000 Credit hours**
- **2.000 Lecture hours**

### NURS 60452 - PSYCHIATRIC MENTAL HEALTH FAMILY NURSE PRACTITIONER ROLE

This is the capstone course for students in the Psychiatric Mental Health Family Nurse Practitioner concentration. Students further integrate and apply Psychiatric Mental Health Advanced Practice Nurse knowledge and learn about their professional roles, coached by established Psychiatric Mental Health Advanced Practice Registered Nurses. Prerequisite: graduate standing. Pre/Corequisites: NURS 60353 and NURS 60355. Corequisite: NURS 64592.

- **2.000 Credit hours**
- **2.000 Lecture hours**

### NURS 60470 - PEDIATRIC NURSE PRACTITIONER III

Focus on synthesizing pediatric nurse practitioner knowledge and skills to provide expert care to a selected population of pediatric clients. Prerequisites: NURS 60372 and NURS 63992; and graduate standing. Corequisite: NURS 64792.

- **2.000 Credit hours**
- **2.000 Lecture hours**
NURS 60472 - PEDIATRIC CLINICAL NURSE SPECIALIST II

Focus on synthesizing the clinical nurse specialist knowledge and skills to provide expert care to a selected population of pediatric clients. Prerequisites: graduate standing; and NURS 60372 and NURS 63992 with a minimum B (3.000) grade. Corequisite: NURS 64992.

2.000 Credit hours
2.000 Lecture hours

NURS 60496 - INDEPENDENT STUDY

(Repeatable for credit)Readings and/or research supervised by a member of graduate faculty. Provides students the opportunity to explore a content area in depth. Prerequisite: Special approval and graduate standing.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

NURS 60498 - RESEARCH

(Repeatable for credit)Research or individual investigation supervised by a graduate faculty member. Repeat registration permitted. Maximum of 9 credit hours may apply toward degree. Prerequisite: Special approval and graduate standing.

1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

NURS 60506 - CLINICAL DIAGNOSTICS FOR ADVANCED PRACTICE NURSES

Prepares the student in the selection, use and interpretation of laboratory and other diagnostic tests for screening, examination, and therapeutics in the care of ambulatory adults. The course examines comprehensive laboratory and diagnostic techniques and guides the student in safe and appropriate application. The student is be able to use their understanding of complex clinical situations to build specialty nursing knowledge. Throughout this course the student is guided in the demonstration of sound clinical judgment in diagnostic testing for patient assessment and evaluation using case management problems. Prerequisites: graduate standing. Pre/corequisites: NURS 60015 and NURS 60045.

3.000 Credit hours
3.000 Lecture hours
**NURS 60540 - WOMEN'S HEALTH CARE NURSE PRACTITIONER V**

Student performs in the advanced practice role with a specified population of clients of the student's choice in a selected multidisciplinary care setting. Students have an opportunity to test the effectiveness of various strategies inherent within the role of nurse practitioner and to demonstrate leadership through role implementation under the guidance of the faculty. Prerequisites: NURS 60050; and NURS 60440 and NURS 64892; and graduate standing. Corequisite: NURS 65892.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

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**NURS 60592 - NURSING EDUCATION PRACTICUM**

(Repeatable for credit) Prepares students with practical experiences in curriculum design, implementation, evaluation, and instruction with a master educator in the academic and or staff development setting. Prerequisites: NURS 60601and NURS 60602, NURS 60604 and NURS 60605; and graduate standing.

3.000 Credit hours
1.000 Lecture hours
12.000 Other hours

Levels: Graduate
Schedule Types: Lecture, Practicum or Internship

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**NURS 60601 - CURRICULUM AND INSTRUCTION IN NURSING EDUCATION**

For master's enrolled or master's prepared nurses learning to teach and facilitate critical thinking in the areas of curriculum planning, design, development, implementation and evaluation in nursing education in the academic and staff development settings. Prerequisite: graduate standing. Pre/Corequisites: NURS 60015 and NURS 60101.

3.000 Credit hours
1.000 Lecture hours
4.000 Lab hours

Levels: Graduate
Schedule Types: Laboratory, Lecture

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**NURS 60602 - ROLES AND EVALUATION FOR NURSING EDUCATION CURRICULA**

For master's enrolled or master's prepared nurses focusing on theory, history and techniques of evaluation and testing for nurse educators in academic and staff development settings. Faculty and student roles, and legal and ethical issues are addressed. Prerequisite: NURS 60601 and graduate standing.

3.000 Credit hours
1.000 Lecture hours
4.000 Lab hours

Levels: Graduate
**NURS 60604 - CLINICAL NURSING AND EDUCATION ISSUES IN A SPECIALTY AREA**

This course focuses on exploration of pertinent issues applicable to clinical practice. Students will analyze how this impacts their role as nurse educators within their specialty. Prerequisite: nursing graduate standing.

- 2.000 Credit hours
- 1.000 Lecture hours
- 2.000 Lab hours

Levels: Graduate  
Schedule Types: Laboratory, Lecture

**Nursing Department**

**NURS 60605 - NURSING EDUCATION WITH TECHNOLOGY**

This course is designed for master's enrolled or master's prepared students with a focus in nursing education. Theory, concepts and evidence are introduced to support the use of technology in nursing education. Students gain an understanding of how to use and integrate a variety of technology tools as they prepare to deliver educational offerings in academic and staff development nursing settings. Prerequisite: NURS 60601; and graduate standing. Corequisite: NURS 60602 and NURS 60604.

- 2.000 Credit hours
- 1.000 Lecture hours
- 2.000 Lab hours

Levels: Graduate  
Schedule Types: Laboratory, Lecture

**Nursing Department**

**NURS 61006 - NEUROBIOLOGY AND PSYCHOPHARMACOLOGY OF MAJOR PSYCHIATRIC DISORDERS: CHILD/ADOLESCENT FOCUS**

Focuses on the neurobiology of severe and persistent psychiatric disorders of children and adolescents. Addresses fundamental principles underlying psychopharmacology related to these disorders. Prerequisite: graduate standing.

- 3.000 Credit hours
- 3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

**Nursing Department**

**NURS 61095 - SPECIAL TOPICS IN NURSING**

(Repeateable for credit) Topics in nursing such as holistic health, selected pathological alterations and recent developments. May include clinical practicum. May be repeated three times with approval for a maximum of 12 credits applied toward the degree. Prerequisite: Graduate standing in nursing.

- 2.000 TO 6.000 Credit hours
- 2.000 TO 6.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture
NURS 61192 - ADULT GERONTOLOGY CLINICAL NURSE SPECIALIST I PRACTICUM

Clinical practicum of 210 hours with application of principles of clinical nurse specialist practice introduced in NURS 60110. The student acquires direct care CNS competencies in specialty practice with adults and older adults in a variety of health care settings in consultation with faculty and a clinical preceptor. Prerequisites: NURS 60015; and graduate standing. Pre/Corequisites: NURS 60441. Corequisite: NURS 60110.

2.000 Credit hours
14.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

NURS 61292 - PRIMARY CARE I PRACTICUM: ADULTS ACROSS THE LIFESPAN

Practicum for the concepts introduced in Adult-Gero Primary Care I. Includes 105 practicum hours. Prerequisites: NURS 60015; and graduate standing. Corequisite: NURS 60120.

1.000 Credit hours
7.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

NURS 61392 - ADULT GERONTOLOGY ACUTE CARE NURSE PRACTITIONER ROLE PRACTICUM

(Repeatable for credit) This practicum introduces the student to the concepts of working with multi-disciplinary teams and follows the content taught in NURS 60130 Adult Gerontology Acute Care Nurse Practitioner Role. Prerequisites: graduate standing; and NURS 60120 and 61292. Corequisite: NURS 60130.

1.000 TO 2.000 Credit hours
7.000 TO 14.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

NURS 61492 - WOMEN'S HEALTH CARE NURSE PRACTITIONER I PRACTICUM

Practicum for concepts introduced in Women's Health Care NP I. This course has 105 clinical hours. Prerequisites: graduate standing. Pre/Corequisite: NURS 60015. Corequisite: NURS 60140.

1.000 Credit hours
7.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

NURS 61592 - PSYCHIATRIC MENTAL HEALTH ADVANCED PRACTICE NURSE I PRACTICUM IN NURSING
Initial PMH nurse practitioner practicum emphasizes the development of knowledge and skills in mental health assessment, individual psychotherapy, and psychopharmacologic therapies with individuals experiencing chronic or acute mental illness. 210 practicum hours required including 105 child-adolescent and 105 adult-geriatric. Prerequisites: NURS 60012 and NURS 60051; and graduate standing. Corequisite: NURS 60151.

Levels: Graduate
Schedule Types: Practicum or Internship

Nursing Department

**NURS 61692 - PRIMARY CARE PEDIATRICS PRACTICUM**

Practicum for Primary Care Pediatrics is the clinical experience to correspond with the content in the corresponding didactic course. 105 hours of practicum. Prerequisites: NURS 60015; and graduate standing. Corequisite: NURS 60160.

1.000 Credit hours
7.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Nursing Department

**NURS 61792 - PEDIATRIC ASSESSMENT FOR ADVANCED PRACTICE NURSE PRACTICUM**

This course is the clinical application of concepts introduced in Advanced Pediatric Assessment for Advanced Practice Nurses. 105 hours of practicum. Prerequisites: NURS 60045 and NURS 60101; and graduate standing. Pre/corequisite: NURS 60015. Corequisite: NURS 60170.

1.000 Credit hours
7.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Nursing Department

**NURS 61892 - ADVANCED PRACTICE REGISTERED NURSE ROLE PRACTICUM**

Practicum for the concepts introduced in NURS 60125 Family and Adult-Gero Nurse Practitioner Role. Includes 105 practicum hours. Prerequisites: graduate standing; and NURS 60120 and 61292. Corequisite: NURS 60125.

1.000 Credit hours
7.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Nursing Department

**NURS 62192 - ADULT GERONTOLOGY CLINICAL NURSE SPECIALIST II PRACTICUM**

Application of principles of clinical nurse specialist (CNS) practice introduced in NURS 60210. The student acquires direct care CNS competencies in specialty practice with adults and older adults in a variety of health care settings in consultation with faculty and a clinical preceptor. 210 hours of practicum. Prerequisites: NURS 60110 and NURS 61192; and graduate standing. Corequisite: NURS 60210.
NURS 62292 - PRIMARY CARE II PRACTICUM: CHRONICALLY ILL ADULTS ACROSS THE LIFESPAN

Practicum for the concepts introduced in Primary Care II: Chronically Ill Adults. 105 practicum hours.
Prerequisites: NURS 60125 and NURS 61892; and graduate standing. Corequisite: NURS 60220.
1.000 Credit hours
7.000 Other hours

NURS 62392 - ADULT GERONTOLOGY ACUTE CARE NURSE PRACTITIONER I PRACTICUM

(Cross-listed with NURS 82392) The student will apply techniques for evaluation and treatment of the adult-gerontology patient in the acute care setting. The course includes approaches to pharmacotherapeutic and non-pharmacotherapeutic treatment for acute, acute on chronic and chronic illness. 210 hours of practicum.
Prerequisite: NURS 60130 and NURS 61392; and graduate standing. Corequisite: NURS 60230.
1.000 TO 2.000 Credit hours
7.000 TO 14.000 Other hours

NURS 62492 - WOMEN'S HEALTH CARE NURSE PRACTITIONER II PRACTICUM

Practicum for concepts introduced in Women's Health Care NP II. This course has 105 practicum hours.
Prerequisites: NURS 60140 and NURS 61492; and graduate standing. Pre/corequisite: NURS 60441.
Corequisite: NURS 60240.
1.000 Credit hours
7.000 Other hours

NURS 62592 - PSYCHIATRIC MENTAL HEALTH ADVANCED PRACTICE NURSE II PRACTICUM IN NURSING

Second Psychiatric Mental Health Advanced Practice Nurse practicum emphasizes the continued development of knowledge and skills in mental health assessment, individual psychotherapy, and psychopharmacologic therapies with individuals experiencing chronic or acute mental illness. Students will also get experience working with a Psychiatric Mental Health prescriber. Group supervision is provided. 105 practicum hours.
Prerequisites: NURS 61592 and NURS 60151; and graduate standing.
1.000 Credit hours
7.000 Other hours
NURS 62792 - PEDIATRIC NURSE PRACTITIONER I PRACTICUM

Practicum for the concepts introduced in Pediatric Nurse Practitioner I. 105 hours of practicum. Prerequisites: NURS 60015 and NURS 60170; and graduate standing. Corequisite: NURS 60270.

1.000 Credit hours
7.000 Other hours

NURS 62992 - PEDIATRIC CLINICAL NURSE SPECIALIST I PRACTICUM

Practicum for the concepts introduced in Pediatric Clinical Nurse Specialist I. Prerequisites: graduate standing; and NURS 60170 and NURS 61792 with a minimum B (3.000) grade. Corequisite: NURS 60272.

2.000 Credit hours
14.000 Other hours

NURS 63192 - ADULT GERONTOLOGY CLINICAL NURSE SPECIALIST III PRACTICUM

Acquires CNS systems and leadership competencies in specialty practice with adults and older adults in a variety of health care settings in consultation with faculty and a clinical preceptor. 105 hours of clinical practicum. Prerequisites: NURS 60210 and NURS 62192; and graduate standing. Corequisite: NURS 60310.

1.000 Credit hours
7.000 Other hours

NURS 63292 - PRIMARY CARE: FAMILY HEALTH AND CHRONIC ILLNESS ACROSS THE LIFESPAN PRACTICUM

This course is a practicum of concepts introduced in NURS 60325 Primary Care: Family Health and Chronic Illness course. 210 hours of practicum. Prerequisites: NURS 60220 and NURS 62292; and graduate standing. Corequisite: NURS 60325.

2.000 Credit hours
14.000 Other hours
NURS 63392 - ADULT GERONTOLOGY ACUTE CARE NURSE PRACTITIONER II PRACTICUM

(Cross-listed with NURS 83392) The student applies therapeutic measures for patients with specialty needs as it relates to acute, acute on chronic and chronic illness. Demonstrates competency in direct acute care of patients across the adult lifespan and demonstrate professional, compassionate care to patients and their significant others. 210 hours of practicum. Prerequisites: NURS 60230 and NURS 62392; and graduate standing. Corequisite: NURS 60330.

1.00 TO 2.00 Credit hours
7.00 TO 14.00 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Nursing Department

NURS 63492 - WOMEN’S HEALTH CARE NURSE PRACTITIONER III PRACTICUM

Practicum concepts introduced in Women’s Health Care Nurse Practitioner III. This course has 105 clinical hours. Student must achieve a "B" (3.0) or higher to progress. Prerequisites: NURS 60506; and NURS 60240 and NURS 62492 with a minimum "B" (3.000) grade; and graduate standing. Corequisite: NURS 60340.

1.00 Credit hours
7.00 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Nursing Department

NURS 63592 - PSYCHIATRIC MENTAL HEALTH ADVANCED PRACTICE NURSE III PRACTICUM NURSING

Third Psychiatric Mental Health Advanced Practice Nurse practicum emphasizes the development of knowledge and skills in family and group psychotherapies with individuals experiencing chronic or acute mental illness. Prerequisites: NURS 62592; and graduate standing. Corequisite: NURS 60251.

1.00 Credit hours
7.00 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Nursing Department

NURS 63692 - COMPREHENSIVE PRIMARY CARE III PRACTICUM: ADULTS ACROSS THE LIFESPAN

Practicum for the concepts introduced in AdultGero Comprehensive Primary Care III. 210 hours of practicum. Prerequisites: NURS 60220 and NURS 62292; and graduate standing. Corequisite: NURS 60320.

2.00 Credit hours
14.00 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Nursing Department

NURS 63792 - PEDIATRIC NURSE PRACTITIONER II PRACTICUM

Practicum for the concepts introduced in Pediatric Nurse Practitioner II. 105 hours of practicum. Prerequisites:
NURS 60270 and NURS 62792; and graduate standing. Corequisite: NURS 60370.
1.000 Credit hours
7.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Nursing Department

NURS 63992 - CARE OF THE CHRONICALLY ILL CHILD FOR ADVANCE PRACTICE NURSE PRACTICUM

Practicum for the concepts introduced in Advanced Nursing Care of the Chronically Ill Child. 105 hours of practicum. Prerequisites: NURS 60270 and NURS 60270; and graduate standing. Corequisite: NURS 60372.
1.000 Credit hours
7.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Nursing Department

NURS 64492 - PSYCHIATRIC MENTAL HEALTH NURSING PRACTICUM I

(Repeatable for credit) The focus of this practicum is learning mental health assessment, diagnosis, and individual psychotherapy skills. Requires 140 clinical hours. Group supervision is provided. Prerequisites: NURS 60001 or 60004; and NURS 61003 or 61006; and NURS 60206; and graduate standing.
2.000 Credit hours
11.660 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Nursing Department

NURS 64592 - PSYCHIATRIC MENTAL HEALTH FAMILY NURSE PRACTITIONER ROLE PRACTICUM

This is the capstone practicum course for students in the Psychiatric Mental Health Family Nurse Practitioner concentration. Students further integrate and apply Psychiatric Mental Health Advance Practice Nurse knowledge and learn about their professional roles, coached by established Psychiatric Mental Health Advanced Practice Registered Nurses. 210 hours of practicum. Prerequisites: NURS 60353 and NURS 60355; and graduate standing. Corequisite: NURS 60452.
2.000 Credit hours
14.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Nursing Department

NURS 64792 - PEDIATRIC NURSE PRACTITIONER III PRACTICUM

Practicum for the concepts introduced in Pediatric Nurse Practitioner III. 210 hours of practicum. Prerequisites: NURS 60372 and NURS 63992; and graduate standing. Corequisite: NURS 60470.
2.000 Credit hours
14.000 Other hours

Levels: Graduate
NURS 64892 - WOMEN'S HEALTH CARE NURSE PRACTITIONER IV PRACTICUM

This course is the clinical application of concepts introduced in Women's Health Care NP IV. 105 hours of practicum. Prerequisite: NURS 60340 and NURS 63492; and graduate standing. Corequisite: NURS 60050 and NURS 60440.

1.000 Credit hours
7.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Nursing Department

NURS 64992 - PEDIATRIC CLINICAL NURSE SPECIALIST II PRACTICUM

Practicum for the concepts introduced in Pediatric Clinical Nurse Specialist II. Prerequisites: graduate standing; and NURS 60372 and NURS 63992 with a minimum B (3.000) grade. Corequisite: NURS 60472.

2.000 Credit hours
14.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Nursing Department

NURS 65092 - PRACTICUM: NURSING AND HEALTH CARE MANAGEMENT I

(Repeatable for credit) The required first of two capstone management practicums in a health care agency for nurses. Students integrate and apply management knowledge and are coached in professional roles by established nursing and health care management leaders. Prior to registration for this course, students must complete 18-25 credit hours of combined NURS, BAD and PADM courses before taking this course. Prerequisite: special approval and graduate standing.

3.000 TO 5.000 Credit hours
7.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Nursing Department

NURS 65192 - PRACTICUM: NURSING AND HEALTH CARE MANAGEMENT II

(Repeatable for credit) The second of two capstone management practicums in a health care agency for nurses. Students further integrate and apply management knowledge and their professional roles coached by established nursing and health care management leaders. One credit hour managerial topics. Prerequisites: NURS 65092 and graduate standing.

3.000 TO 5.000 Credit hours
9.000 TO 11.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Nursing Department
**NURS 65892 - WOMENS HEALTH CARE NURSE PRACTITIONER V PRACTICUM**

Practicum for concepts introduced in Women’s Health Care Nurse Practitioner V. 210 hours in practicum. Prerequisites: NURS 60050, NURS 60440 and NURS 64892; and graduate standing. Corequisite: NURS 60540.
2.000 Credit hours
14.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Nursing Department

**NURS 70600 - CLINICAL SCHOLAR I**

Focus is transitioning to the clinical scholar leader role within an identified area of advanced nursing practice. Emphasis is placed on the epistemology underlying advanced nursing practice and the integration of theoretical frameworks and evidence-based practice principles in achieving optimal health outcomes for individuals and groups. Comprised of 2 didactic content hours per week and a clinical practicum of 7 hours per week. Prerequisite: doctoral standing and special approval.
3.000 Credit hours
2.000 Lecture hours
7.000 Other hours

Levels: Graduate
Schedule Types: Clinic, Lecture

Nursing Department

**NURS 70602 - SYNTHESIS AND APPLICATION OF EVIDENCE FOR ADVANCED NURSING PRACTICE**

Focus is on the concepts, models, and methods for implementation of evidence-based nursing practice at both individual clinician and system levels. Competencies for the identification, analysis, synthesis, and application of evidence relevant to nursing and health care practice are developed. Factors that facilitate and impede implementing and sustaining evidence-based practice are considered. Students learn skills necessary for identification of clinical problems in advanced practice nursing and promoting adoption and implementation of evidence-based solutions to promote patient health outcomes. Prerequisite: doctoral standing.
Pre/Corequisites:: NURS 70727.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

**NURS 70605 - PROGRAM EVALUATION IN NURSING**

Analysis of theories and models of program evaluation and their relationship to designs, processes, techniques, and outcomes in nursing related evaluations. Prerequisite: special approval; and doctor of nursing practice standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
NURS 70610 - CLINICAL SCHOLAR II

Translating and integrating theory and scientific evidence into the clinical work of the advanced practice clinical scholar is the focus of this second seminar course. Culturally-aware approaches are developed to resolve a healthcare issue using theoretic models and principles of evidence-based practice to design innovative interventions. Comprised of 2 didactic content hours per week and a clinical practicum of 14 hours per week.

Prerequisites: NURS 70600; and doctoral standing; and special approval.

4.000 Credit hours
2.000 Lecture hours
14.000 Other hours

Levels: Graduate
Schedule Types: Clinic, Lecture

NURS 70640 - ADVANCED LEADERSHIP IN HEALTHCARE

Advanced competencies of the doctoral-prepared advanced practice nurse for transformational leadership in healthcare to improve patient and population health outcomes are addressed. Five key leadership competencies including creating and leading change; self-knowledge; strategic vision; interpersonal communication; and organizational effectiveness are presented with examples and case studies. Transcending themes of ethics, research, interprofessional collaboration, creativity, and insuring accountability are addressed throughout the course. Students conduct a self-assessment, and develop and implement individualized action plans for advanced competency in interprofessional healthcare leadership. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

NURS 70692 - CLINICAL SCHOLAR PRACTICUM

(Repeatable for credit)Synthesis of components of clinical scholar leader role comprises this practicum. Students apply advanced leadership and clinical scholarship skills to developing and evaluating approaches to healthcare problems in a practicum setting. Prerequisites: NURS 70610; and doctoral standing; and special approval.

3.000 Credit hours
21.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

NURS 70705 - FOUNDATIONS OF RESEARCH METHODS IN NURSING

Examines diverse paradigms and research methods as the foundation for scholarly inquiry in nursing knowledge development. Students begin building a foundation for focused intellectual inquiry in a substantive area of nursing. Prerequisite: doctoral standing. Corequisite: NURS 70710.

3.000 Credit hours
3.000 Lecture hours
NURS 70710 - HISTORY AND PHILOSOPHY OF NURSING SCIENCE

This course examines the nature and metaphysics and epistemology and the influence of contemporary Eastern and Western philosophies on the developing epistemology of disciplinary nursing knowledge. Prerequisite: Doctoral standing and special approval.
3.000 Credit hours
3.000 Lecture hours

NURS 70715 - THEORY CONSTRUCTION AND DEVELOPMENT IN NURSING

This course examines strategies for theory development including logical-empirical-deductive and inductive approaches. Emphasis will be on elements and strategies used in theory building. Prerequisite: NURS 70710 and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

NURS 70720 - INTRODUCTION TO NURSING KNOWLEDGE DOMAINS

Introductory seminar analyzing selected theoretical and methodological approaches to knowledge development in nursing. Emphasis on critical analysis of knowledge in areas of special interest. Prerequisite: Doctoral standing or special approval from Department. Pre- or corequisite: NURS 70715.
3.000 Credit hours
3.000 Lecture hours

NURS 70725 - QUANTITATIVE RESEARCH METHODS IN NURSING

Extends students' knowledge of the theory and practice of quantitative research in nursing. Focus is on the major types of quantitative design in nursing science. Theoretical and procedural issues related to design, measurement and data management with a substantive area of nursing inquiry are emphasized. Akron 8200:825. Prerequisite: doctoral standing. Corequisites: NURS 70705 and NURS 70727.
3.000 Credit hours
3.000 Lecture hours
**NURS 70727 - ADVANCED HEALTH CARE STATISTICS I**

Comprehension of bivariate and multivariate descriptive and inferential statistics designed for nurse researchers. Applications to research problems in nursing. Akron 8200 827. Prerequisite: Doctoral standing.

3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Nursing Department

**NURS 70730 - QUALITATIVE RESEARCH METHODS IN NURSING**

Selected qualitative research methods used to study nursing phenomena. Philosophical bases; design, data collection and analysis; evaluation of rigor; and ethical issues for major qualitative methods will be analyzed with regard to nursing phenomena. Prerequisite: Doctoral standing.

3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Nursing Department

**NURS 70735 - NURSING AND HEALTH CARE POLICY**

Critical examination of theories and processes of formulating state/national health care policy. Focus on health issues, the political and legislative process and contemporary policy dilemmas. Prerequisite: Doctoral standing and special approval.

3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Nursing Department

**NURS 70737 - ADVANCED HEALTH CARE STATISTICS II**

Application of bivariate and multivariate descriptive and inferential statistics to research problems in nursing. Akron 8200 837. Prerequisite: NURS 70727 and doctoral standing or special approval from department.

3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Nursing Department

**NURS 70745 - ADVANCED TOPICS IN QUANTITATIVE RESEARCH METHODS**

Focuses on integration and application of components of quantitative research design in nursing through application of multivariate design principles to existing data sets. Advanced topics in methods, statistics and measurement are addressed. Prerequisites: NURS 70725 and 70727 and doctoral standing. Pre- or corequisite:
NURS 70747 - ADVANCED METHODS FOR NURSING RESEARCH: APPLICATION OF QUALITATIVE METHODS

Theory, data collection and analysis used in qualitative nursing research with a focus on phenomenology, grounded theory and ethnography. Prerequisite: NURS 70720 and NURS 70725 and NURS 70730. Doctoral standing.

Levels: Graduate
Schedule Types: Lecture
Nursing Department

NURS 70749 - ADVANCED METHODS FOR NURSING RESEARCH: GRANT DEVELOPMENT AND FUNDING

Advanced seminar on critical analysis of proposal and grant development, funding, peer review and advocacy process with emphasis on the development of a grant proposal. Prerequisite: Doctoral standing or special approval from department; and NURS 70720.

Levels: Graduate
Schedule Types: Lecture
Nursing Department

NURS 70792 - FIELD EXPERIENCE IN NURSING

(Repeatable for credit) Individual enrollment in field experience settings related to nursing. Prerequisite: Doctoral standing.

Levels: Graduate
Schedule Types: Field Experience
Nursing Department

NURS 70795 - SPECIAL TOPICS IN NURSING

(Repeatable for credit) Study of important topics in nursing practice, research on the profession. Offering in response to existing interests and opportunities. Prerequisite: Doctoral standing.

Levels: Graduate
Schedule Types: Lecture
Nursing Department

**NURS 70796 - INDIVIDUAL INVESTIGATION IN NURSING**

(Repeatable for credit) Individual enrollment for independent study in nursing carried out by student under supervision of a doctoral faculty member. Prerequisite: Doctoral standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Nursing Department

**NURS 70798 - RESEARCH IN NURSING**

(Repeatable for credit) Research carried out by a student under faculty supervision. In-depth inquiry should result in a paper or appropriate product. Prerequisite: Doctoral standing.

1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

Nursing Department

**NURS 76199 - DOCTOR OF NURSING PRACTICE SCHOLARLY PROJECT**

(Repeatable for credit) Faculty and preceptor-directed project that contributes to nursing practice knowledge. Culminates in an oral defense and a publishable manuscript. Students register for a total of 6 hours, 2 to 6 hours in a single semester, distributed over three semesters if desired. Prerequisites: NURS 70600; and doctoral standing; and special approval. Pre- or Corequisite: NURS 70610

2.000 TO 6.000 Credit hours
14.000 TO 42.000 Other hours

Levels: Graduate
Schedule Types: Research

Nursing Department

**NURS 76299 - CAPSTONE PROJECT II**

(Repeatable for credit) Capstone project students must continue registration until all degree requirements are met. Prerequisites: NURS 76199; and doctoral standing; and special approval.

1.000 TO 3.000 Credit hours

Levels: Graduate
Schedule Types: Research

Nursing Department

**NURS 80006 - INTRODUCTION TO FAMILY ASSESSMENT AND COUNSELING IN NURSING**

Study of theoretical approaches to counseling interventions with families and couples. Current status of research and evaluation of care is examined. Prerequisite: doctoral of nursing practice standing.
NURS 80007 - ADVANCED HEALTH ASSESSMENT ACROSS THE LIFESPAN

Advanced Health Assessment Across the Lifespan included foundational skills including the comprehensive history, physical, and psychological assessment of the patient. The course will address skills of effective communication and patient interaction which serve as a basis for further clinical experiences. Prerequisite: doctoral standing. Pre/corequisite: NURS 80045.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

NURS 80008 - ADVANCED HEALTH ASSESSMENT ACROSS THE LIFESPAN LABORATORY

This course is the laboratory application of concepts introduced in Advanced Health Assessment Across the Lifespan. Prerequisite: doctoral standing. Pre/corequisites: NURS 80045. Corequisite: NURS 80007.

1.000 Credit hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Laboratory

Nursing Department

NURS 80011 - ADVANCED ASSESSMENT ACROSS THE LIFESPAN LABORATORY FOR ADVANCED PRACTICE REGISTERED NURSES

This laboratory course will augment the objectives for Advanced Assessment Across the Lifespan didactic course. A hands-on approach to mastering skills necessary for thorough physical and functional examinations and patient interviewing techniques. Prerequisites: doctoral standing. Corequisite: NURS 80007.

1.000 Credit hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Laboratory

Nursing Department

NURS 80012 - ADVANCED MENTAL HEALTH ASSESSMENT AND PSYCHOPATHOLOGY ACROSS THE LIFESPAN

Focuses on developing skills related to conducting a holistic mental health assessment and making psychiatric diagnoses. Focuses also on understanding of psychopathology, which is integral to assessment and diagnosis processes. Prerequisites: doctoral standing; and nursing [NURS] major.

4.000 Credit hours
4.000 Lecture hours
### NURS 80013 - ADVANCED HEALTH AND PHYSICAL ASSESSMENT ACROSS THE LIFESPAN LABORATORY FOR FAMILY APRN'S

This laboratory course will augment the objectives for Advanced Assessment Across the Lifespan didactic course. Prerequisites: doctoral standing; and Advanced Practice Registered Nurse: Nurse Practitioner Family (APNF) concentration or Psychiatric Mental Health Family Nurse Practitioner (PMNF) concentration. Corequisite: NURS 60007.

- **1.000 Credit hours**
- **2.000 Lab hours**

### NURS 80015 - ADVANCED HEALTH ASSESSMENT

Advanced Health Assessment comprises foundational skills including the comprehensive history, physical and psychological assessment of the patient. Students apply the diagnostic reasoning process to develop a comprehensive plan of care for patients in a variety of settings. Pre/Corequisite: NURS 60045. Prerequisites: doctoral standing.

- **3.000 Credit hours**
- **3.000 Lecture hours**

### NURS 80030 - HEALTH PROMOTIONS ACROSS THE LIFESPAN FOR FAMILY PRACTICE

This lecture course will augment both the lecture course and Advanced Assessment Across the Lifespan and Advanced Physical and Health Assessment Laboratory for Family Practice. Focus on the anticipatory guidance and health promotional activities which are age and developmentally appropriate across the lifespan. Prerequisites: doctor of nursing practice standing; and advanced Practice Registered Nurse: Nurse Practitioner Family (APNF) concentration. Corequisites: NURS 80015.

- **1.000 Credit hours**
- **1.000 Lecture hours**

### NURS 80045 - PATHOPHYSIOLOGY FOR THE ADVANCED PRACTICE REGISTERED NURSE

Provides graduate nursing students with a theoretic foundation of human physiology and the phenomena that produce alterations or pathology in human physiologic function; and an understanding of the basis of disease processes across the lifespan. Prerequisite: admission to the DNP program. Prerequisite: doctor of nursing practice standing.

- **3.000 Credit hours**
- **3.000 Lecture hours**
NURS 80050 - PHARMACOLOGY FOR WOMEN'S HEALTH NURSE PRACTITIONERS

Web-based course focuses on pharmacology related specifically to women throughout their lifespan. Prepares Advanced Nurse Practitioners to meet the pharmacological healthcare needs of women in primary healthcare setting. Prerequisites: NURS 80441, NURS 80640 and NURS 83492; and doctoral standing. Corequisites: NURS 80440 and NURS 84892.
3.000 Credit hours
3.000 Lecture hours

NURS 80051 - NEUROBIOLOGY AND PSYCHOPHARMACOLOGY OF MAJOR PSYCHIATRIC DISORDERS ACROSS THE LIFESPAN

Focuses on the neurobiology of severe and persistent psychiatric disorders. Addresses fundamental principles underlying psychopharmacology related to these disorders. Prerequisites: doctoral standing; and nursing [NURS] major.
4.000 Credit hours
4.000 Lecture hours

NURS 80101 - THEORETICAL BASIS FOR NURSING PRACTICE

This course will be used to study concepts and theories common to all specialty areas of nursing. It provides a firm basis for advanced clinical nursing practice. Progress in theory development for nursing practice is addressed. Prerequisite: doctor of nursing practice standing.
3.000 Credit hours
3.000 Lecture hours

NURS 80110 - ADULT GERONTOLOGY CLINICAL NURSE SPECIALIST I

Introduction to the clinical nurse specialist role with adults and older adults experiencing common health and illness conditions. The focus is on developing a foundation for evidence-based, patient-centered advanced nursing care, including teaching, coaching and identification and management of symptoms, functional problems and risk behaviors. The scientific and theoretical basis for interventions to achieve clinical outcomes in health promotion and illness care for adults and older persons across the care continuum are explored. This course is taken concurrently with NURS 81192 for clinical application. Prerequisites: NURS 80015 and NURS 80403; and doctoral standing in adult gerontology clinical nurse specialist (AGCN) concentration or adult-gerontology clinical nurse specialist (C844) certificate. Pre/Corequisites: NURS 80441. Corequisite: NURS 81192.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

NURS 80120 - PRIMARY CARE I: ADULTS ACROSS THE LIFESPAN

Introduction to the care of adult-gero primary care patients. Identification and examination of evidence-based primary health care problems, needs, and interventions. The course will focus on biological and behavioral parameters at primary, secondary and tertiary levels of prevention. Prerequisites: doctoral standing; and NURS 80015 and NURS 80441. Corequisite: NURS 81292.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

NURS 80125 - ADVANCED PRACTICE REGISTERED NURSE ROLE

This course continues to develop competencies of the Family and Adult-Gero Nurse Practitioner including requirements for practice and prescribing. Quality of health care delivery is examined. Prerequisites: doctoral standing; and NURS 80120 and NURS 81292. Corequisite: NURS 81892.

1.000 Credit hours
1.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

NURS 80130 - ADULT GERONTOLOGY ACUTE CARE NURSE PRACTITIONER ROLE

This course introduces the acute care nurse practitioner student to the role of inpatient medical management, utilizing evidence-based practice, and working with interdisciplinary team members. The student will also have an experience caring for the under-served in the hospital and-or community setting. Additionally, the student will participate in a simulation workshop, demonstrating common inpatient procedures. This student will also be introduced to the role of the nurse practitioner, the professional responsibilities and stewardship. Prerequisite: doctoral standing; and NURS 80120 and NURS 80441 and NURS 81292. Corequisite: NURS 81392.

1.000 Credit hours
1.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

NURS 80140 - WOMEN'S HEALTH CARE NURSE PRACTITIONER I

Development of foundational basis for competent clinical practice in women's health is the basis for this course. Emphasis is placed on the menstrual cycle, fertility control, and normal and abnormal gynecological conditions. Course also emphasizes the coordination of care needed within the clinical setting through the diagnostic,

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

**NURS 80151 - PSYCHIATRIC MENTAL HEALTH ADVANCED PRACTICE NURSE I: INDIVIDUAL PSYCHOTHERAPY ACROSS THE LIFESPAN**

Basic elements related to individual psychotherapy, as well as various theoretical approaches to individual psychotherapy are examined. Prerequisites: NURS 80012 and NURS 80051; and doctoral standing. Corequisite: NURS 81592.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

**NURS 80160 - PRIMARY CARE PEDIATRICS**

Addresses the care of pediatric patients in a primary care setting. Focus is on the acute illnesses and management of age and developmentally appropriate anticipatory guidance for infants and children. Prerequisites: NURS 80015 and NURS 80441; and doctoral standing. Corequisites: NURS 81692.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

**NURS 80170 - PEDIATRIC ASSESSMENT FOR ADVANCED PRACTICE NURSES**

Initial pediatric assessment course emphasizes primary care of infants, children & teens with a holistic approach to well child development, health promotion, illness prevention, and management of developmental challenges with a family centered approach. Prerequisites: NURS 80045; and doctoral standing. Pre/corerequisite: NURS 80015. Corequisites: NURS 81792.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

**NURS 80199 - DISSERTATION I**

(Repeatable for credit)Independent doctoral research for the dissertation under faculty supervision. Registration of at least two semesters is require, continuing until completion of 30 credit hours. Akron 8200:899. Prerequisite: doctoral standing and admission to doctoral candidacy.

15.000 Credit hours
Nursing Department

NURS 80205 - INTRODUCTION TO APPLIED EPIDEMIOLOGY
Seminar on basic epidemiology principles, concepts and procedures for disease surveillance and investigation. Prerequisite: doctoral standing.
1.000 Credit hours
1.000 Lecture hours

Nursing Department

NURS 80210 - ADULT GERONTOLOGY CLINICAL NURSE SPECIALIST II
Application and further development of the clinical nurse specialist (CNS) role introduced in NURS80110, with continued emphasis on direct care competencies for adults and older adults experiencing common health and illness conditions in a variety of settings. Evaluation of care outcomes including quality and safety are examined. This course is taken concurrently with NURS82192 for clinical application. Prerequisites: NURS 80110 and NURS 81192; and doctoral standing. Corequisite: NURS 82192.
3.000 Credit hours
3.000 Lecture hours

Nursing Department

NURS 80220 - PRIMARY CARE II: CHRONICALLY ILL ADULTS ACROSS THE LIFESPAN
Focus of this course is to establish a knowledge base of appropriate collaboration and consultation within a multidisciplinary approach to maximize the effectiveness of health care systems and community services in the health care of adults. Prerequisites: NURS 80125 and NUIRS 81892; and doctoral standing. Corequisite: NURS 82292.
3.000 Credit hours
3.000 Lecture hours

Nursing Department

NURS 80230 - ADULT GERONTOLOGY ACUTE CARE NURSE PRACTITIONER I
The student will apply techniques for critical care evaluation and treatment for the adult gerontology patient, specifically, in the acute care setting. The student will be instructed about pharmacotherapeutic and non-pharmacotherapeutic treatment for acute, acute on chronic and chronic illness. This will be accomplished via classroom lecture, case studies and simulation case studies. Prerequisites: NURS 80130 and NURS 81392; doctoral standing. Corequisite: NURS 82392.
4.000 Credit hours
4.000 Lecture hours
NURS 80240 - WOMEN’S HEALTH CARE NURSE PRACTITIONER II

The primary purpose of Women’s Health Care Nurse Practitioner II is the application of evidence-based practice and research by advanced practice nurses in the promotion of health and wellness of women during the reproductive years. The emphasis is on the normal pregnancy focusing on prevention and health promotion as well as the management of deviations from normal. Clinical assessment skills, including diagnosis, nursing intervention, treatment, and evaluation, will be emphasized and the student is expected to concentrate efforts in attainment and safe execution of skills pertinent to the women during the reproductive years. Student must achieve a “B” (3.000) or higher to progress. Prerequisites: NURS 80141 and NURS 81492 with minimum B (3.000) grade; and NURS 80441; and doctoral standing. Corequisite: NURS 82492.

2.000 Credit hours
2.000 Lecture hours

NURS 80251 - PSYCHIATRIC MENTAL HEALTH ADVANCED PRACTICE NURSE II: FAMILY AND GROUP PSYCHOTHERAPY ACROSS LIFESPAN

Study of theoretical approaches to advanced psychiatric mental health nursing practice with individuals who are experiencing identified mental health problems. Basic elements related to family and group psychotherapy are examined. Prerequisite: doctoral standing. Pre/Corequisite: NURS 83592.

3.000 Credit hours
3.000 Lecture hours

NURS 80270 - PEDIATRIC NURSE PRACTIONER I

Emphasizes the development of competent advanced practice nursing skills and comprehensive knowledge of acute physical and psychosocial illnesses in children including diagnoses, management and evaluation in primary care. Prerequisites: NURS 80015, NURS 80170 and NURS 81792; and doctoral standing. Corequisite: NURS 82792.

3.000 Credit hours
3.000 Lecture hours

NURS 80272 - PEDIATRIC CLINICAL NURSE SPECIALIST I

Course focuses on the complex physical and psychological needs of hospitalized acutely ill children and their families. Analysis and synthesis of holistic assessment serve as conceptual framework for advanced practice nursing interventions. Student must achieve a "B" (3.0) or higher to progress. Prerequisites: NURS 80170 and
NURS 80299 - DISSERTATION II
(Repeatable for credit) Continuing registration of research, after initial 30 hours of Dissertation I. Prerequisites: 30 hours of NURS 80199 and doctoral standing.

Levels: Graduate
Schedule Types: Dissertation

NURS 80310 - ADULT GERONTOLOGY CLINICAL NURSE SPECIALIST III
Development of clinical nurse specialist (CNS) competencies in the organizational sphere of influence, including analysis of health promotion and care delivery models and their impact on patient health and organizational outcomes. CNS leadership competencies involving consultation, mentoring, coaching, role modeling and education with the interdisciplinary health care team are developed. Strategies for developing and evaluating programs of care based on analysis of professional standards, clinical outcomes, and cost effectiveness are addressed. This course is taken concurrently with NURS 83192 for clinical application. Prerequisites: NURS 80210 and NURS 82192; and doctoral standing. Corequisite: 83192.

Levels: Graduate
Schedule Types: Lecture

NURS 80320 - COMPREHENSIVE PRIMARY CARE III: ADULTS ACROSS THE LIFESPAN
Synthesizes an understanding of the transition to the professional role of the primary care nurse practitioner. Integration of practice, theory, leadership and evidence-based practice will all be applied to primary care. Prerequisite: NURS 80220 and NURS 82292; and doctoral standing. Corequisite: NURS 83692.

Levels: Graduate
Schedule Types: Lecture

NURS 80325 - PRIMARY CARE: FAMILY HEALTH AND CHRONIC ILLNESS ACROSS THE LIFESPAN
The content of this course is organized around common health issues, needs and problems of women and children. Additional focus is placed on health promotion and disease detection as related to pediatric primary care, preconception, pregnancy, and post-partum patients. Prerequisites: NURS 80020 and NURS 82292; and
NURS 80330 - ADULT GERONTOLOGY ACUTE CARE NURSE PRACTITIONER II

The student will apply therapeutic measures for patients with specialty needs as it relates to acute, acute on chronic and chronic illness. Additionally, the student will review therapeutic conversation with patient and patient's family via case studies and role-play. Students will synthesize information on billing, coding, credentialing and certification requirements. Prerequisites: NURS 80230 and NURS 81392; and doctoral standing. Corequisite: NURS 83392.

Levels: Graduate
Schedule Types: Lecture

Nursing Department

NURS 80340 - WOMEN'S HEALTH CARE NURSE PRACTITIONER III

This course focuses on the legal and business aspects associated with refinement of women’s health nurse practitioner skills and expansion of knowledge related to women’s health in selected areas of concentration. Prerequisites: NURS 80240, NURSE 80506 and NURS 82492; and doctoral standing. Corequisite: NURS 83492.

Levels: Graduate
Schedule Types: Lecture

Nursing Department

NURS 80353 - PSYCHIATRIC MENTAL HEALTH ADVANCED PRACTICE NURSE III: ORGANIZATION/COMMUNITY ASSESSMENT/CONSULTATION

(Cross-listed with NURS 60353) Study of the theoretical approaches to psychiatric mental health advanced practice nursing with organizations and communities. Emphasis is on learning consultation and liaison skills. Students develop skills in performing a community needs assessment and organizational analysis. Prerequisites: NURS 80251 and 83592; and doctoral standing.

Levels: Graduate
Schedule Types: Lecture

Nursing Department

NURS 80355 - PRIMARY HEALTH CARE CONCEPTS FOR THE PSYCHIATRIC MENTAL HEALTH ADVANCED PRACTICE NURSE

Study of common co-morbid illnesses encountered with individuals experiencing severe mental illness. Issues related to diagnosis, treatment, and referral are emphasized. Prerequisite: NURS 80012, NURS 80015 and
NURS 80051; and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

NURS 80370 - PEDIATRIC NURSE PRACTITIONER II

Focuses on continued development of advanced practice nursing assessment skills for well and-or acute care of infants, children and adolescents. Prerequisites: NURS 80270 and 82792; and doctoral standing. Corequisite: NURS 83792.
1.000 Credit hours
1.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

NURS 80372 - CARE OF THE CHRONICALLY ILL CHILD FOR ADVANCED PRACTICE NURSES

Emphasizes the development of competent advanced practice nursing skills and comprehensive knowledge of chronic illness conditions in children including diagnoses, management and evaluation in primary care. Concepts of chronic illness and interventions for families are explored. Prerequisites: NURS 80370 and 83792; and doctoral standing. Corequisite: NURS 83992.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

NURS 80403 - METHODS OF INQUIRY

Surveys types of research designs and methods that produce evidence contributing to positive patient outcomes. For each design the student learns essential elements, appropriate use, and the criteria for rigor within the context of patient outcomes. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

NURS 80440 - WOMEN'S HEALTH CARE NURSE PRACTITIONER IV

Further development of a foundation for competent clinical practice within a health care setting. Introduces the student to the practice of primary health care of women including premenopausal and menopausal women. Included are principles of growth and development, health promotion, disease prevention and management of common acute and chronic health problems. Emphasis is placed on the biological, psychological and sociocultural aspects of care. Pathophysiology, assessment and diagnostic techniques specific to acute and common problems are stressed. Nursing strategies related to health problems used to enhance, maintain and
restore health are emphasized. Also emphasized are the coordination of care needed within the clinical setting, collaboration and use of community resources. Prerequisites: NURS 80340 and NURS 83492; and doctoral standing. Corequisites: NURS 80050 and NURS 84892.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

NURS 80441 - PHARMACOLOGY FOR ADVANCED PRACTICE NURSING

A survey course addressing the fundamental principles of medication prescribing and administration necessary for nurses in advanced practice. Course addresses pharmacodynamics, pharmacokinetics, and pharmacotherapeutics. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

NURS 80450 - ETHICAL AND CULTURAL ISSUES FOR HEALTH PROFESSIONALS

This course will examine varying cultural perspectives, including one's own, and critical ethical issues faced by today's health care providers. Prerequisite: doctor of nursing practice standing.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

NURS 80451 - HEALTH POLICY AND DELIVERY SYSTEMS FOR HEALTH CARE PROFESSIONALS

This course focuses on health policy, financing, and delivery systems. Students explore the political, social, economic, and scientific bases of health policy formation, primarily in the U.S.; opportunity exists for individual exploration of international health concerns of importance. "State of the science" assignments concern current research findings related to the health care delivery systems, and health policy and outcomes. Economic drivers, and public and private funding for health services, are examined in all topic areas throughout the course. Students will research a health policy for health care delivery issue of interest. Prerequisite: doctoral standing.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

NURS 80452 - PSYCHIATRIC MENTAL HEALTH FAMILY NURSE PRACTITIONER ROLE

This is the capstone course for students in the PMH Family NP concentration. Students further integrate and apply PMH APN knowledge and learn about their professional roles, coached by established PMH APRNs.
NURS 80470 - PEDIATRIC NURSE PRACTITIONER III

Focus on synthesizing pediatric nurse practitioner knowledge and skills to provide expert care to a selected population of pediatric clients. Prerequisites: NURS 80372 and 83992; and doctoral standing. Corequisite: NURS 84792.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

NURS 80472 - PEDIATRIC CLINICAL NURSE SPECIALIST II

Focus on synthesizing the clinical nurse specialist knowledge and skills to provide expert care to a selected population of pediatric clients. Student must achieve a “B” (3.000) or higher to progress. Prerequisites: NURS 80372 and NURS 83992 with a minimum B (3.000) grade; and doctoral standing. Corequisite: NURS 84992.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

NURS 80506 - CLINICAL DIAGNOSTICS FOR ADVANCED NURSING PRACTICE

The purpose of this course is to prepare the advanced practice nurse for the selection and use of laboratory screening, examination, laboratory interpretation and therapeutics in the care of ambulatory adults. The course will comprehensively examine laboratory and diagnostic techniques and will guide the student in safe and appropriate application. Students will be able to use their understanding of complex clinical situations to build specialty nursing knowledge. Throughout this course the student will be guided in the demonstration of sound judgment in diagnostic testing for patient assessment and evaluation using case management problems. Prerequisites: NURS 80045; and doctoral standing. Corequisite: NURS 80015.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Nursing Department

NURS 80540 - WOMEN'S HEALTH CARE NURSE PRACTITIONER V

Student performs in the advanced practice role with a specified population of clients of the student’s choice in a selected multidisciplinary care setting. Students have an opportunity to test the effectiveness of various strategies inherent within the role of nurse practitioner and to demonstrate leadership through role
NURS 81192 - ADULT GERONTOLOGY CLINICAL NURSE SPECIALIST I PRACTICUM

Application of principles of clinical nurse specialist (CNS) practice introduced in NURS 80110. The student acquires direct care CNS competencies in specialty practice with adults and older adults in a variety of health care settings in consultation with faculty and a clinical preceptor. 210 hours of practicum. Prerequisites: NURS 80015 and NURS 80045; and doctoral standing. Pre/Corequisites: NURS 80441. Corequisite: NURS 80110.

2.000 Credit hours
14.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Nursing Department

NURS 81292 - PRIMARY CARE I PRACTICUM: ADULT ACROSS THE LIFESPAN

Practicum for the concepts introduced in Adult-Gero Primary Care I. Includes 105 practicum hours. Prerequisite: doctoral standing; and NURS 80015. Corequisite: NURS 80120.

1.000 Credit hours
7.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Nursing Department

NURS 81392 - ADULT GERONTOLOGY ACUTE CARE NURSE PRACTITIONER ROLE PRACTICUM

This practicum introduces the student to the concepts of working with multidisciplinary teams and follows the content taught in NURS 80130 Adult-Gero Acute Care Nurse Practitioner Role. This includes 105 hours of practicum. Prerequisites: NURS 80120 and NURS 81292; and doctoral standing. Corequisite: NURS 80130.

1.000 TO 2.000 Credit hours
7.000 TO 14.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Nursing Department

NURS 81492 - WOMEN'S HEALTH CARE NURSE PRACTITIONER I PRACTICUM

Practicum for concepts introduced in Women's Health Care NP I. This course has 105 clinical hours. Prerequisites: doctoral standing. Pre/Corequisites: NURS 80015. Corequisite: NURS 80140.

1.000 Credit hours
7.000 Other hours

Levels: Graduate
**NURS 81592 - PSYCHIATRIC MENTAL HEALTH ADVANCED PRACTICE NURSE I PRACTICUM IN NURSING**

Initial PMH APN Psychiatric mental health nurse practitioner practicum emphasizes the development of knowledge and skills in mental health assessment, individual psychotherapy, and psychopharmacologic therapies with individuals experiencing chronic or acute mental illness. 210 practicum hours required including 105 child-adolescent and 105 adult-geriatric. Prerequisites: NURS 80012 and NURS 80051; and doctoral standing. Corequisite: NURS 80151.

- **2.000 Credit hours**
- **14.000 Other hours**

**Levels:** Graduate  
**Schedule Types:** Practicum or Internship

**Nursing Department**

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**NURS 81692 - PRIMARY CARE PEDIATRICS PRACTICUM**

Practicum for Primary Care Pediatrics will be clinical experience to correspond with the content in the corresponding didactic course. Prerequisites: NURS 80015; and doctoral standing. Corequisite: NURS 80160.

- **1.000 Credit hours**
- **7.000 Other hours**

**Levels:** Graduate  
**Schedule Types:** Practicum or Internship

**Nursing Department**

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**NURS 81792 - PEDIATRIC ASSESSMENT FOR ADVANCED PRACTICE NURSES PRACTICUM**

This course is the clinical application of concepts introduced in 80170 Pediatric Assessment for the Advanced Practice Nurses. This practicum includes 105 clinical hours. Prerequisites: NURS 80045 and NURS 80101; and doctoral standing. Corequisites: NURS 80015 and NURS 80170.

- **1.000 Credit hours**
- **7.000 Other hours**

**Levels:** Graduate  
**Schedule Types:** Practicum or Internship

**Nursing Department**

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**NURS 81892 - ADVANCED PRACTICE REGISTERED NURSE ROLE PRACTICUM**

Practicum for the concepts introduced in NURS 80125 Family and Adult-Gero Nurse Practitioner Role. Includes 105 practicum hours. Prerequisites: NURS 80120 and NURS 81292; and doctoral standing. Corequisite: NURS 80125.

- **1.000 Credit hours**
- **7.000 Other hours**

**Levels:** Graduate  
**Schedule Types:** Practicum or Internship

**Nursing Department**
**NURS 82192 - ADULT GERONTOLOGY CLINICAL NURSE SPECIALIST II PRACTICUM**

Application of principles of clinical nurse specialist (CNS) practice introduced in NURS 80210. The student acquires direct care CNS competencies in specialty practice with adults and older adults in a variety of health care settings in consultation with faculty and a clinical preceptor. 210 hours of practicum. Prerequisite: NURS 80110 and NURS 81292; and doctoral standing. Corequisite: NURS 80210.

2.000 Credit hours
14.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Nursing Department

**NURS 82292 - PRIMARY CARE II PRACTICUM: CHRONICALLY ILL ADULTS ACROSS THE LIFESPAN**

Practicum for the concepts introduced in Primary Care II: Chronically Ill Adults Across the Lifespan. 105 practicum hours. Students need to achieve a "B-" or higher to progress. Prerequisites: NURS 80125 and NURS 81892 with a minimum B- (2.700) grade; and doctoral standing. Corequisite: NURS 80220.

1.000 Credit hours
7.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Nursing Department

**NURS 82392 - ADULT GERONTOLOGY ACUTE CARE NURSE PRACTITIONER I PRACTICUM**

(Cross-listed with NURS 82392) (Repeatable for credit) The student applies techniques for evaluation and treatment of the adult-gerontology patient in the acute care setting. The course includes approaches to pharmacotherapeutic and non-pharmacotherapeutic treatment for acute, acute on chronic and chronic illness. 210 hours of practicum. Prerequisites: NURS 80130 and 81392; and doctoral standing. Corequisite: NURS 80230.

1.000 TO 2.000 Credit hours
7.000 TO 14.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Nursing Department

**NURS 82492 - WOMEN'S HEALTH CARE NURSE PRACTITIONER II PRACTICUM**

Practicum for concepts introduced in Women's Health Care Nurse Practitioner II. This course has 105 practicum hours. Prerequisites: NURS 80140 and NURS 81492; and doctoral standing. Pre/corequisite: NURS 80441. Corequisite: NURS 80240.

1.000 Credit hours
7.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Nursing Department
NURS 82592 - PSYCHIATRIC MENTAL HEALTH ADVANCED PRACTICE NURSE II PRACTICUM IN NURSING

Second Psychiatric Mental Health Advanced Practice Nurse practicum emphasized the continued development of knowledge and skills in mental health assessment, individual psychotherapy, and psychopharmacologic therapies with individuals experiencing chronic or acute mental illness. Students will also get experience working with a Psychiatric Mental Health prescriber. Group supervision is provided. 105 practicum hours. Prerequisites: NURS 80151 and NURS 81592; and doctoral standing.

1.000 Credit hours
7.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Nursing Department

NURS 82792 - PEDIATRIC NURSE PRACTITIONER I PRACTICUM

Practicum for the concepts introduced in Pediatric Nurse Practitioner I. This practicum includes 105 clinical hours. Prerequisites: NURS 80015, NURS 80170 and NURS 81792; and doctoral standing. Corequisite: NURS 80270.

1.000 Credit hours
7.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Nursing Department

NURS 82992 - PEDIATRIC CLINICAL NURSE SPECIALIST I PRACTICUM

This course is the clinical application of concepts introduced in Pediatric Clinical Nurse Specialist I. This practicum includes 210 clinical hours. Student must achieve a “B” (3.000) or higher to progress. Prerequisites: NURS 80170 and NURS 81792 with a minimum B (3.000) grade; and doctoral standing. Corequisite: NURS 80272.

2.000 Credit hours
14.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Nursing Department

NURS 83192 - ADULT GERONTOLOGY CLINICAL NURSE SPECIALIST III PRACTICUM

Application of principles of clinical nurse specialist (CNS) practice introduced in NURS 80310. The student acquires CNS systems and leadership competencies in specialty practice with adults and older adults in a variety of health care settings in consultation with faculty and a clinical preceptor. 105 hours of clinical practicum. Prerequisites: NURS 80211 and NURS 82192; and doctoral standing. Corequisite: NURS 80310.

1.000 Credit hours
7.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Nursing Department
NURS 83292 - PRIMARY CARE: FAMILY HEALTH AND CHRONIC ILLNESS ACROSS THE LIFESPAN PRACTICUM

This course is a practicum of concepts introduced in Primary Care: Family Health and Chronic Illness Nurs 60325. 210 hours of practicum. Prerequisites: NURS 80220 and NURS 82292; and doctoral standing. Corequisite: NURS 80325.

2.000 Credit hours
14.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Nursing Department

NURS 83392 - ADULT GERONTOLOGY ACUTE CARE NURSE PRACTITIONER II PRACTICUM

(Cross-listed with NURS 63392) The student applies therapeutic measures for patients with specialty needs as it relates to acute, acute on chronic and chronic illness. Demonstrates competency in direct acute care of patients across the adult lifespan and demonstrate professional, compassionate care to patients and their significant others. 210 hours of practicum. Prerequisites: NURS 80230 and 82392; and doctoral standing. Corequisite: NURS 80330.

1.000 TO 2.000 Credit hours
7.000 TO 14.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Nursing Department

NURS 83492 - WOMEN'S HEALTH CARE NURSE PRACTITIONER III PRACTICUM

Practicum concepts introduced in Women's Health Care Nurse Practitioner III. This course has 105 clinical hours. Student must achieve a "B" (3.000) or higher to progress. Prerequisites: NURS 80240 and NURS 82492 with a minimum B (3.000) grade; and NURS 80506; and doctoral standing. Corequisite: NURS 80340.

1.000 Credit hours
7.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Nursing Department

NURS 83592 - PSYCHIATRIC MENTAL HEALTH ADVANCED PRACTICE NURSE III PRACTICUM IN NURSING

Third Psychiatric Mental Health Advanced Practice Nurse practicum emphasizes the development of knowledge and skills in family and group psychotherapies with individuals experiencing chronic or acute mental illness. 105 hours of practicum. Prerequisites: NURS 82592; and doctoral standing. Corequisite: NURS 80251.

1.000 Credit hours
7.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Nursing Department

NURS 83692 - COMPREHENSIVE PRIMARY CARE III PRACTICUM: ADULTS ACROSS THE LIFESPAN
Practicum for the concepts introduced in AdultGero Comprehensive Primary Care III. 210 hours of practicum. Prerequisite: doctoral standing. Pre/corequisites: NURS 80220 and NURS 82292.

2.000 Credit hours
14.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Nursing Department

**NURS 83792 - PEDIATRIC NURSE PRACTITIONER II PRACTICUM**

Practicum for the concepts introduced in Pediatric Nurse Practitioner II, 105 hours of practicum. Prerequisites: NURS 80270 and NURS 82792; and doctoral standing. Corequisite: NURS 80370.

1.000 Credit hours
7.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Nursing Department

**NURS 83992 - CARE OF THE CHRONICALLY ILL CHILD FOR ADVANCED PRACTICE NURSES PRACTICUM**

Practicum for the concepts introduced in Care of the Chronically Ill Child for Advanced Practice Nurses. 105 hours of practicum. Prerequisites: NURS 80370 and NURS 83792; and doctoral standing. Corequisite: NURS 80372.

1.000 Credit hours
7.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Nursing Department

**NURS 84592 - PSYCHIATRIC MENTAL HEALTH FAMILY NURSE PRACTITIONER ROLE PRACTICUM**

This is the capstone practicum course for students in the PMH Family NP concentration. Students further integrate and apply PMH APN knowledge and learn about their professionals roles, coached by established PMH APRNs. 210 hours of practicum. Prerequisite: NURS 80353 and NURS 80355; and doctoral standing. Corequisite: NURS 80452.

2.000 Credit hours
14.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Nursing Department

**NURS 84792 - PEDIATRIC NURSE PRACTITIONER III PRACTICUM**

Practicum for the concepts introduced in Pediatric Nurse Practitioner III. 210 hours of practicum. Prerequisites: NURS 80372 and 83992; and doctoral standing. Corequisite: NURS 80470.

2.000 Credit hours
14.000 Other hours
NURS 84892 - WOMEN'S HEALTH CARE NURSE PRACTITIONER IV PRACTICUM

This course is the clinical application of concepts introduced in Women's Health Care Nurse Practitioner IV. 105 hours of practicum. Prerequisites: NURS 80340 and NURS 83492; and doctoral standing. Corequisites: NURS 80050 and NURS 80440.

1.000 Credit hours
7.000 Other hours

NURS 84992 - PEDIATRIC CLINICAL NURSE SPECIALIST II PRACTICUM

This course is the practicum application of concepts introduced in Pediatric CNS II. This practicum includes 210 clinical hours. Student must achieve a “B” (3.0) or higher to progress. Prerequisites: NURS 80372 and NURS 83992 with a minimum B (3.000) grade; and doctoral standing. Corequisite: NURS 80472.

2.000 Credit hours
14.000 Other hours

NURS 85892 - WOMEN'S HEALTH CARE NURSE PRACTITIONER V PRACTICUM

Practicum for concepts introduced in Women's Health Care Nurse Practitioner V. 210 hours of practicum. Prerequisites: NURS 80050, NURS 80440 and NURS 84892; and doctoral standing. Corequisite: NURS 80540.

2.000 Credit hours
14.000 Other hours

NURS 86091 - VARIABLE CONTENT SEMINAR IN NURSING: NURSING SCIENCE I

(Repeatable for credit) Seminar on in-depth analysis, synthesis and evaluation of one substantive area within nursing and related disciplines focusing on the generation and dissemination of nursing knowledge. Akron 8200:840. Prerequisite: NURS 70720.

3.000 Credit hours
3.000 Other hours
NURS 86191 - VARIABLE CONTENT SEMINAR IN NURSING: NURSING SCIENCE I: FAMILY THEORIES AND NURSING RESEARCH

(Repeatable for credit) Seminar on in-depth analysis, synthesis and evaluation of one substantive area within nursing and related disciplines focusing on the generation and dissemination of nursing knowledge. Akron 8200:840. Prerequisite: NURS 70720.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Nursing Department

NURS 86291 - VARIABLE CONTENT SEMINAR IN NURSING: NURSING SCIENCE I: NURSING AND WOMEN'S HEALTH

(Repeatable for credit) Seminar: Analysis, synthesis and evaluation of theories and research in women's health across the life span as consumers and providers in nursing and health care. Akron 8200:840. Prerequisite: NURS 70720
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Nursing Department

NURS 86391 - VARIABLE CONTENT SEMINAR IN NURSING: NURSING SCIENCE II

(Repeatable for credit) Seminar: Analysis, synthesis and evaluation of stress, coping and social-support literature in nursing and related disciplines, focusing on the generation and dissemination of knowledge. Akron 8200:840. Prerequisite: NURS 70720
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Nursing Department

NURS 87091 - VARIABLE CONTENT SEMINAR IN NURSING: NURSING SCIENCE II

(Repeatable for credit) In-depth focused analysis and synthesis of a substantive area relevant to the student's specific research focus, culminating in a written product for dissemination. Prerequisite: NURS 86091.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Nursing Department

NUTR 10011 - NUTRITIONAL OUTREACH: A HOW-TO FOR LIFE-LONG HEALTHY EATING

Teaches basic nutrition information for healthy eating including the important nutritional aspects of cooking, shopping, dining and disease prevention related to dietary intake. Prerequisite: none.
**NUTR 23112 - INTRODUCTION TO THE PROFESSION: NUTRITION AND DIETETICS**

Discusses academic requirements for successful completion of the Bachelor of Science in Nutrition, the history of the profession as well as current credentialing and licensing requirements. Explores the opportunities within the field of dietetics. Teaches methods to document academic, personal and professional skills. Prerequisite: none.

1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Health Sciences Department

**NUTR 23511 - SCIENCE OF HUMAN NUTRITION**

Basic concepts and principles in the science of human nutrition, energy balance and weight control, individual nutrient needs, diet selection, nutrition related metabolism and physiological functions, nutritional diseases and current human nutrition controversies. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Health Sciences Department

Course Attributes:
Kent Core-Basic Sciences, LER-Basic Sciences, TAG - Health

**NUTR 33512 - NUTRITION**

Functions, sources and interactions of essential nutrients. Nutritional needs of family members, methods of meeting these needs, sources of reliable nutrition information. Prerequisites: CHEM 10060 and CHEM 10061 and CHEM 20481; or CHEM 10050 and CHEM 10052; or CHEM 10054.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Health Sciences Department

**NUTR 33522 - APPLIED NUTRITION**

Application of nutrition principles including nutrition assessment, charting of medical records, interviewing, counseling, nutrition education, food exchange lists, nutrition surveys and dietary standards. Prerequisites: Nutrition majors and NUTR 23511 and PSYC 11762 and SOC 12050.

3.000 Credit hours
NUTR 41095 - SPECIAL TOPICS IN NUTRITION

(Repeatable for credit) Discussion of a major topic within a specific field in nutrition and dietetics. Prerequisite: None.
1.000 TO 4.000 Credit hours
1.000 TO 4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Health Sciences Department

NUTR 41096 - INDIVIDUAL INVESTIGATION IN NUTRITION

(Repeatable for credit) Independent study in nutrition and dietetics. Prerequisite: Written permission from instructor.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Health Sciences Department

NUTR 43013 - EXPERIMENTAL METHODS IN NUTRITION

Students will gain laboratory experience in the biochemical methods of assessing nutrition status and the identification of nutrition-related conditions. Principles of experimental design and data analysis and techniques of scientific writing will be applied. Prerequisite: NUTR 33512.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Health Sciences Department

Course Attributes:
Writing Intensive Course

NUTR 43016 - CULTURAL ASPECTS OF FOOD, NUTRITION AND HEALTH

Cultural overview of racial, ethnic and religious population groups residing in the United States and the impact on food habits, nutritional and health status, and counseling concerns. Prerequisite: NUTR 23511.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
NUTR 43512 - ADVANCED NUTRITION I
An exploration into the mechanisms through which macronutrients meet the human biological needs. Fundamental concepts underlying applied human nutrition. Evaluation and interpretation of research findings. Prerequisite: NUTR 33512.
3.000 Credit hours
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture

NUTR 43513 - ADVANCED NUTRITION II
Mechanisms through which nutrients meet the human biological needs. Fundamental concepts underlying applied human nutrition. Evaluation and interpretation of research findings. Prerequisites: NUTR 33512 and BSCI 30030 and CHEM 30284.
3.000 Credit hours
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture

NUTR 43514 - CLINICAL DIETETICS
Application of the principles of normal nutrition to diet and disease effect of pathological conditions on nutritional needs. Also has a lab which provides the opportunity for students to engage in case studies and nutritional assessments. Prerequisites: NUTR 33522 and NUTR 43513.
4.000 Credit hours
3.000 Lecture hours
1.000 Lab hours
Levels: Undergraduate
Schedule Types: Laboratory, Lecture

NUTR 43515 - COMMUNITY NUTRITION
Introduction to nutrition problems and practices in the community. Study of legislation, philosophies, management, nutrition education processes, food assistance programs and agencies affecting nutritional care. Includes a experiential laboratory component with focuses in planning, implementation, evaluation and outcomes in nutrition education. Prerequisite: NUTR 33512 and 33522.
3.000 Credit hours
2.000 Lecture hours
1.000 Lab hours
Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Health Sciences Department
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<tr>
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<tbody>
<tr>
<td>NUTR 43518</td>
<td>MATERNAL AND CHILD NUTRITION</td>
<td>Nutrition requirements and problems: pregnancy, lactation, childhood and adolescence. Prerequisite: NUTR 33512.</td>
<td>3.000 Credit hours 3.000 Lecture hours</td>
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<td>NUTR 43520</td>
<td>NUTRITION FOR FITNESS</td>
<td>Course explores the relationship between nutrition, health and exercise. Dietary change for improved health and fitness is discussed as well as the impact of diet and exercise on body composition and weight. Prerequisite: NUTR 33512.</td>
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<td>NUTR 43521</td>
<td>FOOD CHOICES FOR PRESCRIBED DIETARY MODIFICATION</td>
<td>Adapting adequate normal diet in terms of food choices to accommodate prescribed food restriction or bodily dysfunction. Prerequisite: NUTR 23511; not open to nutrition (NUTR) majors.</td>
<td>2.000 Credit hours 2.000 Lecture hours</td>
<td>Undergraduate</td>
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<tr>
<td>NUTR 43523</td>
<td>NUTRITION AND DIETETICS:PROFESSIONAL PRACTICE</td>
<td>Development of professional awareness. Evaluation of professional growth and formulation of plans for continued growth. Prerequisite: Nutrition (NUTR) major and senior standing.</td>
<td>1.000 Credit hours 1.000 Lecture hours</td>
<td>Undergraduate</td>
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<td>NUTR 43532</td>
<td>METH AND EXP NUTR OUTREACH</td>
<td>Students learn methods for development and evaluation techniques used for nutrition outreach programming,</td>
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the role of community nutrition education in public health, and the impact of nutrition programming on disease prevention and management. Students also engage in service learning opportunities in community nutrition education. Prerequisite: special approval.

3.000 Credit hours
2.500 Lecture hours
0.500 Other hours

Levels: Undergraduate
Schedule Types: Field Experience, Lecture

Health Sciences Department

**NUTR 51095 - SPECIAL TOPICS IN NUTRITION**

(Repeatable for credit) Discussion of a major topics within the field of nutrition and dietetics. Prerequisite: Graduate standing.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

**NUTR 51096 - INDIVIDUAL INVESTIGATION IN NUTRITION**

(Repeatable for credit) Independent study in the area of nutrition and dietetics. Prerequisite: Graduate standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Health Sciences Department

**NUTR 53013 - EXPERIMENTAL METHODS IN NUTRITION**

Student gain experience in research methods related to nutrition and dietetics, principles of experimental design, data analysis and techniques of scientific writing are applied. Prerequisite: nutrition (NUTR) majors and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

**NUTR 53016 - CULTURAL ASPECTS OF FOOD, NUTRITION AND HEALTH**

Cultural overview of racial, ethnic and religious population groups residing in the United States and the impact on food habits, nutritional and health status, and counseling concerns. Prerequisites: NUTR 23511 and graduate standing.

3.000 Credit hours
3.000 Lecture hours
NUTR 53512 - ADVANCED NUTRITION I

An exploration into the mechanisms through which macronutrients meet the human biological needs. Fundamental concepts underlying applied human nutrition. Evaluation and interpretation of research findings. Prerequisites: nutrition (NUTR) major and graduate standing.
3.000 Credit hours
3.000 Lecture hours

NUTR 53513 - ADVANCED NUTRITION II

Mechanisms through which nutrients meet human biological needs. Fundamental concepts underlying human nutrition. Evaluation and interpretation of research findings. Prerequisites: nutrition major (NUTR) and graduate standing.
3.000 Credit hours
3.000 Lecture hours

NUTR 53514 - CLINICAL DIETETICS

Application of the principles of normal nutrition to diet and disease effect of pathological conditions on nutritional needs. Also included is a lab which provides the opportunity for students to engage in case studies and nutritional assessments. Prerequisites: nutrition (NUTR) major and graduate standing.
4.000 Credit hours
3.000 Lecture hours
1.000 Lab hours

NUTR 53515 - COMMUNITY NUTRITION

Introduction to nutrition problems and policies in the community. Study of legislation, philosophies, management, nutrition education processes, food assistance programs, and agencies affecting nutritional care. This course also includes an experiential laboratory component with focuses in planning, implementation, evaluation, and outcomes in nutrition education. Prerequisites: nutrition (NUTR) major and graduate standing.
3.000 Credit hours
2.000 Lecture hours
1.000 Lab hours
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<td>NUTR 53521</td>
<td>FOOD CHOICES FOR PRESCRIBED DIETARY MODIFICATION</td>
<td>Adapting normal diet to accommodate prescribed food restriction. Provides introductory overview of dietary modifications commonly encountered by the elderly. Prerequisites: NUTR 23511 and graduate standing; not open to nutrition (NUTR) majors.</td>
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<td>NUTR 53532</td>
<td>METHODS AND EXPERIENCES IN NUTRITION OUTREACH</td>
<td>Students learn methods for development and evaluation techniques used for nutrition outreach programming, the role of community nutrition education in public health, and the impact of nutrition programming on disease prevention and management. Students also engage in service learning opportunities in community nutrition education. Prerequisite: special approval; and nutrition (NUTR) major; and graduate standing.</td>
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<td>3.000</td>
<td>2.500</td>
<td>0.500</td>
<td>Graduate</td>
<td>Field Experience, Lecture</td>
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Health Sciences Department
NUTR 61018 - TECHNIQUES OF RESEARCH IN FAMILY AND CONSUMER STUDIES

Introduction to the types of research and methods of data collection applied to a project of the student's choice. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

NUTR 61098 - RESEARCH

(Repeatable for credit) Research for master's-level graduate students. Credits earned may be applied toward meeting degree requirements if school approves. Prerequisite: Graduate standing.
1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

Health Sciences Department

NUTR 61198 - MASTER'S PROJECT

(Repeatable for credit) (Cross-listed with HDFS 61198) Completion and successful defense of a master's project. Master's project students must register for a total of 6 hours, 2 to 6 hours in a single semester distributed over several semesters if desired. Prerequisite: Special approval and graduate standing.
2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Master's Project

Health Sciences Department

NUTR 63199 - THESIS I

Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester distributed over several semesters if desired. Prerequisite: Special approval and graduate standing.
2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Health Sciences Department

NUTR 63299 - THESIS II

Thesis II students must continue registration each semester until all degree requirements are met. Prerequisite: NUTR 61199 and graduate standing.
2.000 Credit hours
2.000 Other hours

Levels: Graduate
### NUTR 63519 - ADVANCED STUDY OF MICRONUTRIENTS

Intake, digestion and absorption of nutrients. Prerequisite: nutrition (NUTR) major and graduate standing.
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture

### NUTR 63520 - MACRONUTRIENT NUTRITION

Metabolic utilization of macronutrients for body processes. Prerequisite: nutrition (NUTR) major and graduate standing.
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture

### NUTR 63521 - NUTRITION AND DISEASE:CLINICAL APPLICATIONS

Recent trends and concepts in research and practice of therapeutic dietetics. Prerequisites: nutrition (NUTR) major and graduate standing.
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture

### NUTR 63524 - PERSPECTIVE ON PREVENTION AND PRACTICE IN COMMUNITY NUTRITION

Explores the relationship between nutritional epidemiology and the research, policies, and programs for successful treatment and prevention of nutrition related disease in the U.S. Also focuses on the behavioral and learning theories used in successful nutrition interventions and grant writing to sustain community programs. Prerequisite: graduate standing.
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture

### NUTR 63525 - DIETETIC PRACTICE:COMMUNITY

Discussion focusing on nutrition care in the community setting. Evaluation and interpretation of the scientific
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisite</th>
<th>Credit Hours</th>
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<th>Levels</th>
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<tr>
<td>NUTR 63526</td>
<td>DIETETIC PRACTICE:MANAGEMENT</td>
<td>Discussion focusing on the management of food and nutrition services.</td>
<td>Prerequisite: Special approval and graduate standing.</td>
<td>1.000</td>
<td>1.000</td>
<td>Graduate</td>
<td>Lecture</td>
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<tr>
<td>NUTR 63527</td>
<td>DIETETIC PRACTICE:CLINICAL</td>
<td>Discussion focusing on nutrition care in the acute practice setting.</td>
<td>Prerequisite: Special approval and graduate standing.</td>
<td>1.000</td>
<td>1.000</td>
<td>Graduate</td>
<td>Lecture</td>
<td>Health Sciences Department</td>
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<tr>
<td>NUTR 63591</td>
<td>NUTRITION SEMINAR</td>
<td>(Repeatable for credit) Evaluation and interpretation of recent literature in an area of nutrition. Topic selected will be indicated in the schedule of classes each semester offered.</td>
<td>Prerequisite: Graduate standing.</td>
<td>1.000 TO 3.000</td>
<td>1.000 TO 3.000</td>
<td>Graduate</td>
<td>Seminar</td>
<td>Health Sciences Department</td>
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<tr>
<td>NUTR 63592</td>
<td>DIETETIC INTERNSHIP</td>
<td>(Repeatable for credit) Supervised practice component of dietetic internship.</td>
<td>Prerequisite: Special approval and graduate standing.</td>
<td>1.000 TO 4.000</td>
<td>12.000 TO 48.000</td>
<td>Graduate</td>
<td>Practicum or Internship</td>
<td>Health Sciences Department</td>
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</table>
OCAT 10000 - FOUNDATIONS IN OCCUPATIONAL THERAPY

Introduction to basic theoretical concepts, professional development, profession of occupational therapy, its place in the health care system, and the role and function of the Occupational Therapist and Occupational Therapist Assistant. Prerequisite: none.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

OCAT 10001 - OCCUPATIONAL THERAPY PRACTICE SKILLS II

Development of the OT practice skills in therapeutic use of occupation, including crafts, activity analysis, and basic documentation. Prerequisite: OCAT 10003 with minimum C grade.

3.000 Credit hours
2.000 Lecture hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Regional College Department

OCAT 10002 - THERAPEUTIC TECHNIQUES I-PSYCHOSOCIAL

Application of occupational therapy skills and techniques in treatment programs, concerned with psychosocial dysfunction. Prerequisite: OCAT 10003 with a minimum grade of C (2.000).

4.000 Credit hours
3.000 Lecture hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Regional College Department

OCAT 10003 - OCCUPATIONAL THERAPY PRACTICE SKILLS LABORATORY

Development of basic assessment and intervention skills as related to clients with physical and mental disabilities. Prerequisite: occupational therapist assistant technology (OCAT) majors; and admission to technical study.

1.000 Credit hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Regional College Department

OCAT 10004 - OCCUPATIONAL THERAPY ASSISTANT TERMINOLOGY

An introduction to key terms utilized in occupational therapy and rehabilitation settings. Emphasis is on increasing professional understanding of occupational therapy terminology including related medical
terminology found in professional documentation. Student is introduced to Occupational Therapy Practice Framework terminology. Prerequisite: occupational therapy assistant technology (OCAT) major.

1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**OCAT 10010 - PROFESSIONALISM IN HEALTHCARE**

Provides information concerning professional behaviors, character traits, work ethics and communication skills that OTAs will need as they interact with other healthcare professionals. Students need to understand the importance of being professional, competent, ethical and legal. Prerequisite: none.

1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**OCAT 10092 - THERAPEUTIC TECHNIQUES - FIELDWORK 1A**

Under the supervision of personnel in selected facilities or agencies, the student will apply knowledge, skills and techniques acquired in the concurrent OCAT therapeutic technique courses. Prerequisite: OCAT 10003 with a minimum grade of C (2.000)

1.000 Credit hours
5.600 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Regional College Department

Course Attributes:
Experiential Learning Requirem

**OCAT 20000 - THERAPEUTIC TECHNIQUES II-PHYSICAL DYSFUNCTION I**

Application of occupational therapy skills and techniques in treatment programs, specifically concerned with physical dysfunctions. Prerequisite: Minimum grade of C (2.000) in OCAT 10001 and OCAT 10002.

4.000 Credit hours
3.000 Lecture hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Regional College Department

**OCAT 20001 - PROFESSIONAL ISSUES IN OCCUPATIONAL THERAPY**

Introduction to professional issues including ethics, licensure, reimbursement issues related to practice settings, research and skills required for performing administrative tasks in the occupational therapy department. Prerequisites: OCAT 10002.
2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**OCAT 20003 - OCCUPATIONAL THERAPY PRACTICE SKILLS III**

Development of the occupational therapy practice skills including therapeutic use of occupation, leisure, adapting equipment and environment, therapeutic exercises, activity analysis and documentation. Prerequisite: OCAT 10001 and OCAT 10002.

3.000 Credit hours
2.000 Lecture hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Regional College Department

**OCAT 20004 - THERAPEUTIC TECHNIQUES III-DEVELOPMENTAL DISABILITIES**

Application of occupational therapy skills and techniques applied to patients/clients with developmental disabilities. Prerequisite: OCAT 20000.

3.000 Credit hours
2.000 Lecture hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Regional College Department

**OCAT 20006 - THERAPY TECHNIQUES IV-PHYSICAL DYSFUNCTION II**

Continued application of occupational therapy skills and techniques in treatment programs in the area of physical dysfunction. Prerequisites: minimum grade of C (2.000) OCAT 10002 and OCAT 20000.

3.000 Credit hours
2.000 Lecture hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Regional College Department

**OCAT 20092 - THERAPEUTIC TECHNIQUES - FIELDWORK 1B**

Under the supervision of personnel in selected healthcare facilities or agencies, the student will apply knowledge, skills, and techniques acquired in the concurrent OCAT therapeutic techniques course. Prerequisites: OCAT 10000 and OCAT 10002. Corequisite: OCAT 20000.

1.000 Credit hours
5.600 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Regional College Department

Course Attributes:
Experiential Learning Requirem

**OCAT 20192 - CLINICAL APPLICATIONS I**

Under the supervision of personnel in selected healthcare agencies, the student will apply knowledge, skills and techniques acquired in prior OCAT courses. Prerequisites: OCAT 10000 and 10001 and 10002 and 20000 and 20001 and 20003 and 20006 all with grade of "C" or better.

4.000 Credit hours
20.000 Other hours

Levels: Undergraduate
Schedule Types: Field Experience

Regional College Department

**OCAT 20292 - CLINICAL APPLICATIONS II**

Under the supervision of personnel in selected healthcare agencies, the student will apply knowledge, skills and techniques acquired in prior OCAT courses. Prerequisites: OCAT 10000, OCAT 10001, OCAT10002, OCAT 20000, OCAT 20001, OCAT 20003 and OCAT 20006.

4.000 Credit hours
20.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Regional College Department

**OCAT 21095 - SPECIAL TOPICS IN OCCUPATIONAL THERAPIST ASSISTANT TECHNOLOGY**

(Repeatable maximum 6 times for credit) Special topics in Occupational Therapy Assistant Technology; topics announced when scheduled. Prerequisite: OCAT 10003.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**OCAT 21096 - INDIVIDUAL INVESTIGATION IN OCCUPATIONAL THERAPIST ASSISTANT TECHNOLOGY**

(Repeatable for credit) Individual study in Occupational Therapy Assistant Technology and related fields; open to OCAT majors. Prerequisite: OCAT 10003.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Regional College Department
**OIA 10095 - SPECIAL TOPICS: STUDY ABROAD**

(Repeatable for credit) This course provides a vehicle for registering students enrolled in study-abroad programs involving approved Kent State University exchanges with foreign universities. Prerequisite: Special approval.

0.000 TO 20.000 Credit hours
0.000 TO 20.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Office of Global Education Department

Course Attributes:
Experiential Learning Requirem, Residence Eligible

**ORT 80131 - BIOMECHANICS I**

Biomechanics is a comprehensive course, which stresses normal gait and foot function. Abnormalities in gait of foot mechanics are related to foot pathology. Prerequisite: enrolled in the College of Podiatric Medicine.

3.000 Credit hours
3.000 Lecture hours

Levels: Professional
Schedule Types: Lecture

Podiatric Medicine Department

**ORT 80132 - REHABILITATIVE MEDICINE**

Rehabilitative Medicine reviews various physical therapy modalities and principles of rehabilitation. Examples of application of these principles as relating to foot pathology are given. Prerequisite: enrolled in the College of Podiatric Medicine.

2.000 Credit hours
2.000 Lecture hours

Levels: Professional
Schedule Types: Lecture

Podiatric Medicine Department

**ORT 80211 - BIOMECHANICS II**

Biomechanics II introduces common foot pathologies and their affects on function. The examination techniques utilized in the evaluation of patients are introduced as is the use of foot orthotic devices and computers in the assessment of biomechanical pathology. Prerequisite: enrolled in the College of Podiatric Medicine.

2.000 Credit hours
2.000 Lecture hours

Levels: Professional
Schedule Types: Lecture

Podiatric Medicine Department

**ORT 80314 - PODOPEDIATRICS**
Podopediatrics is a comprehensive course, which emphasizes the incidence, etiology, pathomechanics, evaluation and treatment of lower extremity pathology in children. Prerequisite: enrolled in the College of Podiatric Medicine.

2.000 Credit hours
2.000 Lecture hours

Levels: Professional
Schedule Types: Lecture

Podiatric Medicine Department

**ORT 80325 - SPORTS MEDICINE**

Sports Medicine is a comprehensive course. Students gain an understanding of running biomechanics, shoe gear construction and evaluation, and the incidence, etiology, pathomechanics, evaluation and treatment of many lower extremity sports pathologies. Prerequisite: enrolled in the College of Podiatric Medicine.

2.000 Credit hours
2.000 Lecture hours

Levels: Professional
Schedule Types: Lecture

Podiatric Medicine Department

**PADM 60195 - SPECIAL TOPICS IN PUBLIC ADMINISTRATION**

(Repeatable for credit) Various topics offered by the Master of Public Administration program. Prerequisite: graduate standing and special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

**PADM 60198 - RESEARCH IN PUBLIC ADMINISTRATION**

(Repeatable 3 times for credit) Research or individual investigation for master's level graduate students. Credits earned may be applied toward meeting requirements if department approves. Prerequisite: Special approval and graduate standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Research

Political Science Department

**PADM 60371 - GRADUATE INTRODUCTION TO PUBLIC ADMINISTRATION**

Introductory graduate course to the theory and study of public administration. Topics include: evolution and characteristics of the modern nation state; core functions of public bureaucracy in any nation state; intergovernmental relations; formal and informal institutions and their role in policy; legal-regulatory processes; historical evolution of public administration as an academic field; major paradigms in organization theory and internal organizational dynamics. Prerequisite: public administration (PADM) major and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

**PADM 60375 - PUBLIC PERSONNEL ADMINISTRATION**

Study of public personnel systems, including underlying system values and current problems with emphasis on skill development and understanding of techniques for public personnel managers. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

**PADM 60376 - LABOR MANAGEMENT RELATIONS IN THE PUBLIC SECTOR**

This course focuses on issues peculiar to public sector labor relations, including the impact of public employee unionism on traditional merit systems and personnel policy decision processes. Prerequisite: PADM 60375 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

**PADM 60377 - PUBLIC BUDGETING AND FINANCIAL MANAGEMENT**

Focuses on two aspects of public financial analysis: budgeting and financial management. The topics in budgeting are the basic purposes of budgets as mechanisms of resource control and allocation, and as legal documents; distinct budget formats and cross-walking of formats; budget preparation; legislative review; implementation and auditing. The topics in financial management are the mechanisms and tools for financing public operations, debt management, fund accounting, analyzing budgets, and forecasting. Prerequisites: public administration (PADM) major and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

**PADM 60378 - MUNICIPAL MANAGEMENT AND ADMINISTRATION**

Detailed analysis of metropolitan complex. Emphasis given to administrative, political, fiscal and legal problems in governing cities. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
PADM 60379 - PROGRAM EVALUATION I

Introduction to evaluation of government programs. Emphasis on familiarizing students with the theory and specifically the techniques utilized under different evaluation formats. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

PADM 60381 - METHODS IN PUBLIC ADMINISTRATION

This course is a graduate-level introduction to statistical methods and their use in public administration. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

PADM 60382 - SEMINAR IN PUBLIC ADMINISTRATION

Study of selected problem areas in public service organizations with emphasis on understanding the factors contributing to them, their solution and literature bearing on the problems. Prerequisite: Special approval and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

PADM 60386 - PUBLIC SECTOR INFORMATION TECHNOLOGY MANAGEMENT

Management of information technology systems in the public sector. Specific focus on: planning and acquisition of hardware and software and networking technologies, organizational governance and implementation, information security and privacy, legal requirements, IT service delivery and emerging enterprise technologies. Prerequisites: public administration (PADM ) major and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

PADM 60387 - ELECTRONIC GOVERNANCE
An introduction to electronic governance with an emphasis on public administration. Examines the implications of information and communication technology in public organizations with regard to democracy, civic engagement, and performance improvement. Through case studies from the United States and across the world, students will become familiar with the factors and issues surrounding the implementation of electronic governance on a comparative basis. Prerequisites: PADM 60386; public administration (PADM) major; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

**PADM 60392 - INTERNSHIP IN PUBLIC ADMINISTRATION**

(Repeatable for credit) Provides an opportunity for students to gain practical experience and be exposed to processes of public decision making and policy development. Prerequisite: public administration (PADM) major; and graduate standing; and special approval.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Political Science Department

**PADM 60470 - PERSONAL ACCOUNTABILITY IN THE PUBLIC SERVICE**

Focus is on students internalizing their role in the public service as stewards of the public trust. Topics covered include dimensions of stewardship: maintaining personal honor; protecting the liberty and dignity of the citizen, dimensions of justice; anti-corruption, incorporating principles of stewardship in their personal decision making and throughout the organization. Prerequisite: public administration (PADM) major and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

**PADM 60471 - NONPROFIT LAW**

Introduction to legal issues for nonprofit organizations in the United States; including types of IRS tax exempt status, basic requirements for establishing/operating nonprofit organizations specifically in Ohio. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

**PADM 60472 - NONPROFIT BOARD EXEC RELATIONS**
Key aspects of effective nonprofit governance, major roles of nonprofit board members and their responsibilities and governance structures. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

**PADM 60475 - CAPSTONE SEMINAR**

(Repeatable for credit) Capstone course required for all M.P.A. students. Students will complete an approved written project that is analytical and research based. Prerequisite: public administration (PADM) major; and graduate standing; and special approval needed from department.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Political Science Department

**PADM 60477 - NONPROFIT FINANCIAL RESOURCE DEVELOPMENT**

Successful strategies for fundraising and resource development for nonprofit organizations. Students will be exposed to fundraising in practice and will write a resource development plan. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

**PADM 60574 - STRATEGIC PLANNING**

Introduction to the practice of strategic planning as it relates to policy design and implementation by public and nonprofit organizations. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

**PAS 10101 - ELEMENTARY KISWAHILI I**

This course is an introduction to Kiswahili in which students will learn the essentials of speaking, reading and writing the most extensively used language in East Africa. Prerequisite: None.
4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
**PAS 10102 - ELEMENTARY KISWAHILI II**

Continuation of PAS 10101, aimed at advancing student knowledge and communication skills in Kiswahili by introducing Kiswahili literature, short narratives, proverbs, folktales. Prerequisite: PAS 10101.

4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**PAS 15200 - INTRODUCTION TO WEST AFRICAN CULTURES**

Drawing on history, literature and social anthropology, students learn key events and places in W. Africa from the 9th century to the 19th century, covering the Trans-Atlantic Slave trade and the development of long distance networks, including Andalusian Spain, the trans-Saharan trade, the expulsion of Jews and Moors from Spain, state formation in W. Africa, and the role of Saharan–Savannah relations in the expansion of the Atlantic Slave Trade and the movement of European and African peoples to the Americas. The development of this Atlantic world assured the economic centrality of W. Europe and eventually the US, due to the immense transfer of labor and skills from W. Africa. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**PAS 20101 - KISWAHILI III**

Continuation of Kiswahili II, aimed at developing knowledge competence and recognition of Kiswahili usage in all forms of Kiswahili literature. Prerequisite: PAS 10102.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**PAS 20102 - KISWAHILI IV**

Continuation of Kiswahili III, aimed at developing knowledge, competence and recognition of Kiswahili usage in all forms of Kiswahili literature. Prerequisite: PAS 20101.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**PAS 20200 - RECOVERING THE PAST: KENT TO MEMPHIS**
3.000 Credit hours
2.000 Lecture hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Field Experience, Lecture

Pan-African Studies Department

Course Attributes:
Experiential Learning Requirem

**PAS 20300 - BLACK IMAGES**

Examines the historical origins of racial images and anti-black perceptions through newspapers, magazines, songs, plays, literature, textbooks, radio, television, films, comic books, etc. and the role of these images in American culture past and present. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Pan-African Studies Department

**PAS 22000 - CREATIVE WRITING IN THE BLACK WORLD**

Explores the major aesthetic and cultural issues that have historically shaped creative writing in the black world and begins by exploring the African Griot tradition. Students learn about the African-American tradition in literature as an organic part of the larger Pan-African world. Students are expected to write, perform, critique and produce original works in the modes and performance styles of the global African world. Prerequisite: ENG 11011 or HONR 10197.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Pan-African Studies Department

**PAS 22101 - AFRICAN AMERICAN VISUAL ARTISTS**

An Afrocentric survey of visual and aural artistry, course examines cultural context and perspectives, mediums of expression, form, style, content and patronage of African American artists from 1800. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Pan-African Studies Department

**PAS 22200 - INTRODUCTION TO THE AFRICAN ARTS**
Investigation of function of creative forms of artistic expression particular to experiences of Pan-African community at home and abroad. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Pan-African Studies Department

**PAS 23001 - BLACK EXPERIENCE I:BEGINNINGS TO 1865**

Study and analysis of the African experience prior to, and following the arrival of Africans in the New World. Emphasis on North and South America, Africa and Caribbean. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Pan-African Studies Department

Course Attributes:
Diversity Course-Global, Kent Core-Humanities, LER-Humanities, Trnfr Module-Humanities

**PAS 23002 - BLACK EXPERIENCE II:1865 TO PRESENT**

Covers the Black Experience from 1865 to the present, including events, ideas and persons in Africa, North and South America, and the Caribbean. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Pan-African Studies Department

Course Attributes:
Diversity Course-Domestic, Kent Core-Humanities, LER-Humanities, Trnfr Module-Humanities

**PAS 23095 - SPECIAL TOPICS IN PAN-AFRICAN LITERATURE AND COMMUNICATION SKILLS**

(Repeatable for a maximum of 6 credit hours) Introduction to a current and specialized topic in Pan-African Literature and/or communication skills. Prerequisite: none.
1.000 TO 4.000 Credit hours
1.000 TO 4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Pan-African Studies Department

**PAS 23310 - NATIVE AMERICAN CULTURE**

Introduces American Indian culture, sovereignty and civil rights. Ensures an understanding of self-determination in the context of the colonization and decolonization process, through the use of American Indian literature, philosophy, politics and other cultural outlets. Being that we all live in a broader community, students also
examine historical and contemporary relationships with the African American community and other ethnic communities in the US. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Pan-African Studies Department

PAS 23500 - THE AFROCENTRIC PERSPECTIVE

Introduces the history, philosophy and language of Afrocentricity, a mode of thought and action in which the centrality of African interests, values and perspectives predominate. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Pan-African Studies Department

PAS 24000 - BLACK SHORT STORY

Reading and analysis of short stories by important African, Caribbean and African American writers, as well as an introduction to important themes in Black Literature. Prerequisite: ENG 11011 or HONR 10197.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Pan-African Studies Department

PAS 24407 - CARIBBEAN STUDIES

Focus on people of African descent in the West Indies and their way of life for the cultural contributions made to Pan-African communities. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Pan-African Studies Department

Course Attributes:
Diversity Course-Global

PAS 24500 - JAZZ IMAGINES AFRICA

Students learn how to listen to jazz by exploring cultural and musical elements and gain an understanding of raw musical materials from West Africa, how they arrived in the western hemisphere through the "cultural memory" of Africans in bondage, and how those elements blended with materials from European music to inspire the development of jazz. Students also explore Caribbean "bush reggae," a precursor to what became reggae, which contains some of the same root elements as jazz. Prerequisite: none.
3.000 Credit hours
PAS 25200 - EAST AFRICAN-KISWAHILI CULTURES

Students learn about the relationship between the Kiswahili language and the cultures of East African peoples, especially those in Malawi, Mozambique, Zaire, Zambia and Zimbabwe. This includes geographical, historical and sociological perspectives and an analysis of common cultural elements (music, literature, proverbs). Prerequisite: none.

Levels: Undergraduate
Schedule Types: Lecture

PAS 26000 - THE LEGACY OF SLAVERY

Examines the legacy of slavery through literature about the Reconstruction and Jim Crow periods; the writings of Douglass, Washington, DuBois and Garvey; the impact of slavery on modern African American culture; and an investigation of the reparations issue. Prerequisite: none.

Levels: Undergraduate
Schedule Types: Lecture

PAS 26010 - THE BLACK REVOLUTION

Under the umbrella of Afrocentrism, this course examines black revolutionary thought in the U.S. from historical, political, sociological and philosophical perspectives; beginning with the advent of the slave trade, it emphasizes the tools, dynamics and strategies used to ensure the success of the black revolution, which is depicted as still ongoing today and having many implications and ramifications for the future. Prerequisite: none.

Levels: Undergraduate
Schedule Types: Lecture

PAS 30010 - AFRICAN AND AFRICAN-AMERICAN PHILOSOPHIES

Exploration of philosophical issues in African and African-American thought systems including examination of traditional and emerging approaches to developing conceptions of African and African-American philosophies. Prerequisite: None.

Levels: Undergraduate
Schedule Types: Lecture
Pan-African Studies Department

Course Attributes:
Diversity Course-Domestic

**PAS 30310 - BLACK HOLLYWOOD**

Examines the complexities of race relations in the film industry and the need for “Hollywood” and Black filmmakers to create films for mainstream audiences with a multitude of themes from the African American experience in America and around the world. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Pan-African Studies Department

**PAS 31092 - PRACTICUM IN AFRICAN THEATRE ARTS**

(Repeateable for a maximum of 12 credit hours) Exposes students to fundamental techniques of stage through auditory, visual and physical participation. (Students are evaluated in performance and related theater activities.) Prerequisite: none.
3.000 TO 6.000 Credit hours
3.000 TO 6.000 Other hours

Pan-African Studies Department

Course Attributes:
Experiential Learning Requirem

**PAS 32001 - AFRICAN-AMERICAN LITERATURE TO 1900**

(Cross-listed with ENG 33010) Study of African-American literature from its beginning to 1900, including such writers as Wheatley, J. Hammon, Terry, B. Hammon, Jones, Marrant, Allen, Hall, Walker, Truth, Garnet, Douglass, Delany, Harper, Stewart, Turner, Jacobs, Keckley, Brown, Wilson, Griggs, Chesnutt and Dunbar. Prerequisite: ENG 21011 or HONR 10297.
3.000 Credit hours
3.000 Lecture hours

Pan-African Studies Department

**PAS 32002 - MODERN AFRICAN-AMERICAN LITERATURE**

Study of African-American literature from the early twentieth century to the present. The authors include Toomer, Hughes, Larsen, Wright, Baldwin, Hansberry, Jones, Lorde, Walker, Morrison, Mosley, Youngblood and Carter. Prerequisite: ENG 21011 or HONR 10297.
3.000 Credit hours
PAS 32050 - AFRICAN LITERATURES

(Cross-listed with ENG 33015) Examines works of major 20th-century African, African American and Caribbean writers and intellectuals. Authors include Niane, Achebe, Emecheta, Prince, Hurston, Hughes, Cesaire, Senghor, Soyinka and many others. Prerequisite: ENG 11011 or HONR 10197.

Levels: Undergraduate
Schedule Types: Lecture

PAS 33100 - AFRICAN AMERICAN FAMILY IN HISTORICAL PERSPECTIVES

Examines social, political, cultural and historical factors that have influenced the development of African-American family organization, from African shores through the American experience. Prerequisite: none.

Levels: Undergraduate
Schedule Types: Lecture

PAS 33101 - AFRICAN AMERICAN HISTORY: SLAVERY TO FREEDOM

(Cross-listed with HIST 31080) Survey of African American history form the colonial period to 1877. Course provides a general knowledge of the social, political and cultural history of African Americans from colonial times to the end of the Reconstruction. Prerequisite: none.

Levels: Undergraduate
Schedule Types: Lecture

PAS 33110 - THE BLACK WOMAN: HISTORICAL PERSPECTIVES

Course surveys the experiences of African-American women throughout various periods of history, and their roles in shaping the social, economic, political and cultural development of societies. Prerequisite: sophomore standing.

Levels: Undergraduate
Schedule Types: Lecture
PAS 33120 - THE BLACK MAN: HISTORICAL PERSPECTIVES

Focuses on various roles of the African American man within the context of the African experience and the African diaspora. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Pan-African Studies Department

PAS 33130 - GENDER AND SEXUALITY IN AFRICA AND THE AFRICAN DIASPORA

Using lectures, videos, discussions, readings and application this course explores ways in which gender and sexuality in Africa and the African Diaspora have and can be constructed, performed, articulated and researched. Attention is also paid to the existence of LGBTQ identities within the global black community. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Pan-African Studies Department

PAS 33171 - THE AFRICAN-AMERICAN COMMUNITY

Explores problems of African-American communities: public administration, transportation, health, public finance, crime and justice, geography, black/demography and education. Prerequisite: sophomore standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Pan-African Studies Department

Course Attributes:
Diversity Course-Domestic

PAS 33200 - ANCIENT AFRICAN CIVILIZATIONS

Examines the history of ancient African civilizations and their contributions to world history. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours
**PAS 33310 - LATINOS, THE AFRICAN DIASPORA AND AMERICAN SOCIETY**

Introduction to Latino minorities. Focus on Mexican-Americans, Puerto Ricans and Cubans and African influences on Latino culture. Prerequisite: None.
3.000 Credit hours  
3.000 Lecture hours

**PAS 34000 - INTRODUCTION TO AFRICAN WORLD VIEW**

Investigates traditional African cosmological world views and aesthetics in global Africa. Students who do not have prerequisites may request permission from instructor. Prerequisite: PAS 23001 or PAS 23002.
3.000 Credit hours  
3.000 Lecture hours

**PAS 34100 - ISLAMIC WEST AFRICA**

Familiarizes students with the cultural and historical specificities of Islamic communities in West Africa. Beginning with the introduction of Islam into West Africa in the eighth century, this course takes a multi-disciplinary point of view and covers contemporary political issues as well as historical topics. Students are provided the analytical tools and documentation to understand contemporary religious issues in West Africa and the diversity in expression of thought and practice of Islamic West Africa. Prerequisite: sophomore standing.
3.000 Credit hours  
3.000 Lecture hours

**PAS 35100 - BLACK SOCIAL AND POLITICAL THOUGHT**

Study of the history and nature of social and political thought of African Americans including an overview of various movements and individuals, as well as their strategies and tactics, in the struggle for social change in the U.S. as it relates to black people. Prerequisite: junior standing.
3.000 Credit hours  
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture

Pan-African Studies Department

**PAS 35200 - AFRICAN SOCIAL AND POLITICAL SYSTEMS**

An African-centered focus on traditional African institutions as these interact with the Jihad Movements, Western European incursion, the slave trade, colonialism, independence movements and contemporary issues. Prerequisite: Junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Pan-African Studies Department

**PAS 37000 - ORAL AND WRITTEN DISCOURSES IN PAN-AFRICAN STUDIES**

Examines the spoken and written English of African-Americans with some emphasis on mastering consensus English writing skills required in upper-division PAS courses. Prerequisite: ENG 21011 or HONR 10297.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Pan-African Studies Department

Course Attributes:
Writing Intensive Course

**PAS 37001 - THEORETICAL APPROACHES TO PAN-AFRICAN STUDIES**

A critical analysis of the diverse approaches to and underlying principles of Pan-African Studies. Prerequisite: Sophomore standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Pan-African Studies Department

**PAS 37010 - RESEARCH METHODS IN PAN-AFRICAN STUDIES**

This course will expose students to the basic components of research methods in Pan-African studies utilizing multidisciplinary approaches. Prerequisite: PAS 37000 AND 37001.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Pan-African Studies Department
### PAS 37020 - THE MODEL AFRICAN UNION

Students examine role, structure and performance of the African Union in the search for solutions to key economic, social and political-security issues facing Africa. Students attend the annual meeting of the Model African Union Conference in Washington D.C., which is a simulation of proceedings of the African Union, augmented by briefings at African Embassies. Participants gain an understanding of the various determinants, capabilities and constraints shaping the domestic and foreign policies of African countries. Prerequisite: sophomore standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Pan-African Studies Department

### PAS 37100 - PAN-AFRICAN WOMEN’S LITERATURE

(Cross-listed with ENG 33013) Introduces students to literary works by African and Caribbean women. Prerequisite: ENG 11011 or HONR 10197.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Pan-African Studies Department

### PAS 37150 - THE UNDERGROUND RAILROAD

Examines the Underground Railroad and its impact as an American phenomenon. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Pan-African Studies Department

### PAS 37200 - AFRICAN-AMERICAN WOMEN’S LITERATURE

(Cross-listed with ENG 33014) Introduces students to literary works by African-American women. Prerequisite: ENG 11011 or HONR 10197.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
### PAS 40120 - CONTEMPORARY ISSUES IN AFRICAN-AMERICAN EDUCATION

This course examines the interrelationship of contemporary issues and the education of people of African descent. Prerequisite: none.

- 3.000 Credit hours
- 3.000 Lecture hours

#### Levels: Undergraduate
#### Schedule Types: Lecture

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### PAS 41192 - PRACTICUM IN AFRICAN AMERICAN AFFAIRS

(Repeatable for a maximum of 12 credit hours) Guided involvements in urban areas with large African-American populations to provide experience with community service, government agencies, public and private schools, non-profit organizations, etc. Prerequisite: none.

- 1.000 TO 12.000 Credit hours
- 3.000 TO 36.000 Other hours

#### Levels: Undergraduate
#### Schedule Types: Practicum or Internship

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### PAS 42500 - BLACK EDUCATION IN AMERICA

(Repeatable for a maximum of 6 credit hours) Analyzes the historical, social and political perspectives of educating people of African descent in America. Prerequisite: PAS 23002.

- 3.000 Credit hours
- 3.000 Lecture hours

#### Levels: Undergraduate
#### Schedule Types: Lecture

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### PAS 43095 - SPECIAL TOPICS IN PAN-AFRICAN LITERATURE, ARTS AND CULTURES

(Repeatable for credit) Broadens upper division offerings in holistic study and performance in Pan-African literatures, arts and cultures. Prerequisite: none.

- 3.000 Credit hours
- 3.000 Lecture hours

#### Levels: Undergraduate
#### Schedule Types: Lecture
PAS 43200 - MALCOLM AND MARTIN

A critical study of the major ideas and doctrines, including religious and theological beliefs, of Malcolm X and Martin L. King and their roles in American history. Prerequisite: junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Pan-African Studies Department

PAS 43395 - SPECIAL TOPICS IN AFRICAN DIASPORA STUDIES

(Repeatable for a maximum of 12 credit hours) Study of selected topics related to people of African descent outside of the African continent including, but not limited to the Americas and Europe. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Pan-African Studies Department

PAS 44095 - SPECIAL TOPICS IN CONTEMPORARY AFRICA

(Repeatable for a total of 12 credit hours when topic varies) Study of selected topics related to contemporary Africa. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Pan-African Studies Department

PAS 47091 - SENIOR SEMINAR IN PAN-AFRICAN STUDIES

Students prepare a capstone portfolio of their work to be presented to PAS faculty and develop individual topical PAS research papers for presentation before departmental faculty, students and general public. Prerequisite: PAS 37010
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

Pan-African Studies Department

Course Attributes:
Writing Intensive Course

PAS 47095 - SPECIAL TOPICS IN THEORETICAL AND APPLIED RESEARCH

(Repeatable for a maximum of 12 credit hours) Selected topics in the intellectual, cultural, political and historical development of Pan-Africanism, its diverse theoretical approaches and multiple applications including the Organization of African Unity. Prerequisite: none.
PAS 49093 - VARIABLE TITLE WORKSHOP IN PAS

(Repeatable for credit) Prerequisite: special approval.
2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Undergraduate
Schedule Types: Workshop

Pan-African Studies Department

PAS 49095 - SELECTED TOPICS

(Repeatable for credit) Scheduled topic announced. Intended to encourage further study in areas not treated adequately in standard courses. Offered irregularly by available or visiting faculty. Prerequisite: none.
2.000 OR 3.000 Credit hours
2.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Pan-African Studies Department

PAS 49096 - INDIVIDUAL INVESTIGATION

(Repeatable once for credit) Research in areas of interest not available in departmental courses. Approval by faculty member or chairperson necessary prior to registration. Prerequisite: Junior or senior standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Pan-African Studies Department

PEB 10020 - DEVELOPMENT AND CONDITIONING

Introduction to the principles of physical training. Practical application of these principles through a variety of activities. Prerequisite: None.
1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Teaching Learning and Curricul Department

PEB 10035 - LIFETIME FITNESS
The role of exercise in enhancing physical fitness. Lectures on principles of planning scientifically sound exercise programs. Laboratory experiences in personal fitness evaluation and exercise routines. Prerequisite: None.
2.000 Credit hours
2.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Teaching Learning and Curricul Department

**PEB 10036 - FITNESS WALKING**

Introduction to Fitness Walking as a lifetime physical activity through personal cardiovascular fitness.
Prerequisite: None.
1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Teaching Learning and Curricul Department

**PEB 10095 - SELECTED TOPICS: PHYSICAL EDUCATION ACTIVITIES**

(Repeatable for credit) Selected and varied topics of relevance in physical education basic instruction.
Prerequisite: none.
1.000 OR 2.000 Credit hours
2.000 OR 4.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Teaching Learning and Curricul Department

**PEB 10101 - SCUBA DIVING**

Designed to make students a comfortable and qualified diver, capable of conducting recreational dives to shallow depths and deep water diving. Could lead to certification as a PADI open water diver. Prerequisite: none.
1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Teaching Learning and Curricul Department

**PEB 10102 - BEGINNING SWIMMING**

No or minimal swimming ability. Prerequisite: Special approval.
1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory
PEB 10125 - BASKETBALL

The course is designed to give students a basic understanding of how to play the game of basketball through active participation. Students are expected to learn and be able to demonstrate the skills and strategies of the game through various practice and competitive activities. Material is presented through class instruction and handouts. Prerequisite: None.
1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Teaching Learning and Curricul Department

PEB 10126 - BASKETBALL-VARSITY

(Repeatable for credit) Controlled registration. Prerequisite: none.
1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Teaching Learning and Curricul Department

PEB 10202 - INTERMEDIATE SWIMMING

Prerequisite: PEB 10102.
1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Teaching Learning and Curricul Department

PEB 10204 - BADMINTON

Instruction in the skills and techniques of the game of Badminton Prerequisite: None.
1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Teaching Learning and Curricul Department

PEB 10304 - BOWLING

Prerequisite: None.
1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
**PEB 10305 - BILLIARDS**

Skills, technique, strategy, game knowledge as introduction to billiards (pool), a ‘cue’ sport; rules and gaming for variations of pocket billiards; practice and class tournament play. Prerequisite: None.

1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Teaching Learning and Curricul Department

**PEB 10306 - JOGGING**

This course is designed to enhance cardiovascular fitness through jogging and/or running. The course will focus on a mixture of training techniques including light jogging and interval type workouts. This course will also include supplemental exercises such as core strengthening and stretching. Students will perform basic calculations to determine target heart rate zones. Students will establish fitness goals and select appropriate activities to attain these goals. Pre and Post assessments will allow students to monitor progress towards their fitness goals. Prerequisite: None.

1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Teaching Learning and Curricul Department

**PEB 10325 - SOCCER**

(Repeatable for credit) Prerequisite: none.

1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Teaching Learning and Curricul Department

**PEB 10403 - BEGINNING BALLROOM DANCE**

This course is designed for the beginning social dance to learn how to partner dance in a recreational setting. Dances include: Foxtrot, Rhumba, Meringue, Swing, Cha Cha. Prerequisite: None.

1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Teaching Learning and Curricul Department

**PEB 10413 - LATIN SOCIAL DANCE**
Presentation of the DVIDA bronze syllabus for Latin dances. Introduction of Latin rhythm dances, which will include the Merengue, Salsa, Rumba, Cha Cha and Samba. Includes proper technique, rhythm of the dance and approximately 10-15 figures for each dance. Prerequisite: none.

1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

**PEB 10425 - BASEBALL-VARSITY**

(Repeatable for credit) Controlled registration. Prerequisite: None.

1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Teaching Learning and Curricul Department

**PEB 10426 - SOFTBALL-VARSITY**

(Repeatable for credit). Controlled registration. Prerequisite: none.

1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Teaching Learning and Curricul Department

**PEB 10504 - SAND VOLLEYBALL**

Basic instruction in Volleyball skills and Sand Volleyball game strategies. Prerequisite: none.

1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Teaching Learning and Curricul Department

**PEB 10505 - VOLLEYBALL**

Introduction to the sport of Volleyball through instruction in individual and team skills, team building and gameplay. Prerequisite: None.

1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Teaching Learning and Curricul Department
PEB 10515 - WALLYBALL

Basic instruction in Volleyball skill and Wallyball game strategies. Prerequisites: none.
1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Teaching Learning and Curricul Department

PEB 10604 - BEGINNING GOLF

The student will have the opportunity to develop basic golf skills through lectures, demonstration, drills and game play. The student will also gain knowledge of golf etiquette and other areas as related to the game of golf. Prerequisite: None.
1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Teaching Learning and Curricul Department

PEB 10612 - LIFEGUARD TRAINING

Individuals beyond the lifesaving level are prepared to assume the responsibilities of lifeguards at pools or at nonsurf open water beaches. Prerequisite: PEB 10202.
2.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

PEB 10704 - INTERMEDIATE GOLF

Learn mechanics and techniques of the full golf swing, pitching, chipping, bunker play and putting. Learn to play better by playing rounds of golf. Learn the basic rules of golf and proper golf etiquette. Prerequisite: PEB 10604.
1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Teaching Learning and Curricul Department

PEB 10724 - GOLF-VARSITY

(Repeatable for credit). Controlled registration. Prerequisite: none.
1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory
### PEB 10904 - TENNIS
You will be exposed to and utilize basic tennis skills, terms, and principles, with an emphasis on skill development and integration of playing tactics and strategies during match play. Prerequisite: None.

1.000 Credit hours  
2.000 Lab hours

Levels: Undergraduate  
Schedule Types: Laboratory

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### PEB 10906 - RACQUETBALL
Instruction in the skills, techniques and strategies of the game of Racquetball. Prerequisite: None.

1.000 Credit hours  
2.000 Lab hours

Levels: Undergraduate  
Schedule Types: Laboratory

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### PEB 11024 - TRACK AND FIELD-VARSITY
(Repeatable for credit). Controlled registration. Prerequisite: none.

1.000 Credit hours  
2.000 Lab hours

Levels: Undergraduate  
Schedule Types: Laboratory

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### PEB 11124 - GYMNASTICS-VARSITY
(Repeatable for credit). Controlled registration. Prerequisite: none.

1.000 Credit hours  
2.000 Lab hours

Levels: Undergraduate  
Schedule Types: Laboratory

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### PEB 11125 - FOOTBALL-VARSITY
(Repeatable for credit). Controlled registration. Prerequisite: none.

1.000 Credit hours  
2.000 Lab hours

Levels: Undergraduate  
Schedule Types: Laboratory
**PEB 11325 - ADVANCED ICE HOCKEY**

To build on the basic hockey fundamentals, leading to advanced team play and game situations providing deeper insight into the game of hockey. Prerequisite: none.

1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

**PEB 11425 - VARSITY SPORTS**

(Repeatable for a maximum of 2 credit hours) Designed to focus on advanced varsity sport skill development, to promote techniques and strategies to perform at a high level of competition, and to foster ethical values, sportsmanship and responsible citizenship through practices and game competitions. Designed for the student athlete who meets NCAA eligibility requirements. Prerequisite: special approval.

1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

**PEB 11426 - VARSITY SPORT TRAINING AND CONDITIONING**

(Repeatable for a maximum of 2 credit hours) Designed for sport specific training both in and out of season to produce highly skilled student-athletes through structured programs for immediate performance enhancement and injury prevention and to endure practice and competition. Designed for the student athlete who meets NCAA eligibility requirements. Prerequisite: special approval.

1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

**PEB 11604 - BEGINNING KARATE**

Beginning Karate A karate course designed for students with little or no martial arts or karate experience. This course will involve the training in the philosophy, principles, and techniques of Karate for self-defense, improvement of overall fitness and to give a greater understanding of the art and themselves. Prerequisite: none.

1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory
PEB 11605 - INTERMEDIATE KARATE

Continuation of the perfection of basic karate techniques with the main emphasis on kumite (fighting).
Prerequisite: PEB 11604.
1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Teaching Learning and Curricul Department

PEB 11633 - JU JITSU

Presentation of Ju-Jitsu and Judo techniques for use in self-defense. Includes falling, throwing, grappling, bars, locks, strikes, kicks and defends against various weapons. Prerequisite: none.
1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Teaching Learning and Curricul Department

PEB 11634 - SELF-DEFENSE

A self-defense course designed for students with little or no martial arts or self-defense background. Physical, verbal, and mental defensive techniques, tactics, and strategies are taught to prepare students for any potentially dangerous situation they may encounter. The course will also improve the student's physical and mental fitness. Prerequisite: None.
1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Teaching Learning and Curricul Department

PEB 11663 - BEGINNING YOGA

Overview course in yoga, an integrated study of health. Involves the investigation and practice of breathing techniques (pranayama), hatha yoga postures (asana), meditation and relaxation. Also unifies the mind, body and spirit. Prerequisite: none.
1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Teaching Learning and Curricul Department

PEB 11664 - PILATES

Pilates is a form of fitness endeavors which unite the rhythmic performances and strength with the conditioning principles of the movement sciences. Prerequisites: none.
1.000 Credit hours
2.000 Lab hours
PEB 11665 - ZUMBA

Zumba® is a fitness program that fuses hypnotic Latin rhythms and easy-to-follow moves and mixes body sculpting movements with dance steps. Prerequisite: none.
1.000 Credit hours
2.000 Lab hours

PEB 11666 - BEGINNING SPINNING

The Spinning program is based on two major components: health and fitness. Each of these parts is also related to the concept of mind (the health component) and body (the fitness component), and the overall program design is intended as more than a fitness regimen. It encourages Spinning participants to shift and broaden their perspectives by exposing them to new ideas and a variety of training styles and Energy Zones. Prerequisite: none.
1.000 Credit hours
2.000 Lab hours

PEB 11667 - BOOT CAMP I

This course is designed to acquaint students with an exercise program using calisthenics, resistance training, running, and agility drills. The course will focus on increasing physical fitness, including cardiovascular efficiency, muscular strength, and flexibility. Students will also learn the fundamental principles of physical fitness and their effect on lifelong health and fitness. Prerequisite: none.
1.000 Credit hours
2.000 Lab hours

PEB 11673 - INTERMEDIATE YOGA

Expansion of Yoga skills, building on knowledge base from Beginning Yoga. Students will explore movement components of anatomy, as related to yoga asanas and understand relationship of asanas to anatomy, creating movement and space. Prerequisite: PEB 11663.
1.000 Credit hours
2.000 Lab hours
PEB 11674 - INTERMEDIATE PILATES

Intermediate Pilates reviews the fundamentals of the beginner class while moving on to the more challenging exercises and repertoire. Students will review and practice correct technique and form for strength, breathing, fluidity, and endurance for mat Pilates. This class is designed for experienced Pilates students. Prerequisite: PEB 11664.

1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Teaching Learning and Curricul Department

PEB 11675 - ZUMBA TONING

Zumba® is a fitness program that fuses hypnotic Latin and International rhythms with easy-to-follow moves and body sculpting movements to create a dynamic workout. The Zumba Toning® program uses hand held weights to enhance rhythm and tone the muscles, specifically arms, thighs, and abdomen. Zumba Toning is the an ideal way to sculpt the body. Prerequisite: none.

1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Teaching Learning and Curricul Department

PEB 11825 - WRESTLING-VARSITY

(Repeatable for credit) Controlled registration. Prerequisite: none.

1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Teaching Learning and Curricul Department

PEB 11904 - BEGINNING ICE SKATING

This course will give the beginner an introduction to the basic skills of ice skating with a focus on safe technique and the development of the basic skills of ice skating. Students will learn the fundamentals of balance, movement and safety on the ice. Prerequisite: None.

1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Teaching Learning and Curricul Department

PEB 12004 - BASIC FIGURE SKATING
This course will give the intermediate skater an introduction to the disciplines of figure skating and basic figure skating terminology. Students will learn figure skating fundamentals and how to use previously developed skills to achieve proficiency in more difficult skills. Prerequisite: PEB 11904.

1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

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**PEB 12204 - BEGINNING BROOMBALL**

Broomball is a recreational ice game played in an ice rink. Skills, tactics and plays are similar to those used in ice hockey. Prerequisites: none.

1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

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**PEB 12324 - WEIGHT TRAINING**

This course is designed to teach students the correct technique in lifting with machines, free weights and body weight in a safe and effective manner. Students learn scientific methods (macrocycle, mesocycle and microcycle) on how to correctly design a resistance training workout based around desired goals of strength, endurance, hypertrophy, power and speed. Students will be tested on the application of their knowledge by having to design an 8 week training planning with specific training principles used. Prerequisite: none.

1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

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**PEB 12325 - WOMEN’S WEIGHT TRAINING**

A basic course in the use of equipment in an average weight room and its application towards the development of strength and power. Prerequisite: None.

1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

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**PEB 12424 - EXERCISE AND WEIGHT CONTROL**

The course aims to educate the student on differing types of exercise styles currently available to assist in living a healthy lifestyle. The student will also learn ideal dietary requirements required to compliment the variety of exercise components. This course will teach how to combine this information to create a nutritional and training plan to meet current goals for this course. Students will pre-test and post-test physical fitness components in order to successfully assess how a change in a nutrition and exercise can contribute to living a healthy lifestyle.
PEB 12425 - NAUTILUS EXERCISES

This course will cover the proper use and weight training equipment. This course will also cover the instruction of proper weight training techniques for a safe and effective weight training program. Functional training and isolation training will be discussed and practiced, so that the student will benefit from both types of strength training exercises. The course is part theory and part practical application. Prerequisite: None.
1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Teaching Learning and Curricul Department

PEB 13003 - DANCE EXERCISE

Dance Exercise is a form of fitness, which unites the rhythmic performance, and energy of dance with the conditioning principles of the movement sciences. In addition to the physical exercise, students will also learn about the basic methodology behind an exercise class, a general history of dance exercise, and its relevance in the fitness industry today. Students should leave the course with knowledge of basic exercise and nutrition principles that can be applied in their personal exercise programs. Prerequisite: None.
1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Teaching Learning and Curricul Department

PEB 13008 - INTERMEDIATE VOLLEYBALL

Introduction of advanced playing systems and strategies in volleyball while emphasizing individual skill performance. Prerequisite: PEB 10505.
1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Teaching Learning and Curricul Department

PEB 13010 - JUDO-AIKIDO

Presentation of basic beginning judo falls, throws, arm locks and chokes with emphasis on the knowledge of the tournament judo. Self-defense skills are also taught. Skill level of student is in conjunction with USJA guidelines of the green belt rank. Prerequisite: none.
1.000 Credit hours
2.000 Lab hours
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisites</th>
<th>Credits</th>
<th>Lab Hours</th>
<th>Lecture Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEB 13012</td>
<td>BACKPACKING</td>
<td>Trip planning and leadership, equipment and clothing selection, safety considerations, search and rescue, environmental ethics, map and compass, weekend backpacking trip. Student must supply equipment.</td>
<td>Prerequisite: Special approval.</td>
<td>2.000</td>
<td>4.000</td>
<td>0.000</td>
</tr>
<tr>
<td>PEB 13015</td>
<td>FIELD HOCKEY-VARSITY</td>
<td>(Repeatable for credit) Introduction to the sport of bicycling through instruction and activities in safe riding practices, riding for fitness, and basic bicycle maintenance.</td>
<td>Prerequisite: None.</td>
<td>1.000</td>
<td>2.000</td>
<td></td>
</tr>
<tr>
<td>PEB 13016</td>
<td>CYCLING</td>
<td>Prerequisite: None.</td>
<td></td>
<td>1.000</td>
<td>2.000</td>
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</tr>
<tr>
<td>PEB 13017</td>
<td>VOLLEYBALL-VARSITY</td>
<td>(Repeatable for credit) Controlled registration.</td>
<td>Prerequisite: none.</td>
<td>1.000</td>
<td>2.000</td>
<td></td>
</tr>
<tr>
<td>PEB 13022</td>
<td>CAMPING</td>
<td>Basic camping skills including: toolcraft, ropecraft, fire building, cooking, campsite management, equipment</td>
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</tr>
</tbody>
</table>
selection, safety considerations, environmental ethics, and map and compass for use on weekend trip. Students must supply own clothing and shelter. Prerequisite: Special approval.

2.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

PEB 13028 - INTRODUCTION TO KAYAKING

Basic paddling skills learned in a pool environment and then experienced in open lakes and whitewater situations. Prerequisite: none.
1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Teaching Learning and Curricul Department

PEB 13030 - BEGINNING ROCK CLIMBING

Basic instruction in safe rope handling, knots, conditioning, climbing technique, belaying, anchor systems and rappelling. Prerequisite: none.
1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Teaching Learning and Curricul Department

PEB 13036 - INDOOR CYCLING

Covers the knowledge and skills that are needed for understanding and participating in an indoor cycling program. Also covers the components of fitness and the physiological factors and benefits of exercise to promote a healthy lifestyle. Prerequisite: none.
1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Teaching Learning and Curricul Department

PEB 13040 - CARDIO KICKBOXING

Covers the knowledge and skills that are needed to understand and participate in Cardio Kickboxing. Also covers the components of fitness and the physiological factors and benefits of exercise to promote a healthy lifestyle. This course is part theory and part practical application. Prerequisite: none.
1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory
PEB 13041 - HARDCORE ABS
Examines methods and techniques that improve abdominal and back strength, mechanics and the ability to dynamically stabilize. The student masters total body movement that occur through all three planes of motion. The exercises are performed on a stable and unstable surface for greater balance challenge. Equipment is used to increase resistance to intensify the work load. Improves core strength and activities of daily living.
Prerequisite: none.
1.000 Credit hours
2.000 Lab hours
Levels: Undergraduate
Schedule Types: Laboratory

PEB 13093 - VARIABLE TITLE WORKSHOP IN EXERCISE, LEISURE AND SPORT
(Repeatable for credit) Workshop in exercise, leisure and sport activities topics vary. Prerequisite: None.
1.000 TO 2.000 Credit hours
1.000 TO 2.000 Other hours
Levels: Undergraduate
Schedule Types: Workshop

PEP 15010 - INTRODUCTION TO PHYSICAL EDUCATION, FITNESS AND SPORT
Development of a knowledge base on the roles, foundations, contextual and social issues, and career opportunities as they relate to physical education, physical activity and sport. Experimentation with various fitness tests and assessments that lead to the development of personal fitness plans. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture

PEP 15011 - DEVELOPMENT AND ANALYSIS OF INVASION GAMES
Development, analysis and assessment of game performance skills used in invasion games. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture

PEP 15015 - DEVELOPMENT AND ANALYSIS OF NET GAMES
Development and analysis of game performance skills in net games. Emphasis on problem solving strategies
and skill execution related to game performance and on effective pedagogy. Prerequisites: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**PEP 15016 - DEVELOPMENT AND ANALYSIS OF TARGET AND FIELD GAMES**

Development and analysis of game performance skills used in target games and field-run-score games. Prerequisites: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**PEP 15018 - DEVELOPMENT OF SWIMMING AND AQUATIC SKILLS**

Development and analysis of basic aquatic skills, swimming strokes, starts and turns, diving skills, physical fitness principles, aquatic safety and basic rescue techniques. Prerequisite: None.

1.000 Credit hours
1.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Teaching Learning and Curricul Department

**PEP 15020 - FUNDAMENTAL MOVEMENT, GYMNASTICS AND DANCE**

Designed to provide teachers and activity leaders with knowledge, skills, and dispositions necessary to teach developmentally appropriate progressions for fundamental movement skills, dance, and gymnastics. Prerequisites: none

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**PEP 25025 - TEACHING IN PHYSICAL EDUCATION**

A seminar focused on the inquiry of teaching and learning of movement activities. A study of the role of the teacher, teacher behaviors, learning environments in movement activities and technology applications in physical education. Field observation hours requires a BCII and FBI background check report. Prerequisite: PEP 15010.

3.000 Credit hours
1.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
**PEP 25026 - OVERVIEW OF OUTDOOR PURSUITS AND ADVENTURE EDUCATION**

An overview of outdoor pursuits and adventure education is provided for students preparing to serve students/clients in physically active, outdoor and adventure contexts. Includes a required service learning component, which involves the design and delivery of quality outdoor education programs and/or curricula to children within the local community. Prerequisite: physical education-professional (PEP) majors.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

**PEP 25033 - LIFESPAN MOTOR DEVELOPMENT**

Introduction to motor development across the life span. Special emphasis on description of motor development changes and factors influencing change. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**PEP 35010 - PSYCHOLOGICAL DIMENSIONS OF MOTOR BEHAVIOR**

Psychological factors in exercise, physical activity and sport emphasizing motor control learning and performance. Laboratory included. Prerequisite: Junior standing and EXSC 35068.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Course Attributes:
Writing Intensive Course

**PEP 35020 - FITNESS EDUCATION**

This course is designed to prepare teachers, coaches, and physical activity specialists for an interdisciplinary approach to fitness education. Specific emphasis will be placed on enhancing students' content knowledge of fitness and physical activity within a classroom setting as well as applying pedagogical principles of class management, instructional strategies, feedback and assessment in in practical settings to enhance students' ability to teach and coach fitness content within a variety of physical education, sport and physical activity contexts. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
PEP 35040 - COACHING FOOTBALL

Techniques of coaching football, including film analysis and offensive and defensive skills and systems. Prerequisite: Not open to freshmen.
2.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

PEP 35041 - COACHING SOCCER

Coaching soccer, including analysis of skills strategy and administrative responsibilities. Prerequisite: Not open to freshmen.
2.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

PEP 35042 - COACHING VOLLEYBALL

Coaching volleyball, including analysis of skills, offensive and defensive strategy and administrative responsibilities. Prerequisite: Not open to freshmen.
2.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

PEP 35044 - COACHING BASKETBALL

Philosophy, fundamentals, strategy, administrative responsibilities and conditioning. Prerequisite: Not open to freshmen.
2.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

PEP 35048 - COACHING BASEBALL AND SOFTBALL

Coaching techniques in softball and baseball, including analysis of basic skills, position play and offensive and defensive strategies. Prerequisite: Not open to freshmen.
PEP 35049 - COACHING TRACK AND FIELD

Coaching techniques relative to track and field events. Principles of organization for track and field meets. Prerequisite: Not open to freshmen.

2.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

PEP 35084 - MOTOR SKILL ANALYSIS

Designed to assist teachers, coaches, and physical activity specialists in the analysis of motor skills. Students study the applications of performance and biomechanical principles to enhance skill and tactical performance in physical activity settings. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

PEP 45015 - PSYCHOLOGY OF COACHING

(Cross-listed with CI 55015) Psychological factors affecting athletic performance, with particular attention to practice factors, personality, motivation and problem athletes. Prerequisite: Junior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

PEP 45020 - CONTEMPORARY ATHLETIC COACHING

(Cross-listed with CI 55020) A focus on the philosophy, skills strategies and tactics of coaching within contemporary society. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Teaching Learning and Curricul Department
**PEP 45037 - ADAPTED PHYSICAL EDUCATION**

An academic and practical approach to physical education for specific disorders. Field based experience (10 hours). Prerequisite: junior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Teaching Learning and Curricul Department

**PEP 45051 - ELEMENTARY SCHOOL PHYSICAL EDUCATION METHODS**

(Cross-listed with CI 55051) Approaches to teaching in elementary school physical education. Focus on establishing an environment for learning, planning standards based lessons, instructional effectiveness, and assessment of student learning. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school-agency before the first day of field experience. Prerequisites: PEP 15010, 15011, PEP 15015, PEP 15016, PEP 15020, PEP 25025, and PEP 25033; and special approval

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Teaching Learning and Curricul Department

**PEP 45053 - ELEMENTARY SCHOOL PHYSICAL EDUCATION CONTENT**

(Cross-listed with CI 55053) Physical education content for the elementary school child with emphasis on developmentally appropriate learning in three domains. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school-agency before the first day of field experience. Prerequisites: PEP 15010, PEP 15011, PEP 15015, PEP 15016, PEP 15020, PEP 25025, and PEP 25033; and special approval. Corequisite: PEP 45051.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Teaching Learning and Curricul Department

**PEP 45058 - SECONDARY SCHOOL PHYSICAL EDUCATION METHODS**

(Cross-listed with CI 55058) Approaches to teaching in secondary school physical education. Focus on management of the learning environment, planning for learning outcomes in three domains, instructional effectiveness, and sequential curriculum development. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school-agency before the first day of field experience. Prerequisites: PEP 15010, PEP 15011, PEP 15015, PEP 15016, PEP 15020, PEP 25025, and PEP 25033; and special approval. Corequisite: PEP 45059

3.000 Credit hours
2.000 Lecture hours
PEP 45059 - SECONDARY SCHOOL PHYSICAL EDUCATION CONTENT

(Cross-listed with CI 55059) Introduction and development of content, standards-based curriculum models, management and organizational skills related to sports and activities utilized in secondary school physical education. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school-agency before the first day of field experience. Prerequisites: PEP 15010, PEP 15011, PEP 15015, PEP 15016, PEP 15020, PEP 25025, and PEP 25033; and special approval. Corequisite: PEP 45058.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Teaching Learning and Curricul Department

PEP 45092 - INTERNSHIP IN PHYSICAL EDUCATION

(Repeatable for a maximum of 8 credit hours) Supervised full-time experience providing knowledge of overall operations for an agency or sports program in an approved setting. Forty-five (45) work hours per credit hour. Prerequisite: Senior standing and special approval.

2.000 TO 4.000 Credit hours
6.000 TO 12.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Teaching Learning and Curricul Department

Course Attributes:
Experiential Learning Requirem

PEP 45096 - INDIVIDUAL INVESTIGATION IN PHYSICAL EDUCATION

(Repeatable for a maximum of 6 credit hours) Independent study completed under the supervision of a faculty member. Written approval of supervising faculty member and school director required prior to registration. Prerequisite: Junior standing and special approval.

1.000 TO 3.000 Credit hours
3.000 TO 6.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Teaching Learning and Curricul Department

PEP 45692 - INTERNSHIP IN ATHLETIC COACHING

(Repeatable for a maximum of 4 credit hours) Supervised experience in organized sport focused upon the duties of a coach; can involve one or more level (youth, school, college, professional) and sport. 45 contact
PEP 49525 - INQUIRY INTO PROFESSIONAL PRACTICE IN PHYSICAL EDUCATION

Seminar focused on development of those skills and knowledge which enable future teachers to engage in effective reflective, collaborative and ethical professional practice. Prerequisite: Admission to advanced study. Corequisite: PEP 49526. 3.000 Credit hours 3.000 Lecture hours

PEP 49526 - STUDENT TEACHING IN PHYSICAL EDUCATION

This experience provides for a full semester of student teaching in a school setting that is corequisite with PEP 49525 Inquiry into Professional Practice in Physical Education. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school/agency before the first day of the semester in which student teaching/ internship will take place; Official valid certification of Child Safety Training, approved Basic Life Support and A.L.I.C.E. Training must be presented to the campus office of clinical experience or designated faculty/staff at Regional campuses as prerequisite for student teaching. Prerequisite: Special approval and admission to advanced study. Corequisite: PEP 49525. 12.000 Credit hours 45.000 Other hours

PH 10000 - EXPLORING CAREERS IN PUBLIC HEALTH

Provides an overview of the diverse career opportunities available in the field. Explores various public health issues from the perspectives of public health professionals from the core disciplines in public health: social behavioral sciences, environmental health, health policy and management, epidemiology and biostatistics. Students learn about how public health professionals approach issues and the types of professional roles and activities they bring to addressing each issue. Prerequisite: none. 1.000 Credit hours 1.000 Lecture hours
**PH 10001 - INTRODUCTION TO PUBLIC HEALTH**

An overview of the evolution and practices of the dynamic field of public health in the United States and globally. Students are introduced to the structure and functions of public health organizations and public health practice. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Public Health Department

**PH 10002 - INTRODUCTION TO GLOBAL HEALTH**

An overview of the biological, social and environmental contributors to health and diseases in populations around the world, including case studies of selected infectious diseases, nutritional deficiencies and health effects of environmental change. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Public Health Department

*Course Attributes: Diversity Course-Global*

**PH 10195 - SPECIAL TOPICS IN PUBLIC HEALTH**

(Repeatable for credit) Subject varies depending on the emerging issue. Prerequisite: none.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Public Health Department

**PH 20000 - PUBLIC HEALTH PROFESSIONAL PRACTICE I**

Professional development course designed to expose future public health leaders to the diverse field of public health and develop attainable career goals. Student will begin the development of personal goals and a portfolio of work that will build during the entire program. The understanding of public health as a profession will be fostered. Prerequisite: sophomore standing.

1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Public Health Department
PH 20001 - ESSENTIALS OF EPIDEMIOLOGY

Students are introduced to the strategies adopted by public health professionals to study distribution and identification of important biologic, social and environmental determinants of diseases and health-related states in specific populations. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Public Health Department

PH 20010 - INTRODUCTION TO PUBLIC HEALTH INFORMATICS

Provides an overview of informatics principles applied in public health settings. Issues addressed include definitions, approaches, competencies, applications and the national health information network. Topical areas are digital literacy, electronic communication, system development, information use, project management, procurement, accountability, research, data standards, databases, human resource management, and confidentiality and security. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Public Health Department

PH 20015 - ZOMBIE OUTBREAK

Teaches the basic survival skills necessary to protect you, your family, and the public from a variety of natural and manmade “apocalypses”. Students apply the basics of emergency Public Health management to a zombie outbreak. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Public Health Department

PH 20195 - SPECIAL TOPICS IN PUBLIC HEALTH

(Repeatable for credit) Subject varies depending on the emerging issue. Prerequisite: none.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Public Health Department

PH 30000 - PUBLIC HEALTH PROFESSIONAL PRACTICE II

Professional development course designed to further prepare future public health leaders to the diverse field of
public health. The career portfolio will be further developed. Career goals will be re-evaluated and the strategies for goal attainment reassessed. The understanding of public health as a profession will be further developed. Graduate or professional education as an option will be discussed in greater detail. Prerequisites: PH 20000; and junior standing.
1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Public Health Department

**PH 30002 - INTRODUCTORY BIOSTATISTICS**

An introduction to statistical methodology in the field of public health. Students learn the statistical skills to read scientific articles, understand the statistical methods used and interpret the results on their own. Prerequisite: MATH 11008 or 11009 or 11010 or 11012 or 12002 or 12011 or 12012 or 14001 or 14002 or CS 10051 or PHIL 21002.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Public Health Department

**PH 30004 - PUBLIC HEALTH RESEARCH**

Approaches involved in defining public health problems and steps involved in conducting research about these problems. Students are introduced to how to evaluate published public health research. Prerequisite: PH 30002; and ENG 21011 or HONR 10297.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Public Health Department

**PH 30005 - SOCIAL AND BEHAVIORAL SCIENCE THEORIES IN PUBLIC HEALTH**

An overview of the contributions of the social and behavioral sciences to human health behavior, including application of studies in the area of health promotion, health protection and disease prevention in public health. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Public Health Department

**PH 30006 - INTRODUCTION TO ENVIRONMENTAL HEALTH AND SAFETY**

Introduction: the environment at risk; environmental epidemiology, environmental toxicology, environmental policy and regulation, watershed management, safe drinking water, wastewater management, vector-born and zoonotic disease, air quality, solid and hazardous waste, food protection, radiation safety and injury prevention,
PH 30007 - PREVENTION AND CONTROL OF DISEASES

Provides an overview of concepts involved in biological mechanisms of disease at cell, individual and community levels, provides insight into strategies used in preventing and controlling diseases at the population and/or community level within this framework. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Public Health Department

PH 30009 - ENVIRONMENTAL HEALTH AND SAFETY REGULATIONS AND POLICY

Develops a framework for understanding the regulatory structure of environmental and occupational health and safety regulations and policy in the U.S. Federal, state, and local levels of government are reviewed as well as major agencies and regulations. Prerequisite: PH 30006.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Public Health Department

PH 30012 - COMMUNICABLE DISEASES

A survey of communicable diseases of global public health significance, including the epidemiology and forensics associated with disease transmission, vaccination strategies and practices, and human responses to infectious disease. Students are introduced to infectious disease pathogens and the practices and procedures for their surveillance, handling and control. Prerequisite: PH 20001 and 30007.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Public Health Department

PH 30014 - STRATEGIES FOR PREVENTION IN PUBLIC HEALTH

Provides a review of population strategies for health promotion and disease prevention from a social-ecological perspective, highlighting the importance of evidence-based, equitable, and ethical approaches. Prerequisite: PH 30007
3.000 Credit hours
3.000 Lecture hours
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>PH 30015</td>
<td>UNITED STATES HEALTH CARE SYSTEM</td>
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<tr>
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<td>Provides an overview of the U.S. healthcare delivery system, including</td>
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<td>operations, stakeholders and the role of government with a particular</td>
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<td>emphasis on public health’s role in health care. Students gain an</td>
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<td>understanding of inpatient and outpatient services, the various roles of</td>
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<td>healthcare professionals, private and public financing and the impact of</td>
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<td>managed care. The primary focus is the public health system. Prerequisite:</td>
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<td>3.000 Credit hours</td>
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<td>3.000 Lecture hours</td>
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<td>PH 30033</td>
<td>PUBLIC HEALTH POLICY AND DECISION-MAKING</td>
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<td></td>
<td>An introductory survey of the formulation to implementation of public health</td>
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<td>policies for various public health issues, and the use of practical</td>
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<td>administrative tools such as strategic planning, use of economic evaluation</td>
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<td>tools and decision analysis. Prerequisite: none.</td>
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<td>3.000 Credit hours</td>
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<td>3.000 Lecture hours</td>
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<tr>
<td>PH 30040</td>
<td>PUBLIC HEALTH LABORATORY SAFETY, SECURITY AND EMERGENCY PREPAREDNESS</td>
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<td>Safe operations within the public health laboratory require specific</td>
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<td>knowledge and skills sets. Upon completion of this course, the student</td>
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<td>will (1) understand the public health laboratory infrastructure; (2) work</td>
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<td>safely and responsibly with equipment and reagents to investigate laboratory-</td>
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<td>based public health problems; (3) define the laws, policies and guidance</td>
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<td>documents related to public health laboratory activities; and (4) respond</td>
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<td>to simulated laboratory safety and security emergencies. Prerequisites: PH</td>
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<td>300006 and 30012.</td>
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<td>3.000 Credit hours</td>
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<td>1.000 Lecture hours</td>
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<td>2.000 Lab hours</td>
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<tr>
<td>PH 30101</td>
<td>SOLID AND HAZARDOUS WASTE MANAGEMENT</td>
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<td></td>
<td>Solid and hazardous waste programs and practices are explored. Pollution</td>
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<td>prevention, safety, sanitation practices, sustainability concepts,</td>
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<td>management, and regulations pertinent to solid and hazardous waste such as</td>
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<td>RCRA, are discussed and studied. Consumption, garbage handling, landfill</td>
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<td>design and disposal, sustainability concepts, reuse, recycling, composting</td>
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<td>and other waste strategies are presented. Hazardous waste and</td>
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<td>materials issues in the environment are introduced; such as HW disposal,</td>
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<td>TSD Facilities, underground storage tanks, “Superfund”, brownfields and</td>
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<td>related issues. Prerequisite: PH 30006.</td>
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<td>3.000 Credit hours</td>
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PH 30102 - AIR QUALITY AND POLLUTION CONTROL

Basic survey of air pollution and its control. The respiratory system and the bodies response to air pollutants of different types is reviewed and related illnesses such as asthma are studied. The Clean Air Act, NESHAPS and related regulations are surveyed. Ambient air quality standards, the effect of climate and other air pollution concepts are reviewed. Measurement and control methods for both particulate and gaseous contaminants are surveyed. Prerequisite: PH 30006.

3.000 Credit hours
2.670 Lecture hours
0.330 Other hours

Levels: Undergraduate
Schedule Types: Field Experience, Lecture

Public Health Department

PH 30103 - FOOD PROTECTION

Topics in foodborne disease prevention and food sanitation relative to quality control, food service and processing systems are introduced. Foodborne disease agents, microbiology, epidemiology and outbreak investigation techniques are explored. The regulatory process and agencies at the wholesale, retail and food service levels are introduced. Ohio food regulations are covered, including the Ohio Uniform Food Code. Basic preparation of students to conduct food serve inspections and foodborne disease investigations as part of agency regulatory programs. The opportunity to earn the National Restaurant Association, ServSafe Manager Certification is also provided. Prerequisite: PH 30006.

3.000 Credit hours
2.670 Lecture hours
0.330 Other hours

Levels: Undergraduate
Schedule Types: Field Experience, Lecture

Public Health Department

PH 30105 - WATER AND WASTEWATER MANAGEMENT

Explores the issues surrounding water pollution and human health, and the environmental treatment systems developed to provide safe water and sewage disposal. Private water and sewage systems and public water and sewage systems are studied. Federal and State regulations, including the Safe Drinking Water Act and Clean Water Act are reviewed. Field experiences are included. Prerequisite: 30006.

3.000 Credit hours
2.670 Lecture hours
0.330 Other hours

Levels: Undergraduate
Schedule Types: Field Experience, Lecture

Public Health Department
**PH 30106 - ENVIRONMENTAL TOXICOLOGY**

Basic toxicological principles applied to studies of environmental health are surveyed. Basic concepts of toxicological testing, dose response, animal and other models, dose curves, LD50’s, risk assessment, threshold theories, classifications of harmful effects, environmental pathways, metabolism and elimination are reviewed. Biological effects and the effect of select toxins on body systems are reviewed. Major groups of toxins and their effects are reviewed. Toxin behavior in air, water, wastewater, soil and environmental media are studied.

Prerequisite: PH 30006.

3.000 Credit hours
2.800 Lecture hours
0.200 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Public Health Department

**PH 30110 - HAZARDOUS MATERIALS MANAGEMENT**

Covers the use of hazardous materials. Emphasis is on the safe management of hazardous materials in the workplace and community, their procurement, storage, regulation, pollution problems, use, release, clean up, disposal, and their control, to prevent workplace and community health and safety problems. Prerequisite: PH 30006.

3.000 Credit hours
2.670 Lecture hours
0.330 Lab hours

Levels: Undergraduate
Schedule Types: Field Experience, Lecture

Public Health Department

**PH 30195 - SPECIAL TOPICS IN PUBLIC HEALTH**

(Repeatable for credit) Subject varies depending on the emerging issue. Prerequisite: none.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Public Health Department

**PH 31005 - SOCIAL DETERMINANTS OF HEALTH AND HEALTH BEHAVIOR**

Provides students with an overview of the social determinants of health behaviors and health outcomes. Students examine the relationships among the root causes of health disparities (education, income, inequality, race-ethnicity, social status-class, and gender) and more proximal causes of these disparities (e.g., access to and quality of medical care, work conditions, lifestyles, living conditions, social capital). These relationships are examined within ecological and multi-level theoretical frameworks. Prerequisite: PH 30005.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Public Health Department
PH 32005 - EMERGING ISSUES IN SOCIAL AND BEHAVIORAL SCIENCES

Provides students with exposure to touchstone issues in public health programming that have social and behavioral science implications. Topics reflect emergent priority areas and are expected to vary from semester to semester. Examples of current, emerging issues that may be covered include the Healthy People 2020 initiative, leading health indicators, role of CDC, state and local health departments and NGOs in promoting health behaviors, program recruitment, retention, evaluation and generalization challenges, ethical issues including informed consent and voluntary change, funding challenges for prevention programs, grant writing exposure, role of politics in public health programming, evidenced-based practices and practice-based evidence. Prerequisite: PH 30005.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Public Health Department

PH 34001 - PUBLIC HEALTH INTERVENTIONS I

Provides an overview of the planning and development of public health interventions including environmental, social, and behavioral public health issues from a social-ecological perspective, with attention to evidence-based, theoretical, and ethical approaches. Prerequisite: PH 30005.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Public Health Department

PH 34002 - PUBLIC HEALTH INTERVENTIONS II

Provides an overview of public health intervention implementation, evaluation, and sustainability, with examples of public health interventions in practice and exploration into the future of public health interventions. Prerequisite: PH 34001.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Public Health Department

PH 35001 - COMMUNITY-BASED PUBLIC HEALTH PRACTICE

Course focuses on the fundamentals of applying community engagement, organization, and development principles to create successful community public health interventions. Addresses work in at-risk and diverse communities using methods optimal for public health practice, including public health ethics, faith-based initiatives in community health, community health assessment and measurement methods, coalition building, and frameworks for developing health policy. Will also review the basic principles of health-related non-profit organization management and support. Prerequisite: PH 30005.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
### PH 35005 - ADVOCACY AND ACTIVISM IN PUBLIC HEALTH

Public health advocacy and activism are areas of increasing importance for those in public health at both national and international levels because they offer more direct approaches to achieve lasting social and political change. This course provides a foundation to the theory, evidence-base and strategies that can be harnessed to bring about change to improve the lives and health of populations, and explains how activism has an essential role in public health policy and practice. Prerequisite: PH 30005. Pre/corequisites: PH 35001 and PH 44000.

3.000 Credit hours
3.000 Lecture hours

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### PH 40000 - PUBLIC HEALTH PROFESSIONAL PRACTICE III

Professional development course designed to launch graduates into the workforce or graduate school. The career portfolio, resume, and cover letters will be finalized. Interviewing and application skills will be developed. Working with a College of Public Health career counselor students will develop job search strategies and begin the application process. Students continuing their education in a graduate program will work on application materials. Prerequisites: PH 30000; and senior standing.

1.000 Credit hours
1.000 Lecture hours

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### PH 40020 - DISASTER PREPAREDNESS

College-level version of the FEMA “Are You Ready?” training designed to prepare average citizens to respond to emergency situations. Students learn how to appropriately prepare for and respond to natural and contrived emergencies, such as floods, tornados, fires, terrorism, etc. Students prepare an emergency response kit for home use, using materials from home or store, and learn how to shelter-in-place. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

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### PH 40040 - FORENSIC EPIDEMIOLOGY

Introduction to the principles and practices of investigative epidemiology. Inherent to the course is the understanding of how public health law impacts data collection and representation. Students learn the roles and responsibilities of the criminal justice, public health, and first responder communities as they relate to the investigation of public health crimes. Additionally, students use real case studies to apply knowledge in the investigation of mock public health crimes. Prerequisite: special approval.

3.000 Credit hours
3.000 Lecture hours
PH 40050 - PUBLIC HEALTH AND FIRST RESPONDER LINKAGES

Capstone experience meant to unite students of public health with their professional partners. Students interact in the classroom and at the partners’ place of business to link theory and practice, gain real-world knowledge and cement partnerships. Prerequisite: PH 40040 and special approval.

3.000 Credit hours
1.000 Lecture hours
2.000 Other hours

PH 40092 - INTERNATIONAL HEALTH PRACTICUM

(Repeatable for credit) A supervised internship in global/international health. Prerequisite: PH 10002; and junior or senior standing.

3.000 TO 6.000 Credit hours
10.000 TO 20.000 Other hours

PH 40100 - VECTOR-BORNE AND ZOONOTIC DISEASES

Presents a broad overview of major considerations related to human health and the vector-borne diseases transmitted by rodents and arthropods (insects and arachnids). Control measures, including rodent control, local mosquito control programs, and integrated pest management (IPM) concepts with safe pesticide use are reviewed. Application of FIFRA regulations are presented. An overview of issues associated with zoonotic diseases transmitted by animals, such as rabies, and their control are also included. Vector and reservoir relationships are explored. Prerequisite: PH 30006.

3.000 Credit hours
2.670 Lecture hours
0.330 Other hours

PH 40101 - OCCUPATIONAL HEALTH AND SAFETY

Introduction to workplace safety and industrial hygiene. The OSHA regulations and procedures are reviewed and workplace safety and health principles studied. Students learn how to anticipate, recognize, evaluate and control workplace hazards. Safety issues are surveyed; such as confined space, electrical LOTO, trenching, fall protection, walking and working surfaces. Industrial hygiene issues are surveyed; such as air contaminants,
hazard communication, respiratory protection, ergonomics, noise control and bloodborne pathogens. Control measures for workplace hazards are discussed. Prerequisite: PH 30006.

Levels: Undergraduate
Schedule Types: Field Experience, Lecture

Public Health Department

PH 40109 - LABORATORY SAFETY AND HYGIENE

Basic introduction to laboratory safety, chemical hygiene, and biosafety. Includes the research compliance programs of institutions (IBC, IACUC, IRB, RSC) and the OSHA Chemical Hygiene Standard requirements and program responsibilities. General lab safety concepts are reviewed, along with chemical handling and storage, fumehoods and ventilation, hazardous waste disposal, radiation safety, and lab design. Basic principles of biosafety are covered, BSL 1-4 levels, biosafety cabinets, select agents, bloodborne pathogens, NIH Guidelines, biosecurity and animal use. Prerequisite: PH 30006.

Levels: Undergraduate
Schedule Types: Field Experience, Lecture

Public Health Department

PH 40112 - INSTITUTIONAL AND RECREATIONAL ENVIRONMENTAL, OCCUPATIONAL HEALTH AND SAFETY

Introduces the environmental and occupational health and safety issues unique to institutional settings and licensed facilities; such as, hospitals, nursing homes, K-12 schools, universities, R&D, correctional facilities, and childcare facilities; and in various recreational environments, such as swimming pools, spas, bathing beaches, marinas, campgrounds, playgrounds and natural areas. Prerequisite: PH 30006.

Levels: Undergraduate
Schedule Types: Field Experience, Lecture

Public Health Department

PH 40191 - SEMINAR IN PUBLIC HEALTH

(Repeatable for credit) Seminar on current and important topics in public health. Subject matter varies depending on topic. Prerequisite: none.

Levels: Undergraduate
Schedule Types: Seminar

Public Health Department

PH 40195 - SPECIAL TOPICS IN PUBLIC HEALTH
PH 40196 - INDIVIDUAL INVESTIGATION IN PUBLIC HEALTH

(Repeatable for maximum 6 credits) Individual undergraduate investigation or research on specific public health issues. Prerequisite: junior or senior standing and special approval.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Public Health Department

PH 40200 - THE BUILT ENVIRONMENT

Provides a basic understanding of the relationships between poor housing and environmental health and safety problems. It explores the physiological and psychological aspects of shelter. Students gain a basic understanding of housing codes, fire codes, zoning, and related regulatory issues. Students explore housing related health problems; such as, indoor air quality, mold, asbestos, lead paint, and radon. Manufactured housing parks and agricultural labor camp regulations are also reviewed. The role of EH in community planning is explored. Health issues with urban sprawl and community design problems, utility problems such as urban run-off and pest problems, and other issues are reviewed. Elements of healthy community, community planning and environmental protection are introduced; such as new urbanism, walkable communities programs, environmental building design, green communities, urban gardening and LEED's. Prerequisite: PH 30006.

3.000 Credit hours
2.670 Lecture hours
0.330 Other hours

Levels: Undergraduate
Schedule Types: Field Experience, Lecture

Public Health Department

PH 41000 - ENVIRONMENTAL AND OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT

Entails leadership and management principles in environmental and occupational health and safety (EOHS), and helps students develop skills needed to become an effective supervisor. Issues such as regulatory structure, program and community planning, policy development, budgeting, staffing and staff development, strategic planning, training, professionalism and assessment are reviewed. Board development, dealing with difficult people and situations, legal, social, political, and economic effects on EOHS programs are dealt with. Related issues such as ethics, human resources, workers comp, court appearances, media relations and communications are reviewed. Prerequisites: PH 30006 and 30102 and 30105 and 30106; and senior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Public Health Department
PH 41092 - FIELD EXPERIENCE IN MEETING THE BASIC HEALTH AND HUMAN NEEDS

(Repeatable for credit) Provides practical skills in simple, affordable appropriate technologies that can offer solutions for meeting basic health and human needs in the developing world at the household and community levels. Technologies are organized into five modules: 1) food, agriculture, and nutrition; 2) water and sanitation; 3) alternative household energy; 4) primary health care; and 5) community development needs and resource assessment. All five modules cover appropriate technologies that while meeting the basic needs have significant impact on health of the individuals and communities. Principles of participatory community development and sensitivity to cross-cultural, gender, and ecological issues are emphasized throughout the training. Prerequisite: special approval.

3.000 Credit hours
8.000 Other hours

Levels: Undergraduate
Schedule Types: Field Experience

Public Health Department

Course Attributes:
Experiential Learning Requirem

PH 42092 - ENVIRONMENTAL, OCCUPATIONAL, HEALTH AND SAFETY INTERNSHIP

The purpose of the environmental and occupational health and safety internship is to supplement the student in-class learning experiences with practical hand-on skills and work practice experiences that helps them develop the environmental competencies required for success in the field. Prerequisite: junior or senior standing; and special approval.

4.000 TO 6.000 Credit hours
13.330 TO 20.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Public Health Department

Course Attributes:
Experiential Learning Requirem

PH 44000 - HEALTH DISPARITIES

Understanding the factors involved in health disparities at the national and global level, and the impact of health disparities on public health. Prerequisite: ENG 21011 or HONR 10297; and 21 credit hours of public health (PH) courses; and junior or senior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Public Health Department

Course Attributes:
Diversity Course-Domestic, Writing Intensive Course

PH 44002 - GLOBAL HEALTH IMMERSION: GENEVA, SWITZERLAND
Participants explore a number of health concerns, policies and challenges with global importance and implications. Students investigate current global health policies and themes, and become familiar with the major players in global health including governmental and nongovernmental organizations and multinational agencies. Presentations are given by experts currently working in various regions of the world to solve such pressing global problems as HIV/AIDS, post-war trauma, tuberculosis, refugee health, non-communicable disease prevention and environmental contamination. Prerequisites: PH 10001 and 10002; and junior or senior standing; and special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Public Health Department

PH 44003 - ENVIRONMENTAL HEALTH ISSUES IN LOW- AND MIDDLE-INCOME COUNTRIES

Covers the important environmental health issues of concerns in low- and middle-income countries and appropriate intervention strategies. Topics include clean drinking water and sanitation, indoor air pollution, outdoor air pollution, environmental management, sustainability and health. Prerequisite: public health (PH) or anthropology (ANTH) major; and junior or senior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Public Health Department

PH 44004 - GLOBAL HEALTH IMMERSION: LATIN AMERICA

The principal objective of this summer intersession course is to immerse students into the history, culture and public health systems of Latin American countries Colombia Ecuador. Students will have the opportunity to visit major cities, i.e., Cali, Colombia, and Quito, Ecuador, rural areas, and well-known tourist destinations (Cartagena, Colombia, Otavalo, Ecuador). Students will gain an understanding of current scientific research on tropical diseases of local public health relevance, such as malaria. The course will focus on the basic biology of disease, mechanisms of transmission (epidemiology), and efforts to develop vaccines against malaria. The course is designed primarily for sophomores, juniors and seniors who are public health, nursing, or biological science majors. Master's level students will also be accepted. Knowledge of basic Spanish language is useful but not necessary. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Public Health Department

PH 44005 - LEGAL ASPECTS OF HEALTH SERVICES MANAGEMENT

Provides an overview of legal and regulatory essentials in health services management. Provides a historical perspective on legal aspects of health care as well as an introduction to law, tort law, criminal aspects, contracts, civil procedure and trial practice as related to health care. Students examine how liability impacts corporate structures, health departments and health care professionals and examine issues related to patient consent, legal reporting requirements, labor relations and patient rights. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours
Public Health Department

**PH 44010 - PUBLIC HEALTH PLANNING AND FINANCE**

Introduces students to business planning of health services. Students obtain skills in public health financial decision-making, including general principles of public health accounting, budgeting and financial planning. 
Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Public Health Department

**PH 44015 - PUBLIC HEALTH MANAGEMENT**

Provides an overview of management and leadership concepts, principles and practice as applied to public health management. Students learn basic skills in team-building, developing board relationships, strategic planning, fiscal management, marketing, conflict resolution and negotiation in healthcare management. Coursework integrates principles of ethics and professionalism, effective communication, managing complex and culturally diverse workplaces and the changing role of public health managers. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Public Health Department

**PH 44020 - PUBLIC HEALTH ETHICS IN PRACTICE, POLICY AND RESEARCH**

Provides an introduction to public health ethics, including the key foundations, concepts and frameworks for evaluating ethical issues in the public health setting. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Public Health Department

**PH 44025 - PRINCIPLES OF PUBLIC HEALTH LEADERSHIP**

Designed to introduce students to skill-sets and leadership practices necessary for successful public health leadership, with an emphasis on leading positive and sustainable change in real world situations. It also familiarizes students with key aspects of partnership building and advocacy for the purposes of improving health. Particular skills include coalition/partnership development, health advocacy, team building, mentoring and leadership. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Public Health Department
**PH 44092 - INTERNSHIP IN PUBLIC HEALTH**

(Repeatable for credit) Capstone internship experience in a public health setting under the supervision of a site preceptor and university supervisor. Students gain experience in public health work. Prerequisite: senior standing and special approval.

3.000 TO 6.000 Credit hours
3.000 TO 6.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

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**PH 45092 - SERVICE LEARNING PRACTICUM IN COMMUNITY-BASED PUBLIC HEALTH**

(Repeatable for credit) This course is designed to provide an opportunity for students to engage in a variety of public health settings under the supervision of faculty. The practicum experience is focused on developing skills needed to implement change to improve population health, providing a setting in which students may integrate and apply the skills and knowledge acquired through their coursework. Students will be exposed to some of the benefits and challenges encountered by public health professionals on a routine basis. Prerequisite: PH 35001; and special approval. Pre/corequisite: PH 35005.

3.000 Credit hours
1.000 Lecture hours
6.000 Other hours

Levels: Undergraduate
Schedule Types: Lecture, Practicum or Internship

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**PH 49000 - CAPSTONE EXPERIENCE IN PUBLIC HEALTH**

Case studies of various strategies used in addressing various public health issues are discussed within an evaluative framework. Prerequisite: 21 credit hours of public health (PH) courses; and junior or senior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

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**PH 60172 - PRACTICUM SEMINAR IN PUBLIC HEALTH**
Seminar component of the Practicum Experience; course must be taken at the same time as the Practicum Experience; students prepare a final portfolio and seminar presentation integrating theory and practice. Prerequisite: graduate standing. Corequisite: PH 60192.

1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Lecture

Public Health Department

**PH 60192 - PRACTICUM EXPERIENCE**

(Repeatable for credit) Observational and participation in public health activities of a public health agency, hospital or other approved organization. The student completes the field experience with joint supervision from the university and approved organization or agency. Prerequisite: graduate standing. Corequisite: PH 60172.

5.000 Credit hours
20.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Public Health Department

**PH 80199 - DISSERTATION I**

(Repeatable for credit) Registration for two semesters required, first semester dissertation work beings and continues until completion of 30 hours. Prerequisite: doctoral standing.

15.000 Credit hours
15.000 Other hours

Levels: Graduate
Schedule Types: Dissertation

Public Health Department

**PH 80299 - DISSERTATION II**

(Repeatable for credit) Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until degree requirements are met. Prerequisite: doctoral standing.

15.000 Credit hours
15.000 Other hours

Levels: Graduate
Schedule Types: Dissertation

Public Health Department

**PHIL 11001 - INTRODUCTION TO PHILOSOPHY**

An introduction to the diverse methods and subject matters of philosophy. Primary philosophic sources from varied philosophical traditions focus on at least three philosophic areas. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
PHIL 11009 - CRITICAL THINKING
An exploration of the place of argument in reasoning through a consideration of the structure, expression and function of arguments. Attention is also given to the evaluation of arguments and the identification of common errors in reasoning. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture

PHIL 21001 - INTRODUCTION TO ETHICS
This course considers what constitutes ethics, not just which specific acts or act-kinds are ethical, using at least three primary philosophic sources from varied ethical traditions. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture

PHIL 21002 - INTRODUCTION TO FORMAL LOGIC
Techniques of formal logic, traditional and contemporary. Prerequisite: MATH 00022 with a minimum C grade or minimum 22 ACT mathematics score or minimum 520 SAT mathematics score or minimum 35 ALEKS placement exam score.
3.000 Credit hours
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture

PHIL 30015 - MEDICINE AND MORALITY
A philosophical exploration of at least three issues related to current medical practices, which may include ethical, religious, legal and clinical aspects. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Philosophy Department

**PHIL 30025 - ENVIRONMENTAL ETHICS**

A philosophical examination of ethical issues in environmental studies, including topics such as: animal ethics and the sources of our food; the value of nature and environmental aesthetics; sustainability and biodiversity; ecofeminism, social justice and radical ecology; and the human response to climate change. The course is designed to complement fields of study such as geography, environmental studies and biology. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Philosophy Department

**PHIL 31001 - ANCIENT GREEK PHILOSOPHY**

Examination of issues of Greek thought from its inception through Plato and Aristotle. Prerequisite: at least one of PHIL 11009 or PHIL 21002 or PHIL 41038; and at least one of PHIL 11001 or PHIL 21001.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Philosophy Department

Course Attributes:
Writing Intensive Course

**PHIL 31002 - MEDIEVAL PHILOSOPHY**

Examination of issues in medieval thought; for instance, the existence and nature of God and the problem of universals. Prerequisite: At least one of PHIL 11009 or PHIL 21002 or PHIL 41038; and at least one of PHIL 11001 or PHIL 21001.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Philosophy Department

Course Attributes:
Writing Intensive Course

**PHIL 31003 - CONTINENTAL RATIONALISM**
Selections from Rationalists; for instance, Descartes, Spinoza and Leibniz. Prerequisite: At least one of PHIL 11009 or PHIL 21002 or PHIL 41038; and at least one of PHIL 11001 or PHIL 21001.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Philosophy Department

Course Attributes:
Writing Intensive Course

**PHIL 31004 - BRITISH EMPIRICISM**

Selections from British Empiricists; for instance, Locke, Berkeley and Hume. Prerequisite: At least one of PHIL 11009 or PHIL 21002 or PHIL 41038; and at least one of PHIL 11001 or PHIL 21001.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Philosophy Department

Course Attributes:
Writing Intensive Course

**PHIL 31005 - GERMAN CRITICAL PHILOSOPHY**

Selections from Kant and post-Kantians. Prerequisite: At least one of PHIL 11009 or PHIL 21002 or PHIL 41038; and at least one of PHIL 11001 or PHIL 21001.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Philosophy Department

Course Attributes:
Writing Intensive Course

**PHIL 31006 - NINETEENTH-CENTURY PHILOSOPHY**

Selections from works of 19th-century philosophers. Prerequisite: At least one of PHIL 11009 or PHIL 21002 and at least one of PHIL 11001 or PHIL 21001.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Philosophy Department

Course Attributes:
Writing Intensive Course
**PHIL 31010 - TWENTIETH-CENTURY PHILOSOPHY**

Selections from the most influential schools of thought within 20th-century philosophy: existentialism, pragmatism, logical positivism, analytic philosophy, phenomenology. Prerequisite: At least one of PHIL 11009 or PHIL 21002 or PHIL 41038; and at least one of PHIL 11001 or PHIL 21001.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Philosophy Department

Course Attributes:
Writing Intensive Course

**PHIL 31020 - AMERICAN PHILOSOPHY**

Selections from principal American philosophers from Colonial times to present. Prerequisite: At least one of PHIL 11009 or PHIL 21002 or PHIL 31020; and at least one of PHIL 11001 or PHIL 21001.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Philosophy Department

Course Attributes:
Writing Intensive Course

**PHIL 31030 - EXISTENTIALISM**

Development and themes of existentialism. Students with junior standing or above, who have not taken a Philosophy (PHIL) course, should contact the department for a prerequisite override. Prerequisite: one course in philosophy (PHIL).

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Philosophy Department

**PHIL 31035 - PHILOSOPHY AND JUSTICE**

Consideration of topics and issues in the general sphere of justice from different perspectives by classical and contemporary philosophers. Students with junior standing or above, who have not taken a Philosophy (PHIL) course, should contact the department for a prerequisite override. Prerequisite: one course in Philosophy (PHIL).

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
PHIL 31040 - WOMEN AND PHILOSOPHY

Examines the influences and contributions of women to philosophy and the influences philosophy has had on women, either historically or currently. Students with junior standing or above, who have not taken a Philosophy [PHIL] course should contact the department for a prerequisite override. Prerequisite: one course in philosophy [PHIL].
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

PHIL 31060 - AESTHETICS

Investigation of concepts such as the aesthetic object and creative expression, and critique of certain theories designed to solve various problems of aesthetic evaluations. Students with junior standing or above, who have not taken a Philosophy (PHIL) course, should contact the department for a prerequisite override. Prerequisite: one course in Philosophy (PHIL).
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

PHIL 31070 - AFRICAN AND AFRICAN-AMERICAN PHILOSOPHIES

Exploration of philosophical issues in African and African-American thought systems including examination of traditional and emerging approaches to developing conceptions of African and African-American philosophies. Students with junior standing or above, who have not taken a Philosophy (PHIL) course, should contact the department for a prerequisite override. Prerequisite: one course in Philosophy (PHIL).
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

PHIL 31072 - AMERICAN INDIAN PHILOSOPHIES

Examination of philosophical issues and themes in American Indian world views with attention given to the reflections of contemporary native scholars. Students with junior standing or above, who have not taken a
Philosophy [PHIL] course should contact the department for a prerequisite override. Prerequisites: one course in philosophy [PHIL].

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Philosophy Department

Course Attributes:
Diversity Course-Domestic

**PHIL 31075 - PHILOSOPHY AND MULTICULTURALISM**

Philosophical examination of various approaches to multiculturalism, in terms of definitions, justifications and relevant alternative views regarding the scope and nature of multiculturalism. Students with junior standing or above, who have not taken a Philosophy (PHIL) course, should contact the department for a prerequisite override. Prerequisite: one course in Philosophy (PHIL).

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Philosophy Department

Course Attributes:
Diversity Course-Global

**PHIL 31080 - FOUNDATIONS IN THE HISTORY AND PHILOSOPHY OF SCIENCE**

(Cross-listed with HIST 31500) An introduction to the study of science as a social, cultural, and historical phenomenon with an emphasis on the history of science primarily in western civilization since 1500 and the major philosophical approaches to science developed in the twentieth century. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Philosophy Department

**PHIL 32091 - SEMINAR: PHILOSOPHICAL REFLECTIONS**

Exploration of philosophic literature for contrasting or developing man. Conceptions of human beings. Students with junior standing or above, who have not taken a Philosophy (PHIL) course, should contact the department for a prerequisite override. Prerequisite: one course in Philosophy (PHIL).

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

Philosophy Department

**PHIL 40005 - HEALTH CARE ETHICS**
Ethical problems in health care critically assessed, and consideration of how these specific ethical problems illuminate the ethical enterprise. Students with junior standing or above, who have not taken a Philosophy (PHIL) course, should contact the department for a prerequisite override. Prerequisite: one course in Philosophy (PHIL).

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Philosophy Department

PHIL 40093 - VARIABLE TITLE WORKSHOP IN PHILOSOPHY

(Repeatable for credit) S/u graded. Prerequisite: Permission.
1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Undergraduate
Schedule Types: Workshop

Philosophy Department

PHIL 41010 - PROBLEMS IN THE PHILOSOPHY OF RELIGION

Philosophical examination of issues and problems presented by various writers in philosophy of religion. Prerequisite: one of the following: PHIL 31001 or PHIL 31002 or PHIL 31003 or PHIL 31004 or PHIL 31005 or PHIL 31006 or PHIL 31010 or PHIL 31020
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Philosophy Department

PHIL 41020 - SOCIAL PHILOSOPHY

Philosophic examination of theories of societies as proposed by various writers. Prerequisite: one of the following - PHIL 31001, 31002 31003, 31004, 31005, 31006, 31010 or 31020.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Philosophy Department

PHIL 41025 - PHILOSOPHY OF LAW

Critical examination of the nature and function of law. Prerequisite: one of the following: PHIL 31001 or PHIL 31002 or PHIL 31003 or PHIL 31004 or PHIL 31005 or PHIL 31006 or PHIL 31010 or PHIL 31020
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
**PHIL 41030 - ETHICAL THEORY**

Intensive and in-depth study of some aspects of ethical theory in the philosophical tradition. Prerequisite: At least one of PHIL 31001 or PHIL 31002 or PHIL 31003 or PHIL 31004 or PHIL 31005 or PHIL 31006 or PHIL 31010 or PHIL 31020.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Philosophy Department

**PHIL 41035 - PHILOSOPHY OF SCIENCE**

Analysis of methodological problems in scientific disciplines. Prerequisite: one of the following - PHIL 31001, 31002, 31003, 31004, 31005, 31006, 31010 or 31020.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Philosophy Department

**PHIL 41036 - PHILOSOPHY OF COGNITIVE SCIENCE**

(Slashed with PHIL 51036) Designed to analyze the core philosophical commitments that define contemporary cognitive science and to examine the debates about foundational issues such as, for example, modularity, innateness, computationalism, and consciousness. Prerequisite: PHIL 31001 or PHIL 31002 or PHIL 31003 or PHIL 31004 or PHIL 31005 or PHIL 31006 or PHIL 31010 or PHIL 31020.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Philosophy Department

**PHIL 41037 - RENAISSANCE AND EARLY MODERN PHILOSOPHY AND SCIENCE**

( Slashed with PHIL 51037 ) An investigation of the work of the most important European philosophers of the 15th-17th centuries, with a particular emphasis on the interrelation between philosophy and science in their thought, and on the influence of Greek philosophy on the intellectual life of the time. Prerequisite: PHIL 31001 or PHIL 31002 or PHIL 31003 or PHIL 31004 or PHIL 31005 or PHIL 31006 or PHIL 31010 or PHIL 31020.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Philosophy Department
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisites</th>
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<th>Lecture Hours</th>
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</thead>
<tbody>
<tr>
<td>PHIL 41038</td>
<td>INTERMEDIATE LOGIC</td>
<td>Study of first order predicate calculus with identity and function symbols. Students with junior standing or above, who have not taken a Philosophy (PHIL) course, should contact the department for a prerequisite override. Prerequisite: one course in Philosophy (PHIL).</td>
<td>3.000 Credit hours, 3.000 Lecture hours</td>
<td>Undergraduate</td>
<td>Lecture</td>
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<tr>
<td>PHIL 41040</td>
<td>EPISTEMOLOGY</td>
<td>Study of various theories of knowledge in the philosophical tradition. Prerequisite: one of the following - PHIL 31001, 31003, 31004, 31005, 31006, 31010 or 31020.</td>
<td>3.000 Credit hours, 3.000 Lecture hours</td>
<td>Undergraduate</td>
<td>Lecture</td>
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<tr>
<td>PHIL 41042</td>
<td>METAPHYSICS</td>
<td>Philosophical examination of at least three issues in metaphysics with an emphasis on the historical debates that give rise to them and their contemporary contexts. Prerequisite: One of the following courses: PHIL 31001 or PHIL 31002 or PHIL 31003 or PHIL 31004 or PHIL 31005 or PHIL 31006 or PHIL 31010 or PHIL 31020.</td>
<td>3.000 Credit hours, 3.000 Lecture hours</td>
<td>Undergraduate</td>
<td>Lecture</td>
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<tr>
<td>PHIL 41045</td>
<td>METALOGIC</td>
<td>Consideration of various metatheorems including soundness and completeness of propositional and predicate calculus, undecidability of predicate calculus, and incompleteness of the theory of arithmetic. Prerequisite: PHIL 41038.</td>
<td>3.000 Credit hours, 3.000 Lecture hours</td>
<td>Undergraduate</td>
<td>Lecture</td>
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<td>PHIL 41048</td>
<td>METAETHICS</td>
<td>Examination of the semantics, ontology and modes of justification employed in ethical theories. Prerequisite: PHIL 31001 or 31002 or 31003 or 31004 or 31005 or 31006 or 31010 or 31020.</td>
<td>3.000 Credit hours, 3.000 Lecture hours</td>
<td>Undergraduate</td>
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<td>PHIL 41050</td>
<td><strong>ANALYTIC PHILOSOPHY</strong></td>
<td>Study of major problems in analytic philosophy and subsequent philosophical analysis. Prerequisite: At least one of PHIL 31001 or PHIL 31002 or PHIL 31003 or PHIL 31004 or PHIL 31005 or PHIL 31006 or PHIL 31010 or PHIL 31020.</td>
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<tr>
<td>PHIL 41055</td>
<td><strong>PHENOMENOLOGY</strong></td>
<td>Investigation of phenomenological movement, its methods and the scope and course of its applications in philosophy and other disciplines. Prerequisite: one of the following - PHIL 31001, 31002, 31003, 31004, 31005, 31006, 31010 or 31020.</td>
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<td>PHIL 41060</td>
<td><strong>PRAGMATISM</strong></td>
<td>Detailed reading from classical American pragmatists along with some attention to later interpretations and explorations of current re-appraisals and developments. Prerequisite: one of the following - PHIL 31001, 31002, 31003, 31004, 31005, 31006, 31010 or 31020.</td>
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<td>PHIL 41065</td>
<td><strong>PLATO</strong></td>
<td>Detailed examination of selected Platonic dialogues, with some attention to Plato’s development and dismissal of certain pre-Socratic (and Socratic) themes. Prerequisite: one of the following - PHIL 31001, 31002, 31003, 31004, 31005, 31006, 31010 or 31020.</td>
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**PHIL 41070 - ARISTOTLE**

Detailed examination of selected works of Aristotle, with some attention given to Aristotle's development and dismissal of certain pre-Socratic and Platonic themes. Prerequisite: one of the following - PHIL 31001, 31002, 31003, 31004, 31005, 31006, 31010 or 31020.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**PHIL 41076 - CONTINENTAL PHILOSOPHY**

Investigation of some figure, issue or theme in continental philosophy from Descartes to present. Prerequisite: one of the following - PHIL 31001, 31002, 31003, 31004, 31005, 31006, 31010 or 31020.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**PHIL 41077 - BRITISH AND AMERICAN THOUGHT**

Detailed investigation of a figure or issue in British or American philosophy. Prerequisite: one of the following - PHIL 31001, 31002, 31003, 31004, 31005, 31006, 31010 or 31020.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**PHIL 41080 - PHILOSOPHY AND ART IN THE MODERN AGE**

Exploring, with emphasis on the modern age, philosophical conceptions of art in their interplays with, especially, practicing artists' attitudes toward theory. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Course Attributes:
Writing Intensive Course

**PHIL 41086 - PHILOSOPHY OF EXPRESSION**
Concentrated study of expression through philosophy of literature, of music, of body, of language or of symbols. Prerequisite: one of the following - PHIL 31001, 31002, 31003, 31004, 31005, 31006, 31010 or 31020.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Philosophy Department

PHIL 41091 - SEMINAR IN WORLD PHILOSOPHY

(Repeatable for a maximum of 3 credit hours) Intensive primary-source reading and critical appreciation of the significant works of one or more philosophical figures or one or more philosophical issues from traditions outside the Western canon. Prerequisite: PHIL 310001 or 31002 or 31003 or 31004 or 31005 or 31006 or 31010 or 31020.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

Philosophy Department

PHIL 41491 - SEMINAR IN ASIAN PHILOSOPHY

(Repeatable a maximum of 2 times) (Cross-listed with PHIL 51491) Intensive primary-source reading and critical appreciation of the significant works of one or more philosophical figures or one or more philosophical issues from traditions in Asian philosophy. Prerequisite: at least one of PHIL 31001 or 31002 or 31003 or 31004 or 31005 or 31006 or 31010 or 31020.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

Philosophy Department

PHIL 41591 - SEMINAR IN THE HISTORY OF ETHICS

(Repeatable a maximum of 2 times) (Cross-listed with PHIL 51591) Intensive primary-source reading and critical appreciation of the significant works of one or more philosophical figures or one or more philosophical issues from traditions in the history of ethics. Prerequisite: at least of PHIL 31001 or 31002 or 31003 or 31004 or 31005 or 31006 or 31010 or 31020.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

Philosophy Department

PHIL 49995 - SPECIAL TOPICS

(Repeatable for credit when topic varies) Prerequisite: special approval.
2.000 OR 3.000 Credit hours
2.000 OR 3.000 Lecture hours
PHIL 49996 - INDIVIDUAL INVESTIGATION

(Repeatable for credit with departmental approval prior to registration) Prerequisite: departmental special approval prior to registration.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

PHIL 49999 - SENIOR HONORS PROJECT

(Repeated registration permitted with departmental approval prior to registration) Thesis or other independent study or creative project. Prerequisite: Departmental permission before registration.
2.000 OR 3.000 Credit hours
2.000 OR 3.000 Other hours

PHIL 50005 - HEALTH CARE ETHICS

Ethical problems in health care critically assessed and consideration of how these specific ethical problems illuminate the ethical enterprise. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

PHIL 50093 - VARIABLE TITLE WORKSHOP IN PHILOSOPHY

(Repeatable for credit) Prerequisite: Graduate standing.
1.000 TO 6.000 Credit hours
3.000 Other hours
PHIL 51010 - PROBLEMS IN THE PHILOSOPHY OF RELIGION

Philosophical examination of issues and problems presented by various writers in philosophy of religion. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Philosophy Department

PHIL 51015 - PHILOSOPHICAL STUDY OF RELIGION

A philosophical examination of pivotal issues, schools and theorists in the study of religion and the future of comparative studies. This course pursues the academic study of religion at an advanced level. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Philosophy Department

PHIL 51020 - SOCIAL PHILOSOPHY

Philosophical examination of theories of society as proposed by various writers. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Philosophy Department

PHIL 51025 - PHILOSOPHY OF LAW

Critical examination of nature and function of law. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Philosophy Department

PHIL 51030 - ETHICAL THEORY

Intensive and in-depth study of some aspects of ethical theory in the philosophical tradition. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
PHIL 51035 - PHILOSOPHY OF SCIENCE

Analysis of methodological problems in scientific disciplines. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

PHIL 51036 - PHILOSOPHY OF COGNITIVE SCIENCE

(Slashed with PHIL 41036) Designed to analyze the core philosophical commitments that define contemporary cognitive science, and to examine the debates about foundational issues such as modularity, innateness, computationalism, and consciousness. Prerequisite: Graduate standing.
3.000 Credit hours
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Levels: Graduate
Schedule Types: Lecture

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(Slashed with PHIL 41037) An investigation of the work of the most important European philosophers of the 15th-17th centuries, with a particular emphasis on the interrelation between philosophy and science in their thought, and on the influence of Greek philosophy on the intellectual life of the time. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

PHIL 51038 - INTERMEDIATE LOGIC

(Cross-listed with CS 41038 and MATH 41038 and MATH 51038 and PHIL 41038) Study of first order predicate calculus with identity and function symbols. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

PHIL 51040 - EPISTEMOLOGY

Study of various theories of knowledge in the philosophical tradition. Prerequisite: Graduate standing.
PHIL 51042 - METAPHYSICS
A philosophical examination of at least three issues in metaphysics with an emphasis on the historical debates that give rise to them and their contemporary contexts. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture
Philosophy Department

PHIL 51045 - METALOGIC
(Cross-listed with CS 41045 and CS 51045 and MATH 41045 and MATH 51045 and PHIL 41045) Consideration of various metatheorems including soundness and completeness of propositional and predicate calculus, undecidability of predicate calculus and incompleteness of the theory of arithmetic. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture
Philosophy Department

PHIL 51048 - METAETHICS
Examination of the semantics, ontology, and modes of justification employed in ethical theories. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture
Philosophy Department

PHIL 51050 - ANALYTIC PHILOSOPHY
Study of major problems in analytic philosophy and subsequent philosophical analysis. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture
Philosophy Department
**PHIL 51055 - PHENOMENOLOGY**

Investigation of phenomenological movement, its methods and the scope and course of its applications in philosophy and other disciplines. Prerequisite: Graduate standing.

3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Philosophy Department

**PHIL 51060 - PRAGMATISM**

Detailed reading from classical american pragmatists along with some alert to later interpretations and exploration of current reappraisals and developments. Prerequisite: Graduate standing.

3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Philosophy Department

**PHIL 51065 - PLATO**

Detailed examination of selected platonic dialogues, with some attention to Plato's development and dismissal of certain pre-Socratic (and Socratic) themes. Prerequisite: Graduate standing.

3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Philosophy Department

**PHIL 51070 - ARISTOTLE**

Detailed examination of selected works of Aristotle, with some attention given to Aristotle's development and dismissal of certain pre-Socratic and Platonic themes. Prerequisite: Graduate standing.

3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Philosophy Department

**PHIL 51076 - CONTINENTAL PHILOSOPHY**

Investigation of some figure, issue or theme in continental philosophy from Descartes to present. Prerequisite: Graduate standing.

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<td>Exploring, with emphasis, on the modern age philosophical conceptions of art in their interplays with, especially, practicing artists' attitudes toward theory. Prerequisite: Graduate standing.</td>
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<tr>
<td>PHIL 51091</td>
<td>SEMINAR IN WORLD PHILOSOPHY</td>
<td>(Repeatable for a maximum of 3 credit hours) Intensive primary-source reading and critical appreciation of the significant works of one or more philosophical figures or one or more philosophical issues from traditions outside the Western canon. Prerequisite: graduate standing.</td>
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<tr>
<td>PHIL 51491</td>
<td>SEMINAR IN ASIAN PHILOSOPHY</td>
<td>(Repeatable for a maximum of 2 times) (Cross-listed with PHIL 41491) Intensive primary-source reading and</td>
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critical appreciation of the significant works of one or more philosophical figures or one or more philosophical issues from traditions in Asian philosophy. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Philosophy Department

PHIL 51591 - SEMINAR IN THE HISTORY OF ETHICS

(Repeatable twice for credit) Intensive primary-source reading and critical appreciation of the significant works of one or more philosophical figures or one or more philosophical issues from traditions in the history of ethics. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Philosophy Department

PHIL 59995 - SPECIAL TOPICS

(Repeatable for credit) When content varies, may be repeated for credit. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Philosophy Department

PHIL 59996 - INDIVIDUAL INVESTIGATION

(Repeatable for credit with department approval) Prerequisite: Special approval and graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Philosophy Department

PHIL 60191 - GRADUATE SEMINAR

(Repeatable for credit) Intensive primary-source reading and critical appreciation of the significant works of one or more philosophical figures or one or more philosophical issues. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Seminar

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<tbody>
<tr>
<td>PHIL 60201</td>
<td>SEMINAR: HISTORY OF PHILOSOPHY</td>
<td>Intensive primary-source reading and critical appreciation of the significant works of one or more historical philosophers (other than Plato and Aristotle) or one or more historical philosophical issues. Prerequisite: Graduate standing.</td>
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<td>Graduate</td>
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<tr>
<td>PHIL 61000</td>
<td>RESPONSIBLE CONDUCT OF RESEARCH</td>
<td>(Cross-listed with BMS 61000 and BMS 71000) Introduction into professional and ethical conduct of research. Topics include codes and laws governing research, identification of scientific misconduct, plagiarism, authorship and intellectual properties, ethical animal and human research. Prerequisite: Graduate standing.</td>
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<tr>
<td>PHIL 61050</td>
<td>PHILOSOPHY OF LANGUAGE</td>
<td>(Cross-listed with ENG 65050 and ENG 75050) Critical examination of nature and function of language especially in relation to mental function and development. Prerequisite: Graduate standing.</td>
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<tr>
<td>PHIL 61055</td>
<td>SEMEIOTICS</td>
<td>(Cross-listed with MCLS 60020) An introduction to contemporary theories of semiotics and to the application of those theories to linguistics, literature, translation and technology. Prerequisite: Graduate standing.</td>
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<td>Graduate</td>
<td>Lecture</td>
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<tr>
<td>PHIL 61056</td>
<td>HERMENEUTICS</td>
<td>Critical appreciation of the theories and practices of interpretation comprehended according to certain classical, current and emergent philosophic styles and traditions. Prerequisite: Graduate standing.</td>
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<td>3.000</td>
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<td>Schedule Types: Lecture</td>
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<td>PHIL 61085</td>
<td>METAETHICS</td>
<td>Examination of the conceptions, presuppositions and value judgments of ethical theories. Prerequisite: Graduate standing.</td>
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<tr>
<td>PHIL 69194</td>
<td>COLLEGE TEACHING OF PHILOSOPHY</td>
<td>(Repeatable for credit) Discussion, critique and development of concepts to guide the teaching of philosophy including concepts of procedures and tactics for planning, pacing, presenting, representing and reviewing philosophic texts figures and issues. Prerequisite: graduate standing.</td>
<td>Graduate</td>
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<td>1.000 Lecture hours</td>
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<tr>
<td>PHIL 69198</td>
<td>FIRST YEAR PAPER</td>
<td>Research paper for graduate students conducted under direction of the advisory group. Prerequisite: graduate standing.</td>
<td>Graduate</td>
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<td>1.000 Credit hours</td>
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<tr>
<td>PHIL 69199</td>
<td>THESIS I</td>
<td>Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester distributed over several semesters if desired. Prerequisite: Departmental special approval before registration and graduate standing.</td>
<td>Graduate</td>
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<td>Masters Thesis</td>
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<td>2.000 TO 6.000 Credit hours</td>
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<td>2.000 TO 6.000 Other hours</td>
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</table>
Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: PHIL 69199 and graduate standing.

2.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Philosophy Department

**PHIL 69995 - SPECIAL TOPICS**

(Repeatable for credit) Selected topics in Philosophy. Prerequisite: Special approval and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Philosophy Department

**PHIL 69997 - COLLOQUIUM**

(Repeatable for credit) Student, faculty and invited guests participate in conference-like contexts to present and discuss issues of current philosophic interest. Prerequisite: Graduate standing.

1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Colloquium

Philosophy Department

**PHIL 69998 - RESEARCH**

(Repeatable for credit) Research or individual investigation for master's level graduate students. Credits earned may be applied toward meeting degree requirements. Prerequisite: Special approval and graduate standing.

1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

Philosophy Department

**PHY 11030 - SEVEN IDEAS THAT SHOOK THE UNIVERSE**

Description of major revolutionary physical concepts and their implications for understanding the physical universe. Not counted toward requirements for physics major. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Physics Department
PHY 12000 - INTRODUCTORY PHYSICS SEMINAR

To provide a nurturing course for new physics majors, ideally to be taken in their first semester as majors. The course includes a journal club component, informational talks by industrial physicists and training in a select group of essential skills and tools for future work in the physics program. Prerequisite: None.

1.000 Credit hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

Physics Department

Course Attributes:
Experiential Learning Requirem

PHY 12111 - PHYSICS FOR HEALTH TECHNOLOGIES

Basic physics applied to health technologies: measurement techniques, force and motion of solids and fluids, energy, heat wave phenomena, electricity. Students taking this course should be in a health technologies major. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Physics Department

PHY 12201 - TECHNICAL PHYSICS I

Introduction to principles of physics: mechanics. Two-hour lecture/recitation and two-hour laboratory weekly. Prerequisite: MATH 11010; and pre- or corequisite: MATH 11022 or MATH 12001 or MATH 19001.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Physics Department

Course Attributes:
Kent Core-Basic Sciences, Kent Core-Basic Sciences Lab

PHY 12202 - TECHNICAL PHYSICS II

Introduction to principles of physics: fluids, thermodynamics, electricity and magnetism. Three-hour lecture/recitation and two-hour laboratory weekly. Prerequisite: PHY 12201.

4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab
Physics Department

Course Attributes:
Kent Core-Basic Sciences, Kent Core-Basic Sciences Lab

**PHY 13001 - GENERAL COLLEGE PHYSICS I**

Principles of mechanics, heat and sound. Three-hour lecture, one-hour recitation. Pre/corequisite: MATH 11022 or MATH 12001 or MATH 12002 or MATH 12021. Corequisite: PHY 13021.

4.00 Credit hours
3.00 Lecture hours
1.00 Other hours

Levels: Undergraduate
Schedule Types: Lecture, Recitation

Physics Department

Course Attributes:
Kent Core-Basic Sciences, LER-Basic Sciences, TAG - Science, Trnfr Module-Natural Sciences

**PHY 13002 - GENERAL COLLEGE PHYSICS II**

Principles of electricity and magnetism, optics and modern physics. Three hours lecture and one hour recitation weekly. Prerequisite: PHY 13001 or PHY 23101. Corequisite: PHY 13022.

4.00 Credit hours
3.00 Lecture hours
1.00 Other hours

Levels: Undergraduate
Schedule Types: Lecture, Recitation

Physics Department

Course Attributes:
Kent Core-Basic Sciences, LER-Basic Sciences, TAG - Science, Trnfr Module-Natural Sciences

**PHY 13011 - COLLEGE PHYSICS I**

Principles of classical physics, primarily mechanics. Three-hour lecture and one-hour recitation weekly. This is a flexibly scheduled course that meets concurrently with PHY 13001 for the first half of the regular term. Pre/corequisite: MATH 11022 or 12001 or 12002 or 12012 or 12021. Corequisite: PHY 13021.

2.00 Credit hours
3.00 Lecture hours
1.00 Other hours

Levels: Undergraduate
Schedule Types: Lecture, Recitation

Physics Department

Course Attributes:
Kent Core-Basic Sciences, LER-Basic Sciences, Trnfr Module-Natural Sciences

**PHY 13012 - COLLEGE PHYSICS II**

Principles of classical physics, primarily electricity and magnetism. Three-hour lecture and one-hour recitation
weekly. This is a flexibly scheduled course that meets concurrently with PHY 13002 for the first half of a regular term. Prerequisite: PHY 13001 or PHY 13011 or PHY 23101.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture, Recitation

Physics Department

Course Attributes:
Kent Core-Basic Sciences, LER-Basic Sciences, Trnfr Module-Natural Sciences

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Credit Hours</th>
<th>Lecture Hours</th>
<th>Lab Hours</th>
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<tbody>
<tr>
<td>PHY 13021</td>
<td>GENERAL COLLEGE PHYSICS LABORATORY I</td>
<td>Introductory lab to accompany PHY 13001 or PHY 13011. Corequisite: PHY 13001 or PHY 13011.</td>
<td>1.000</td>
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<tr>
<td>PHY 13022</td>
<td>GENERAL COLLEGE PHYSICS LABORATORY II</td>
<td>Introductory lab to accompany PHY 13002 or PHY 13012. Corequisite: PHY 13002 or PHY 13012.</td>
<td>1.000</td>
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<tr>
<td>PHY 20095</td>
<td>SPECIAL TOPICS</td>
<td>(Repeatable for credit) Topic announced when scheduled. Prerequisite: None.</td>
<td>1.000 TO 3.000</td>
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<td>1.000 TO 3.000</td>
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<tr>
<td>PHY 20096</td>
<td>INDIVIDUAL INVESTIGATION IN PHYSICS</td>
<td>(Repeatable for credit) Individual projects in physics. Prerequisite: Special approval.</td>
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</table>
PHY 21040 - PHYSICS IN ENTERTAINMENT AND THE ARTS

Descriptive introduction to physics underlying selected forms of art and entertainment. Examples are drawn from music, visual arts and communications media. Not counted toward requirements for physics major. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Physics Department

Course Attributes:
Kent Core-Basic Sciences, LER-Basic Sciences, Trnfr Module-Natural Sciences

PHY 21041 - PHYSICS IN ENTERTAINMENT AND THE ARTS LABORATORY

Laboratory component of PHY 21040, two hours weekly. Pre/corequisite: PHY 21040.
1.000 Credit hours
1.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Physics Department

Course Attributes:
Kent Core-Basic Sciences, Kent Core-Basic Sciences Lab, LER-Basic Sciences, Trnfr Module-Natural Sciences

PHY 21430 - FRONTIERS IN ASTRONOMY

Modern description of astrophysical observations, the results of these observations and the physical principles based on them. Not counted toward requirements for physics major. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Physics Department

Course Attributes:
Kent Core-Basic Sciences, LER-Basic Sciences, Trnfr Module-Natural Sciences

PHY 21431 - FRONTIERS IN ASTRONOMY LABORATORY

Laboratory component of PHY 21430. Pre/corequisite: PHY 21430.
1.000 Credit hours
PHY 22564 - INTRODUCTION TO MATERIALS PHYSICS
Survey of mechanical and electronic properties of materials with application in science and technology. Metals, semiconductors, ceramics, polymers and liquid crystals, and other special materials will be addressed.
Prerequisite: PHY 23102.
3.000 Credit hours
3.000 Lecture hours

PHY 23101 - GENERAL UNIVERSITY PHYSICS I
Principles of mechanics, heat and sound at calculus level. Four hours lecture/recitation and three hours lab weekly. Pre/corequisite MATH 12002.
5.000 Credit hours
4.000 Lecture hours
3.000 Lab hours

PHY 23102 - GENERAL UNIVERSITY PHYSICS II
Principles of electricity, magnetism, light and modern physics at calculus level. Four hours lecture/recitation and three-hour lab weekly. Prerequisite: PHY 13001 or PHY 23101. Pre/corequisite: MATH 12003.
5.000 Credit hours
4.000 Lecture hours
3.000 Lab hours

PHY 30020 - INTERMEDIATE PHYSICS LABORATORY
Experiments in classical and modern physics are selected to accompany and to supplement junior-level physics courses. Prerequisite: PHY 36001 and 10 hours of additional physics courses.

2.000 Credit hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Physics Department

Course Attributes:
Writing Intensive Course

**PHY 30095 - SPECIAL TOPICS**

(Repeatable for credit) Topic announced when scheduled. Prerequisite: Permission.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Physics Department

**PHY 32511 - ELECTRONICS**

"Hands-on" course to give the student a working knowledge of analog electronics and of AC and DC circuits typically used by the scientist. Prerequisite: MATH 12002 and; PHY 13002 or PHY 23102.
4.000 Credit hours
6.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Physics Department

**PHY 34000 - COSMOLOGY**

This course will provide a quantitative introduction to modern cosmology, from the Big Bang to the formation of the first stars. Subjects include the evolution of the geometry and temperature of the universe its composition and select aspects of general relativity. Prerequisite: PHY 36001.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Physics Department

**PHY 35101 - CLASSICAL MECHANICS**

Modern description of mechanics including both LaGrangian and Hamilton formulations, with applications to central force, motion, coupled oscillations, rigid body motion and motion in non-inertial reference frames. Prerequisite: PHY 23102 and MATH 32052.
4.000 Credit hours
4.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture

Physics Department

**PHY 36001 - INTRODUCTORY MODERN PHYSICS**

Special theory of relativity, Rutherford-Bohr model of atom, quantization of light, matter waves, Schroedinger equation, hydrogen atom, electron spin, multi-electron atoms. Prerequisite: MATH 12003 and PHY 23102.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Physics Department

**PHY 36002 - APPLICATIONS OF MODERN PHYSICS**

Survey of applications of twentieth century physics. Topics include molecular bonding, conducting and insulating solids, degenerate matter, quantum condensates, subatomic and sub-nuclear particle physics, cosmology. Prerequisite: PHY 36001.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Physics Department

**PHY 40020 - ADVANCED PHYSICS LABORATORY**

(Repeatable for credit) Advanced experiments in classical and modern physics are selected to accompany and to supplement senior-level physics courses. Prerequisites: PHY 30020; and pre- or corequisite: 6 credit hours of 40000-level physics courses.

2.000 Credit hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Physics Department

Course Attributes:
Writing Intensive Course

**PHY 40060 - PHYSICAL LITERATURE**

Study of current or topical literature. Prerequisite: Permission.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Physics Department
**PHY 40092 - INTERNSHIP IN PHYSICS**

(Repeatable for credit) Supervised capstone experience in physics at a national laboratory, a research university in industry or at a local research site. No more than 3 credit hours may be applied toward the major electives for physics majors. Prerequisite: Permission.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Physics Department

Course Attributes:
Experiential Learning Requirem

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**PHY 40095 - SPECIAL TOPICS**

(Repeatable for credit) Topic announced when scheduled. Prerequisite: Permission.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Physics Department

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**PHY 40096 - INDIVIDUAL INVESTIGATION**

(Repeatable for credit) Individual projects for physics majors. Prerequisite: 20 hours of physics; and special approval of department chairperson.

1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Physics Department

Course Attributes:
Experiential Learning Requirem

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**PHY 40099 - SENIOR HONORS THESIS**

Thesis for departmental, general or university honors must be 1-10 hours with continuous registration throughout the senior year beginning in the summer prior to the senior year. Students taking this course must consult with their department and the Honors College and receive approval prior to the first semester of the senior year. Prerequisites: Honors senior standing and special approval.

1.000 TO 10.000 Credit hours
1.000 TO 10.000 Other hours

Levels: Undergraduate
Schedule Types: Senior Project/Honors Thesis

Physics Department

Course Attributes:
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Prerequisites</th>
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<tbody>
<tr>
<td>PHY 40195</td>
<td>SPECIAL TOPICS</td>
<td>(Repeatable for credit) Topic announced when scheduled. Prerequisite: Permission.</td>
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</table>
|            |                                                  | 1.000 TO 3.000 Credit hours
|            |                                                  | 1.000 TO 3.000 Lecture hours
|            | Levels: Undergraduate Schedule Types: Lecture   | Physics Department                                                            |
| PHY 41010  | BIOPHOTONICS                                    | (Cross-listed with BSCI 41010 and BSCI 51010 and CHEM 41010 and CHEM 51010 and PHY 51010) Interdisciplinary overview of the basics of biophotonics; application of biophotonic techniques to probe biological samples. Introduction to the foundations of optics and photonics and how the molecular structure of organic molecules translates into unique photonic properties and targeting in biological cells or tissue. Preparation of fluorescent materials, advanced spectroscopy and cell visualization using regular and confocal fluorescence microscopy. Prerequisite: special approval. |
|            |                                                  | 3.000 Credit hours
|            |                                                  | 1.000 Lecture hours
|            |                                                  | 6.000 Lab hours
|            | Levels: Undergraduate Schedule Types: Combined Lecture and Lab | Physics Department                                                            |
| PHY 44600  | INTRODUCTION TO BIOLOGICAL PHYSICS              | Introduces ideas essential to physical understanding of biological systems. Topics include: introduction to molecular components of the cell; statistical mechanics and transport in biological systems; selected topics in biophysics. Prerequisite: PHY 23102. |
|            |                                                  | 3.000 Credit hours
|            |                                                  | 3.000 Lecture hours
|            | Levels: Undergraduate Schedule Types: Lecture   | Physics Department                                                            |
| PHY 44802  | ASTROPHYSICS                                    | Galactic structure, stellar formation and evolution, origin of the elements (or nucleosynthesis), nonoptical astronomies, and description of various cosmological theories. Prerequisite: MATH 12003. |
|            |                                                  | 3.000 Credit hours
|            |                                                  | 3.000 Lecture hours
|            | Levels: Undergraduate Schedule Types: Lecture   | Physics Department                                                            |
| PHY 45201  | ELECTROMAGNETIC THEORY                          |                                                                               |
|            |                                                  |                                                                               |
Properties of electric and magnetic fields developed by vector methods. Treatment on static fields in vacuum and matter. Theory of classical electromagnetic fields with emphasis on dynamic fields. Prerequisites: MATH 32052 and PHY 23102.  
4.000 Credit hours  
4.000 Lecture hours  

Levels: Undergraduate  
Schedule Types: Lecture  

Physics Department  

**PHY 45301 - THERMAL PHYSICS**  

An introduction to thermodynamics and statistical mechanics, with applications in material science and engineering. Prerequisite: PHY 36001.  
3.000 Credit hours  
3.000 Lecture hours  

Levels: Undergraduate  
Schedule Types: Lecture  

Physics Department  

**PHY 45401 - MATHEMATICAL METHODS IN PHYSICS**  

Consolidation of vector analysis, curvilinear coordinate systems, tensors, matrix algebra, vector spaces, common groups in physics, calculus of residues, contour integration, methods for differential equations in physics; additional topics important for physics selected from special functions, integral equations, calculus of variations. Prerequisite: MATH 32052.  
4.000 Credit hours  
4.000 Lecture hours  

Levels: Undergraduate  
Schedule Types: Lecture  

Physics Department  

**PHY 45403 - DATA ANALYSIS AND COMPUTATIONAL PHYSICS TECHNIQUES**  

3.000 Credit hours  
3.000 Lecture hours  

Levels: Undergraduate  
Schedule Types: Lecture  

Physics Department  

**PHY 45501 - ELECTROMAGNETIC WAVES AND MODERN OPTICS**  

Interactions between light and matter from both a macroscopic and microscopic perspective; producing and controlling light devices and spectroscopic techniques based on modern optics. Prerequisite: PHY 45201.  
3.000 Credit hours  
3.000 Lecture hours
# PHY 46101 - QUANTUM MECHANICS

Systematic introduction to the principles and solution techniques of quantum mechanics, including the Schrödinger equation in one and three dimensions. Topics include: angular momentum formalism, introductory Dirac notation and vector space formalism, intrinsic spin, identical particle systems and perturbation theory. Prerequisite: PHY 36001. Pre- or corequisite: MATH 32052.

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<tr>
<th>Levels: Undergraduate</th>
<th>Schedule Types: Lecture</th>
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<tr>
<td>PHY 46101</td>
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## PHY 46301 - INTRODUCTION TO NUCLEAR AND PARTICLE PHYSICS

(Cross-listed with PHY 56301) Introduction to nuclear and particle physics including particle detectors and accelerators, experimental techniques, nuclear fission and fusion, nuclear reactors, medical applications, and connections to astrophysics and cosmology. Prerequisite: PHY 36001. Pre- or corequisite: MATH 32052.

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<th>Levels: Undergraduate</th>
<th>Schedule Types: Lecture</th>
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<td>PHY 46301</td>
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## PHY 46401 - INTRODUCTION TO SOLID STATE PHYSICS

Fundamental unifying concepts and experimental techniques needed to understand thermal, electrical and optical properties of ions and electrons in solids. Special topics of current research. Prerequisite: PHY 36002.

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<tr>
<th>Levels: Undergraduate</th>
<th>Schedule Types: Lecture</th>
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<tbody>
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<td>PHY 46401</td>
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## PHY 50020 - ADVANCED PHYSICS LAB

(Repeatable for credit) Advanced experiments in classical and modern physics are selected to accompany and to supplement graduate-level physics courses. Prerequisite: Graduate standing.

<table>
<thead>
<tr>
<th>Levels: Graduate</th>
<th>Schedule Types: Laboratory</th>
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<tbody>
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<td>PHY 50020</td>
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<tr>
<td>PHY 50093</td>
<td>VARIABLE TITLE WORKSHOP IN PHYSICS</td>
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<tr>
<td>PHY 50095</td>
<td>SPECIAL TOPICS</td>
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<tr>
<td>PHY 50096</td>
<td>INDIVIDUAL INVESTIGATION</td>
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<tr>
<td>PHY 50195</td>
<td>SPECIAL TOPICS</td>
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<tr>
<td>PHY 51010</td>
<td>BIOPHOTONICS</td>
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<td>Course Code</td>
<td>Course Title</td>
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<tr>
<td>PHY 54600</td>
<td>INTRODUCTION TO BIOLOGICAL PHYSICS</td>
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<tr>
<td>PHY 54802</td>
<td>ASTROPHYSICS</td>
</tr>
<tr>
<td>PHY 55201</td>
<td>ELECTROMAGNETIC THEORY</td>
</tr>
<tr>
<td>PHY 55301</td>
<td>THERMAL PHYSICS</td>
</tr>
<tr>
<td>PHY 55401</td>
<td>MATHEMATICAL METHODS IN PHYSICS</td>
</tr>
</tbody>
</table>
Consolidation of vector analysis, curvilinear coordinate systems, tensors, matrix algebra, vector spaces, common groups in physics, calculus of residues, contour integration, methods for differential equations in physics; additional topics important for physics selected from special functions, integral equations, calculus of variations. Prerequisite: MATH 32052 and graduate standing.

4.000 Credit hours
4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Physics Department

**PHY 55403 - DATA ANALYSIS AND COMPUTATIONAL PHYSICS TECHNIQUES**

Study of uncertainties in physical measurements. Data reduction and error analysis techniques. Monte Carlo simulation method. Least-squares fits to data. Basic computational physics techniques. Prerequisite: MATH 12003 and PHY 23102 and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Physics Department

**PHY 55501 - ELECTROMAGNETIC WAVES AND MODERN OPTICS**

Interactions between light and matter from both a macroscopic and microscopic perspective; producing and controlling light; devices and spectroscopic techniques based on modern optics. Prerequisite: PHY 55201 and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Physics Department

**PHY 56101 - QUANTUM MECHANICS**

Systematic introduction to the principles and solution techniques of quantum mechanics, including the Schroedinger equation in one and three dimensions. Topics include: angular momentum formalism, introductory Dirac notation and vector space formalism, intrinsic spin, identical particle systems, and perturbation theory. Prerequisite: Special approval and graduate standing.

4.000 Credit hours
4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Physics Department

**PHY 56301 - INTRODUCTION TO NUCLEAR AND PARTICLE PHYSICS**

(Cross-listed with PHY 46301) Introduction to nuclear and particle physics including particle detectors and accelerators, experimental techniques, nuclear fission and fusion, nuclear reactors, medical applications, and
connections to astrophysics and cosmology. Prerequisite: graduate standing.
4.000 Credit hours
4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Physics Department

**PHY 56401 - INTRODUCTION TO SOLID STATE PHYSICS**

Fundamental unifying concepts and experimental techniques needed to understand thermal, electrical and optical properties of ions and electrons in solids. Special topics of current research. Prerequisite: PHY 36002 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Physics Department

**PHY 60091 - PHYSICS SEMINAR**

(Repeatable for credit) Discussion of current literature or of original research in physics. Participation by students, faculty and guests. Prerequisite: Graduate standing.
1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Physics Department

**PHY 60093 - VARIABLE TITLE WORKSHOP IN PHYSICS**

(Repeatable for credit) Workshops individually designed to provide instruction and training in specific areas of physics. Prerequisite: Graduate standing.
1.000 TO 6.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Physics Department

**PHY 60094 - COLLEGE TEACHING OF PHYSICS**

(Repeatable for credit) Methodology of teaching in a university, college or junior college. Includes observation of kinds of teaching and practice teaching. Prerequisite: Graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Physics Department
PHY 60098 - RESEARCH

(Repeatable for credit) Research or individual investigation. Credits earned may be applied toward meeting degree requirements if department approves. Prerequisite: Graduate standing.
1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

Physics Department

PHY 60199 - THESIS I

Thesis students must register for total of 6 hours, 2 to 6 hours in a single semester distributed over several semesters if desired. Prerequisite: Special approval of adviser and graduate standing.
2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Physics Department

PHY 60295 - ADVANCED TOPICS

(Repeatable for credit) Selected special topics of current research interest. Prerequisite: Special approval and graduate standing.
1.000 TO 3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Physics Department

PHY 60299 - THESIS II

Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: PHY 60199 and graduate standing.
2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Physics Department

PHY 64101 - ADVANCED PROBLEM SOLVING IN PHYSICS

The course imparts advanced problem-solving skills not acquired in regular courses. Examples from four basic areas of physics (classical mechanics, electricity and magnetism, quantum mechanics and statistical physics) will be emphasized. Prerequisite: PHY 6/75101 or PHY 6/75203 or PHY 6/76161 or PHY 6/75301 or departmental instructor approval. Graduate standing.
3.000 Credit hours
PHY 65101 - CLASSICAL MECHANICS
Lagrange's equations, variational principles, two-body central force problem and rigid body motion. Hamilton's equations, canonical transformations, Hamilton-Jacobi theory and small oscillations. Prerequisite: special approval and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

PHY 65203 - CLASSICAL ELECTRODYNAMICS I
Introduction to electrostatics, boundary value problems multipoles electrostatics of macroscopic media magnetostatics time varying fields maxwell's equations conservation laws. Prerequisite: Permission and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

PHY 65204 - CLASSICAL ELECTRODYNAMICS II
Plane electromagnetic waves, simple radiating systems, scattering, special theory of relativity, relativistic dynamics, radiation of moving charges, Bremsstrahlung. Prerequisite: PHY 6/75203 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

PHY 65301 - STATISTICAL MECHANICS I
An introduction to statistical mechanics, including classical and quantum statistics. Derives thermodynamic quantities from a statistical viewpoint. Prerequisite: Graduate standing.
4.000 Credit hours
4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
**PHY 66161 - QUANTUM MECHANICS I**


3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Physics Department

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**PHY 66162 - QUANTUM MECHANICS II**


3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Physics Department

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**PHY 66201 - PARTICLE PHYSICS**

Discussion of particle detectors, invariance principles, and conservation laws, fundamental interactions, quark model of hadrons, basic concepts of field theory, the Standard Model and selected topics of current interest. Prerequisite: PHY 6/76162 and graduate standing.

3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Physics Department

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**PHY 66302 - MODERN NUCLEAR PHYSICS**

Survey of basic physics of nucleons and nuclei including associated experimental techniques, emphasizing interaction of radiation with matter. Applications covered include detectors, electron scattering from nuclei, quark-parton model of the nucleon, heavy-ion collisions, quark-gluon plasma, and nuclear astrophysics. Prerequisites: PHY 56101; and graduate standing.

3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Physics Department

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**PHY 66401 - SOLID STATE PHYSICS I**

Crystalline state, with emphasis on wave propagation, zone and band theory, phonons. Applications to electrical
and thermal conductivities, specific heats, optical, dielectric and magnetic properties. Prerequisite: PHY 56101 or PHY 6/76161.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Physics Department

**PHY 66403 - ADVANCED CONDENSED MATTER PHYSICS**

Advanced theories of solids, fluids, superfluids, magnetic, ferroelectric and liquid crystal systems and the experimental methods that probe them. Prerequisites: PHY 66402 and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Physics Department

**PHY 68401 - LIQUID CRYSTAL PHYSICS**

The molecular structure and properties of liquid crystals and their role in biological systems and industrial applications. Prerequisite: Graduate standing in physics or chemical physics.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Physics Department

**PHY 70094 - COLLEGE TEACHING OF PHYSICS**

(Repeatable for credit) Methodology of teaching in a university, college or junior college. Includes observation of kinds of teaching and practice teaching. Prerequisite: Doctoral standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Physics Department

**PHY 70095 - SPECIAL TOPICS**

(Repeatable for credit) Topic announced when scheduled. Prerequisite: Special approval and doctoral standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Physics Department
PHY 70295 - ADVANCED TOPICS

(Repeatable for credit) Selected special topics of current research interest. Prerequisite: Special approval and doctoral standing.

1.000 TO 3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Physics Department

PHY 74101 - ADVANCED PROBLEM SOLVING IN PHYSICS

The course imparts advanced problem-solving skills not acquired in regular courses. Examples from four basic areas of physics (classical mechanics, electricity and magnetism, quantum mechanics and statistical physics) will be emphasized. Prerequisite: PHY 6/75101 or PHY 6/75203 or PHY 6/76161 or PHY 6/75301; or departmental instructor approval. Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Physics Department

PHY 75101 - CLASSICAL MECHANICS

Lagrange's equations, variational principles, two-body central force problems, rigid body motion, Hamilton's equations, canonical transformations, Hamilton-Jacobi theory, small oscillations. Prerequisite: Special approval and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Physics Department

PHY 75203 - CLASSICAL ELECTRODYNAMICS I

Introduction to electrostatics, boundary value problems, multipoles, electrostatics of macroscopic media, magnetostatics, time-varying fields, Maxwell's equations, conservation laws. Prerequisite: Special approval and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Physics Department

PHY 75204 - CLASSICAL ELECTRODYNAMICS II

Plane electromagnetic waves, simple radiating systems, scattering special theory of relativity, relativistic dynamics, radiation of moving charges, Bremsstrahlung. Prerequisite: PHY 6/75203 and doctoral standing.
PHY 75301 - STATISTICAL MECHANICS I
An introduction to statistical mechanics, including classical and quantum statistics. Derives thermodynamic quantities from a statistical viewpoint. Prerequisite: Doctoral standing.

PHY 76161 - QUANTUM MECHANICS I

PHY 76162 - QUANTUM MECHANICS II

PHY 76163 - QUANTUM MECHANICS III
Second quantization and field theory formalism are developed for the many-particle system. Topics include the electron gas and nuclear matter. Prerequisite: PHY 6 76162 and doctoral standing.
**PHY 76201 - PARTICLE PHYSICS**

Discussion of particle detectors, invariance principles and conservation laws fundamental interactions quark model of hadrons basic concepts of field theory the standard model and selected topics of current interest. Prerequisite: PHY 6 76162 or permission. Doctoral standing.

3.000 Credit hours  
3.000 Lecture hours  

Levels: Graduate  
Schedule Types: Lecture  

Physics Department  

**PHY 76303 - APPLICATIONS OF QUANTUM CHROMODYNAMICS**

Introduce the key attributes and techniques of Quantum Chromodynamics which is the relativistic quantum field theory of the strong interaction. Topics treated include the properties, structure and interactions of strongly interacting sub-nuclear particles (hadrons), and the physics of hadronic and nuclear matter at finite temperature and density, as applicable to modern nuclear particle physics research. Prerequisite: PHY 76163. Corequisite: PHY 66201 or PHY 76201.

3.000 Credit hours  
3.000 Lecture hours  

Levels: Graduate  
Schedule Types: Lecture  

Physics Department  

**PHY 76401 - SOLID STATE PHYSICS I**

Crystalline state, with emphasis on wave propagation zone and band theory phonons. Applications to electrical and thermal conductivities specific heats optical dielectric and magnetic properties. Prerequisite: PHY 56101 or PHY 6 76161 doctoral standing.

3.000 Credit hours  
3.000 Lecture hours  

Levels: Graduate  
Schedule Types: Lecture  

Physics Department  

**PHY 76403 - ADVANCED CONDENSED MATTER PHYSICS**

Advanced theories of solids, fluids superfluids magnetic ferroelectric and liquid crystal systems and the experimental methods that probe them. Prerequisite: PHY 6 76402 and doctoral standing.

3.000 Credit hours  
3.000 Lecture hours  

Levels: Graduate  
Schedule Types: Lecture  

Physics Department  

**PHY 78401 - LIQUID CRYSTAL PHYSICS**
The molecular structure and properties of liquid crystals and their role in biological systems and industrial applications. Prerequisite: Doctoral standing in physics or chemical physics.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Physics Department

**PHY 80091 - PHYSICS SEMINAR**

(Repeatable for credit) Discussion of current literature or of original research in physics. Participation by students faculty and guests. Prerequisite: Doctoral standing.

1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Physics Department

**PHY 80097 - PHYSICS COLLOQUIUM**

(Repeatable for credit) Presentation by invited speakers of research and other topics on graduate level followed by discussion period. Regular attendance of all physics majors expected. Three or more meetings each semester as arranged. Prerequisite: Doctoral standing.

1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Colloquium

Physics Department

**PHY 80098 - RESEARCH**

(Repeatable for credit) Research or individual investigation for doctoral students who have not yet passed their candidacy exams. Credit earned may be applied toward the degree if the department approves. Prerequisite: Special approval and doctoral standing.

1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

Physics Department

**PHY 80199 - DISSERTATION I**

(Repeatable for credit) Doctoral dissertation, for which registration in at least two semesters is required first of which will be semester in which dissertation work is begun and continuing until the completion of 30 hours. Prerequisite: Special approval and doctoral standing.

15.000 Credit hours
15.000 Other hours

Levels: Graduate
**PHY 80299 - DISSERTATION II**

(Repeatable for credit) Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. Prerequisites: PHY 80199 and doctoral standing.
15.000 Credit hours
15.000 Other hours

**PLST 18000 - INTRODUCTION TO PARALEGAL STUDIES AND PROFESSIONAL ETHICS**

An overview of the legal system and the role of a paralegal professional. Includes legal terminology, types of laws, research, litigation, interviewing and office management. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

**PLST 28001 - LEGAL RESEARCH AND WRITING**

In-depth analysis of the legal research process, development of legal writing skills, opportunities to utilize research and writing skills are integrated into the course. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

**PLST 28003 - FAMILY LAW AND PROCEDURE**

Designed to acquaint the student with family law substance and practice. Covers definitions, terminology, topical areas and the philosophy underlying family law practice. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

**PLST 28004 - PRINCIPLES AND PRACTICE OF LITIGATION**

Provides an introduction to the rules of civil procedure, statutes of limitation, and discovery. Included in this
course is a discussion of the role of the paralegal in preparation for litigation. Prerequisite: none.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisite</th>
<th>Credit Hours</th>
<th>Lecture Hours</th>
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</thead>
<tbody>
<tr>
<td>PLST 28007</td>
<td>ESTATE AND PROBATE ADMINISTRATION</td>
<td>A study of legal principles applicable to wills, organization and jurisdiction of probate court, estate administration in probate and tax considerations in estate administration. Prerequisite: PLST 18000.</td>
<td>Undergraduate Lecture</td>
<td>3.000</td>
<td>3.000</td>
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<tr>
<td>PLST 35001</td>
<td>ENVIRONMENTAL LAW FOR PARALEGALS</td>
<td>Acquaints the student with the various federal and state statutes, administrative rules and case law that govern environmental regulation. International environmental law is also studied. Prerequisite: sophomore standing.</td>
<td>Undergraduate Lecture</td>
<td>3.000</td>
<td>3.000</td>
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<tr>
<td>PLST 35003</td>
<td>HEALTH LAW</td>
<td>Makes the student familiar with legal topics in the field of health care including federal and state statutes governing the health care industry in the United States. Specific topics include insurance, privacy, malpractice, fraud, Medicare, Medicaid, health records, labor law-related issues and clinical research. Prerequisite: sophomore standing.</td>
<td>Undergraduate Lecture</td>
<td>3.000</td>
<td>3.000</td>
</tr>
<tr>
<td>PLST 35005</td>
<td>LABOR AND EMPLOYMENT LAW FOR PARALEGALS</td>
<td>Provides a foundation in the areas of labor law, employment law, and employment discrimination law. Requires in-depth study of constitutional, statutory, administrative, and case law at both the federal and state level. Prerequisite: sophomore standing.</td>
<td>Undergraduate Lecture</td>
<td>3.000</td>
<td>3.000</td>
</tr>
</tbody>
</table>
PLST 35007 - ENERGY AND NATURAL RESOURCES LAW

Acquaints the student with the various sources of law that govern energy production and the harvesting of natural resources in the United States. Statutory, administrative, and case law at the federal and state levels are explored. Prerequisite: sophomore standing.

3.000 Credit hours  
3.000 Lecture hours  

Levels: Undergraduate  
Schedule Types: Lecture

PLST 36792 - INTERNSHIP IN PARALEGAL

(Repeatable for credit) Work experience under direction of supervising faculty member in the following entities: private law firms, legal service/legal aid offices, law departments or corporations and government agencies. Prerequisite: PLST 18000 and 28001 and 28004.

3.000 TO 12.000 Credit hours  
21.000 TO 84.000 Other hours  

Levels: Undergraduate  
Schedule Types: Practicum or Internship

PLST 38003 - ADMINISTRATIVE LAW AND PROCESS

The substantive and procedural aspects of administrative law are covered in this course. Specific topics include the regulation of public utilities, transportation agencies, employment, food and drugs and the environment. Prerequisite: sophomore standing.

3.000 Credit hours  
3.000 Lecture hours  

Levels: Undergraduate  
Schedule Types: Lecture

PLST 38005 - TORT LAW

Focus is on tort and personal injury law. Specific topics include intentional torts, negligent torts, strict liability, vicarious liability, product liability and business torts. Defenses to tort and product liability are also discussed. Prerequisite: sophomore standing.

3.000 Credit hours  
3.000 Lecture hours  

Levels: Undergraduate  
Schedule Types: Lecture
PLST 38006 - APPLIED LEGAL RESEARCH AND LITIGATION

Provides for intense case analysis and preparation of argumentative memorandum, including writing of factual memoranda, file summaries and advocacy letters. Prerequisite: PLST 28001.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Center Compar/Integrative Prog Department

Course Attributes:
Writing Intensive Course

PLST 42701 - EVIDENCE AND E-DISCOVERY

Addresses the various issues concerning the use of evidence in the pre-trial, trial, and post-trial phases of litigation. The course will address the traditional rules and issues associated with litigation practice as well as the new issues concerning electronic discovery of evidence and the use of that evidence. Prerequisites: PLST 28001; and PLST 28004.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Center Compar/Integrative Prog Department

PLST 42705 - BANKRUPTCY LAW I: BASIC FUNDAMENTALS

Provides an outlay of the fundamentals of bankruptcy law including the basic rules of the Chapter 7, Chapter 11, and Chapter 13 forms of bankruptcy. This course will also cover other topics such as the bankruptcy petition, the role of the bankruptcy trustee, and discharge from bankruptcy. Prerequisite: Sophomore standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Center Compar/Integrative Prog Department

PLST 42706 - BANKRUPTCY LAW II: CREDITOR-DEBTOR RELATIONS

Addresses issues not addressed in PLST 42705 including Chapter 9, Chapter 12, and Chapter 15 bankruptcy as well as the problems associated with gaining and collecting on a judgment. International bankruptcy issues will also be addressed. Prerequisite: PLST 42705.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Center Compar/Integrative Prog Department
PLST 42708 - REAL ESTATE LAW

Provides a general outlay of real estate law in the United States. Students will learn the substantive and procedural aspects of gaining and protecting property rights. Real estate contracts, financing, zoning, and landlord-tenant issues will also be covered. Prerequisite: Sophomore standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Center Compar/Integrative Prog Department

PLST 48002 - CONTRACT LAW

(Cross-listed with PLST 58002) Intended to provide the student with an in-depth analysis of basic contract law as such related to contact information, performance and remedies. Also intended to familiarize the student with the sources of law that define contracts with an emphasis on reading and understanding case law. The student also develops a vocabulary of legal terms so that the student may assist the legal practitioner in the representation of clients in business transactions and in disputes. Prerequisite: sophomore standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Center Compar/Integrative Prog Department

PLST 48300 - LAW OF CORPORATIONS AND OTHER ASSOCIATIONS

Covers the formation, operation and dissolution of various kinds of business organizations. Subjects covered include sole proprietorships, corporations, partnerships, the law of agency and employment agreements. Prerequisite: sophomore standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Center Compar/Integrative Prog Department

PLST 48401 - PATENT LAW

Provides the student with an in-depth analysis of the law pertaining to patents, stressing the ability of the owner to protect their rights through filing, registration and use. International issues concerning registration, use, and trade agreements are also covered. Prerequisite: sophomore standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Center Compar/Integrative Prog Department

PLST 48403 - PATENT PROSECUTION

Students learn to craft patent claims in various types of patent applications that would be submitted to the U.S.
Patent and Trademark Office. Students also learn the mechanics of various types of patent applications including traditional applications, provisional applications, divisional applications and continuing applications. Students also gain an understanding of the various post-grant proceedings. Prerequisites: PLST 48401 and sophomore standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Center Compar/Integrative Prog Department

PLST 48404 - COPYRIGHT LAW I

(Cross-listed with PLST 58404) Intended to provide the student with an in-depth analysis of the foundations of the law pertaining to copyrights. Stresses the ability of the owner to protect such rights through use and registration. Also discusses the links to patent law, trademark law and the law of trade secrets. Prerequisite: sophomore standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Center Compar/Integrative Prog Department

PLST 48407 - TRADEMARK LAW

(Cross-listed with PLST 58407) Intended to provide the student with an in-depth analysis of the law pertaining to trademarks and trade secrets. Stresses the ability of the owner to protect such rights through use and registration. Also discusses the links to patent law and copyright law. Prerequisite: sophomore standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Center Compar/Integrative Prog Department

PLST 48408 - TRADEMARK PROSECUTION

Covers the substantive and procedural aspects of trademark prosecution at the state, federal, and international levels. Special attention will be paid to the topics of drafting the trademark application and conducting searches of existing trademarks in the United States and abroad. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Center Compar/Integrative Prog Department

PMD 80113 - MEDICAL ETHICS

The focus of the medical ethics curriculum is to provide a foundation in ethical analysis, augment knowledge of contemporary bioethics issues, and offer experience applying ethical reasoning to clinical cases. The goal of this course is to promote discussion of the ethical responsibilities of a doctor to their patients. Prerequisite: enrolled
in the College of Podiatric Medicine.
1.000 Credit hours
1.000 Lecture hours

Levels: Professional
Schedule Types: Lecture

Podiatric Medicine Department

**PMD 80114 - PRINCIPLES OF MEDICAL RESEARCH**

It is important for a podiatric physician to have developed the ability to read and interpret the medical literature. This requires a fundamental understanding of biostatistics, epidemiology, and research design. This course provides a framework for the development of an evidence-based methodology to patient care.
Prerequisite: enrolled in the College of Podiatric Medicine.
1.000 Credit hours
1.000 Lecture hours

Levels: Professional
Schedule Types: Lecture

Podiatric Medicine Department

**PMD 80115 - PODIATRIC MEDICAL PRACTICE SEMINAR**

Through instruction by numerous field experts of the American Academy of Podiatric Practice Management, this monthly class is designed to place students on a fast track to success. The curriculum focuses on strategies to help students acclimate to the challenges that medical students typically face. Lifestyle improvement skills such as positive mental attitude, study strategies, time and stress management skills, and organization are stressed.
Prerequisite: enrolled in the College of Podiatric Medicine.
1.000 Credit hours
1.000 Lecture hours

Levels: Professional
Schedule Types: Lecture

Podiatric Medicine Department

**PMD 80116 - PODIATRIC MEDICAL PRACTICE SEMINAR**

Through instruction by numerous field experts of the American Academy of Podiatric Practice Management, this monthly class is designed to place students on a fast track to success. The curriculum focuses on strategies to help students acclimate to the challenges that medical students typically face. Lifestyle improvement skills such as positive mental attitude, study strategies, time and stress management skills, and organization are stressed.
Prerequisite: enrolled in the College of Podiatric Medicine.
1.000 Credit hours
1.000 Lecture hours

Levels: Professional
Schedule Types: Lecture

Podiatric Medicine Department

**PMD 80132 - LOW EXTREMITY ASSESSMENT AND DIAGNOSIS**

A comprehensive approach to physical examination, which combines the patient’s symptoms and the physical signs to arrive at a diagnosis of disease. It is accomplished by training students in the methods of history taking
and physical examination. The course focuses on lower extremity examination. The traditional processes of inspection, palpation, percussion and auscultation are emphasized. Prerequisite: enrolled in the College of Podiatric Medicine.

2.000 Credit hours
1.000 Lecture hours
2.000 Lab hours

Levels: Professional
Schedule Types: Combined Lecture and Lab

Podiatric Medicine Department

**PMD 80133 - INTRODUCTION MEDICAL IMAGING**

Podiatric physicians are fully licensed to order, perform and interpret radiologic studies of the foot and ankle. As operators of ionizing x-ray equipment, all practitioners must undergo basic training in x-ray physics, image control and quality assurance, safety and patient positioning. These four building blocks comprise the foundation of this course in fundamentals. Prerequisite: student must be enrolled in the Podiatric Medicine program.

1.000 Credit hours
1.000 Lecture hours

Levels: Professional
Schedule Types: Lecture

Podiatric Medicine Department

**PMD 80134 - RADIATION SAFETY**

Podiatric physicians are fully licensed to order, perform and interpret radiologic studies of the foot and ankle. As operators of ionizing x-ray equipment, all practitioners must undergo basic training in x-ray physics, image control and quality assurance, safety and patient positioning. These four building blocks comprise the foundation of this course in fundamentals. Prerequisite: enrolled in the College of Podiatric Medicine.

1.000 Credit hours
1.000 Lecture hours

Levels: Professional
Schedule Types: Lecture

Podiatric Medicine Department

**PMD 80211 - PODIATRIC MEDICINE I**

This is a core course designed to present the 2nd year student with the full spectrum of pathology, which he or she will encounter during his or her clinical training and later in private practice. Topics include infectious disease, wound care, rheumatology, vascular medicine, and the diabetic foot. The student will be instructed in the evaluation of foot and ankle pathology including signs, symptoms, and differential diagnosis. Laboratory and radiographic evaluation will be discussed when appropriate. The student will also be instructed in the treatment alternatives available in each case. Prerequisite: enrolled in the College of Podiatric Medicine.

2.000 Credit hours
2.000 Lecture hours

Levels: Professional
Schedule Types: Lecture

Podiatric Medicine Department
PMD 80214 - RADIOLOGY AND MEDICAL IMAGING I

This course encompasses the fundamentals of modern musculoskeletal imaging, with particular emphasis on the foot and ankle. The course begins with basic principles of plain film radiographic imaging, an approach that emphasizes the correlation of abnormal findings with basis pathologic differential consideration. Lectures will then introduce the student to pedal biomechanical radiography before moving to cover the imaging topics such as the pedal arthropathies, infection and the diabetic foot. The semester will end with a detailed presentation of the diabetic neuro-osteoarthropathy (Charcot arthropathy). Prerequisite: enrolled in the College of Podiatric Medicine.

2.000 Credit hours
2.000 Lecture hours

Levels: Professional
Schedule Types: Lecture

Podiatric Medicine Department

PMD 80215 - PODIATRIC MEDICAL PRACTICE SEMINAR

Through instruction by numerous field experts of the American Academy of Podiatric Practice Management, this monthly class is designed to facilitate the long term objective of optimizing the academic knowledge obtained throughout the first two years and prepares the student to become an outstanding “caregiver.” The core focus includes communication skills, patient compliance, dealing with conflicts, concepts of efficiency, and practice model options. Prerequisite: enrolled in the College of Podiatric Medicine.

1.000 Credit hours
1.000 Lecture hours

Levels: Professional
Schedule Types: Lecture

Podiatric Medicine Department

PMD 80216 - PODIATRIC MEDICAL PRACTICE SEMINAR

Through instruction by numerous field experts of the American Academy of Podiatric Practice Management, this monthly class is designed to facilitate the long term objective of optimizing the academic knowledge obtained throughout the first two years and prepares the student to become an outstanding “caregiver.” The core focus includes communication skills, patient compliance, dealing with conflicts, concepts of efficiency, and practice model options. Prerequisite: enrolled in the College of Podiatric Medicine.

1.000 Credit hours
1.000 Lecture hours

Levels: Professional
Schedule Types: Lecture

Podiatric Medicine Department

PMD 80221 - PODIATRIC MEDICINE II

This is a core course designed to present the 2nd year student with the full spectrum of pathology, which he or she will encounter during his or her clinical training and later in private practice. Topics include infectious disease, wound care, peripheral neuropathy, vascular medicine, and the diabetic foot. The student will be instructed in the evaluation of foot and ankle pathology including signs, symptoms, and differential diagnosis. Laboratory and radiographic evaluation will be discussed when appropriate. The student will also be instructed in the treatment alternatives available in each case. Prerequisite: enrolled in the College of Podiatric Medicine.

2.000 Credit hours
2.000 Lecture hours
PMD 80222 - PODIATRIC MEDICAL SKILLS

Podiatric Medical Skills is a practical course, which includes strapping and padding, instrument dexterity, local anesthetic injection, nail avulsion technique, blood glucose finger stick, handheld Doppler exam, fitting for diabetic shoes, arthrometric examination and casting for orthoses. Students are taught the indications and proper application of adhesive bandages and splints for the prevention of injury, control of foot function and treatment of injuries to the foot and lower extremity. Padding is the treatment of foot pathology by redistribution of weight, stress and friction. Students are taught how to relieve acute and chronic pathologies of the foot through the use of various padding materials, or prefabricated pads. Students also gain an understanding of the theory of pad placement. Students are taught the proper techniques for performing toenail avulsions, blood glucose finger sticks, and using the handheld Doppler. Students are taught the proper methods of fitting for diabetic shoes, performing a foot and ankle arthrometric examination and casting methods for foot orthoses. Prerequisite: enrolled in the College of Podiatric Medicine.

2.000 Credit hours
2.000 Lab hours

Levels: Professional
Schedule Types: Laboratory

Podiatric Medicine Department

PMD 80224 - RADIOLOGY AND MEDICAL IMAGING II

The Spring semester course will continue to the topic of imaging complex diabetic foot problems, focusing on non-invasive imaging modalities as potential problem solvers. The first of these will be radionuclide imaging modalities, which will be covered in detail. From the diabetic foot, the course will then logically continue onto defining and then detailing the classic metabolic bone disorders. The course will then delve into the basics of MR and CT sectional imaging. The course will then formally cover applications to common pedal problems such as infection, trauma, and bone and soft tissue tumors. The course will then conclude with an introduction to diagnostic musculoskeletal ultrasound. Prerequisite: enrolled in the College of Podiatric Medicine.

2.000 Credit hours
2.000 Lecture hours

Levels: Professional
Schedule Types: Lecture

Podiatric Medicine Department

PMD 80315 - PODIATRIC MEDICAL PRACTICE SEMINAR

Through instruction by numerous field experts of the American Academy of Podiatric Practice Management, this monthly class is designed to facilitate the long term objective of optimizing the academic knowledge obtained throughout the first two years and prepares the student to become an outstanding “caregiver.” The core focus includes communication skills, patient compliance, dealing with conflicts, concepts of efficiency, and practice model options. Prerequisite: enrolled in the College of Podiatric Medicine.

1.000 Credit hours
1.000 Lecture hours

Levels: Professional
Schedule Types: Lecture

Podiatric Medicine Department
PMD 80316 - PODIATRIC MEDICAL PRACTICE SEMINAR

Through instruction by numerous field experts of the American Academy of Podiatric Practice Management, this monthly class is designed to facilitate the long term objective of optimizing the academic knowledge obtained throughout the first two years and prepares the student to become an outstanding “caregiver.” The core focus includes communication skills, patient compliance, dealing with conflicts, concepts of efficiency, and practice model options. Prerequisite: enrolled in the College of Podiatric Medicine.

1.000 Credit hours
1.000 Lecture hours

Levels: Professional
Schedule Types: Lecture

Podiatric Medicine Department

PMD 80396 - INDEPENDENT STUDY

Independent study in Podiatric Medicine. Prerequisite: enrolled in the College of Podiatric Medicine.

5.000 Credit hours
5.000 Other hours

Levels: Professional
Schedule Types: Individual Investigation

Podiatric Medicine Department

POL 10001 - INTRODUCTION TO POLITICAL SCIENCE

This course introduces the history and structure of political science, including its relationship to neighboring disciplines. This course thus asks what does it mean to study politics? What does it mean to study politics scientifically? What are the consequences of different conceptions of politics? Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Political Science Department

POL 10004 - COMPARATIVE POLITICS

Introduces the different institutional structures of governance (e.g., parliamentary versus presidential systems) in a range of different states for different types of regimes (e.g. democratic and authoritarian) and at the international level. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Political Science Department

Course Attributes:
Diversity Course-Global, Kent Core-Social Sciences, LER-Social Sciences, TAG - Social/Behavior Sciences, Trnfr Module-Social Sciences
# POL 10100 - AMERICAN POLITICS

Covers the basic elements of politics at the national level in the United States: structures, processes, behaviors, institutions, policies. Special emphasis is given to conflicting theories of power as they apply to different economic, sexual and racial groups. Prerequisite: None.

- **3.000 Credit hours**
- **3.000 Lecture hours**

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**Levels:** Undergraduate  
**Schedule Types:** Lecture

Political Science Department

**Course Attributes:**  
Diversity Course-Domestic, Kent Core-Social Sciences, TAG - Social/Behavior Sciences, Trnfr Module-Social Sciences

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# POL 10300 - PUBLIC POLICY

This course provides a survey of basic public policy concepts and processes within an historical context. It incorporates applied work to bridge conceptual understanding and empirical cases. Prerequisite: None.

- **3.000 Credit hours**
- **3.000 Lecture hours**

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**Levels:** Undergraduate  
**Schedule Types:** Lecture

Political Science Department

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# POL 10500 - WORLD POLITICS

A practical, theoretical introduction to a study of systematic patterns in international relations. Includes analysis of rules, instruments, processes, decision-making factors, conflict resolution. Prerequisite: None.

- **3.000 Credit hours**
- **3.000 Lecture hours**

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**Levels:** Undergraduate  
**Schedule Types:** Lecture

Political Science Department

**Course Attributes:**  
Diversity Course-Global, Kent Core-Social Sciences, TAG - Social/Behavior Sciences, Trnfr Module-Social Sciences

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# POL 10504 - THE NEW PANGAEA: YOUR ROLE IN OUR GLOBAL COMMUNITY

Introduces students to the myriad ways in which they are individually and collectively connected to the global community. Looking specifically at ways in which we are interconnected as consumers, patients, donors and participants in discourse, the course introduces students to the concepts, institutions and dynamics of globalization. Through assignments that focus on important global issues and engage students directly with the global community, students will (a) learn how to engage the global community as informed consumers of information, (b) understand the basic structure of the global political arena, (c) learn how to engage actively and consciously within that arena and (d) understand the ways in which their daily behavior impacts global trends. Prerequisite: None.

- **3.000 Credit hours**
- **3.000 Lecture hours**
**POL 20001 - POLITICAL METHODS**

This course is designed to bring students to a basic level of "statistical literacy" by introducing the fundamentals of research design and interpretation; as well as to basic descriptive and inferential statistics. Prerequisite: none.

- 3.000 Credit hours
- 3.000 Lecture hours

**POL 20002 - POLITICAL THOUGHT**

This course is designed to introduce the student to basic methodological and substantive concerns in the tradition of western political thought. Prerequisite: none.

- 3.000 Credit hours
- 3.000 Lecture hours

**POL 20003 - POLITICAL ECONOMY**

This course is designed to introduce students to the fundamental questions surrounding the relationship between the public and private sectors, considered from the perspective of the state and its major political institutions. Of central concern is the growing internationalization of capital and its consequences for both domestic and international politics. Prerequisite: none.

- 3.000 Credit hours
- 3.000 Lecture hours

**POL 30100 - AMERICAN POLITICAL THEORY**

Major political ideas and controversies associated with the development of American political thought. Prerequisite: POL 10100.

- 3.000 Credit hours
- 3.000 Lecture hours
### POL 30110 - THE CONGRESS
This course deals with the powers of Congress, its organization, leadership of the two houses, role of the parties, relationships with the chief executive and the executive agencies and recent reforms enacted by the House and Senate. Prerequisite: POL 10100.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

### POL 30120 - PRESIDENCY AND EXECUTIVE BUREAUCRACY
Intensive study of the American Presidency, focusing on personality, organization of the office, use and misuse of power and policy making. Prerequisite: POL 10100.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

### POL 30130 - COURTS
Intensive study of the judicial process in United States and the relationship between the judicial system and the larger American social system. Prerequisite: POL 10100.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

### POL 30300 - PUBLIC POLICY THEORY
The core issues of public policy process, institutional contexts and ethical considerations form the basis of this introductory survey of traditional and contemporary theories of public policy. Prerequisite: POL 10300.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

### POL 30301 - INTRODUCTION TO PUBLIC ADMINISTRATION
Introduction to the theory and practice of governmental administration, including structure, organization, direction and control of governmental departments and agencies. Prerequisite: POL 10300.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Political Science Department

**POL 30310 - PUBLIC POLICY ANALYSIS**

Introduces students to the political and economic tools used to analyze public policies and discusses the political elements influencing that analysis. Essentially, the goal is to ensure that students understand the basic economic principles used to evaluate different public policy proposals while questioning the assumptions underlying those economic assumptions. Prerequisite: POL 10300.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Political Science Department

**POL 30350 - ENVIRONMENTAL CONFLICT RESOLUTION**

Examines alternative dispute resolution principles applicable to complex, multi-party public sector disputes, especially environmental and land use disputes. Students learn about deliberative democracy, a variety of circle processes, consensus decision-making, collaborative problem-solving, digital dialogue processes, and town hall meeting structures among others. Case studies of environmental conflicts and multi-party mediation simulations are used. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Political Science Department

**POL 30430 - OHIO POLITICS**

Addresses the history, structure, and current practices of politics and public policy in the state of Ohio. Prerequisite: POL 10100 or POL 10300.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Political Science Department

**POL 30450 - URBAN POLITICS AND POLICY**

Discusses local governance in the context of metropolitan change, and issues such as governing capacity, local democracy, individual choice, and economic and racial inequality. Examines the formal and informal arrangements that shape change and public policy. Prerequisite: POL 10100 or POL 10300.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
### POL 30460 - STATE POLITICS AND POLICY

Introduces the theoretical and legal infrastructures of federalism and intergovernmental relations, with a particular emphasis on political and policy operations at the state level. Political behavior and institutions, as well as the specifics of selected, substantive policy areas are emphasized. Prerequisite: POL 10100 or POL 10300.

- 3.000 Credit hours
- 3.000 Lecture hours

**Levels:** Undergraduate

**Schedule Types:** Lecture

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### POL 30500 - INTERNATIONAL RELATIONS THEORY

This course introduces competing theoretical approaches to the study of international relations; an examination of the historical developments followed by an examination of current issues in world politics. Prerequisite: POL 10500.

- 3.000 Credit hours
- 3.000 Lecture hours

**Levels:** Undergraduate

**Schedule Types:** Lecture

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### POL 30511 - PROBLEMS OF INTERNATIONAL ORGANIZATION

Intensive study of major European problems handled by international organizations, including the United Nations and nongovernmental organizations. Combines classroom and field investigations. Prerequisite: registration in the Geneva Semester required.

- 3.000 Credit hours
- 3.000 Lecture hours

**Levels:** Undergraduate

**Schedule Types:** Lecture

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### POL 30520 - EUROPEAN POLITICS

This course examines major European national political systems (British, French, German, Russian and Scandinavian) relations between the European states, the institutions of the European Union and prospects and problems of European integration. Prerequisite: POL 10004.

- 3.000 Credit hours
- 3.000 Lecture hours

**Levels:** Undergraduate

**Schedule Types:** Lecture
POL 30530 - ASIAN POLITICS

Introduction to the political, economic, and social dynamics of Asia: from Siberia in the north to the Indian Ocean in the south, and from the Pacific Ocean in the east to the Hindu Kush in the west. The first part of the course examines Asia's modern political history (particularly the past half-century). The second part of the course focuses on contemporary issues, including the roles of the US and sub-regional actors such as ASEAN. Prerequisite: POL 10004.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Political Science Department

Course Attributes:
Diversity Course-Global

POL 30540 - AFRICAN POLITICS

An analysis of major issues in African politics and international relations. The contemporary development of Africa will be analyzed in the global context of the historical forces of imperialism and colonialism. Prerequisite: POL 10004.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Political Science Department

Course Attributes:
Diversity Course-Global

POL 30550 - LATIN AMERICAN POLITICS

Analysis of political culture/process in selected Latin American states, with particular emphasis on Mexico, Brazil, Argentina and Columbia. Prerequisite: POL 10004.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Political Science Department

Course Attributes:
Diversity Course-Global

POL 30560 - MIDDLE EAST POLITICS

Introduces students to the theory and context of politics in the Middle East in a way that contests the often-simplistic stereotypes communicated through western media and throughout western culture, in order to encourage a more nuanced appreciation of the Middle East. Theoretical approaches utilized include modernization, dependency, structuralism and constructivism. Prerequisite: POL 10004.
3.000 Credit hours
3.000 Lecture hours
POL 30810 - POLITICS OF THE GLOBAL ECONOMY

Examines interaction between economics and politics in international relations. Topics: poverty and uneven economic development, political prerequisites for free trade, intra-western and north-south economic conflict, and distributive justice. Prerequisite: POL 10300 or POL 10500.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Political Science Department

POL 30820 - INTERNATIONAL ORGANIZATION AND LAW

This course introduces the subject matter in historical and theoretical contexts, then devotes detailed attention to the full range of international organizations that exist today. A final section addresses the role of international law in world politics. Prerequisite: POL 10300 or POL 10500.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Political Science Department

POL 30840 - NONGOVERNMENTAL ORGANIZATIONS

This course introduces the diverse range of nongovernmental organizations which exist today and explores their varying roles in setting agendas, shaping legislation and implementing public policy reforms. Prerequisite: POL 10300 or POL 10500.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Political Science Department

POL 30991 - SEMINAR:COLUMBUS PROGRAM IN INTERGOVERNMENTAL ISSUES

(Repeatable for credit)Annual fall semester resident-study in Columbus. Students spend three days per week working at an internship and two days per week attending briefings and completing POL 40995. Prerequisites: minimum 2.500 GPA and special approval. Corequisite: POL 40995.

6.000 TO 12.000 Credit hours
6.000 TO 12.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

Political Science Department
**POL 39592 - GENEVA INTERNSHIP**

(Repeatable for credit) Allows students to earn academic credit while performing intern's duties as part of the Semester in Geneva program. Prerequisite: none.

- 3.000 Credit hours
- 21.000 Other hours

Levels: Undergraduate

Schedule Types: Practicum or Internship

Political Science Department

Course Attributes:

Experiential Learning Requirement

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**POL 40112 - POLITICS AND THE MASS MEDIA**

This course examines the multiple roles played by the mass media in contemporary politics and analyzes the implications of those roles. Prerequisite: POL 10100.

- 3.000 Credit hours
- 3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Political Science Department

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**POL 40116 - PUBLIC OPINION AND POLITICAL BEHAVIOR**

Analysis of determinants of public opinion and political behavior. Study of how public makes up its mind and impact of public opinion on government policy. Prerequisite: POL 10100.

- 3.000 Credit hours
- 3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Political Science Department

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**POL 40118 - POLITICAL PARTIES AND INTEREST GROUPS**

An examination of the changing roles of political parties and interest groups in the American political system, including a comparison of their respective electoral activities. Prerequisite: POL 10100.

- 3.000 Credit hours
- 3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Political Science Department

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**POL 40170 - MOOT COURT I**
Prepares students for oral advocacy in a simulated court room experience known as moot court. Preparation includes learning pre-trial and trial processes, including case evaluation, legal investigation, discovery and motion practice, and trial processes. Prerequisite: None.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Political Science Department

**POL 40171 - MOOT COURT II**

Prepares students to engage in oral advocacy by using a learning experiential exercise, including a regional competition hosted by the American Collegiate Mock Trial Association, known as Moot Court. Students will perform relevant roles (including case evaluation and strategy, legal investigation, discovery and motion practice, and trial preparation) both in the competition and in preparing a hypothetical case for trial.

Prerequisite: POL 40170.

1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Political Science Department

**POL 40182 - CONSTITUTIONAL LAW:GOVERNMENTAL STRUCTURES AND FUNCTIONS**

Nature and scope of constitutional government. Study of judicial review, separation of powers, federalism, commerce and taxation. Prerequisite: POL 10100.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Political Science Department

**POL 40183 - CONSTITUTIONAL LAW:CIVIL RIGHTS AND LIBERTIES**

Nature and scope of constitutional limitations. Study of first amendment, freedom of expression, freedom of religion, criminal rights, due process, equal protection. Prerequisite: POL 10100.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Political Science Department

Course Attributes:
Diversity Course-Domestic

**POL 40191 - SEMINAR IN AMERICAN POLITICS**

(Repeatable with special approval A required, writing-intensive seminar for juniors and seniors in the American politics concentration. The focus of the seminar will vary depending on instructor. Prerequisites: POL 10100 or
10300; and POL 10004 or 10500; and POL 20001 and POL 20002 or POL 20003; and political science (POL) major.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

Political Science Department

Course Attributes:
Writing Intensive Course

**POL 40320 - ETHICS AND PUBLIC POLICY**

The ethical obligations of public policy makers are examined in this course, within a series of applied cases. The goal is to empower students with the intellectual tools of critical analysis within diverse policy environments. Prerequisite: POL 10300.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Political Science Department

**POL 40391 - SEMINAR IN PUBLIC POLICY**

(Repeatable with special approval) A required, writing intensive seminar for juniors and seniors in the public policy concentration. The focus of the seminar will vary depending on instructor. Prerequisites: POL 10100 or 10300; and POL 10004 or POL 10500; and POL 20001 and POL 20002 or 20003; and political science (POL) major.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

Political Science Department

Course Attributes:
Writing Intensive Course

**POL 40410 - REGULATORY POLICY**

Provides an advanced understanding of the nature of government regulation: its definition; the institutions and groups involved in developing it; and current practices. The focus is on analyzing why regulation exists and how regulatory agencies function. Prerequisites: POL 10100 or POL 10300.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Political Science Department

**POL 40440 - U.S. ENVIRONMENTAL POLITICS AND POLICIES**
This is a course in United States environmental politics and policies. It deals with topics such as the history of the U.S. environmental movement, public opinion and environmental issues, environmental racism and classism, and environmental policy making and implementation. Prerequisites: POL 10100 or POL 10300. 
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Political Science Department

### POL 40450 - HEALTH CARE AND SOCIAL POLICY

Addresses health care policy in the United States from both theoretical (political, economic as well as public policy) and substantive perspectives at the state, national and comparative-international levels. Further, the examination of health care policy takes place in the context of social welfare policy more broadly considered. Prerequisite: POL 10100 or 10300. 
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Political Science Department

### POL 40470 - WOMEN, POLITICS AND POLICY

Examines origins, development and current record of century-old women's movement unique in U.S. annals; compares it with other contemporary social movements. Examines issues of women and public policy. Prerequisite: POL 10100 or POL 10300. 
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Political Science Department

Course Attributes:
Diversity Course-Domestic

### POL 40530 - POLITICS OF WAR

Examines central questions concerning the justification, explanation characteristic features and consequences of war. Specific cases are examined such as World War II, the Chinese Revolution, Vietnam's civil war and potential nuclear war. Prerequisite: POL 10500. 
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Political Science Department

### POL 40540 - POLITICS OF DEVELOPMENT
Examines practice, record and theories of political development for less developed, developing and developed political systems. Includes extensive analysis of issues, problems through case studies. Prerequisite: POL 10004 or POL 10500.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Political Science Department

Course Attributes:
Diversity Course-Global

**POL 40560 - HUMAN RIGHTS AND SOCIAL JUSTICE**

Examines the relationship between human rights and problems of the Third World in the civic, political, social and cultural arenas. Particular attention is placed on the struggle of women. Prerequisite: POL 10004 or POL 10500.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Political Science Department

Course Attributes:
Diversity Course-Global

**POL 40591 - SEMINAR IN INTERNATIONAL RELATIONS-COMPARATIVE POLITICS**

(Repeatable with special approval) A required, writing-intensive seminar for juniors or seniors in the International Relations-Comparative Politics concentration. The focus of the seminar varies depending on instructor. International Relations (INTL) majors who have completed POL 10004, 10500, and six (6) hours from the Political Science - International Relations and Comparative Politics concentration may request a prerequisite override from the Department of Political Science. Prerequisites: POL 10100 or 10300; and POL 10004 or 10500; and POL 20001 and POL 20002 or 20003; and political science (POL) major.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

Political Science Department

Course Attributes:
Writing Intensive Course

**POL 40620 - POLITICS OF SOCIAL MOVEMENTS**

Examines the role of social movements both in the US and around the world. Focuses on labor, environmental, social justice and other initiatives in the push for political and economic democracy. North-South, public-private, labor-management and regional perspectives are emphasized. Prerequisite: POL 10004 or POL 10100 or POL 10500.
3.000 Credit hours
3.000 Lecture hours
POL 40840 - COMPARATIVE FOREIGN POLICY

Comparative analysis of foreign policy patterns and determinants on the basis of the examination of foreign policy of selected countries. Prerequisite: POL 10004 or POL 10300 or POL 10500.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

 Polynomial Science Department

POL 40930 - U.S. FOREIGN POLICY

Examines policy objectives, patterns of decision-making and foreign policy actions, roles of interest groups, public opinion, congress, executive and external influences on policy. Prerequisite: POL 10300 or POL 10300 or POL 10500.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

 Polynomial Science Department

POL 40991 - WASHINGTON PROGRAM IN NATIONAL ISSUES

(Repeatable for credit) Annual spring semester resident-study in Washington, D.C. Credit hours divided among three units: preparatory colloquium, on-site briefings seminar and internship. Prerequisite: Junior standing; and 2.750 GPA; and special approval of the director.
15.000 Credit hours
15.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

 Polynomial Science Department

Course Attributes:
Experiential Learning Requirem

POL 40992 - PUBLIC SERVICE

(Repeatable for a maximum of 6 credit hours) Allows academic credit for approved participation in variety of political processes, or as an intern with governmental or private agencies dealing with public affairs. Prerequisites: Minimum 2.000 cumulative GPA; and special approval.
1.000 TO 3.000 Credit hours
3.000 TO 9.000 Other hours

Levels: Undergraduate
Schedule Types: Field Experience
Political Science Department

Course Attributes:
Experiential Learning Requirem

POL 40993 - VARIABLE TITLE WORKSHOP IN POLITICAL SCIENCE

(Repeatable for credit)Prerequisite: None.
1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Undergraduate
Schedule Types: Workshop

Political Science Department

POL 40995 - SELECTED TOPICS IN POLITICAL SCIENCE

(Repeatable for credit)Special course, not regularly offered. Subject varies depending on the emerging issue, staff availability and competencies. Precise title always listed in the schedule of classes. Prerequisite: Junior or senior standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Political Science Department

POL 40996 - INDIVIDUAL INVESTIGATION

(Repeatable for credit)For students desiring research into subjects beyond level of completed course work, or on subjects for which no regular course is offered. A minimum GPA of 2.750 is required prior to registration for this course. Prerequisite: Political science (POL) major; and junior standing; and POL core completed (POL core: POL 10004 or POL 10500; and POL 10100 or 10300; and POL 20001; and POL 20002 or 20003); and special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Political Science Department

POL 51191 - SEMINAR:PROBLEMS IN AMERICAN GOVERNMENT

(Repeatable for credit)For graduate students outside of political science who wish to take 40000-level American Government courses for graduate credit. Students must meet all of the requirements of the 40000 level plus do additional work as agreed upon by the instructor. May be taken more than once but never for more than 3 hours in any one semester. Instructor and course content may vary from semester to semester. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Seminar
**POL 51391 - SEMINAR: PROBLEMS IN PUBLIC POLICY**

(Repeatable for credit) For graduate students outside of political science who wish to take 40000-level Public Policy courses for graduate credit. Students must meet all of the requirements of the 40000 level plus do additional work as agreed upon by the instructor. May be taken more than once but never more than 3 hours in any one semester. Instructor and course content may vary from semester to semester. "IP" permissible. Core seminars. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Other hours

**Levels:** Graduate
**Schedule Types:** Seminar

Political Science Department

**POL 51591 - SEMINAR: PROBLEMS IN INTERNATIONAL RELATIONS/COMPARATIVE GOVERNMENT**

(Repeatable for credit) For graduate students outside of political science who wish to take 40000 International/Comparative Government courses for graduate credit. Students must meet all of the requirements of the 40000 level plus do additional work as agreed upon by the instructor. May be taken more than once but never for more than 3 hours in any one semester. Instructor and course content may vary from semester to semester. Public policy. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Other hours

**Levels:** Graduate
**Schedule Types:** Seminar

Political Science Department

**POL 60002 - SCOPE AND EPISTEMOLOGY**

Introduces students to the philosophy of science and scientific inquiry within the context of the social sciences, and presents a broad survey of leading paradigms and debates within political science. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

**Levels:** Graduate
**Schedule Types:** Lecture

Political Science Department

**POL 60003 - QUANTITATIVE METHODS I**

Provides a selective introduction to basic quantitative methods for the analysis of political and public policy data dealing with basic descriptive and inferential statistics. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

**Levels:** Graduate
**Schedule Types:** Lecture

Political Science Department
POL 60004 - QUANTITATIVE METHODS II

Introduces students to multivariate quantitative techniques appropriate for the analysis of political and public policy data. Prerequisite: POL 60003 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

POL 60010 - QUALITATIVE RESEARCH METHODS

Introduces the principles and methods of qualitative research, examining the place of qualitative research alongside discussions about positivist, interpretivist and critical approaches. A variety of qualitative research methods are introduced including: social observation and ethnography, interviewing, discourse analysis, oral history, document analysis, historical analysis and case studies. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

POL 60101 - PROSEMINAR IN AMERICAN POLITICS AND POLICY

This course provides a broad survey of the policymaking process in the U.S. government. Coverage includes formal government structures as well as more informal networks of private groups that seek to influence public policy at the national level. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

POL 60102 - AMERICAN POLICY PROCESS

This course emphasizes the politics of the policy process. Among topics covered are theories of policy formulation implementation and evaluation. Prerequisite: POL 60101 or POL 60301 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

POL 60103 - CONGRESS, THE PRESIDENCY AND THE COURTS

Focuses on the three branches of the U.S. government, specifically Congress, the presidency and the judiciary. Coverage includes institutional rules and procedures that shape the incentives of these political actors and ultimately policy outcomes. Prerequisite: POL 60101 and graduate standing.
POL 60105 - FEDERALISM AND STATE POLICYMAKING

This course covers the theory and practice of federalism with emphasis on its consequences for policy outcomes. Students also examine the transformation of the policy role of state governments in recent years. Prerequisite: POL 60101 and graduate standing.

Levels: Graduate
Schedule Types: Lecture

POL 60106 - URBAN POLICY AND POLITICS

Urban public policy takes place within the context of suburbanization and metropolitan sprawl. Issues raised in this course include poverty, race and the role of business in local policymaking. Prerequisite: POL 60101 or POL 60301 and graduate standing.

Levels: Graduate
Schedule Types: Lecture

POL 60108 - AMERICAN POLITICAL BEHAVIOR

Explores scholarship on the behavior of non-elite political actors including various forms of electoral participation, voting, psychological attachments, affect, cognitions, perceptions, attitudes, and beliefs. Additional topics include: ethnic, racial, and gender politics; political participation; voting choice; political psychology; politics and networks; macro politics; and connecting individual-level and macro-level findings with democratic outcomes and citizen capacity. Prerequisites: POL 60101 and graduate standing.

Levels: Graduate
Schedule Types: Lecture

POL 60191 - SEMINAR IN AMERICAN POLITICS AND POLICY

(Repeatable for credit) Seminar on current and important topics in American politics and policy. Subject matter varies depending on the emerging issue. This course may be repeated for credit with departmental approval. Prerequisite: Graduate standing.

Levels: Graduate
Schedule Types: Lecture
Political Science Department

**POL 60304 - ANALYTIC TECHNIQUES OF POLICY-MAKING**

This course covers the concepts, techniques, and conventions for assessing economic efficiency when this is one of the social and political goals relevant to public policymakers. Students are introduced to theories of cost-benefit analysis as they pertain to public policy. Prerequisite: POL 60301 and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

**POL 60501 - PROSEMINAR IN TRANSNATIONAL AND COMPARATIVE POLITICS AND POLICY**

This course introduces students to the primary concepts, theories and subfields of comparative and transnational politics. Each field of study is reviewed along with the primary subfields of analysis. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

**POL 60502 - GLOBAL GOVERNANCE**

This course examines issues, problems and debates regarding global governance in the contemporary world. Of primary interest is the array of actors in this process including nation-states, intergovernmental organizations and non-governmental organizations. Prerequisite: POL 60501 and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

**POL 60503 - FOREIGN POLICY ANALYSIS**

This course provides an overview of the diverse analytic traditions and issues that relate to the study of foreign policy. Areas of coverage include theories of foreign policy decision-making, levels of analysis, and policy domains. Prerequisite: POL 60501 and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department
POL 60507 - CONFLICT TRANSFORMATION AND RECONCILIATION

Cross-cultural analysis of transition from mass violence to justice and from protracted conflict to democracy. Subjects of study include truth and reconciliation commissions criminal tribunals apologies reparations and, other aids to conflict transformation. Prerequisite: POL 60501 or POL 60701 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

POL 60510 - POLITICS OF DEVELOPMENT

Surveys the scholarship on political development, examining the ways in which the conceptualization of development has evolved over time, looking specifically at institutionalization, state failure and the role of civil society. Prerequisite: POL 60501 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

POL 60511 - INTERNATIONAL POLITICAL ECONOMY

Introduces students to the study of how politics and economics interact on a global scale, covering the major theories of IPE, the international monetary system, global trade, and the connections between international economics and domestic development. Prerequisites: POL 60501 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

POL 60591 - SEMINAR IN TRANSNATIONAL AND COMPARATIVE POLITICS AND POLICY

(Repeatable for credit)Seminar on current and important topics in transnational and comparative politics and policy. Subject matter varies depending on the emerging issue. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Political Science Department

POL 60901 - PROSEMINAR IN CONFLICT ANALYSIS AND MANAGEMENT

Covers the historical development of the conflict analysis and management field; conflict theories; the dynamics by which conflicts escalate, stalemate, and de-escalate; and theories of conflict intervention, resolution and transformation. Prerequisite: graduate standing.
POL 60902 - POWER, CONFLICT AND THE POLITICS OF GENDER

Examines power disparities and gender as sources of conflict in multiple arenas—including family, community, workplace and the political sphere. The intersections of gender and power in the generation and resolution of social conflicts are examined. Emphases is placed on empowerment strategies and tactics used to transform gendered conflicts and redress power imbalances. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

POL 60903 - IDENTITY DRIVEN CONFLICTS

Explores the roles played by ethnicity, race, religion, culture and other elements of identity in the generation, resolution and conduct of conflicts within and between groups. Physical and symbolic markers of difference are examined in order to understand both why groups differentiate themselves from one another and how mechanisms such as skin color, religious affiliation, ethnic background or cultural traditions can provide the impetus for conflict or the grounds for resolution. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

POL 60904 - SOCIAL MOVEMENTS AND NONVIOLENT CONFLICTS

The waging and escalating of conflicts by social movements through nonviolent actions frequently shifts conflicts from one stage to another while also contributing to conflict transformation and to substantive social and political changes. Focuses on social movement theories and practices, and on the complicated dynamics of nonviolent action campaigns waged by social movements. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

POL 60906 - POLITICAL VIOLENCE

Examines the dynamics, networks, interests and resource mobilization underlying state-sponsored political violence, focusing on “low-intensity conflict” and counter-insurgency, paramilitarism and genocide. Of special interest is the relationship of the state to various non-state actors, both perpetrators and victims, and the role of the international community in domestic-level violence. Prerequisites: POL 60501 or POL 60901; and
POL 60907 - TERRORISM AND HUMAN RIGHTS

Examines how governments try to adhere to the rule of law in managing terrorist threats in a post 9-11 era, striking a balance between the competing demands of public safety, personal freedom and human rights. Topics include understanding terrorism as a problem for western governments, the rule of law and human rights. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

POL 60991 - SEMINAR IN CONFLICT ANALYSIS AND MANAGEMENT

(Repeatable for a total of 9 credit hours) Seminar on current and important topics in Conflict Analysis and Management. This course may be repeated for credit with departmental approval. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Seminar

Political Science Department

POL 61094 - COLLEGE TEACHING IN POLITICAL SCIENCE

(Repeatable for credit) Staff training and experience in college teaching; colloquia on professional ethics and responsibilities of political scientists. Maximum of 4 hours applicable toward Ph.D. requirements, with graduate studies committee approval. Prerequisite: Graduate standing.

1.000 Credit hours
1.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

POL 61098 - RESEARCH

(Repeatable for credit) Research or individual investigation for master's level graduate students. Credits may be applied toward meeting degree requirements if department approves and a letter grade is given. Prerequisite: Graduate standing.

1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours
**POL 61199 - THESIS I**

Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester distributed over several semesters if desired. Prerequisite: Graduate standing.

2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Political Science Department

**POL 61299 - THESIS II**

Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: POL 61199 and graduate standing.

2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Political Science Department

**POL 69091 - SEMINAR: QUANTITATIVE METHODS**

(Repeatable a maximum of 3 times) Focuses on select topics in quantitative methods, including limited and categorical dependent variables, hierarchical linear models, panel data, structural equation modeling, and Q Methodology. More than one seminar may be offered. Prerequisite: POL 60004 and graduate standing.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Political Science Department

**POL 69095 - SPECIAL TOPICS IN POLITICAL SCIENCE AND PUBLIC POLICY**

(Repeatable for a maximum of 12 credit hours) Topics course. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

**POL 70002 - SCOPE AND EPISTEMOLOGY**

Introduces students to the philosophy of science and scientific inquiry within the context of the social sciences,
and presents a broad survey of leading paradigms and debates within political science. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

POL 70003 - QUANTITATIVE METHODS I

Provides a selective introduction to basic quantitative methods for the analysis of political and public policy data dealing with basic descriptive and inferential statistics. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

POL 70004 - QUANTITATIVE METHODS II

Introduces students to multivariate quantitative techniques appropriate for the analysis of political and public policy data. Prerequisite: POL 70003 and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

POL 70010 - QUALITATIVE RESEARCH METHODS

Introduces the principles and methods of qualitative research, examining the place of qualitative research alongside discussions about positivist, interpretivist and critical approaches. A variety of qualitative research methods are introduced including: social observation and ethnography, interviewing, discourse analysis, oral history, document analysis, historical analysis and case studies. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

POL 70101 - PROSEMINAR IN AMERICAN POLITICS AND POLICY

This course provides a broad survey of the policymaking process in the U.S. government. Coverage includes formal government structures as well as more informal networks of private groups that seek to influence public policy at the national level. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
### POL 70102 - AMERICAN POLICY PROCESS
This course emphasizes the politics of the policy process. Among topics covered are theories of policy formulation, implementation, and evaluation. Prerequisite: POL 70101 or POL 70301; and doctoral standing.

- **3.000 Credit hours**
- **3.000 Lecture hours**

**Levels:** Graduate

**Schedule Types:** Lecture

Political Science Department

### POL 70103 - CONGRESS, THE PRESIDENCY AND THE COURTS
Focuses on the three branches of the U.S. government specifically congress, the presidency, and the judiciary. Coverage includes institutional rules and procedures that shape the incentives of these political actors and ultimately policy outcomes. Prerequisite: POL 70101 and doctoral standing.

- **3.000 Credit hours**
- **3.000 Lecture hours**

**Levels:** Graduate

**Schedule Types:** Lecture

Political Science Department

### POL 70105 - FEDERALISM AND STATE POLICYMAKING
This course covers the theory and practice of federalism with emphasis on its consequences for policy outcomes. Students also examine the transformation of the policy role of state governments in recent years. Prerequisite: POL 70101 and doctoral standing.

- **3.000 Credit hours**
- **3.000 Lecture hours**

**Levels:** Graduate

**Schedule Types:** Lecture

Political Science Department

### POL 70106 - URBAN POLICY AND POLITICS
Urban public policy takes place within the context of suburbanization and metropolitan sprawl. Issues raised in this course include poverty, race, and the role of business in local policymaking. Prerequisite: POL 70101 or POL 70301; and doctoral standing.

- **3.000 Credit hours**
- **3.000 Lecture hours**

**Levels:** Graduate

**Schedule Types:** Lecture

Political Science Department

### POL 70108 - AMERICAN POLITICAL BEHAVIOR
Explores scholarship on the behavior of non-elite political actors including various forms of electoral participation, voting, psychological attachments, affect, cognitions, perceptions, attitudes and beliefs. Additional topics include: ethnic, racial and gender politics; political participation; voting choice; political psychology; politics and networks; macro politics; and connecting individual-level and macro-level findings with democratic outcomes and citizen capacity. Prerequisites: POL 70101 and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

**POL 70191 - SEMINAR IN AMERICAN POLITICS AND POLICY**

(Repeatable for credit) Seminar on current and important topics in American politics and policy. Subject matter varies depending on the emerging issue. This course may be repeated for credit with departmental approval. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Political Science Department

**POL 70195 - SPECIAL TOPICS IN PUBLIC ADMINISTRATION**

(Repeatable for maximum 12 credit hours) Various topics offered by the Master of Public Administration program. Prerequisite: doctoral standing and special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

**POL 70198 - RESEARCH IN PUBLIC ADMINISTRATION**

(Repeatable 3 times for credit) Research or individual investigation for graduate students. Credits earned may be applied toward meeting requirements if department approves. Prerequisite: political science (POL) major; and doctoral standing; and special approval.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Research

Political Science Department

**POL 70304 - ANALYTIC TECHNIQUES OF POLICY-MAKING**

This course covers the concepts, techniques and conventions for assessing economic efficiency when this is one of the social and political goals relevant to public policymakers. Students are introduced to theories of cost-benefit analysis as they pertain to public policy. Prerequisite: POL 70301 and doctoral standing.
POL 70371 - GRADUATE INTRODUCTION TO PUBLIC ADMINISTRATION

Introductory graduate course to the theory and study of public administration. Topics include: evolution and characteristics of the modern nation state; core functions of public bureaucracy in any nation state; intergovernmental relations; formal and informal institutions and their role in policy; legal-regulatory processes; historical evolution of public administration as an academic field; major paradigms in organization theory and internal organizational dynamics. Prerequisite: political science (POL) major and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

POL 70377 - PUBLIC BUDGETING AND FINANCIAL MANAGEMENT

Focuses on two aspects of public financial analysis: budgeting and financial management. The topics in budgeting are the basic purposes of budgets as mechanisms of resource control and allocation, and as legal documents; distinct budget formats and cross-walking of formats; budget preparation; legislative review; implementation and auditing. The topics in financial management are the mechanisms and tools for financing public operations, debt management, fund accounting, analyzing budgets, and forecasting. Prerequisites: political science (POL) major and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

POL 70379 - PROGRAM EVALUATION I

Introduction to evaluation of government programs. Emphasis on familiarizing students with the theory and specifically the techniques utilized under different evaluation formats. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

POL 70386 - PUBLIC SECTOR INFORMATION TECHNOLOGY MANAGEMENT

Management of information technology systems in the public sector. Specific focus on: planning and acquisition of hardware and software and networking technologies, organizational governance and implementation, information security and privacy, legal requirements, IT service delivery and emerging enterprise technologies. Prerequisites: political science (POL) major and doctoral standing.
**POL 70387 - ELECTRONIC GOVERNANCE**

An introduction to electronic governance with an emphasis on public administration. Examines the implications of information and communication technology in public organizations with regard to democracy, civic engagement, and performance improvement. Through case studies from the United States and across the world, students become familiar with the factors and issues surrounding the implementation of electronic governance on a comparative basis. Prerequisites: political science (POL) major and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

**POL 70392 - INTERNSHIP IN PUBLIC ADMINISTRATION**

(Repeatable maximum 3 times for credit) Provides an opportunity for students to gain practical experience and be exposed to processes of public decision making and policy development. Prerequisite: political science (POL) major; and doctoral standing; and special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Practicum or Internship

Political Science Department

**POL 70501 - PROSEMINAR IN TRANSNATIONAL AND COMPARATIVE POLITICS AND POLICY**

This course introduces students to the primary concepts, theories and subfields of comparative and transnational politics. Each field of study is reviewed along with the primary sub-fields of analysis. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

**POL 70502 - GLOBAL GOVERNANCE**

This course examines issues, problems and debates regarding global governance in the contemporary world. Of primary interest is the array of actors in this process including nation-states, intergovernmental organizations, and non-governmental organizations. Prerequisite: POL 70501 and doctoral standing.

3.000 Credit hours
3.000 Lecture hours
POL 70503 - FOREIGN POLICY ANALYSIS

This course provides an overview of the diverse analytic traditions and issues that relate to the study of foreign policy. Areas of coverage include theories of foreign policy decision-making, levels of analysis, and policy domains. Prerequisite: POL 70501 and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

POL 70507 - CONFLICT TRANSFORMATION AND RECONCILIATION

Cross-cultural analysis of transition from mass violence to justice and from protracted conflict to democracy. Subjects of study include truth and reconciliation commissions, criminal tribunals, apologies, reparations, and other aids to conflict transformation. Prerequisite: POL 70501 or POL 70701; and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

POL 70510 - POLITICS OF DEVELOPMENT

Surveys the scholarship on political development, examining the ways in which the conceptualization of development has evolved over time, looking specifically at institutionalization, state failure and the role of civil society. Prerequisites: POL 70501 and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

POL 70511 - INTERNATIONAL POLITICAL ECONOMY

Introduces students to the study of how politics and economics interact on a global scale, covering the major theories of IPE, the international monetary system, global trade, and the connections between international economics and domestic development. Prerequisites: POL 70501 and doctoral standing.

3.000 Credit hours
3.000 Lecture hours
POL 70591 - SEMINAR IN TRANSNATIONAL AND COMPARATIVE POLITICS AND POLICY

(Repeatable for credit) Seminar on current and important topics in transnational and comparative politics and policy. Subject matter varies depending on the emerging issue. This course may be repeated for credit with departmental approval. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Political Science Department

POL 70901 - PROSEMINAR IN CONFLICT ANALYSIS AND MANAGEMENT

Covers the historical development of the conflict analysis and management field; conflict theories; the dynamics by which conflicts escalate, stalemate, and de-escalate; and theories of conflict intervention, resolution and transformation. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

POL 70902 - POWER, CONFLICT AND THE POLITICS OF GENDER

Examines power disparities and gender as sources of conflict in multiple arenas—including family, community, workplace and the political sphere. The intersections of gender and power in the generation and resolution of social conflicts is examined. Emphases is placed on empowerment strategies and tactics used to transform gendered conflicts and redress power imbalances. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

POL 70903 - IDENTITY DRIVEN CONFLICTS

Explores the roles played by ethnicity, race, religion, culture and other elements of identity in the generation, resolution and conduct of conflicts within and between groups. Physical and symbolic markers of difference are examined in order to understand both why groups differentiate themselves from one another and how mechanisms such as skin color, religious affiliation, ethnic background or cultural traditions can provide the impetus for conflict or the grounds for resolution. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

POL 70904 - SOCIAL MOVEMENTS AND NONVIOLENT CONFLICTS


The waging and escalating of conflicts by social movements through nonviolent actions frequently shifts conflicts from one stage to another while also contributing to conflict transformation and to substantive social and political changes. Focuses on social movement theories and practices, and on the complicated dynamics of nonviolent action campaigns waged by social movements. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

**POL 70906 - POLITICAL VIOLENCE**

Examines the dynamics, networks, interests and resource mobilization underlying state-sponsored political violence, focusing on “low-intensity conflict” and counter-insurgency, paramilitarism and genocide. Of special interest is the relationship of the state to various non-state actors, both perpetrators and victims, and the role of the international community in domestic-level violence. Prerequisites: POL 70501 or POL 70901; and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

**POL 70907 - TERRORISM AND HUMAN RIGHTS**

Examines how governments try to adhere to the rule of law in managing terrorist threats in a post 9-11 era, thus striking a balance between the competing demands of public safety, personal freedom, and human rights. Topics include understanding terrorism as a problem for western governments, the rule of law, and human rights. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

**POL 70991 - SEMINAR IN CONFLICT ANALYSIS AND MANAGEMENT**

Repeatable for a maximum of 9 credit hours) Seminar on current and important topics in Conflict Analysis and Management. This course may be repeated for credit with departmental approval. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Political Science Department

**POL 71094 - COLLEGE TEACHING IN POLITICAL SCIENCE**

(Repeatable for credit) Staff training and experience in college teaching; colloquia on professional ethics and
responsibilities of political scientists. Maximum of 4 hours applicable toward Ph.D. requirements with graduate studies committee approval. Prerequisite: Doctoral standing.

1.000 Credit hours
1.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

**POL 79091 - SEMINAR: QUANTITATIVE METHODS**

(Repeatable a total of 3 times) Focuses on select topics in quantitativestatistical methods, including limited and categorical dependent variables, hierarchical linear models, panel data, structural equation modeling, and Q Methodology. More than one seminar may be offered. Prerequisites: POL 70004 and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Seminar

Political Science Department

**POL 79095 - SPECIAL TOPICS IN POLITICAL SCIENCE AND PUBLIC POLICY**

(Repeatable for a maximum of 12 credit hours) Topics course. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Political Science Department

**POL 81098 - RESEARCH**

(Repeatable for credit) Research or individual investigation for doctoral students who have not yet passed their candidacy examination. Credits may be applied toward degree if department approves and if letter grade given. Prerequisite: Doctoral standing.

1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

Political Science Department

**POL 81199 - DISSERTATION I**

(Repeatable for credit) Doctoral dissertation, for which registration in at least two semesters is required, and the first of which will be semester in which dissertation work is begun and continuing until the completion of 30 hours. Prerequisite: Special approval and doctoral standing.

15.000 Credit hours
15.000 Other hours

Levels: Graduate
Schedule Types: Dissertation
**POL 81299 - DISSERTATION II**

(Repeatable for credit) Continuing registration required for doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. Prerequisite: POL 81199 and doctoral standing.

15.000 Credit hours
15.000 Other hours

Levels: Graduate
Schedule Types: Dissertation

Political Science Department

**PSYC 11762 - GENERAL PSYCHOLOGY**

Introduction to the scientific approach to understanding human behavior and mental processes such as emotions, perceptions and cognitions. Topics may include personality, social and environmental factors, biological aspects of behavior and the experience of emotion and psychological disorders. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Psychological Sciences Department

Course Attributes:
Diversity Course-Domestic, Kent Core-Social Sciences, LER-Social Sciences, TAG - Social/Behavior Sciences, Trnfr Module-Social Sciences

**PSYC 20651 - CHILD PSYCHOLOGY**

A review of the data, concepts and theories of psychology that contribute to the understanding of child development from conception to age 14. Prerequisite: PSYC 11762.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Psychological Sciences Department

Course Attributes:
Diversity Course-Domestic, Kent Core-Social Sciences, LER-Social Sciences, TAG - Social/Behavior Sciences, Trnfr Module-Social Sciences

**PSYC 21211 - PSYCHOLOGY OF ADJUSTMENT**

A review of theories, concepts and data that contribute to the understanding of human adjustment. Topics may include the following: personality, stress and coping, transitions from adolescence to adulthood, psychological disorders and psychotherapy. Prerequisite: PSYC 11762.

3.000 Credit hours
3.000 Lecture hours
Psychological Sciences Department

Course Attributes:
Diversity Course-Domestic, Kent Core-Social Sciences, LER-Social Sciences, Trnfr Module-Social Sciences

**PSYC 21621 - QUANTITATIVE METHODS IN PSYCHOLOGY I**

Application of quantitative, statistical methods in psychological research. Descriptive and inferential methods (includes ANOVA, t-test and correlation). Prerequisite: PSYC 11762.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Psychological Sciences Department

**PSYC 22221 - MULTICULTURAL PSYCHOLOGY**

Examination of areas of psychology upon which diversity issues have a bearing and focused study of psychological issues relevant to African-American, Asian-American, Hispanic/Latino American and American Indian groups. Prerequisite: PSYC 11762.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Psychological Sciences Department

Course Attributes:
Diversity Course-Domestic, Kent Core-Social Sciences, LER-Social Sciences, Trnfr Module-Social Sciences

**PSYC 30111 - FORENSIC PSYCHOLOGY**

Surveys major areas of forensic psychology, which focuses on the application of the science and profession of psychology to legal settings. Topics include roles and responsibilities of forensic psychologists, forensic assessment, psychological theories of criminal behavior, law enforcement psychology and eyewitness testimony. Prerequisite: PSYC 11762.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Psychological Sciences Department

**PSYC 30651 - ADOLESCENT PSYCHOLOGY**

A review of the theories, concepts and data that contribute to our understanding of the physical, intellectual, educational, personality and social development of adolescents in contemporary society. Prerequisite: PSYC 11762.

3.000 Credit hours
3.000 Lecture hours
PSYC 30652 - SOCIAL AND PERSONALITY DEVELOPMENT

Processes and findings in social and personality development, with a focus on childhood and adolescence. Will include the examination of individual differences as well as developmental changes in social function and personality. Prerequisite: PSYC 11762; and PSYC 20651 or HDFS 24012.

3.000 Credit hours
3.000 Lecture hours

PSYC 30655 - CHILDREN'S THINKING

Focuses on how children's cognitive processes and mental representations change from infancy to early adulthood. Theoretical claims, empirical findings, and methodological issues are critically evaluated. Topics include children's visual and auditory perception, language and literacy, learning and memory, mathematical and spatial thinking, logical and scientific reasoning, problem solving, theory of mind and social cognition. Prerequisite: PSYC 11762; and PSYC 20651 or HDFS 24012.

3.000 Credit hours
3.000 Lecture hours

PSYC 30656 - PSYCHOLOGY OF AGING

(Cross-listed with GERO 30656) Exploration of basic research and theory on the psychological consequences of aging and psychological factors that affect the behavior of older persons. Prerequisite: PSYC 11762.

3.000 Credit hours
3.000 Lecture hours

PSYC 30821 - PSYCHOLOGY OF MOTIVATION

Factors that provide the energy and direction for behaviors, emotions and cognitive processes. Seeks to answer the question "why" concerning the things people do, feel and think. A survey approach is used to include both the traditional and newly emerging concepts in motivation. Prerequisite: PSYC 11762.

3.000 Credit hours
3.000 Lecture hours
PSYC 31141 - PERCEPTION
Investigates how humans detect, organize and interpret information from the environment. Considers how both biological and psychological process create and influence our perception of the world. Prerequisite: PSYC 11762.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

PSYC 31282 - PERSONALITY
A review of the data, concepts and theories of psychology that contribute to the understanding of personality. Prerequisite: PSYC 11762.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

PSYC 31498 - UNDERGRADUATE RESEARCH
(Repeatable for a maximum 16 credit hours) Individual research open to qualified students. See Arts and Sciences and psychology major/minor requirements for applicability repeatable limits. Prerequisite: PSYC 11762 and special approval.

1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Undergraduate
Schedule Types: Research

PSYC 31532 - SOCIAL PSYCHOLOGY
Study of environmental/situational influences on our own and others' thoughts, behaviors and feelings - focus on topics such as aggression, attitudes and behaviors, conformity, helping, personal relationships and social cognition. Prerequisite: PSYC 11762.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
Psychological Sciences Department

Course Attributes:
TAG - Social/Behavior Sciences

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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>PSYC 31574</td>
<td>RESEARCH METHODS IN PSYCHOLOGY</td>
<td>The rationale, logic and procedures of scientific research in psychology with an emphasis on measurement, causal inference and research design. Prerequisites: PSYC 11762 and PSYC 21621.</td>
<td>3.000 Credit hours, 3.000 Lecture hours</td>
<td>Undergraduate</td>
<td>Lecture</td>
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<tr>
<td>PSYC 31634</td>
<td>ANIMAL COGNITION</td>
<td>Focuses on the nature of cognition and intelligence in nonhuman animals. Topics include animal studies of perception and attention, associative learning, memory, spatial cognition, concept formation, reasoning and language in nonhuman animals. Prerequisite: PSYC 11762.</td>
<td>3.000 Credit hours, 3.000 Lecture hours</td>
<td>Undergraduate</td>
<td>Lecture</td>
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<tr>
<td>PSYC 31684</td>
<td>QUANTITATIVE METHODS IN PSYCHOLOGY II</td>
<td>Small sample theory, analysis of variance, linear regression and nonparametric statistics (e.g. Chi Square). This course may include qualitative analyses and computer based data analyses with SPSS. Prerequisite: PSYC 21621.</td>
<td>3.000 Credit hours, 3.000 Lecture hours</td>
<td>Undergraduate</td>
<td>Lecture</td>
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<tr>
<td>PSYC 31773</td>
<td>INDUSTRIAL PSYCHOLOGY</td>
<td>Application of principles, facts and theories of psychology to people at work. Includes motivation and satisfaction at work, personnel selection and placement, training and development, performance appraisal, organizational development, quality of work life, ergonomics and consumer psychology. Prerequisite: PSYC 11762.</td>
<td>3.000 Credit hours, 3.000 Lecture hours</td>
<td>Undergraduate</td>
<td>Lecture</td>
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PSYC 40111 - ABNORMAL PSYCHOLOGY

Survey of the definitions as well as the biological, psychological and sociocultural causes of various psychological disorders. Illustrations of these disorders with cases. Overview of treatment approaches to these disorders may be included. Prerequisite: PSYC 11762.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Psychological Sciences Department

Course Attributes:
TAG - Social/Behavior Sciences

PSYC 40112 - PSYCHOLOGICAL DISORDERS OF CHILDHOOD AND ADOLESCENCE

Covers the biological, psychological, and socio-cultural factors influencing the development of psychological disorders in children and adolescents. Emphasis is placed on conceptual and research issues and the application of knowledge to understanding diagnosis and case studies of specific disorders. Prerequisites: PSYC 11762; and PSYC 20651 or PSYC 30651 or HDFS 24012; and junior or senior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Psychological Sciences Department

PSYC 40231 - PSYCHOLOGICAL ASSESSMENT

Introduction to psychometrics and test theory. Use and basic interpretation of intellectual and personality tests. Skills in using tests at a professional level not given. Prerequisite: PSYC 11762 and PSYC 21621.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Psychological Sciences Department

PSYC 40383 - INTRODUCTION TO CLINICAL PSYCHOLOGY

Application of psychological principles and techniques to the problems of the individual. This course is designed to introduce the field of clinical psychology, including models of understanding abnormal behavior, treatment of individuals and ethics and professional issues. Prerequisite: PSYC 11762.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Psychological Sciences Department
### PSYC 40445 - COGNITIVE PSYCHOLOGY

Covers the mental processes that underline human thought and behavior, such as attention, memory, comprehension, reasoning, problem-solving and language. Considers established and current theoretical models, research methods and experimental results. Prerequisite: PSYC 11762.

3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

Psychological Sciences Department

### PSYC 40446 - COGNITIVE NEUROSCIENCE

Covers the cognitive and neural processes that underlie vision, attention, spatial processing, memory, language, social processes, executive functioning, and action. Introduces basic brain structure and the behavioral and functional imaging techniques used to study the brain bases of cognition. Data from patients with neurological disorders such as Alzheimer's, aphasia, amnesia and others are also be examined. Prerequisite: PSYC 11762.

3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

Psychological Sciences Department

### PSYC 40461 - PSYCHOLOGY OF LANGUAGE

Investigates psychological processes involved in language production, comprehension and development. Within each broad area emphasis is on theories, psychological experiments, key findings and the relationships between theory, method and data. Prerequisite: PSYC 11762 and PSYC 40445.

3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

Psychological Sciences Department

### PSYC 40625 - DEVELOPMENT OF GENDER ROLE AND IDENTITY

A life-span, developmental model is used to analyze the changes which occur with age in gender-related role performance and identity formation. Prerequisite: PSYC 11762.

3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

Psychological Sciences Department

Course Attributes:  
Diversity Course-Domestic
PSYC 40974 - HISTORY OF PSYCHOLOGY
Course examines the historical context, influences and individuals instrumental in the development of psychology. Course organization is designed to compare and contrast systems, theories and fundamental issues with which psychologists have concerned themselves in past and contemporary stages of the science. Prerequisite: PSYC 11762 and Special Approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Psychological Sciences Department

PSYC 41043 - BASIC LEARNING PROCESSES
Examination of basic principles of Pavlovian conditioning, instrumental conditioning, animal learning and memory processes, and animal cognition. Emphasis on major empirical phenomena derived from research with animals with reference to related psychological processes in humans. Prerequisite: PSYC 11762.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Psychological Sciences Department

PSYC 41363 - BIOPSYCHOLOGY
Rigorous course covering the relationship between brain and behavior at the physiological, chemical and anatomical levels. Focuses on the association between the central nervous system and various processes and behaviors such as learning, emotions, neurological disorders and psychopathology. Students with no background or coursework in biological science should plan to devote considerable time to mastering the relevant concepts for this course (e.g., structure and function of neurons). Prerequisites: PSYC 11762; and sophomore standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Psychological Sciences Department

PSYC 41364 - DRUGS AND BEHAVIOR
Provides an overview of drug taking in society, the actions of drugs in the body, and the effects of drugs on behavior. Focus is on drugs and the nervous system, psychopharmacology, and actions and side effects of such drugs as alcohol, opiates, stimulants, marijuana, hallucinogens, depressants, and performance-enhancing drugs. Particular focus is on medications for psychiatric disorders, abuse-potential and the causes of addiction, dependence and relapse. Prerequisite: PSYC 11762.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Psychological Sciences Department
**PSYC 41492 - INTERNSHIP IN PSYCHOLOGY**

(Repeatable for credit) Application of psychological knowledge and skills in applied settings. Allows academic credit for participation as an intern at approved internship sites including social service, non-profit agencies, government agencies and hospital settings. Prerequisite: Must have junior standing and 9 credit hours in psychology and 3.000 GPA overall. Open to psychology majors only. Special approval required.

1.000 TO 6.000 Credit hours
7.000 TO 42.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Psychological Sciences Department

Course Attributes:
Experiential Learning Requirem

**PSYC 41495 - SPECIAL TOPICS IN PSYCHOLOGY**

(Repeatable for credit) In-depth examination of particular topics of current interest to faculty and students. Specialized areas of research theory or methodology may be covered. Specific topics announced. Prerequisite: Junior standing and special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Psychological Sciences Department

**PSYC 41498 - INDIVIDUAL INVESTIGATION**

(Repeatable for a maximum of 16 credit hours) Involves participation in empirical research, review of psychological literature and preparation of a paper or annotated bibliography. See Arts and Sciences and psychology major/minor requirements for applicability repeatable limits. Prerequisite: PSYC 11762 and special approval.

1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Psychological Sciences Department

Course Attributes:
Experiential Learning Requirem

**PSYC 41573 - LABORATORY EXPERIENCE IN PSYCHOLOGICAL RESEARCH: SOCIAL/CLINICAL**

Intensive experience in the conduct, analysis and reporting of empirical research in social or clinical psychology. Specific content varies with instructor. Repeatable once with instructor, and departmental permission if topic is different. Prerequisites: 3.200 GPA and PSYC 11762 and PSYC 21621 and PSYC 31574.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
PSYC 41574 - LABORATORY EXPERIENCE IN PSYCHOLOGICAL RESEARCH: COGNITIVE/LEARNING

(Repeatable once for credit with instructor and departmental permission if topic is different) Intensive experience in the conduct, analysis and reporting of empirical research in cognitive psychology or human/animal learning. Specific content varies with instructor. Prerequisites: 3.200 GPA and PSYC 11762 and PSYC 21621 and PSYC 31574 and special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

PSYC 41581 - HEALTH PSYCHOLOGY

Role of psychological and social factors in health and illness, typically covering three general areas: (1) psychological factors affecting disease, (2) psychological and social consequences of illness and (3) psychotherapeutic interventions. Prerequisite: PSYC 11762.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

PSYC 41990 - WRITING IN PSYCHOLOGY

Writing-intensive course taken in conjunction with a 3-credit-hour, upper-division psychology course (except PSYC 31498, 41498, 41573, 41574 or 41993). Prerequisite: special approval.

1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

PSYC 41993 - VARIABLE TITLE WORKSHOP IN PSYCHOLOGY

(Repeatable for credit) Variable topic offered as need arises. Specific topics will be announced in the schedule of classes. Prerequisite: PSYC 11762 and special approval.

1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours
PSYC 43001 - CLINICAL NEUROANATOMY

(Slashed with PSYC 53001 and PSYC 73001; Cross-listed with BMS 50701 and 70701) This course examines the anatomical organization of the human brain, emphasizing functional aspects of various neural systems, neuroimaging, and topics of clinical relevance. A conceptual understanding of central nervous system organization and memorization of specific neural structures and pathways, as well as knowledge of the impact of structure and systems dysfunction is required. Prerequisites: Junior standing; minimum 3.250 cumulative GPA; and special approval.

3.000 Credit hours
3.000 Lecture hours

PSYC 43002 - CURRENT TECHNIQUES IN BEHAVIORAL NEUROSCIENCE

(Slashed with PSYC 53002 and 73002; Cross-listed with BMS 50702 and BMS 70702) This course details current and advanced techniques used in behavioral neuroscience research. Emphasis is placed on understanding the theory behind each technique, and its use in understanding the neural mechanisms of behavior. Detailed protocols for each technique will also be covered. Students should contact the instructor for permission to enroll. Prerequisites: PSYC 41363 with a minimum grade of B (3.000) or BSCI 30140 with a minimum grade of B (3.000) or BSCI 30156 with a minimum grade of B (3.000); and minimum cumulative GPA of 3.250; and Junior standing; and special approval.

3.000 Credit hours
3.000 Lecture hours

PSYC 43003 - NEURAL MECHANISMS OF LEARNING AND MEMORY

(Slashed with PSYC 53003 and PSYC 73003; Cross-listed with BMS 50703 and BMS 70703) This course examines the neural and molecular mechanisms underlying learning and memory formation. Cellular mechanisms of learning, including long-term potentiation and basic electrophysiology in invertebrate and mammalian preps are covered. Transcriptional and post-translational modifications required for learning and memory formation, genomic signaling and protein synthesis. The course covers structural changes of neurons associated with memory formation, and the different behavioral methods for studying memory. Contact the instructor for permission to enroll. Prerequisites: PSYC 41363 with a minimum grade of B (3.000) or BSCI 30520 with a minimum grade of B (3.000); minimum cumulative GPA of 3.250; Junior standing; and special approval.

3.000 Credit hours
3.000 Lecture hours
PSYC 51993 - VARIABLE TITLE WORKSHOP IN PSYCHOLOGY

(Repeatable for credit) Variable topics offered as need arises to train in specific area of field. Specific topics will be announced in schedule of classes. Prerequisite: Special approval and graduate standing.

1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Psychological Sciences Department

PSYC 53001 - CLINICAL NEUROANATOMY

(Slashed with PSYC 43001 and PSYC 73001; Cross-listed with BMS 50701 and BMS 70701) This course examines the anatomical organization of the human brain, emphasizing functional aspects of various neural systems, neuroimaging, and topics of clinical relevance. A conceptual understanding of central nervous system organization and memorization of specific neural structures and pathways, as well as knowledge of the impact of structure and systems dysfunction is required. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Psychological Sciences Department

PSYC 53002 - CURRENT TECHNIQUES IN BEHAVIORAL NEUROSCIENCE

(Slashed with PSYC 43002 and PSYC 73002; Cross-listed with BMS 50702 and BMS 70702) This course details current and advanced techniques used in behavioral neuroscience research. Emphasis is placed on understanding the theory behind each technique, and its use in understanding the neural mechanisms of behavior. Detailed protocols for each technique will also be covered. Students should contact the instructor for permission to enroll. Prerequisites: Graduate standing; and special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Psychological Sciences Department

PSYC 53003 - NEURAL MECHANISMS OF LEARNING AND MEMORY

(Slashed with PSYC 43003 and PSYC 73003; Cross-listed with BMS 50703 and BMS 70703) This course examines the neural and molecular mechanisms underlying learning and memory formation. Cellular mechanisms of learning, including long-term potentiation and basic electrophysiology in invertebrate and mammalian preps are covered. Transcriptional and post-translational modifications required for learning and memory formation, genomic signaling and protein synthesis. The course covers structural changes of neurons associated with memory formation, and the different behavioral methods for studying memory. Prerequisites: Graduate standing; and special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
**PSYC 60110 - INTRODUCTION TO PSYCHOPATHOLOGY: CHILD**

Introduction to psychopathology from a developmental perspective. Covers models of classification and specific disorders of childhood. Prerequisite: Graduate standing in psychology.

3.000 Credit hours  
3.000 Lecture hours  

Levels: Graduate  
Schedule Types: Lecture  

**PSYC 60170 - INTRODUCTION TO PSYCHOPATHOLOGY: ADULT**

An examination of the etiology, symptomology and theoretical models of adult psychopathology. Prerequisite: Graduate status in psychology.

3.000 Credit hours  
3.000 Lecture hours  

Levels: Graduate  
Schedule Types: Lecture  

**PSYC 60192 - INTEGRATION PRACTICUM**

(Repeatable for credit) Integration of assessment, psychopathology and psychotherapy coursework. Emphasis on learning how to conceptualize cases in general and from differing theoretical perspectives. Prerequisite: PSYC 6/70292 and PSYC 6/70792 and graduate standing in psychology.

1.000 TO 3.000 Credit hours  
1.000 TO 3.000 Lecture hours  

Levels: Graduate  
Schedule Types: Lecture, Practicum or Internship  

**PSYC 60272 - INTRODUCTION TO PSYCHOLOGICAL ASSESSMENT**

Introduction to psychological assessment as a process for solving important clinical problems. Theoretical methodological and research issues are emphasized. Students will also become familiar with major psychological tests. Prerequisite: Graduate standing in psychology.

3.000 Credit hours  
3.000 Lecture hours  

Levels: Graduate  
Schedule Types: Lecture  

**PSYC 60273 - ADVANCED PSYCHOLOGICAL ASSESSMENT: ADULT**

Examines psychodiagnosis within a context of "personality-as-a-coherent-whole." Emphasizes an ideographic approach with a theoretical framework, which organizes and gives meaning to observations. Prerequisite: PSYC
6/70272 and graduate standing in psychology.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Psychological Sciences Department

**PSYC 60274 - ADVANCED PSYCHOLOGICAL ASSESSMENT: CHILD**

Interviewing, developmental and intellectual assessments personality evaluations behavioral assessments and assessment of special child populations. Emphasis on the rationale and integration of research relevant to appropriate use and interpretation. Prerequisite: PSYC 6/70272 and PSYC 6/70292; and graduate standing in psychology.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Psychological Sciences Department

**PSYC 60275 - BEHAVIORAL ASSESSMENT**

Considers behavioral assessment from an empirical as well as an applied perspective. Intended for persons familiar with general assessment, psychopathology and psychotherapy issues. Prerequisite: PSYC 6/70272 and PSYC 6/70292; and graduate standing in psychology.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Psychological Sciences Department

**PSYC 60276 - NEUROPSYCHOLOGICAL ASSESSMENT**

Introduction to the conceptual foundations of neuropsychological assessment and practical knowledge in assessment procedures, methods of interpretation and differential diagnosis. Prerequisite: PSYC 6/70272 and PSYC 6/70292; graduate standing in psychology.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Psychological Sciences Department

**PSYC 60292 - PSYCHOLOGICAL ASSESSMENT PRACTICUM**

(Repeatable for credit) Applied aspects of material presented in PSYC 6/70272. Emphasis on administering, scoring and interpreting major assessment tools. Prerequisite: Concurrent enrollment in PSYC 6/70272; and graduate standing in psychology.

1.000 TO 3.000 Credit hours
3.000 Other hours
PSYC 60324 - PROFESSIONAL ISSUES AND ETHICS IN CLINICAL PSYCHOLOGY

Review of professional concerns in the field, including training, ethics, client rights, economics, legal issues, relationship to other professions and professional organization and policy. Prerequisite: Graduate standing in psychology.
3.000 Credit hours
3.000 Lecture hours

PSYC 60326 - CLINICAL ASPECTS OF HEALTH PSYCHOLOGY

Consideration of psychosocial influences on health status that are relevant to the clinician. Attention is given to interventions on both individual and community levels. Emphasis on approaches to prevention treatment and public policy. Prerequisite: Graduate standing in psychology.
3.000 Credit hours
3.000 Lecture hours

PSYC 60371 - INTRODUCTION TO PSYCHOLOGICAL THERAPY

Introduction to psychotherapy with special emphasis on psychodynamic and phenomenological approaches with theory, technique and major research findings considered. Prerequisite: PSYC 6/70170 and PSYC 6/71260; and graduate standing in psychology.
3.000 Credit hours
3.000 Lecture hours

PSYC 60375 - COGNITIVE BEHAVIOR THERAPY

Empirical and clinical aspects of cognitive and behavioral interventions. Intended for students familiar with basic psychotherapy assessment and psychopathology issues. Prerequisite: PSYC 6/70371 and PSYC 6/70292; and graduate standing in psychology.
3.000 Credit hours
3.000 Lecture hours
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Levels</th>
<th>Schedule Types</th>
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<tbody>
<tr>
<td>PSYC 60376</td>
<td>CHILD PSYCHOTHERAPY</td>
<td>Consideration of various aspects of child psychotherapy, including general issues, traditional therapies, behavior and cognitive behavior therapies, and child therapy research. Emphasis on integration of theory, technique and research. Prerequisite: PSYC 6/70371 and PSYC 6/70792; and graduate standing in psychology.</td>
<td>Graduate</td>
<td>Lecture</td>
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<tr>
<td>PSYC 60395</td>
<td>ADVANCED TOPICS-CLINICAL PSYCHOLOGY</td>
<td>(Repeatable for credit) Advanced-level consideration of selected content areas in assessment, psychotherapy, psycho pathology professional issues and community psychology. Specific topics will be announced in schedule of classes. Prerequisite: Permission and graduate standing.</td>
<td>Graduate</td>
<td>Lecture</td>
</tr>
<tr>
<td>PSYC 60453</td>
<td>INTRODUCTION TO COGNITIVE PSYCHOLOGY</td>
<td>Information-processing approaches to human thought. Focus on processes used to transform store manipulate and retrieve sensory input. Topics include attention pattern recognition memory and language. Prerequisite: Graduate standing in psychology.</td>
<td>Graduate</td>
<td>Lecture</td>
</tr>
<tr>
<td>PSYC 60792</td>
<td>PSYCHOTHERAPY PRACTICUM</td>
<td>(Repeatable for credit) Basic training in applied aspects of psychotherapy. Through didactic and experiential methods students learn basic listening and communication skills that are then applied to specific techniques, situations and issues. Prerequisite: PSYC 6/70292; concurrent enrollment in PSYC 6/70371; and graduate standing in psychology.</td>
<td>Graduate</td>
<td>Practicum or Internship</td>
</tr>
<tr>
<td>PSYC 60895</td>
<td>ADVANCED TOPICS-EXPERIMENTAL PSYCHOLOGY</td>
<td>(Repeatable for credit) Advanced-level consideration of selected content areas in experimental psychology.</td>
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Specific topics will be announced in schedule of classes. Prerequisite: Special approval and graduate standing.

1.000 TO 6.000 Credit hours
1.000 TO 6.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Psychological Sciences Department

**PSYC 60950 - HISTORY AND CONTEMPORARY SYSTEMS**

Relationships between historical antecedents and the major contemporary systems and theories of psychology. Prerequisite: Graduate standing in psychology.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Psychological Sciences Department

**PSYC 61054 - LEARNING AND CONDITIONING**

Introduction to basic conditioning processes. Emphasis on Pavlovian and instrumental learning phenomena particularly as these are exemplified in animal models of behavior. Prerequisite: Graduate standing in psychology.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Psychological Sciences Department

**PSYC 61199 - THESIS I**

Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester distributed over several semesters if desired. Prerequisite: Special approval and graduate standing.

2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Psychological Sciences Department

**PSYC 61260 - THEORIES OF PERSONALITY**

Consideration of major theoretical orientations including psychoanalysis, phenomenology and those stressing learning. Emphasis on principal concepts deals less with research methods and findings. Prerequisite: Graduate standing in psychology.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
### PSYC 61299 - THESIS II

Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: PSYC 61199 and graduate standing.

<table>
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<th>2.000 Credit hours</th>
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<td>2.000 Other hours</td>
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Levels: Graduate  
Schedule Types: Masters Thesis

Psychological Sciences Department

### PSYC 61350 - PHYSIOLOGICAL PSYCHOLOGY

Neurophysiological, neurochemical and neuroanatomical factors in the control of cognitive processes motivation and behavior. Emphasis is on the broad coverage of major topics in the field. Prerequisite: Graduate standing in psychology.

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<th>3.000 Credit hours</th>
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<td>3.000 Lecture hours</td>
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</table>

Levels: Graduate  
Schedule Types: Lecture

Psychological Sciences Department

### PSYC 61496 - INDIVIDUAL INVESTIGATION

(Repeatable for credit) Intensive pursuit of a subject matter beyond normal course coverage with possibility of associated research. Prerequisite: Special approval and graduate standing.

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<td>3.000 Other hours</td>
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</table>

Levels: Graduate  
Schedule Types: Individual Investigation

Psychological Sciences Department

### PSYC 61498 - RESEARCH

(Repeatable for credit) Research or individual investigation for master's level graduate students. Credits may be applied toward meeting degree requirements if department approves and if letter grade or "S" is given. Prerequisite: Graduate standing and special approval.

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<tr>
<th>1.000 TO 15.000 Credit hours</th>
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<td>1.000 TO 15.000 Other hours</td>
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</table>

Levels: Graduate  
Schedule Types: Research

Psychological Sciences Department

### PSYC 61548 - PSYCHOLOGY OF GENDER AND MINORITIES

Neurophysiological, neurochemical and neuroanatomical factors in the control of cognitive processes motivation and behavior. Emphasis is on the broad coverage of major topics in the field. Prerequisite: Graduate standing in...
Psychology.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Psychological Sciences Department

**PSYC 61580 - SOCIAL PSYCHOLOGY**

Introduction to empirical research and theories on the psychological processes related to interpersonal and small group behavior. Prerequisite: Graduate standing in psychology.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Psychological Sciences Department

**PSYC 61651 - QUANTITATIVE STATISTICAL ANALYSIS I**

(Slashed with PSYC 71651) Review of univariate statistics and an introduction to using bivariate and multivariate statistics. Part one of a two semester sequence on statistical analysis. Prerequisite: Graduate standing in psychology and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Psychological Sciences Department

**PSYC 61654 - QUANTITATIVE STATISTICAL ANALYSIS II**

(Slashed with PSYC 71654) Multivariate statistics for classifying individuals and variables. Additional topics include power/effect size and handling missing data. Part two of a two-semester sequence on statistical analysis. Prerequisite: PSYC 61651 or 71651 and graduate standing in psychology.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Psychological Sciences Department

**PSYC 61685 - CLINICAL RESEARCH METHODS**

Consideration of research methodologies relevant to clinical psychology with emphasis on strengths and weaknesses of research designs and issues related to collection and evaluation of data. Prerequisite: Graduate standing in psychology.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
**PSYC 61993 - VARIABLE TITLE WORKSHOP IN PSYCHOLOGY**

(Repeatable for a maximum of 6 credit hours) Training and experience in college teaching. Prerequisite: Graduate standing in psychology (PSYC).

1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Psychological Sciences Department

**PSYC 62392 - CLINICAL PRACTICUM**

(Repeatable for credit) Beginning practicum in psychological clinic involving selection, administration and evaluation of tests of ability and personality. Prerequisite: Special approval and graduate standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Psychological Sciences Department

**PSYC 62492 - ADVANCED PRACTICUM**

(Repeatable for credit) Intensified experience in the diagnosis and treatment of specific disorders from the scientist-practitioner model. Prerequisite: PSYC 6/70192 and PSYC 6/70292 and PSYC 6/70792; and graduate standing in psychology.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Psychological Sciences Department

**PSYC 62685 - RESEARCH METHODS IN PSYCHOLOGICAL SCIENCE**

(Slashed with PSYC 72685) This course fosters the development of graduate students as independent researchers by helping them acquire knowledge of and facility with quantitative research methods in psychology. The course covers a range of topics that are essential for successful research in psychology, including formulating research questions, measurement, research design, sampling, ethics, writing, replication, and validity. Prerequisite: Graduate standing in psychology.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Psychological Sciences Department

**PSYC 70110 - INTRODUCTION TO PSYCHOPATHOLOGY: CHILD**
Introduction to psychopathology from a developmental perspective. Covers models of classification and specific disorders of childhood. Prerequisite: Doctoral standing in psychology.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Psychological Sciences Department

**PSYC 70170 - INTRODUCTION TO PSYCHOPATHOLOGY: ADULT**

An examination of the etiology, symptomology and theoretical models of adult psychopathology. Prerequisite: Doctoral status in psychology.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Psychological Sciences Department

**PSYC 70192 - INTEGRATION PRACTICUM**

(Repeatable for credit) Integration of assessment, psychopathology and psychotherapy coursework. Emphasis on learning how to conceptualize cases in general and from differing theoretical perspectives. Prerequisite: PSYC 6/70292 and PSYC 6/70792; and doctoral standing in psychology.
1.000 TO 3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture, Practicum or Internship

Psychological Sciences Department

**PSYC 70272 - INTRODUCTION TO PSYCHOLOGICAL ASSESSMENT**

Introduction to psychological assessment as a process for solving important clinical problems. Theoretical methodological and research issues are emphasized. Students will also become familiar with major psychological tests. Prerequisite: Doctoral standing in psychology.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Psychological Sciences Department

**PSYC 70273 - ADVANCED PSYCHOLOGICAL ASSESSMENT: ADULT**

Examines psychodiagnosis within a context of "personality-as-a-coherent-whole." Emphasizes an ideographic approach with a theoretical framework, which organizes and gives meaning to observations. Prerequisite: PSYC 6/70272 and doctoral standing in psychology.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
PSYC 70274 - ADVANCED PSYCHOLOGICAL ASSESSMENT: CHILD

Interviewing, developmental and intellectual assessments, personality evaluations, behavioral assessments, and assessment of special child populations. Emphasis on the rationale and integration of research relevant to appropriate use and interpretation. Prerequisite: PSYC 6/70272 and PSYC 6/70292; and doctoral standing in psychology.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

PSYC 70275 - BEHAVIORAL ASSESSMENT

Considers behavioral assessment from an empirical as well as an applied perspective. Intended for persons familiar with general assessment, psychopathology and psychotherapy issues. Prerequisite: PSYC 6/70272 and PSYC 6/70292; and doctoral standing in psychology.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

PSYC 70276 - NEUROPSYCHOLOGICAL ASSESSMENT

Introduction to the conceptual foundations of neuropsychological assessment and practical knowledge in assessment procedures, methods of interpretation and differential diagnosis. Prerequisite: PSYC 6/70272 and PSYC 6/70292 and doctoral standing in psychology.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

PSYC 70292 - PSYCHOLOGICAL ASSESSMENT PRACTICUM

(Repeatable for credit)Applied aspects of material presented in PSYC 6/70272. Emphasis on administering, scoring and interpreting major assessment tools. Prerequisite: Concurrent enrollment in PSYC 6/70272 and doctoral standing in psychology.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Psychological Sciences Department
PSYC 70324 - PROFESSIONAL ISSUES AND ETHICS IN CLINICAL PSYCHOLOGY

Review of professional concerns in the field, including training, ethics, client rights, economics, legal issues, relationship to other professions and professional organization and policy. Prerequisite: Doctoral standing in psychology.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Psychological Sciences Department

PSYC 70326 - CLINICAL ASPECTS OF HEALTH PSYCHOLOGY

Consideration of psychosocial influences on health status that are relevant to the clinician. Attention is given to interventions on both individual and community levels. Emphasis on approaches to prevention treatment and public policy. Prerequisite: Doctoral standing in psychology.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Psychological Sciences Department

PSYC 70371 - INTRODUCTION TO PSYCHOLOGICAL THERAPY

Introduction to psychotherapy with special emphasis on psychodynamic and phenomenological approaches with theory, technique and major research findings considered. Prerequisite: PSYC 6/70170 and PSYC 6/71260 and doctoral standing in psychology.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Psychological Sciences Department

PSYC 70375 - COGNITIVE BEHAVIOR THERAPY

Empirical and clinical aspects of cognitive and behavioral interventions. Intended for students familiar with basic psychotherapy assessment and psychopathology issues. Prerequisite: PSYC 6/70371 and PSYC 6/70292; and doctoral standing in psychology.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Psychological Sciences Department

PSYC 70376 - CHILD PSYCHOTHERAPY

Consideration of various aspects of child psychotherapy, including general issues, traditional therapies, behavior and cognitive behavior therapies, and child therapy research. Emphasis on integration of theory technique and
## PSYC 70392 - SUPERVISED CLINICAL EXPERIENCE

(Repeatable for credit) Post-practicum, psychological service provision and/or research activities in institution or agency under supervision of licensed psychologist and by arrangement of department of psychology. Requires successful completion of PSYC 6/72392. Prerequisite: PSYC 6/72392 and special approval; and doctoral standing.

- 1.000 TO 3.000 Credit hours
- 1.000 TO 3.000 Other hours

## PSYC 70395 - ADVANCED TOPICS-CLINICAL PSYCHOLOGY

(Repeatable for credit) Advanced-level consideration of selected content areas in assessment, psychotherapy, psychopathology, professional issues and community psychology. Specific topics will be announced in schedule of classes. Prerequisite: Special approval and doctoral standing.

- 1.000 TO 6.000 Credit hours
- 1.000 TO 6.000 Lecture hours

## PSYC 70413 - COGNITIVE NEUROPSYCHOLOGY

The effect of brain injury and anomalous neurological development on cognitive skills such as language, perception and memory are explored. Prerequisite: Doctoral standing in psychology.

- 3.000 Credit hours
- 3.000 Lecture hours

## PSYC 70453 - INTRODUCTION TO COGNITIVE PSYCHOLOGY

Information-processing approaches to human thought. Focus on processes used to transform, store, manipulate and retrieve sensory input. Topics include attention, pattern recognition, memory and language. Prerequisite: Doctoral standing in psychology.

- 3.000 Credit hours
- 3.000 Lecture hours
PSYC 70485 - READING PROCESSES

Analysis of basic psychological processes involved in reading with emphasis on models of the skilled reader and of learning to read. Current research is surveyed. Prerequisite: Doctoral standing in psychology.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Psychological Sciences Department

PSYC 70604 - COGNITIVE DEVELOPMENT

Examination of theories and research concerning changes in memory, perception, thought and language over the life span. Prerequisite: Doctoral standing in psychology.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Psychological Sciences Department

PSYC 70615 - SOCIAL AND PERSONALITY DEVELOPMENT

Examination of theories and research in social development, with a focus on how personal relationships influence personality development. Prerequisite: Doctoral standing in psychology.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Psychological Sciences Department

PSYC 70792 - PSYCHOTHERAPY PRACTICUM

(Repeatable for credit) Basic training in applied aspects of psychotherapy. Through didactic and experiential methods students learn basic listening and communication skills that are then applied to specific techniques situations and issues. Prerequisite: PSYC 6/70292; and concurrent enrollment in PSYC 6/70371; and doctoral standing in psychology.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Psychological Sciences Department

PSYC 70895 - ADVANCED TOPICS-EXPERIMENTAL PSYCHOLOGY
Advanced-level consideration of selected content areas in experimental psychology. Specific topics will be announced in schedule of classes. Prerequisite: Special approval and doctoral standing. 1.000 TO 6.000 Credit hours 1.000 TO 6.000 Lecture hours

**PSYC 70950 - HISTORY AND CONTEMPORARY SYSTEMS**

Relationships between historical antecedents and the major contemporary systems and theories of psychology. Prerequisite: Doctoral standing in psychology. 3.000 Credit hours 3.000 Lecture hours

**PSYC 71054 - LEARNING AND CONDITIONING**

Introduction to basic conditioning processes. Emphasis on Pavlovian and instrumental learning phenomena, particularly as these are exemplified in animal models of behavior. Prerequisite: Doctoral standing in psychology. 3.000 Credit hours 3.000 Lecture hours

**PSYC 71260 - THEORIES OF PERSONALITY**

Consideration of major theoretical orientations including psychoanalysis, phenomenology and those stressing learning. Emphasis on principal concepts deals less with research methods and findings. Prerequisite: Doctoral standing in psychology. 3.000 Credit hours 3.000 Lecture hours

**PSYC 71307 - PSYCOBIOLOGICAL ASPECTS OF HEALTH PSYCHOLOGY**

An introduction to non-neural aspects of psychobiology, with emphasis on psycho-endocrinology, psychoimmunology and the psychobiologic aspects of disease. Prerequisite: Doctoral standing in psychology. 3.000 Credit hours 3.000 Lecture hours
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisite</th>
<th>Credit Hours</th>
<th>Lecture hours</th>
<th>Other hours</th>
<th>Levels</th>
<th>Schedule Types</th>
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<tbody>
<tr>
<td>PSYC 71350</td>
<td>PHYSIOLOGICAL PSYCHOLOGY</td>
<td>Neurophysiological, neurochemical and neuroanatomical factors in the control of cognitive processes motivation and behavior. Emphasis is on the broad coverage of major topics in the field. Prerequisite: Doctoral standing in psychology.</td>
<td>3.000 Credit hours 3.000 Lecture hours</td>
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<tr>
<td>PSYC 71498</td>
<td>SELECTED LITERATURE REVIEW</td>
<td>(Repeatable for a maximum of 6 credit hours)Comprehensive literature survey and review prepared by graduate student in area of interest. Prerequisite: Doctoral standing in psychology (PSYC).</td>
<td>3.000 Credit hours 3.000 Other hours</td>
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<td>Research</td>
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<tr>
<td>PSYC 71507</td>
<td>PSYCHOSOCIAL ASPECTS OF HEALTH PSYCHOLOGY</td>
<td>Examines concepts of disease and their implications for health. Emphasizes psychosocial stress in disease etiology and psychological factors influencing illness recovery. Prerequisite: Doctoral standing in psychology.</td>
<td>3.000 Credit hours 3.000 Lecture hours</td>
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<td>Lecture</td>
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<tr>
<td>PSYC 71548</td>
<td>PSYCHOLOGY OF GENDER AND MINORITIES</td>
<td>Neurophysiological, neurochemical and neuroanatomical factors in the control of cognitive processes motivation and behavior. Emphasis is on the broad coverage of major topics in the field. Prerequisite: Doctoral standing in psychology.</td>
<td>3.000 Credit hours 3.000 Lecture hours</td>
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<td>Lecture</td>
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<tr>
<td>PSYC 71580</td>
<td>SOCIAL PSYCHOLOGY</td>
<td>Introduction to empirical research and theories on the psychological processes related to interpersonal and</td>
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</table>
small group behavior. Prerequisite: Doctoral standing in psychology.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Psychological Sciences Department

**PSYC 71651 - QUANTITATIVE STATISTICAL ANALYSIS I**

(Slashed with PSYC 61651) Review of univariate statistics and an introduction to using bivariate and multivariate statistics. Part one of a two semester sequence on statistical analysis. Prerequisite: Doctoral standing in psychology and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Psychological Sciences Department

**PSYC 71654 - QUANTITATIVE STATISTICAL ANALYSIS II**

(Slashed with PSYC 61654) Multivariate statistics for classifying individuals and variables. Additional topics include power/effect size and handling missing data. Part two of a two semester sequence on statistical analysis. Prerequisites: PSYC 61651 or 71651 and doctoral standing in psychology.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Psychological Sciences Department

**PSYC 71685 - CLINICAL RESEARCH METHODS**

Consideration of research methodologies relevant to clinical psychology with emphasis on strengths and weaknesses of research designs and issues related to collection and evaluation of data. Prerequisite: Doctoral standing in psychology.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Psychological Sciences Department

**PSYC 71894 - COLLEGE TEACHING OF PSYCHOLOGY**

(Repeatable for a maximum of 6 credit hours) Training and experience in college teaching. Prerequisite: Doctoral standing in psychology.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
PSYC 71993 - VARIABLE TITLE WORKSHOP IN PSYCHOLOGY

(Repeatable for a maximum of 6 credit hours) Training and experience in college teaching. Prerequisite: Doctoral standing in psychology.
1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Workshop

PSYC 72392 - CLINICAL PRACTICUM

(Repeatable for credit) Beginning practicum in psychological clinic involving selection, administration and evaluation of tests of ability and personality. Prerequisite: Special approval and doctoral standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

PSYC 72445 - MULTIVARIATE STATISTICS

Intended to cover two major multivariate statistical techniques in psychology: structural equation modeling (SEM) and hierarchical linear modeling (HLM). Prerequisite: PSYC 61651 or PSYC 71651; and PSYC 61654 or PSYC 71654; and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

PSYC 72492 - ADVANCED PRACTICUM

(Repeatable for credit) Intensified experience in the diagnosis and treatment of specific disorders from the scientist-practitioner model. Prerequisite: PSYC 6/70192 and PSYC 6/70292 and PSYC 6/70792; and doctoral standing in psychology.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

PSYC 72685 - RESEARCH METHODS IN PSYCHOLOGICAL SCIENCE

(Slashed with PSYC 62685) This course fosters the development of graduate students as independent
researchers by helping them acquire knowledge of and facility with quantitative research methods in psychology. The course covers a range of topics that are essential for successful research in psychology, including formulating research questions, measurement, research design, sampling, ethics, writing, replication, and validity. Prerequisite: Doctoral standing in psychology.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Psychological Sciences Department

### PSYC 73001 - CLINICAL NEUROANATOMY

(Slashed with PSYC 43001 and PSYC 53001; Cross-listed with BMS 50701 and 70701) This course examines the anatomical organization of the human brain, emphasizing functional aspects of various neural systems, neuroimaging, and topics of clinical relevance. A conceptual understanding of central nervous system organization and memorization of specific neural structures and pathways, as well as knowledge of the impact of structure and systems dysfunction is required. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Psychological Sciences Department

### PSYC 73002 - CURRENT TECHNIQUES IN BEHAVIORAL NEUROSCIENCE

(Slashed with PSYC 43002 and PSYC 53002; Cross-listed with BMS 50702 and BMS 70702) This course details current and advanced techniques used in behavioral neuroscience research. Emphasis is placed on understanding the theory behind each technique, and its use in understanding the neural mechanisms of behavior. Detailed protocols for each technique will also be covered. Students should contact the instructor for permission to enroll. Prerequisites: Doctoral standing; and special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Psychological Sciences Department

### PSYC 73003 - NEURAL MECHANISMS OF LEARNING AND MEMORY

(Slashed with PSYC 43003 and PSYC 53003; Cross-listed with BMS 50703 and BMS 70703) This course examines the neural and molecular mechanisms underlying learning and memory formation. Cellular mechanisms of learning, including long-term potentiation and basic electrophysiology in invertebrate and mammalian preps are covered. Transcriptional and post-translational modifications required for learning and memory formation, genomic signaling and protein synthesis. The course covers structural changes of neurons associated with memory formation, and the different behavioral methods for studying memory. Prerequisites: Doctoral standing; and special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Psychological Sciences Department
**PSYC 80391 - SEMINAR IN CLINICAL PSYCHOLOGY**

(Repeatable for credit) Seminar devoted to detailed study of various topics in field of clinical psychology. Specific topics will be announced in schedule of classes. Prerequisite: Special approval and doctoral standing.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Psychological Sciences Department

**PSYC 80491 - SEMINAR IN COGNITIVE PSYCHOLOGY**

(Repeatable for credit) Seminar on current research in cognitive psychology. Specific topics will be announced in schedule of classes. Prerequisite: Special approval and doctoral standing.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Psychological Sciences Department

**PSYC 80691 - SEMINAR IN CHILD AND DEVELOPMENTAL PSYCHOLOGY**

(Repeatable for credit) Seminar on current research in child and developmental psychology. Specific topics will be announced in schedule of classes. Prerequisite: Special approval and doctoral standing.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Psychological Sciences Department

**PSYC 81091 - SEMINAR IN LEARNING AND BIOPSYCHOLOGY**

(Repeatable for credit) Seminar on current research in learning and biopsychology. Specific topics will be announced in the schedule of classes. Prerequisite: Doctoral standing in psychology.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Psychological Sciences Department

**PSYC 81199 - DISSERTATION I**

(Repeatable for credit) Doctoral dissertation, for which registration in at least two semesters is required the first of which will be semester in which dissertation work is begun and continuing until the completion of 30 hours. Prerequisite: Special approval and doctoral standing.

15.000 Credit hours
15.000 Other hours
PSYC 81299 - DISSERTATION II

(Repeatable for credit) Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. Prerequisite: PSYC 81199 and doctoral standing.

15.000 Credit hours
15.000 Other hours

PSYC 81498 - RESEARCH

(Repeatable for credit) Research or individual investigation for doctoral students. Credits may be applied toward degree if department approves. Prerequisite: Special approval and doctoral standing.

1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

PSYC 81591 - SEMINAR IN PERSONALITY AND SOCIAL PSYCHOLOGY

(Repeatable for credit) Seminar on current research in areas of social psychology. Specific topics will be announced in schedule of classes. Prerequisite: Doctoral standing in psychology.

3.000 Credit hours
3.000 Other hours

PSYC 81691 - SEMINAR IN QUANTITATIVE METHODS

(Repeatable for credit) Seminar on applications of quantitative methods within various content areas of psychology. Specific topics will be announced in schedule of classes. Prerequisite: Special approval and doctoral standing.

3.000 Credit hours
3.000 Other hours
PTST 10000 - INTRODUCTION TO PHYSICAL THERAPIST ASSISTANT

Orientation to the field of physical therapy history. Functions and responsibilities. Legal and ethical accountability. Patient rights. Safety. Health care delivery system. Prerequisite: None.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

PTST 10001 - PRINCIPLES OF PATIENT CARE IN PHYSICAL THERAPY

Students develop an understanding of the underlying principles of basic physical therapy procedures and the applications of these concepts in the physical therapy setting. Prerequisites: physical therapist assistant technology (PTST) major and admission to technical study.

4.000 Credit hours
3.000 Lecture hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Regional College Department

PTST 10002 - ANALYSIS OF MOVEMENT

Function of the human body with emphasis on the musculoskeletal system. Gross body measurements. Prerequisite: BSCI 11010; and physical therapist assistant technology (PTST) major; and admission to technical study.

4.000 Credit hours
3.000 Lecture hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Regional College Department

PTST 10003 - CLINICAL CONDITIONS I

Introduction to the pathology, treatment and clinical implications for medical conditions commonly encountered in PT practice: Integumentary, cardiovascular, pulmonary, endocrine and digestive systems. Prerequisites: physical therapist assistant technology (PTST) major and admission to technical study.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

PTST 10004 - PHYSICAL THERAPY PROCEDURES I

Theory and techniques of treatment procedures with emphasis on modalities. Maintenance of equipment and supplies. Prerequisite: physical therapist assistant technology (PTST) major and admission to technical study.
PTST 10009 - MEDICAL TERMINOLOGY
Terminology utilized by the medical profession. Emphasis is on definition, spelling, pronunciation and correct usage of terms. Prerequisite: none.

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Regional College Department

PTST 10010 - TRANSITIONS IN PHYSICAL THERAPY
Validates prior learning in the course content of PTST 10002, 10004, 20003, 20004; builds knowledge necessary for the physical therapist assistant technology (PTST) degree; and prepares students who have previously completed an approved allied health program for advanced placement in PTST. Students successfully completing this course with a grade of C (2.000) or better will receive six (6) transfer credit hours. Prerequisite: Physical Therapist Assistant Technology Athletic Trainers Transistions concentration (PTST-ATT) and special approval.

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Regional College Department

PTST 11005 - PHYSICAL THERAPY PRACTICE
Learn the essentials of safe, ethical, legal, and value-based behaviors in patient care. Acquire documentation skills and prepare for clinical education. Prerequisite: physical therapist assistant technology (PTST) major and admission to technical study.

Levels: Undergraduate
Schedule Types: Seminar

Regional College Department

PTST 11092 - CLINICAL EDUCATION I
Observes and participate in providing selected physical therapy services under the direct supervision of a licensed PT or PTA. Prerequisites: PTST 11005; and physical therapist assistant technology (PTST) major; and admission to technical study.

Levels: Undergraduate
Schedule Types: Seminar

Regional College Department
PTST 20001 - THERAPEUTIC COMMUNICATIONS IN PHYSICAL THERAPY

Focus on understanding human behavior. Emotional needs of individuals. Therapeutic use of self. Development of communication skills and interpersonal relationships. Prerequisite: physical therapist assistant technology (PTST) major; and admission to technical study.
1.000 Credit hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Regional College Department

PTST 20003 - CLINICAL CONDITIONS II

Study of medical conditions commonly encountered in the practice of Physical Therapy. The focus is on orthopedic, psychiatric, and geriatric illnesses, disorders, and diseases. Pharmacology interventions are also covered. Prerequisite: physical therapist assistant technology (PTST) major and admission to technical study.
2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Seminar

Regional College Department

PTST 20004 - PHYSICAL THERAPY PROCEDURES II

Basic principles, therapeutic effects and techniques of therapeutic exercises used in Physical Therapy practice. Prerequisite: PTST 10002; and admission to the Physical Therapist Assistant Technology major and admission to technical study.
4.000 Credit hours
3.000 Lecture hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

PTST 20006 - PHYSICAL REHABILITATION PROCEDURES

Principles and techniques of therapeutic interventions for rehabilitation in physical therapy practice. Prerequisite: PTST 20004 and BSCI 11020; and physical therapist assistant technology (PTST) major and admission to technical study.
4.000 Credit hours
3.000 Lecture hours
3.000 Lab hours
### PTST 20008 - CLINICAL CONDITIONS III
Discussion of neurological pathologies across the lifespan, treatment of the medically complex patient and functional testing for the geriatric patient. Prerequisite: physical therapist assistant technology (PTST) major and admission to technical study.

- 2.000 Credit hours
- 2.000 Lecture hours

### PTST 21095 - SPECIAL TOPICS IN PHYSICAL THERAPIST ASSISTANT TECHNOLOGY
(Repeatable maximum 6 times for credit) Special topics in Physical Therapist Assistant Technology; topics announced when scheduled. Prerequisite: physical therapist assistant technology (PTST) major.

- 1.000 TO 4.000 Credit hours
- 1.000 TO 4.000 Lecture hours

### PTST 21096 - INDIVIDUAL INVESTIGATION IN PHYSICAL THERAPIST ASSISTANT TECHNOLOGY
(Repeatable maximum 6 times for credit) Individual study in physical therapist assistant technology and related fields; open to PTST majors. Prerequisite: physical therapist assistant technology (PTST) major.

- 1.000 TO 3.000 Credit hours
- 1.000 TO 3.000 Other hours

### PTST 22005 - PHYSICAL THERAPY SEMINAR
Understand the current professional, legal, and regulatory implications in the provision of PT services. Prerequisite: PTST 11005; and physical therapist assistant technology (PTST) major; and admission to technical study.

- 1.000 Credit hours
- 1.000 Lecture hours
PTST 22007 - PHYSICAL THERAPY CAPSTONE

Preparation for licensure, employment and career development as a physical therapist assistant. Prerequisite: physical therapist assistant technology (PTST) major and admission to technical study.
1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Seminar

Regional College Department

PTST 22010 - TRANSITIONS TO PHYSICAL THERAPY PRACTICE

Athletic Trainers transitioning to physical therapy practice prepare for employment and licensure. Explores reimbursement regulations, evidence based practice, and various topics related to health care systems, and discuss current topics in the practice of physical therapy. Prerequisite: special approval.
2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

PTST 22092 - CLINICAL EDUCATION PRACTICUM II

Provide physical therapy services under the direct supervision of a licensed PT or PTA. Prerequisites: PTST 11005 with a minimum grade of C (2.000); and PTST 11092 with a grade of satisfactory; and admission to technical study.
2.000 Credit hours
10.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Regional College Department

Course Attributes:
Experiential Learning Requirem

PTST 22392 - ATHLETIC TRAINING PLUS PHYSICAL THERAPIST ASSISTANT CLINICAL EDUCATION PRACTICUM

Provide physical therapy services of an entry-level physical therapist assistant, under the supervision of a licensed PT or PTA. Prerequisites: PTST 11005 with a minimum grade of C (2.000); and PTST 11092; and special approval. Corequisite: PTST 22010.
4.000 Credit hours
480.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Regional College Department

Course Attributes:
Experiential Learning Requirem
**PTST 23092 - CLINICAL EDUCATION PRACTICUM III**

Provide physical therapy services of an entry-level physical therapist assistant, under the supervision of a licensed PT or PTA. Prerequisite: physical therapist assistant technology (PTST) major; and PTST 11005; and PTST 22092; and admission to technical study.

2.000 Credit hours
10.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Regional College Department

Course Attributes:
Experiential Learning Requirem

**RADT 14003 - INTRODUCTION TO RADIOLOGIC TECHNOLOGY**

Introduction to radiologic technology program, general anatomy, radiographic procedures, imaging equipment and techniques, radiation protection, professional organizations and clinical education. Prerequisite: radiologic technology (RADT) major and admission to technical study.

2.000 Credit hours
1.500 Lecture hours
0.500 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Regional College Department

**RADT 14005 - CLINICAL EDUCATION I**

Supervised observation and experience at the clinical education site with emphasis on clinical practice of basic skills of radiologic technology and the exams covered in Radiographic Procedures I (chest and abdomen). Prerequisite: radiologic technology (RADT) major. Corequisites: RADT 14003 and 14006 with a minimum grade of C (2.000).

1.000 Credit hours
5.000 Lab hours
10.000 Other hours

Levels: Undergraduate
Schedule Types: Clinic, Laboratory

Regional College Department

**RADT 14006 - RADIOGRAPHIC PROCEDURES I**

Introduction to radiographic procedures and positioning of the chest and abdomen. Prerequisites: Radiologic Technology (RADT) major and admission to technical study. Corequisites: RADT 14003 and RADT 14005.

1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Regional College Department
### RADT 14015 - CLINICAL EDUCATION II

Continuation of Clinical Education I with emphasis on skeletal radiography that includes upper and lower extremities, shoulder and pelvic girdles, vertebral spine and bony thorax. Student is assigned to the clinical site 22.5 hours per week. Prerequisite: RADT 14005 and 14006.

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Levels: Undergraduate  
Schedule Types: Clinic, Laboratory

Regional College Department

### RADT 14016 - PATIENT CARE MANAGEMENT

Patient interactions and communication, human diversity, patient histories, medical legal issues, patient safety and transfer, vital signs and oxygen administration, infection control and sterile techniques, contrast media, tubes and lines, medical emergencies and pharmacology are topics covered. Prerequisite: RADT 14003 with a grade of C (2.000) or better.

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Levels: Undergraduate  
Schedule Types: Lecture

Regional College Department

### RADT 14018 - RADIOGRAPHIC EXPOSURE AND IMAGING I

Equipment used in medical imaging, including radiographic tubes, filtration, beam restrictors, grids, image receptors, radiographic film and automatic processing. Prerequisite: RADT 14003. Corequisite: RADT 14015.

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Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab

Regional College Department

### RADT 14021 - RADIOGRAPHIC PROCEDURES II

Radiographic anatomy, positioning and image evaluation of the upper extremities, shoulder girdle, lower extremities, pelvic girdle, vertebral spine and bony thorax. Prerequisite: RADT 14006. Corequisite: RADT 14015.

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Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab

Regional College Department

### RADT 14022 - RADIOGRAPHIC EXPOSURE AND IMAGING II
Study of radiographic technical factors, radiographic density, contrast, detail and distortion and the factors that influence them as seen on radiographic images. Prerequisite: RADT 14018 with a minimum grade of C (2.000). Corequisite: RADT 14025.

<table>
<thead>
<tr>
<th>Levels: Undergraduate</th>
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<tr>
<td>Schedule Types: Lecture</td>
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</table>

### RADT 14024 - RADIOGRAPHIC PROCEDURES III

Radiographic anatomy, positioning, procedures and image evaluation of the gastrointestinal, biliary and urinary systems and skull and facial bones positioning. Prerequisite: BSCI 11010 or ATTR 25057 or EXSC 25057 or BSCI 20020; and RADT 14021. Corequisite: RADT 14025.

<table>
<thead>
<tr>
<th>4.000 Credit hours</th>
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<tbody>
<tr>
<td>3.000 Lecture hours</td>
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<tr>
<td>2.000 Lab hours</td>
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</tbody>
</table>

### RADT 14025 - CLINICAL EDUCATION III

Continuation of Clinical Education II with emphasis on clinical practice of previous course content plus digestive, biliary and urinary procedures as well as skull and facial bones positioning. Student assigned to clinical education setting 22.5 hours per week. Prerequisite: RADT 14015. Corequisite: RADT 14024.

<table>
<thead>
<tr>
<th>3.000 Credit hours</th>
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<tr>
<td>7.500 Lab hours</td>
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<td>15.000 Other hours</td>
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### RADT 14075 - CLINICAL EDUCATION IV

Continuation of Clinical Education III with emphasis on clinical practice of content in previous clinical courses. More emphasis on independent clinical practice of procedures previously mastered. Students assigned to clinical education site 30 hours per week for 8 weeks. Prerequisite: RADT 14025.

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<th>3.000 Credit hours</th>
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<tr>
<td>10.000 Lab hours</td>
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<td>20.000 Other hours</td>
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### RADT 14096 - INDIVIDUAL INVESTIGATION IN DIRECTED READINGS IN RADIOLOGIC TECHNOLOGY

(Repeatable for credit) Student selects prescribed number of medical journals, completes questions, paper and presentation. Prerequisite: special approval.
RADT 21095 - SPECIAL TOPICS IN RADIOLOGIC TECHNOLOGY

(repeated registration permitted) Student participation course on topics pertinent to radiologic technology. Topics are chosen by the instructor. Student may enroll in course more than once. Prerequisite: special approval from instructor.
2.000 TO 4.000 Credit hours
2.000 TO 4.000 Lecture hours

RADT 24006 - RADIOLOGIC PHYSICS

Introduction to general physics, units and measurement, atomic structure, electromagnetic spectrum, x-ray production, electricity, magnetism, electromagnetism, x-ray tube, x-ray circuitry and fluoroscopic equipment are covered. Prerequisite: RADT 14018 with a minimum grade of C (2.000)
4.000 Credit hours
4.000 Lecture hours

RADT 24008 - RADIOBIOLOGY AND RADIATION PROTECTION

Describes the risk versus benefit approach, sources of radiation, interactions of radiation with matter, cell structure and function and effects of radiation on them, acute and chronic effects, somatic and genetic effects, radiation quantities and units, radiation protection organizations and regulations, stochastic and non stochastic effects, limits of exposure, methods of protecting patients, public and workers, shielding and dosimetry methods and dose reduction in imaging modalities. Prerequisites: BSCI 11010 and 11020, or BSCI 20020, or ATTR 25057 and 25058, or EXSC 25057 and 25058; and RADT 14003. Corequisite: RADT 24015.
3.000 Credit hours
3.000 Lecture hours

RADT 24014 - ADVANCED IMAGING

Procedures and equipment used in advanced medical imaging including fluoroscopy, mammography, CT, MRI, interventional imaging, nuclear medicine, PET imaging, diagnostic medical sonography, radiation therapy and fusion studies as well as quality assurance. Prerequisite: RADT 14075. Corequisite: RADT 24015.
3.000 Credit hours
3.000 Lecture hours
**RADT 24015 - CLINICAL EDUCATION V**

Continuation of Clinical Education IV with emphasis on clinical practice of content of previous clinical courses. More emphasis on independent clinical practice previously mastered. Students assigned to clinical education setting 22.5 hours per week and rotates to special medical imaging areas. Prerequisite: RADT 14075. Corequisite: RADT 24014.

- 3.000 Credit hours
- 7.500 Lab hours
- 15.000 Other hours

**RADT 24025 - CLINICAL EDUCATION VI**

Continuation of Clinical Education V with emphasis on mastery of clinical procedures. Students assigned to clinical education site 22.5 hours per week. Prerequisite: RADT 24015.

- 3.000 Credit hours
- 7.500 Lab hours
- 15.000 Other hours

**RADT 24028 - RADIOLOGIC PATHOLOGY**

Disease process and the pathologies associated with each anatomical system are described and their application to all modalities in the radiologic and imaging sciences. Prerequisites: radiologic technology (RADT) major; and admission to technical study; and HED 14020; and (BSCI 11010 and 11020) or BSCI 20020 all with a minimum grade of C (2.000). Corequisite: RADT 24025.

- 3.000 Credit hours
- 3.000 Lecture hours

**RADT 24048 - RADIOGRAPHIC TECHNIQUES**

Review of radiologic technology to include patient care, anatomy and physiology, radiologic procedures, equipment and image production, radiologic physics, and radiation protection in preparation for the radiography certification exam. Prerequisites: BSCI 20020 or BSCI 11010 and 11020; and RADT 14016 and 14022 and 24006 and 24008 all with a minimum grade of C (2.000)

- 3.000 Credit hours
- 3.000 Lecture hours
RADT 24058 - DIVERSIFIED EMPLOYMENT

Course features multiple topics in medical imaging to prepare graduates for employment in healthcare. Prerequisite: RADT 24014 with a minimum grade of C (2.000); and radiologic technology (RADT) major; and admission to technical study.
3.000 Credit hours
3.000 Lecture hours

RADT 24096 - INDIVIDUAL INVESTIGATION IN RADIOLOGIC TECHNOLOGY

Directed research of special interest or need in the student's program. A research paper will be written on an assigned topic in radiologic technology. Prerequisite: RADT 14003 with a minimum grade of C (2.000); and radiologic technology (RADT) major; and admission to technical study.
1.000 Credit hours
3.000 Other hours

RADT 24196 - INDIVIDUAL INVESTIGATION IN ADVANCED READINGS IN RADIOLOGIC TECHNOLOGY

(Repeatable for credit) Course permits scholarly activities for research, study and summary of medical journal articles. Information aids in understanding recent advancements in medical imaging. Prerequisite: Radiologic technology (RADT) major and admission to technical study.
3.000 Credit hours
3.000 Other hours

REL 11020 - INTRODUCTION TO WORLD RELIGIONS

A study of the religious impulse as it manifests itself in the plurality of beliefs, practices and institutions of the world religions. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours
**REL 21021 - COMPARATIVE RELIGION**

Comparative exploration in depth of three religions. Selection should include two world religions commonly identified in traditional comparative religion studies and a religion often overlooked in traditional comparative religion studies. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Center Compar/Integrative Prog Department

Course Attributes:
Diversity Course-Global, Experiential Learning Requirem, Kent Core-Humanities, LER-Humanities, Trnfr Module-Humanities

**REL 31065 - COMPARATIVE RELIGIOUS EXPERIENCE**

Examination of the phenomena of religious experience, its structure, ramifications and expression in myth and ritual. Prerequisite: REL 11020 or REL 21021.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Center Compar/Integrative Prog Department

**REL 31091 - SEMINAR: RELIGION IN THE MODERN WORLD**

(Repeatable for maximum 6 credit hours) An inquiry into the influences of modernity in the conception, valuation and-or interpretation of religious convictions, beliefs, symbolizations, institutions and artifacts (including texts). Students with junior standing should contact the director of the Religion Studies program for a pre-requisite override, if necessary. Prerequisite: REL 11020 or REL 21021.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

Center Compar/Integrative Prog Department

**REL 41091 - SEMINAR IN ADVANCED COMPARATIVE RELIGION**

(Repeatable for a maximum of 6 credit hours) An advanced examination of pivotal issues, schools and theorists in the study of religion and the future of comparative studies. Variable Content. Prerequisites: junior standing or higher; at least one of either REL 11020 or REL 21021; and at least one of REL 31065 or REL 31091 with a minimum required course grade of C or higher.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar
**REL 51091 - SEMINAR IN ADVANCED COMPARATIVE RELIGION**

(Repeatable for a maximum of 6 credit hours) An advanced examination of pivotal issues, schools and theorists in the study of religion and the future of comparative studies. Variable content. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

**RERT 11000 - REAL ESTATE PRINCIPLES AND PRACTICES**

Introduction to listing, selling, real estate math, legal descriptions of property and contracts. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**RERT 11001 - REAL ESTATE LAW**

Review of basic Ohio laws covering the functions of an agency and the legal aspects of real estate transactions. Prerequisite: RERT 11000.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**RERT 11003 - REAL ESTATE FINANCING**

Covers types of institutions, instruments and procedures involved in financing real estate transactions. Covers nature and characteristics of mortgage loans and nature of mortgage market. Prerequisite: RERT 11000.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**RERT 21000 - REAL ESTATE APPRAISAL**

Emphasizes methodology of appraising urban real property and appraisal techniques. Presents market approach to residential appraisal. Prerequisite: RERT 11000.

2.000 Credit hours
RERT 21003 - SPECIAL TOPICS IN REAL ESTATE

(Repeatable for credit) Seminar involving discussion of current issues and solutions to special problems in real estate investment, management and brokerage operations. Prerequisite: RERT 11000 and RERT 11001 and RERT 11003 and RERT 21000.
2.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

RHAB 47712 - INTRODUCTION TO REHABILITATION

Introductory course surveys philosophy, history and legislation in rehabilitation which is defined as a process, social movement and public mandate. Particular emphasis is given to the role and function of the rehabilitation counselor in the private and public sectors. Prerequisite: Junior or senior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

RHAB 57712 - INTRODUCTION TO REHABILITATION

Introductory course surveys philosophy, history, and legislation in rehabilitation which is defined as a process, social movement and public mandate. Particular emphasis is given to the role and function of the rehabilitation counselor in the private and public sectors. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

RHAB 60093 - VARIABLE TITLE WORKSHOP IN REHABILITATION COUNSELING

(Repeatable for credit) Prerequisite: Graduate standing and special approval.
1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Lifespan Dev and Educ Sciences Department
**RHAB 60199 - THESIS I**

Thesis students must register each semester until all degree requirements are met. Prerequisite: Graduate standing.

- **Credit hours:** 2.000 TO 6.000
- **Other hours:** 2.000 TO 6.000

Levels: Graduate
Schedule Types: Masters Thesis

Lifespan Dev and Educ Sciences Department

**RHAB 60299 - THESIS II**

Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: RHAB 60199 and graduate standing.

- **Credit hours:** 2.000
- **Other hours:** 2.000

Levels: Graduate
Schedule Types: Masters Thesis

Lifespan Dev and Educ Sciences Department

**RHAB 67723 - MEDICAL INFORMATION FOR REHABILITATION COUNSELORS**

Study of the physical impact of disease or injury on individuals; available medical and restorative resources skills in interpreting medical reports and rehabilitation planning. Prerequisite: Graduate standing.

- **Credit hours:** 3.000
- **Other hours:** 3.000

Levels: Graduate
Schedule Types: Clerkship

Lifespan Dev and Educ Sciences Department

**RHAB 67725 - PSYCHOSOCIAL IMPACT OF DISABILITY**

Introduction to major concepts in rehabilitation regarding the impact of disability on the individual, the family and the community. Normalization stigma and adjustment to loss emphasized. Prerequisite: Graduate standing.

- **Credit hours:** 3.000
- **Lecture hours:** 3.000

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**RHAB 67728 - ADJUSTMENT AND TRAINING GROUPS**

Review of group counseling techniques for rehab counselors and school psychologists. Skills developed in group process and group leadership. A variety of group interventions will be examined including techniques for persons with disabilities. Prerequisite: graduate standing.

- **Credit hours:** 3.000
- **Lecture hours:** 3.000
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Levels: Graduate</th>
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<tbody>
<tr>
<td>RHAB 67729</td>
<td>MEASUREMENT AND APPRAISAL IN REHABILITATION</td>
<td>Review of measurement theory and principles as applied in rehabilitation. Demonstration of instruments used in vocational assessment. Simulation of psychological consultation. Prerequisite: Graduate standing. 3.000 Credit hours 3.000 Lecture hours</td>
<td>Lifespan Dev and Educ Sciences Department</td>
</tr>
<tr>
<td>RHAB 67730</td>
<td>POLICIES AND PRACTICES FOR REHABILITATION COUNSELORS OF THE DEAF</td>
<td>Designed to integrate coursework in Rehabilitation and Deaf Education with field experiences in preparation for interning with an RCD by building upon coursework and field experiences to examine the unique issues, accommodations, and modifications needed when applying these processes to DHH individuals. The course addresses cultural, linguistic, and experiential issues that impact achievement, assessment, vocational identity and skills, career education and training, counseling theory and practice, and employer and employment site preparation with a focus on identification and use of research-based exemplary practices. It also provides specific consumer, vendor, organizational, political, social, and educational aspects facing RCDs. Prerequisite: Rehabilitation Counseling and Training (RHAB) major and graduate standing. 3.000 Credit hours 3.000 Lecture hours</td>
<td>Lifespan Dev and Educ Sciences Department</td>
</tr>
<tr>
<td>RHAB 67731</td>
<td>INDIVIDUAL COUNSELING TECHNIQUES FOR REHABILITATION COUNSELORS AND SCHOOL PSYCHOLOGISTS</td>
<td>(Slashed with RHAB 77731) (Cross-listed with SPSY 67929 and SPSY 77929) Review of individual counseling techniques. Skills developed in communication, interviewing, problem identification, goal-setting and program development are fostered by lecture, video feedback and simulation. Prerequisite: Graduate standing. 3.000 Credit hours 3.000 Lecture hours</td>
<td>Lifespan Dev and Educ Sciences Department</td>
</tr>
<tr>
<td>RHAB 67732</td>
<td>OCCUPATIONAL ASPECTS OF DISABILITY</td>
<td>An introduction to a wide range of occupational and vocational analysis through job analysis, job seeking, job placement, job restructuring, work adjustment and independent living approaches. Prerequisite: RHAB 67729 or 77729; and graduate standing. 3.000 Credit hours 3.000 Lecture hours</td>
<td>Lifespan Dev and Educ Sciences Department</td>
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</tbody>
</table>
RHAB 67743 - PSYCHIATRIC REHABILITATION

Review of psychiatric, alcohol and other drug related disabilities and their treatment. Topics include psychosocial rehabilitation, case management, and psychotropic medication. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

RHAB 67744 - DRUG AND ALCOHOL REHABILITATION

Review of substance abuse treatments, trends, modalities and community agencies; vocational implications of substance abuse; vocational assessment issues and job placement options. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

RHAB 67776 - SEMINAR ON RESEARCH IN DISABILITIES

Survey of the research literature in disabilities. Guidelines for evaluating and implementing research findings. Acquaints students with current research. Evaluation of design statistical analysis and conclusions. Prerequisite: graduate standing. Corequisite: EVAL 65510.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Lifespan Dev and Educ Sciences Department

RHAB 67792 - INDIVIDUAL COUNSELING PRACTICUM IN REHABILITATION

Supervised, controlled exposure to rehabilitation clients; examine alternative modes of intervention; group and individual feedback sessions using audio and videotape recordings. Prerequisite: RHAB 67731 or RHAB 77731; and graduate standing.
2.000 TO 4.000 Credit hours
10.000 TO 20.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Lifespan Dev and Educ Sciences Department

RHAB 67795 - SPECIAL TOPICS IN REHABILITATION
Presentation of special interest to students. Offered irregularly. Topic will be announced in the schedule of classes booklet. Prerequisite: Graduate standing and special approval.

**RHAB 67796 - INDIVIDUAL INVESTIGATION IN REHABILITATION COUNSELING**

(Repeatable for credit) Independent reading and/or research directed by a graduate faculty member. Prerequisite: Graduate standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

**RHAB 67798 - INDIVIDUAL RESEARCH IN REHABILITATION**

(Repeatable for credit) Research project on an aspect of rehabilitation under supervision of instructor. Arrangements with instructor must be made prior to registration. Prerequisite: Graduate standing and special approval.

1.000 TO 9.000 Credit hours
1.000 TO 9.000 Other hours

**RHAB 70093 - VARIABLE TITLE WORKSHOP IN REHABILITATION COUNSELING**

(Repeatable for credit) Prerequisite: Doctoral standing and special approval.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

**RHAB 77712 - INTRODUCTION TO REHABILITATION**

Introductory course surveys philosophy, history and legislation in rehabilitation which is defined as a process, social movement and public mandate. Particular emphasis is given to the role and function of the rehabilitation counselor in the private and public sectors. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours
**RHAB 77725 - PSYCHOSOCIAL IMPACT OF DISABILITY**

Introduction to major concepts in rehabilitation regarding the impact of disability on the individual, the family and the community. Normalization, stigma and adjustment to loss emphasized. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**RHAB 77729 - MEASUREMENT AND APPRAISAL IN REHABILITATION**

Review of measurement theory and principles as applied in rehabilitation. Demonstration of instruments used in vocational assessment. Simulation of psychological consultation. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**RHAB 77732 - OCCUPATIONAL ASPECTS OF DISABILITY**

An introduction to a wide range of occupational and vocational analysis through job analysis, job seeking, job placement, job restructuring, work adjustment and independent living approaches. Prerequisite: RHAB 67729 or 77729 and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**RHAB 77776 - SEMINAR ON RESEARCH IN DISABILITIES**


3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

**RHAB 77792 - INTERNSHIP REHABILITATION**

(Repeatable for credit) Assignment to rehabilitation agency for extensive and intensive applications appropriate
for rehabilitation counseling, consulting and coordinating. Supervision of internships shared jointly by rehabilitation agency and university instructor. Credit hour reduction for prior experience may be granted. Prerequisite: RHAB 6/77736 and doctoral standing.

6.000 Credit hours
43.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Lifespan Dev and Educ Sciences Department

**RHAB 77795 - SPECIAL TOPICS IN REHABILITATION**

(Repeatable for credit) Presentation of special interest to students. Offered irregularly. Topic will be announced in schedule of classes booklet. Prerequisite: Doctoral standing and special approval.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**RHAB 77796 - INDIVIDUAL INVESTIGATION IN REHABILITATION COUNSELING**

(Repeatable for credit) Independent reading and/or research directed by a graduate faculty member. Prerequisite: Doctoral standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Lifespan Dev and Educ Sciences Department

**RHAB 77798 - INDIVIDUAL RESEARCH IN REHABILITATION**

(Repeatable for credit) Research project on an aspect of rehabilitation under supervision of instructor. Arrangements with instructor must be made prior to registration. Prerequisite: Doctoral standing and special approval.

1.000 TO 9.000 Credit hours
1.000 TO 9.000 Other hours

Levels: Graduate
Schedule Types: Research

Lifespan Dev and Educ Sciences Department

**RIS 34001 - INTRODUCTION TO DIAGNOSTIC MEDICAL SONOGRAPHY**

Provides an introduction to diagnostic medical sonography. The course orients new students to the profession. Topics covered include basic sonographic principles, scanning technique, and introduction patient management techniques. Prerequisite: Special approval.

1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
RIS 34003 - RADIATION THERAPY PRINCIPLES/PRACTICE I

An overview of cancer, radiation therapy and its physical and technical aspects. Includes the roles/responsibilities of the therapist, treatment parameters, documentation and delivery of patient care, education and procedures. Prerequisite: radiologic and imaging sciences (RIS) major. Corequisite: RIS 34030. 
3.000 Credit hours 
3.000 Lecture hours

Levels: Undergraduate 
Schedule Types: Lecture

RIS 34004 - RADIATION THERAPY PATIENT MANAGEMENT

Provides the basic concepts in patient assessment and evaluation. Includes communication skills, infection control, nutrition, medications, exams, emergencies, patient transfer techniques, medical ethics and law as applied to radiation therapy. Prerequisite: radiologic and imaging sciences (RIS) major. Corequisite: RIS 34030. 
3.000 Credit hours 
3.000 Lecture hours

Levels: Undergraduate 
Schedule Types: Lecture

RIS 34008 - RADIATION THERAPY PHYSICS I

Introduction to radiation therapy physics, including the fundamentals of atomic structure, radiation properties, radiation production, radiation quality, interactions of radiation with matter and principles of radiation detectors. Prerequisite: radiologic and imaging sciences (RIS) major. Corequisite: RIS 34030. 
3.000 Credit hours 
3.000 Lecture hours

Levels: Undergraduate 
Schedule Types: Lecture

RIS 34030 - RADIATION THERAPY CLINICAL EDUCATION I

Observation and supervised clinical education with emphasis on administering radiation therapy treatments and patient care. Prerequisite: radiologic and imaging sciences (RIS) major and special approval. 
1.000 Credit hours 
2.500 Lab hours 
5.000 Other hours

Levels: Undergraduate 
Schedule Types: Clinic, Laboratory
### RIS 34040 - PATIENT MANAGEMENT IN DIAGNOSTIC MEDICAL SONOGRAPHY

Methods of patient management in diagnostic medical sonography are examined with emphasis on patient communication, clinical assessment, medical legal aspects, medical records, emergencies, pharmacology, safety issues, ethics and critical thinking. Prerequisite: radiologic and imaging sciences (RIS) majors. Corequisite: RIS 34045.

3.000 Credit hours  
3.000 Lecture hours

**Levels:** Undergraduate  
**Schedule Types:** Lecture

**Regional College Department**

### RIS 34042 - ABDOMINAL SONOGRAPHY I

Anatomy, physiology and pathology of the abdomen; instrumentation and scanning techniques; normal and abnormal sonographic appearances of abdominal structures will be presented. Prerequisite: radiologic and imaging sciences (RIS) major. Corequisite: RIS 34045.

3.000 Credit hours  
3.000 Lecture hours

**Levels:** Undergraduate  
**Schedule Types:** Lecture

**Regional College Department**

### RIS 34044 - ULTRASOUND PHYSICS AND INSTRUMENTATION

Ultrasound principles to include interaction of sound with matter, propagation of sound in tissue, physical units, transducer parameters, image storage and display, quality assurance, bioeffects, image artifacts and physical principles of doppler. Prerequisite: radiologic and imaging sciences (RIS) major. Corequisite: RIS 34045.

3.000 Credit hours  
3.000 Lecture hours

**Levels:** Undergraduate  
**Schedule Types:** Lecture

**Regional College Department**

### RIS 34045 - ULTRASOUND CLINICAL EDUCATION I

Provides clinical education and experience at a lab and clinical site to allow students the opportunity to practice skills necessary to obtain high quality sonographic images, to alter protocols on patients and to identify image quality problems. Content includes sonography of the liver, gallbladder, pancreas and spleen. Prerequisite: radiologic imaging science (RIS) major and special approval.

2.000 Credit hours  
3.000 Lab hours  
1.000 Other hours

**Levels:** Undergraduate  
**Schedule Types:** Clinic, Laboratory

**Regional College Department**

### RIS 34052 - ABDOMINAL SONOGRAPHY II
Continuation of RIS 34042; anatomy, physiology and pathology of the abdomen; instrumentation and sonographic scanning techniques; normal and abnormal sonographic appearance of abdominal structures will be presented. Prerequisite: RIS 34042 and radiologic and imaging science (RIS) major.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

RIS 34060 - ULTRASOUND CLINICAL EDUCATION II

Provides clinical education and experience at a clinical site to allow students the opportunity to practice skills necessary to obtain high quality sonographic images, to alter protocols based on patients and to identify image quality problems. Content includes sonography of the abdominal vessels, kidneys, adrenal glands, lymphatics and gynecologic pelvis. Prerequisite: RIS 34045. Corequisite: RIS 34052.

4.000 Credit hours
3.000 Lab hours
5.000 Other hours

Levels: Undergraduate
Schedule Types: Clinic, Laboratory

Regional College Department

RIS 34062 - OBSTETRICS AND GYNECOLOGY SONOGRAPHY I

Anatomy and pathophysiology of the non-pregnant female pelvis; instrumentation and scanning techniques; normal and abnormal sonographic appearances; and findings of the female reproductive tract are covered. Prerequisite: RIS 34045 and radiologic and imaging sciences (RIS) major.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

RIS 34065 - ULTRASOUND CLINICAL EDUCATION III

Provides clinical education and experience at clinical sites to allow students the opportunity to practice skills necessary to obtain high quality sonographic images, to alter protocols based on patients and to evaluate image quality. Content includes first, second and third trimester obstetric sonography. Prerequisite: RIS 34062. Corequisite: RIS 44072.

1.000 Credit hours
1.000 Lab hours
8.000 Other hours

Levels: Undergraduate
Schedule Types: Clinic, Laboratory

Regional College Department

RIS 34082 - SMALL PARTS SONOGRAPHY

Anatomy and pathophysiology of superficial structures; instrumentation and scanning techniques; normal and
abnormal sonographic appearances of superficial structures; correlation with laboratory findings and other imaging modalities are presented. Prerequisites: RIS 34083 and radiologic and imaging sciences (RIS) major.

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**RIS 34083 - SECTIONAL ANATOMY IN MEDICAL IMAGING**

Presentation of sectional anatomy of the body in the transverse (axial), sagittal and coronal planes as seen in medical images in CT, MRI and diagnostic medical sonography. Prerequisite: radiologic and imaging sciences (RIS) major; and BSCI 11000 and 11020 or 20020.

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**RIS 34084 - COMPUTED TOMOGRAPHY AND MAGNETIC RESONANCE IMAGING SECTIONAL ANATOMY I**

Presentation of sectional anatomy of the human body in computed tomography and magnetic resonance imaging. Includes orientation of organs and structures and pathological processes present in images. Prerequisite: radiologic and imaging science (RIS) major and special approval.

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**RIS 34086 - COMPUTED TOMOGRAPHY AND MAGNETIC RESONANCE IMAGING SECTIONAL ANATOMY II**

Presentation of sectional anatomy of the human body in computed tomography and magnetic resonance imaging. Includes orientation of organs and structures and pathological processes present in images as seen in the extremities. Prerequisites: RIS 34084 and radiologic and imaging science (RIS) majors.

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**RIS 41095 - SPECIAL TOPICS IN RADIOLOGIC AND IMAGING SCIENCES**

(Repeatable for credit)Courses will consist of various topics in medical imaging designed to enhance learning outcomes. Prerequisite: Radiologic and imaging sciences (RIS) major.

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department
RIS 44000 - INTRODUCTION TO RADIOLOGIC AND IMAGING SCIENCES

An introduction to radiology patient care techniques and clinical procedures for freshman entry students admitted to the RIS major in nuclear medicine and radiation therapy. Prerequisite: RIS majors and special approval.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

RIS 44001 - PATIENT MANAGEMENT IN NUCLEAR MEDICINE

Provides the student with a working knowledge of a health care facility's function, basic patient care skills, emergency care, patient communications and professionalism. Interactions and care of diverse populations will also be addressed. Course enables the student to provide appropriate care for the patient while undertaking any nuclear medicine procedure. Prerequisites: Radiologic and imaging science (RIS) majors and special approval. Corequisites: RIS 44002 and RIS 44005 and RIS 44006 and RIS 44011.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

RIS 44002 - NUCLEAR MEDICINE PROCEDURES I

An anatomical and physiological review of the skeletal, cardiovascular, gastrointestinal, endocrine, genitourinary, respiratory, lymphatic and central nervous organ systems. Basic nuclear medicine imaging procedures as related to the above listed organ systems is covered. Prerequisite: radiologic and imaging science (RIS) major and special approval. Corequisites: RIS 44001 and 44005 and 44006 and 44011.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

RIS 44005 - NUCLEAR MEDICINE CLINICAL EDUCATION I

Students acquire clinical experience in nuclear medicine procedures and patient care at the assigned clinical education site. Includes an orientation to program and policies, observations of procedures, patient management, radiopharmacy, radiation safety, quality control and equipment orientation. competency testing begins. Prerequisites: radiologic and imaging science (RIS) major and special approval. Corequisites: RIS 44001 and 44002 and 44006 and 44011.

2.000 Credit hours
2.000 Lab hours
RIS 44006 - NUCLEAR MEDICINE PHYSICS AND INSTRUMENTATION I

Explores the concepts of the physical principles of nuclear physics including radioactive decay and interactions with matter. Radiation detector and laboratory equipment applications, functions and limitations is included. Prerequisites: radiologic and imaging science (RIS) major and special approval. Corequisites: RIS 44001 and 44002 and 44005 and 44011.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

RIS 44009 - RADIATION THERAPY PRINCIPLES AND PRACTICE II

Examines the multidisciplinary treatment approaches. Consists of advanced topics in therapy, chemotherapy, immunotherapy, and surgery for combined modalities, for benign conditions, for emergencies and for managing side effects. Prerequisite: RIS 34003. Corequisite: RIS 44053.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

RIS 44010 - NUCLEAR MEDICINE CLINICAL EDUCATION II

Continuation of Clinical Education I. Instructed at both the clinical education sites and Salem Campus, with particular emphasis on clinical procedures covered in RIS 44002 (Nuclear Medicine Procedures I) and RIS 44012 (Nuclear Medicine Procedures II). Clinical correlation for Radiopharmacy rotations and RIS 44014 (Nuclear Medicine Physics and Instrumentation II) included. Competency testing continues; proficiency testing begins. Prerequisites: RIS 44005; radiologic and imaging sciences (RIS) major and special approval. Corequisites: RIS 44002 and 44004 and 44017.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Clinic, Laboratory

Regional College Department

RIS 44011 - NUCLEAR MEDICINE RADIOPHARMACY

Course includes the methodologies, calculations and basic properties of radiopharmaceuticals. Radiopharmaceutical chemistry is applied. Localization methods, quality control and radiation safety issues are examined. Non-radioactive interventional drugs, radiopharmacy management and governing rules and regulations are also explored. Prerequisite: radiologic and imaging science (RIS) major. Corequisites: RIS 44001 and RIS 44002 and RIS 44005 and RIS 44006.
**RIS 44012 - NUCLEAR MEDICINE PROCEDURES II**

Biological, anatomical, physiological and procedural aspects of nuclear medicine as related to the cardiovascular system, the endocrine system, the genitourinary system, inflammatory and tumor imaging, the central nervous system, the gastrointestinal system, the respiratory system and the skeletal system. Prerequisites: RIS 44002; and radiologic and imaging science (RIS) major. Corequisite: RIS 44010.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**RIS 44014 - NUCLEAR MEDICINE PHYSICS AND INSTRUMENTATION II**

Explores the use and quality control of nuclear medicine instrumentation. Students understand the function of radiation detection devices to include counting and imaging equipment and SPECT instrumentation. Computer applications as related to nuclear medicine is addressed. Prerequisites: RIS 44001 and 44002 and 44006 and 44011 and radiologic and imaging science (RIS) major and special approval. Corequisites: RIS 44010 and 44012 and 44017.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**RIS 44015 - NUCLEAR MEDICINE CLINICAL EDUCATION III**

Instructed at both the clinical education sites and Salem Campus. Emphasizes clinical procedures covered in RIS 44012 (Nuclear Medicine Procedures II) and RIS 44014 (NM Physics and Instrumentation II). competency testing and proficiency testing continues. Prerequisites: RIS 44010; radiologic and imaging science (RIS) major; and special approval. Corequisite: RIS 44016.

2.000 Credit hours

2.000 Lab hours

24.000 Other hours

Levels: Undergraduate
Schedule Types: Clinic

Regional College Department

**RIS 44016 - NUCLEAR MEDICINE PROCEDURES III**

Nuclear medicine hematology and immunology, radionuclide therapy, pediatric imaging, and emerging technologies, including PET CT, SPECT CT and PET MRI procedures. Prerequisites: RIS 44012; and radiologic and imaging sciences; and special approval. Corequisite: RIS 44015.
**RIS 44017 - NUCLEAR MEDICINE RADIATION SAFETY**

Includes the units of radiation measurement, radiation exposure dose limits, radiation safety regulations and monitoring devices, safe handling and contamination control of radioactive materials. Also presented are biologic effects of radiation, patient dosimetry, NRC/ODH licensing requirements, rules and regulations, including Title 10 CFR Parts 19, 20 and 35. Prerequisites: RIS 44006; and radiologic and imaging science (RIS) major; and special approval. Corequisite: RIS 44014.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**RIS 44018 - RADIATION THERAPY PHYSICS II**

Continuation of the principles of radiation therapy physics and the study of photon beam dosimetry, electron beam dosimetry and treatment planning. Prerequisite: RIS 34008.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**RIS 44019 - NUCLEAR MEDICINE PROCEDURES IV**

Correlates nuclear medicine imaging procedures covered in RIS 44012 and RIS 44016 with clinical practice. Prerequisites: RIS 44012 and 44016; and special approval.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**RIS 44020 - NUCLEAR MEDICINE CLINICAL EDUCATION IV**

Instructed at both the clinical education sites and Salem Campus. Emphasizes advanced procedures, SPECT and PET scanning, advanced and emerging technologies, teleradiology and PACS, and critical thinking skills for the clinical site. Competency testing is completed. Graduate competency evaluations are performed. Prerequisites: RIS 44015; radiologic and imaging science (RIS) major; and special approval. Corequisites: RIS 44026 and 44032.

3.000 Credit hours
2.000 Lab hours
24.000 Other hours
### RIS 44021 - PATIENT MANAGEMENT IN COMPUTED TOMOGRAPHY

Provides knowledge about care-giving skills for patients undergoing CT exams. Information includes effective communication, problem-solving techniques, patient safety/comfort, patient preparation, monitoring, contrast agents and venipuncture. Prerequisite: radiologic and imaging sciences (RIS) major. Corequisite: RIS 44025.

- 2.000 Credit hours
- 2.000 Lecture hours

### RIS 44023 - NUCLEAR MEDICINE PHYSICS AND INSTRUMENTATION III

Explains the physics and use of Computed Tomography instrumentation and PET instrumentation as well as quality assurance. Fusion imaging with PET CT and SPECT CT as well as other emerging technologies in instrumentation is addressed. Prerequisites: RIS 44006 and 44014; radiologic and imaging sciences (RIS) major; and special approval. Corequisites: RIS 44015 and 44016.

- 3.000 Credit hours
- 3.000 Lecture hours

### RIS 44025 - COMPUTED TOMOGRAPHY (CT) CLINICAL EDUCATION I

Provides clinical education at a clinical site so students can observe and become familiar with CT equipment and procedures, and apply knowledge of physics and patient care. Students begin to perform some CT procedures under direct supervision of CT technologists. Prerequisite: radiologic and imaging sciences (RIS) major and special approval.

- 3.000 Credit hours
- 7.500 Lab hours
- 15.000 Other hours

### RIS 44027 - COMPUTED TOMOGRAPHY (CT) CLINICAL EDUCATION II

Continuation of RIS 44025. Students apply knowledge of physics, patient care, sectional anatomy and pathology in the performance of CT clinical competency exams. Students act more independently using critical thinking skills. Prerequisite: RIS 44025.

- 3.000 Credit hours
- 7.500 Lab hours
- 15.000 Other hours
RIS 44028 - RADIATION THERAPY RADIOBIOLOGY

Establishes a foundation in radiation biology for radiation therapy. Cell biology and its response to radiation are reviewed as well as the effect of radiation on pathology and body systems. Prerequisite: RIS 44018.
3.000 Credit hours
3.000 Lecture hours

RIS 44029 - RADIATION THERAPY PATHOLOGY I

General overview of various disease processes with emphasis on cancer types. Includes epidemiology, etiology, symptoms, metastases, histology, tumor grading, staging, detection, screening and diagnosis, treatment, side effects and prognosis of malignancies of the head and neck, central nervous, respiratory, digestive, and female reproductive systems. Prerequisite: RIS 34003 and 34083. Corequisite: RIS 44053.
3.000 Credit hours
3.000 Lecture hours

RIS 44030 - PHYSICAL PRINCIPLES OF COMPUTED TOMOGRAPHY I

(Repeatable for a maximum of 4 credit hours) Computer fundamentals, operations and applications of CT equipment. Principles of CT system operation and components, image processing and display and image quality. Prerequisite: radiologic and imaging sciences (RIS) major. Corequisite: RIS 44025.
2.000 Credit hours
2.000 Lecture hours

RIS 44031 - PATIENT MANAGEMENT IN MRI

Provides information on the role of the MRI technologist in maintaining patient safety and comfort as well as personal and co-worker safety. MR contrast agents and venipuncture will be studied. Includes problem solving with diverse patient types. Prerequisite: radiologic and imaging sciences (RIS) major. Corequisite: RIS 44035.
2.000 Credit hours
2.000 Lecture hours
**RIS 44033 - COMPUTED TOMOGRAPHY TECHNIQUES**

Integrates concepts of computed tomography including patient care, imaging procedures, physics and instrumentation in preparation for national certification examination in computed tomography. Prerequisites: RIS 34084 and 44030 and 44047.

1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

Regional College Department

**RIS 44035 - MRI CLINICAL EDUCATION I**

Students observe and become familiar with MRI equipment and procedures, and apply knowledge of physics, MRI safety and patient care. Students begin to perform some procedures under direct supervision of technologists. Prerequisite: Radiologic and Imaging Sciences (RIS) major; and special approval.

3.000 Credit hours  
7.500 Lab hours  
15.000 Other hours

Levels: Undergraduate  
Schedule Types: Clinic, Laboratory

Regional College Department

**RIS 44036 - MRI CLINICAL EDUCATION II**

Continuation of RIS 44035. Students apply knowledge of physics, patient care, anatomy and pathology when performing clinical competency exams as well as quality assurance procedures. Some applications to special procedure exams. Prerequisite: RIS 44035.

3.000 Credit hours  
7.500 Lab hours  
15.000 Other hours

Levels: Undergraduate  
Schedule Types: Clinic, Laboratory

Regional College Department

**RIS 44037 - MRI CLINICAL EDUCATION III**

Continuation of RIS 44036. Students use critical thinking skills in performing MRI exams in the clinical setting and solve problems in a more independent manner. Students complete all required clinical competency exams. Prerequisite: RIS 44036.

3.000 Credit hours  
7.500 Lab hours  
15.000 Other hours

Levels: Undergraduate  
Schedule Types: Clinic, Laboratory

Regional College Department

**RIS 44038 - RADIATION THERAPY PHYSICS III**
Covers concepts of radioactivity and brachytherapy. Describes specialized treatment units. Discussion of human resource, therapy department budgets and billing, accreditation, certification, professional societies. Prerequisite: RIS 44018.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**RIS 44039 - NUCLEAR MEDICINE TECHNIQUES**

Course integrates concepts of radiation physics, and nuclear medicine instrumentation and quality control, radiopharmacy and radiation safety in preparation for national certification examinations. Prerequisites: RIS 44023, RIS 44011, RIS 44017; and special approval. Corequisite: RIS 44026.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**RIS 44041 - RADIATION THERAPY QUALITY MANAGEMENT**

Provides overview of quality management programs and continuing quality improvement in radiation therapy. Topics include validity of quality assurance checks, chart checks, image checks, testing on simulators, linear accelerators and brachytherapy sources. Prerequisite: RIS 44018.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**RIS 44042 - RADIATION THERAPY PATHOLOGY II**

Continuation of Radiation Therapy Pathology I to include epidemiology, etiology, symptoms, metastases, histology, tumor grading, staging, detection, screening and diagnosis, treatment, side effects and prognosis of malignancies of the male reproductive, urinary, endocrine, circulatory, lymphatic, integumentary and musculoskeletal systems as well as pediatric solid malignancies. Prerequisites: RIS 34083 and 44029. Corequisite: RIS 44056.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**RIS 44043 - RADIATION THERAPY PRINCIPLES/PRACTICE III**

Review and testing of major subject areas from all radiation therapy courses to prepare students to successfully pass the national certification exam based on the content specifications from the American Registry of Radiologic Technologists (ARRT). Prerequisites: RIS 44013 and radiologic and imaging science (RIS) major.
Prerequisites: RIS 44009 and 44018 and 44028 and 44042.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**RIS 44044 - MRI PROCEDURES I**

Provides the imaging techniques related to the body, special clinical applications, coil selection, scan sequences, protocols, positioning criteria, normal and abnormal anatomical and pathologic structures and signal characteristics for all areas of the body except extremities and vascular areas. Prerequisite: radiologic and imaging science (RIS) major. Corequisite: RIS 44035.
2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**RIS 44045 - MAGNETIC RESONANCE IMAGING PROCEDURES II**

Provides the imaging techniques related to the body, special clinical applications, coil selection, scan sequences, protocols, positioning criteria, normal and abnormal anatomical and pathologic structures and signal characteristics for the extremities and vascular areas. Prerequisites: RIS 44044 and radiologic and imaging science (RIS) major. Corequisite: RIS 44036.
2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**RIS 44046 - MAGNETIC RESONANCE IMAGING TECHNIQUES**

Integrates concepts of magnetic resonance imaging including patient care, imaging procedures, data acquisitions and processing as well as principles of image formation. Prerequisites: special approval.
1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**RIS 44047 - COMPUTED TOMOGRAPHY PROCEDURES I**

(Repeatable for a maximum of 2 credit hours) Introduction to CT procedures with scanning protocols, positioning and non-contrast anatomy. Prerequisite: radiologic and imaging science (RIS) major. Corequisite: RIS 44025.
1.000 Credit hours
1.000 Lecture hours
RIS 44048 - COMPUTED TOMOGRAPHY PROCEDURES II

Overview of the procedures presented in CT Procedures I course, anatomy as seen on scans both with and without contrast media, advanced processing, and advanced imaging procedures. Prerequisite: special approval. Prerequisite: RIS 44047.

2.000 Credit hours
2.000 Lecture hours

RIS 44049 - PHYSICAL PRINCIPLES OF COMPUTED TOMOGRAPHY II

Image post processing, image quality, radiation dose in CT, 3-D CT imaging, virtual reality CT, Cardiac Scoring, Positron Emission Tomography and CT Scanners, Pediatric Imaging and Quality Assurance techniques are presented. Prerequisite: RIS 44030.

1.000 Credit hours
1.000 Lecture hours

RIS 44051 - MAGNETIC RESONANCE EQUIPMENT AND IMAGE ACQUISITION I

Develops and understanding of the physics of MR image acquisition and the hardware used. Provides information in the use and manipulation of the instrumentation and technical parameters used in the generation of images. Establishes safety procedures. Prerequisite: radiologic and imaging science (RIS) major. Corequisite: RIS 44035.

2.000 Credit hours
2.000 Lecture hours

RIS 44052 - MAGNETIC RESONANCE EQUIPMENT AND IMAGE ACQUISITION II

Develops an understanding of MR image acquisition and the hardware used. Provides information in the use and manipulation of the hardware and technical parameters used in the generation of images. Reviews safety special applications such as advanced imaging techniques. Enables the student to maximize MR image quality. Prerequisite: RIS 44051 and radiologic and imaging science (RIS) majors. Corequisite: RIS 44036.

2.000 Credit hours
2.000 Lecture hours
**RIS 44053 - RADIATION THERAPY CLINICAL EDUCATION II**

Continuation of Clinical Education I with emphasis on clinical practice of treatment techniques and planning. Prerequisite: RIS 34030.

3.000 Credit hours
7.500 Lab hours
15.000 Other hours

Levels: Undergraduate
Schedule Types: Clinic, Laboratory

**RIS 44055 - ULTRASOUND CLINICAL EDUCATION IV**

Provides clinical education and experience at a clinical site to allow students the opportunity to practice skills necessary to obtain high quality sonographic images, to alter protocols based on patients and to identify image quality problems. Content includes sonography of superficial structures. Prerequisite: RIS 34062. Corequisite: RIS 34082.

1.000 Credit hours
1.000 Lab hours
8.000 Other hours

Levels: Undergraduate
Schedule Types: Clinic, Laboratory

**RIS 44056 - RADIATION THERAPY CLINICAL EDUCATION III**

Continuation of Clinical Education II with added emphasis on critical thinking, problem solving and clinical competency. Prerequisite: RIS 44053.

1.000 Credit hours
1.000 Lab hours
7.000 Other hours

Levels: Undergraduate
Schedule Types: Clinic, Laboratory

**RIS 44060 - RADIATION THERAPY CLINICAL EDUCATION IV**

Continuation of Clinical Education III with added emphasis on critical thinking, problem solving and clinical competency. Students are assigned to clinical education site for approximately 24 hours per week. Prerequisite: RIS 44056.

1.000 Credit hours
2.500 Lab hours
5.000 Other hours

Levels: Undergraduate
Schedule Types: Clinic, Laboratory
**RIS 44065 - ULTRASOUND CLINICAL EDUCATION V**

Provides clinical education and experience at a clinical site to allow students the opportunity to practice skills necessary to obtain high quality sonographic images, to alter protocols based on patients and to identify image quality problems. Content includes abdominal, pelvic, obstretrical, superficial structure and vascular sonography. Prerequisite: RIS 44055. Corequisite: RIS 44074.

- 4.000 Credit hours
- 4.000 Lab hours
- 32.000 Other hours

Levels: Undergraduate
Schedule Types: Clinic, Laboratory

Regional College Department

**RIS 44072 - OBSTETRICS AND GYNECOLOGY SONOGRAPHY II**

Embryonic and fetal development throughout gestation; fetal measurements, normal fetal anatomy and physiology; and abnormal sonographic appearances of the fetus will be covered as well as invasive obstetric procedures and antepartum testing. Prerequisite: RIS 34062.

- 3.000 Credit hours
- 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**RIS 44074 - VASCULAR SONOGRAPHY**

Anatomy, physiology and hemodynamics of the cerebrovascular, abdominal and peripheral vascular systems; normal and abnormal sonographic vascular appearances; Doppler instrumentation and scanning techniques are covered. Prerequisites: RIS 44055 and radiologic and imaging sciences (RIS) major.

- 2.000 Credit hours
- 2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**RIS 44078 - SONOGRAPHIC TECHNIQUES**

Course integrates diagnostic medical sonography concepts in preparation for certification exams. Prerequisite: RIS 34044 and 34052 and 44072.

- 3.000 Credit hours
- 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**RIS 44080 - RADIATION THERAPY CLINICAL EDUCATION V**

Continuation of Clinical Education IV with added emphasis on clinical practice, treatment procedures, simulation
and treatment planning. Prerequisite: RIS 44060.
3.000 Credit hours
7.500 Lab hours
15.000 Other hours

Levels: Undergraduate
Schedule Types: Clinic, Laboratory

Regional College Department

**RIS 44083 - PATHOPHYSIOLOGY FOR MEDICAL IMAGING**

Provides students with basic information on the causes of disease and the body's response to disease, as well as the medical imaging modalities that will demonstrate them. Prerequisite: radiologic and imaging sciences (RIS) major; and RIS 34045 or RIS 44025 or RIS 44035.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**RIS 44084 - ULTRASOUND IMAGE EVALUATION**

Presentation of sonographic findings in specific disease processes, with evaluation of image quality and emphasis on diagnostic features of pathologic entities. Prerequisites: RIS 34065 and radiologic and imaging sciences (RIS) major.
1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**RIS 44096 - INDIVIDUAL INVESTIGATION IN MEDICAL IMAGING DIRECTED READINGS**

(Repeatable for credit) Students are assigned prescribed number of medical imaging journal articles, completes post test and submits a summary paper and online discussions. Prerequisite: Radiologic and imaging sciences (RIS) major and special approval.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Regional College Department

**RIS 44098 - RESEARCH IN MEDICAL IMAGING**

(Repeatable for credit) Fundamental concepts and procedures for systematic collection, analysis critique and application of qualitative and quantitative data in medical imaging. Prerequisite: RIS 34030 or 34045 or 44025 or 44035; and radiologic and Imaging Science (RIS) major.
3.000 Credit hours
3.000 Other hours
## RPTM 16000 - FOUNDATIONS OF RECREATION AND LEISURE

Historical examination of the park and recreation movement, sociological, economic, psychological and political considerations for the delivery of leisure and recreation services in contemporary society. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

## RPTM 26001 - INTRODUCTION TO COMMUNITY INCLUSION FOR INDIVIDUALS WITH DISABILITIES

Interdisciplinary exploration of conceptual theoretical, philosophical and legal aspects related to inclusion of individuals with disabilities in community life. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

## RPTM 26010 - COMMUNITY DEVELOPMENT IN RECREATION

Explores the contemporary and historical roles, organization and services of public and non-profit leisure service providers. Includes various theoretical perspectives on community organization and development as well as methods available to the recreation practitioner to facilitate the development of recreation services in communities. Prerequisite: RPTM 16000.
3.000 Credit hours
3.000 Lecture hours

## RPTM 26030 - RECREATION GROUP LEADERSHIP

Group leadership concepts, methods and techniques. Practical experience in planning and conducting recreational activities for a variety of populations. Pre- or co-requisite: RPTM 16000.
3.000 Credit hours
3.000 Lecture hours
RPTM 26060 - INTRODUCTION TO GLOBAL TOURISM

(Cross-listed with GEOG 22040) Introduction to travel and tourism around the world, including tourism technologies, cultural and natural environments as attractions, benefits of travel ethics and sustainable development. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Foundations Leadership Admin Department

Course Attributes:
Diversity Course-Global

RPTM 26071 - MAIN AND OPER OF AREAS

A systems approach for the effective maintenance and operation of areas and facilities. Prerequisite: RPTM 16000.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Foundations Leadership Admin Department

RPTM 26081 - PRINCIPLES OF OUTDOOR RECREATION

Introduction to outdoor recreation including historical and cultural perspectives, outdoor recreation resources, environmental aspects, trends and management. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Foundations Leadership Admin Department

RPTM 36010 - RECREATION, LEISURE AND AGING

Knowledge and understanding of leisure and aging. Planning and implementing recreation programs and activities for enriching the lives of older persons. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Foundations Leadership Admin Department

RPTM 36040 - INCLUSION OF PEOPLE WITH DISABILITIES IN LEISURE SERVICES

An examination of attitudes toward people with disabilities, characteristics of various disability groups, the role
and responsibility of leisure service providers to be inclusive of all individuals and techniques for adapting programs. Prerequisite: RPTM 26030.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Foundations Leadership Admin Department

Course Attributes:
Diversity Course-Domestic

RPTM 36060 - ENTREPRENEURIAL APPROACHES TO LEISURE AND HOSPITALITY SERVICES

Principles of commercial recreation and tourism services, including entrepreneurship, economic concepts of the for-profit recreation industries and management skills. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Foundations Leadership Admin Department

RPTM 36075 - PROGRAM DESIGN AND EVALUATION

Programming leisure services within a socio-cultural context, involving understanding and assessing client behavior and needs, proficiency in program design and implementation, and knowledge of evaluation methods reflective of a service-centered and benefits approach. Prerequisite: RPTM 26030.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Foundations Leadership Admin Department

RPTM 36081 - ADVENTURE EDUCATION

Introduction to adventure education, the history and philosophy, initiatives, ropes courses, adventure curricula and the basics of outdoor leadership and process facilitation. Prerequisites: RPTM 26030 and RPTM 26081.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Foundations Leadership Admin Department

RPTM 36082 - INTERPRETATION OF NATURAL AND CULTURAL RESOURCES

Interpretation is the art of creating intellectual and emotional bonds between people and natural and cultural resources. Interpretation is commonly practiced in parks and other protected areas, zoos, museums and a variety of tourist attractions. This course provides students with the philosophies, concepts and practical techniques necessary to plan and present effective interpretation of natural and cultural resources. Prerequisite: RPTM 26081.
RPTM 36083 - ENVIRONMENTAL EDUCATION AND CONSERVATION

Environmental education helps people better understand the natural world and to develop attitudes and behaviors conducive to environmental conservation. Teaches students the foundations, principles and techniques of environmental education thus enabling students to prepare and present effective environmental education programs. Prerequisite: RPTM 26081.

Levels: Undergraduate
Schedule Types: Lecture

RPTM 36085 - LEISURE AND CULTURE

Leisure behaviors and beliefs for people from diverse cultures, factors perpetuating inequity in the United States and strategies for leisure programming in a pluralistic society. Prerequisite: None.

Levels: Undergraduate
Schedule Types: Lecture

Course Attributes:
Diversity Course-Domestic

RPTM 36192 - PRACTICUM IN RECREATION, PARK AND TOURISM MANAGEMENT

(Repeatable for credit) A 60-hour field experience in a recreation, park, or tourism setting. Must be approved by instructor prior to registration. Prerequisite: RPTM 16000; and special approval; and recreation, park and tourism management (RPTM) major or Park Management (PMM) minor or Recreation Management (RMM) minor or Tourism Management (TMM minor) or Event Planning (EVPL) minor.

Levels: Undergraduate
Schedule Types: Practicum or Internship

Course Attributes:
Experiential Learning Requirem

RPTM 36911 - WILDERNESS AND REMOTE FIRST AID FOR PROFESSIONALS AND EDUCATORS

Students build first aid knowledge skills and behaviors through a variety of learning strategies to individually
help in an emergency. A key focus is on how to work in limited resource environments or remote environments (i.e., foreign countries, wilderness, air travel). Then students learn and demonstrate how to prepare others, and be a leader during emergencies through practical experiences. Course is taught and assessed in a cognitively, physically, and emotionally stressed manner. This course includes three weekends and include outdoors experiences. Successful completion of the course may result in American Red Cross certification and Instructor status. Prerequisite: none.

3.000 Credit hours
1.500 Lecture hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Foundations Leadership Admin Department

**RPTM 45031 - SPORT TOURISM**

Incorporates both theoretical learning of travel for sports as a global phenomenon and application of such knowledge in hosting a sporting event with travel as the focus. The experiential, cultural, and economic aspects of sport tourism are examined. Students demonstrate their ability to prepare a sport tourism plan upon the completion of the course. Prerequisite: junior or senior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**RPTM 46000 - TOURISM DEVELOPMENT AND RECREATIONAL TRAVEL**

(Cross-listed with GEOG 42040) Investigation of travel and tourism development using an interdisciplinary social science approach. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**RPTM 46001 - PRINCIPLES AND METHODS OF COMMUNITY INCLUSION**

Interdisciplinary approach to the principles and methods of designing an inclusive environment. Focus is on characteristics of disability groups and societal considerations to making adaptations and accommodations. Students complete a service learning component that focuses on inclusion of people with disabilities in community life. Prerequisite: RPTM 26001.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**RPTM 46030 - DYNAMICS OF LEISURE BEHAVIOR**
(Cross-listed with SRM 56030) Analysis of leisure behavior through an examination of social-psychological theories and research. Prerequisites: RPTM 36040 and 36075.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Foundations Leadership Admin Department

Course Attributes:
Writing Intensive Course

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>RPTM 46060</td>
<td>ADMINISTRATION OF LEISURE SERVICES</td>
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<tr>
<td>RPTM 46070</td>
<td>PARK PLANNING</td>
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<tr>
<td>RPTM 46091</td>
<td>SEMINAR FOR INTERNSHIP PREPARATION</td>
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<td>RPTM 46092</td>
<td>INTERNSHIP IN RECREATION</td>
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</tbody>
</table>

RPTM 46060 - ADMINISTRATION OF LEISURE SERVICES
(Repeatable for a maximum of 9 credit hours) Administrative practices of private and public leisure service agencies. Organization, philosophy, personnel and fiscal management, public relations and legal concerns are examined. Prerequisites: RPTM 36040 and 36075 and 36192.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Foundations Leadership Admin Department

RPTM 46070 - PARK PLANNING
(Cross-listed with SRM 56070) Understanding the relationship between recreation places and the people who use them. This includes the planning, design and functioning of public and commercial recreation places. Prerequisites: RPTM 26081 and 36040.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Foundations Leadership Admin Department

RPTM 46091 - SEMINAR FOR INTERNSHIP PREPARATION
(Repeatable for credit) Planning and preparation for the internship experience in leisure service settings. Students should register for this course two semesters before enrolling in the internship course. Prerequisites: junior standing; and recreation, park and tourism management (RPTM) major; and RPTM 36092 or RPTM 36192; and special approval.
1.000 Credit hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

Foundations Leadership Admin Department

RPTM 46092 - INTERNSHIP IN RECREATION
(Repeatable for credit) Supervised full-time experience providing knowledge of overall agency operation in approved leisure setting. Prerequisites: senior standing and RPTM 46091 and special approval.
RPTM 46095 - SELECTED TOPICS IN RECREATION
(Repeatable for a maximum of 6 credit hours) Selected topics dependent upon interest. Prerequisite: None.
1.000 TO 3.000 Credit hours
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture
Foundations Leadership Admin Department

RPTM 46096 - INDIVIDUAL INVESTIGATION IN RECREATION
(Repeatable for a maximum of 6 credit hours) Independent study completed under the supervision of a faculty member. Written approval of the supervising faculty member and school director required prior to registration. Prerequisite: Junior standing and special approval.
1.000 TO 3.000 Credit hours
3.000 TO 9.000 Other hours
Levels: Undergraduate
Schedule Types: Individual Investigation
Foundations Leadership Admin Department

RSPC 30000 - PROFESSIONAL PRACTICE IN RESPIRATORY CARE
Course guides students in the area of professional practice and the importance of evidence-based practice; continuing professional development; using theory to inform practice; being reflective, ethical and organized; and proactively planning a career as an advanced practitioner. Prerequisite: respiratory care (RSPC) major.
3.000 Credit hours
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture
Regional College Department

RSPC 30002 - LEADERSHIP AND MANAGEMENT IN RESPIRATORY CARE
Course allows students to utilize their knowledge and experience in understanding leadership as a team leader or team member in the practice of respiratory care. Management in respiratory care is explored, including hospital organization; department structure; outcomes; staffing, billing, budgeting and staff development; decision-making; and effective communication. Prerequisite: respiratory care (RSPC) major.
3.000 Credit hours
3.000 Lecture hours
### RSPC 30004 - EDUCATIONAL INSTRUCTION IN RESPIRATORY CARE

Course guides students in perspectives on teaching and learning, characteristics of the learner and techniques and strategies for teaching and learning. Delivery of respiratory therapy education in various settings. 
Prerequisite: respiratory care (RSPC) major.
3.000 Credit hours
3.000 Lecture hours

### RSPC 30006 - SLEEP MEDICINE AND POLYSOMNOGRAPHY

A fundamental overview of a variety of sleep and breathing disorders that affect sleep. Topics include the identification of normal sleep and sleep disorders, methods of diagnosing sleep disorders, and treatment options. Practice in comparing and evaluating the indications and contraindications for sleep studies and evaluating sleep study results in relation to types of respiratory sleep disorders. Prerequisite: respiratory care (RSPC) major.
3.000 Credit hours
3.000 Lecture hours

### RSPC 40000 - DISEASE MANAGEMENT IN RESPIRATORY CARE

Provides an advanced understanding of the pathophysiology and management of cardiopulmonary disease and comorbidities. Provides training in critical thinking in the management of chronic disease and utilization of patient-therapist participation principles; patient communication, evaluation, development of care plans and action plans utilizing evidence-based medicine; and protocols and clinical practice guidelines. Prerequisite: respiratory care (RSPC) major.
3.000 Credit hours
3.000 Lecture hours

### RSPC 40002 - RESEARCH DEVELOPMENT IN RESPIRATORY CARE

Introduces the respiratory care practitioner to research methodology and design, their application to health science research and the application of research to everyday health care. Prerequisite: respiratory care (RSPC) major.
3.000 Credit hours
3.000 Lecture hours
RSPC 40004 - ADVANCED PRACTICE IN RESPIRATORY CARE

Explores the traditional practice roles filled by respiratory therapists; the advanced practice roles that exist, as well as those that are emerging within the profession; and the career opportunities they represent for practitioners. Prerequisites: respiratory care (RSPC) major, and admission to professional study. 3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

RSPC 40006 - CONTEMPORARY ISSUES AND TRENDS IN RESPIRATORY CARE

Analysis of contemporary issues and trends in respiratory care and their impact and influence on the profession. Prerequisites: respiratory care (RSPC) major; and admission to professional study. Pre/corequisites: NURS 46000; and RSPC 40075. 3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

RSPC 40075 - INFORMATION AND PATIENT CARE TECHNOLOGY FOR HEALTHCARE PROFESSIONALS

(Cross-listed with NURS 40075) Focuses on the use of information management and information systems, technology and the human technology interface utilized in professional practice. Prerequisites: respiratory care (RSPC) major; and admission to professional study. 3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

RSPC 41092 - PRACTICUM FOR RESPIRATORY CARE

(Repeatable 2 times for credit) An individually planned practicum that provides students the opportunity to explore real world application of program principles and practice options, or to conduct research within the realm of respiratory care under the guidance of a registered respiratory therapy practitioner. Focus is on options for practice or enhancing practice through application of program principles. Student's practicum experience requires prior faculty approval before registration. Prerequisites: respiratory care (RSPC) major; admission to professional study; and special approval. Pre/corequisites: NURS 46000; and RSPC 40006; and RSPC 40075. 3.000 Credit hours
3.000 Lecture hours
RTT 11000 - INTRODUCTION TO RESPIRATORY THERAPY

Establishes a foundation in the field of respiratory care. Topics include: career options, licensing and credentialing, quality assurance, evidence based learning, health promotion, community health, healthcare management and reimbursement, professional ethics and law, infection control, HIPAA and OSHA standards, patient education and managing disasters. Prerequisite: respiratory therapy technology (RTT) major and admitted to technical study.

2.000 Credit hours
2.000 Lecture hours

RTT 11002 - CARDIOPULMONARY DISEASES

A study of diseases and disorders affecting the cardiopulmonary system; etiology, pathophysiology, clinical manifestations, analyzing and interpreting data, constructing respiratory care plans and the role of the respiratory therapist in treatment. Prerequisites: RTT 11000 and RTT 11003 and RTT 11006 with a minimum grade of C (2.000).

3.000 Credit hours
3.000 Lecture hours

RTT 11003 - APPLICATION AND MECHANISMS OF CARDIOPULMONARY ANATOMY AND PHYSIOLOGY

Provides a solid foundation in cardiopulmonary anatomy and physiology with relevant applied physiology as it relates to the profession of respiratory care. Prerequisites: respiratory therapy technology (RTT) major and admitted to technical study...

3.000 Credit hours
3.000 Lecture hours
RTT 11004 - THERAPEUTICS

Introduction to inhaled medication administration, hyperinflation therapy, bronchopulmonary hygiene, and airway management. There is a laboratory and clinical component. Prerequisites: RTT 11000, 11003, 11006 with a minimum grade of C (2.000).

6.000 Credit hours
4.000 Lecture hours
3.000 Lab hours
8.000 Other hours

RTT 11006 - INTRODUCTION TO CLINICAL RESPIRATORY CARE

Introduction to patient assessment and monitoring, communication, infection control, medical records, medical gas and humidity therapy, and the clinical environment. There is a laboratory component. Prerequisites: respiratory therapy technology (RTT) major and admitted to technical study.

3.000 Credit hours
2.000 Lecture hours
3.000 Lab hours

RTT 11008 - BLOOD GAS ANALYSIS

A study of methods, equipment, and procedures for obtaining arterial blood; additionally, the principles and standards of analysis and applications of physiological data is stressed. Prerequisite: RTT 11003 with a minimum grade of C (2.000).

2.000 Credit hours
1.500 Lecture hours
1.500 Lab hours

RTT 21000 - CRITICAL CARE

An advanced-level course that provides a foundation for managing patients in critical care utilizing mechanical ventilation, pharmacology, and hemodynamic monitoring systems. Students perform, interpret and apply data, and learn advanced life support. There is a clinical component. Prerequisites: RTT 21001 and 21003 with a minimum grade of C (2.000).

4.000 Credit hours
3.000 Lecture hours
16.000 Other hours

Levels: Undergraduate
Schedule Types: Clinic, Lecture

Regional College Department

RTT 21001 - MECHANICAL VENTILATION

Establishes a foundation of mechanical ventilation and associated equipment; assessment, monitoring and modifying parameters. There is a laboratory and clinical component. Prerequisites: RTT 11001, RTT 11002, RTT 11004 and RTT 11008, BSCI 11010 and BSCI 11020 or BSCI 20020, PHY 12111 or PHY 13001, PTST 10009 or HED 14020, CHEM 10050 or CHEM 10054 or CHEM 10060, ENG 11011 or 21011, or HONR 10197 or 10297; all with a minimum grade of C (2.000).

5.000 Credit hours
4.000 Lecture hours
4.000 Lab hours
16.000 Other hours

Levels: Undergraduate
Schedule Types: Clinic, Lecture

Regional College Department

RTT 21003 - PERINATAL AND PEDIATRIC RESPIRATORY THERAPY

An intense study of assessing, providing, and evaluating neonatal and pediatric respiratory care. Topics include: assessment of growth and development from conception to delivery, resuscitation, persistent illness, therapeutic interventions, and managing mechanical ventilation. Prerequisites: RTT 11001 and 11002 and 11004 and 11008 with a minimum grade of C (2.000).

2.000 Credit hours
1.500 Lecture hours
1.500 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Regional College Department

RTT 21004 - ADVANCED DIAGNOSTICS

Provides knowledge and skills necessary to work effectively in a pulmonary function laboratory. Topics include: spirometry, testing standards and techniques, equipment set up and utilization, analyzing test results and applying them in the clinical setting. Prerequisites: RTT 11003 and 11008 with a minimum grade of C (2.000).

3.000 Credit hours
2.000 Lecture hours
1.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Regional College Department

RTT 21005 - PULMONARY REHABILITATION AND CONTINUING CARE

Roles and functions of respiratory therapists in cardiopulmonary rehabilitation and home care. Prerequisites: RTT 21001 with a minimum grade of C (2.000)
2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**RTT 21010 - RESPIRATORY THERAPY CAPSTONE COURSE**

Contemporary issues and trends in respiratory care; preparation for the CRT and RRT credentialing examinations; obtaining employment after graduation. There is a laboratory and clinical component. Prerequisite: RTT 21000 with a minimum grade of C (2.000).

3.000 Credit hours
1.000 Lecture hours
3.000 Lab hours
16.000 Other hours

Levels: Undergraduate
Schedule Types: Clinic, Laboratory, Lecture

Regional College Department

**RTT 21012 - BASIC RESEARCH DEVELOPMENT AND ANALYSIS**

Survey of research problems, methods, and designs utilized in respiratory care with a focus on developing analytical and critiquing skills. Prerequisite: RTT 21000 with a minimum grade of C (2.000).

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**RTT 21095 - SPECIAL TOPICS IN RESPIRATORY THERAPY**

(Repeatable for credit) Scheduled topics of interest to students and faculty. Prerequisite: RTT 11000.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**RTT 21096 - INDIVIDUAL INVESTIGATION IN RESPIRATORY THERAPY**

(Repeatable for a maximum of 6 credit hours) Readings and/or investigation of respiratory therapy topics supervised by respiratory therapy faculty. Prerequisite: respiratory therapy technology (RTT) majors.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Regional College Department
**RUSS 12201 - ELEMENTARY RUSSIAN I**


4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**RUSS 12202 - ELEMENTARY RUSSIAN II**

A continuation of the introduction to the Russian language in the context of Russian cultures. Prerequisite: RUSS 12201 and 12211. Corequisite: RUSS 12212.

4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**RUSS 12211 - ELEMENTARY RUSSIAN I RECITATION**

Reinforces material presented in Elementary Russian I (RUSS 12201). Must be taken with Elementary Russian I. Corequisite: RUSS 12201.

1.000 Credit hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Recitation

Modern-Classical Lang Studies Department

**RUSS 12212 - ELEMENTARY RUSSIAN II RECITATION**

Reinforces material presented in Elementary Russian II (RUSS 12202). Must be taken together with Elementary Russian II. Prerequisite: RUSS 12201 and 12211. Corequisite: RUSS 12202.

1.000 Credit hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Recitation

Modern-Classical Lang Studies Department

**RUSS 22201 - INTERMEDIATE RUSSIAN I**

Continued development of speaking, listening, reading and writing skills using a variety of cultural materials. Prerequisite: RUSS 12202. Corequisite: RUSS 22211.

4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
RUSS 22202 - INTERMEDIATE RUSSIAN II

Continuation of RUSS 22201. Prerequisite: RUSS 22201. Corequisite: RUSS 22212.
4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

RUSS 22211 - INTERMEDIATE RUSSIAN I RECITATION

1.000 Credit hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Recitation

RUSS 22212 - INTERMEDIATE RUSSIAN II RECITATION

Reinforces material presented in Intermediate Russian II (RUSS 22202). Must be taken with Intermediate Russian II. Prerequisite: RUSS 22201 and 22211. Corequisite: RUSS 22202.
1.000 Credit hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Recitation

RUSS 32201 - INTENSIVE RUSSIAN GRAMMAR

A systematic approach to Russian grammar and syntax. Prerequisite: RUSS 22202.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

RUSS 32211 - COMPOSITION AND CONVERSATION

Introduction to advanced oral and written discourse strategies in Russian. Prerequisite: RUSS 22202.
3.000 Credit hours
3.000 Lecture hours
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Description</th>
<th>Credit Hours</th>
<th>Lecture Hours</th>
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<tbody>
<tr>
<td>RUSS 32215</td>
<td>RUSSIAN PHONETICS AND DICTION</td>
<td>Study of the Russian sound system with special emphasis on pronunciation and intonation. Application of the international phonetic alphabet to Russian. Prerequisite: RUSS 22202.</td>
<td>3.000</td>
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<tr>
<td>RUSS 32231</td>
<td>TRANSLATION PRACTICE:RUSSIAN</td>
<td>Translation practice with Russian texts using principles and techniques learned in the lecture class. To be taken concurrently with TRST 30230. Corequisite: TRST 30230.</td>
<td>1.000</td>
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<tr>
<td>RUSS 32240</td>
<td>CONVERSATION FOR BUSINESS AND SPECIAL PURPOSES:RUSSIAN</td>
<td>Introduction to the special vocabulary of business and other special subject areas; introduces the concept of language for special purposes and emphasizes the use of special vocabulary in conversations in business and other settings. Prerequisite: RUSS 32211.</td>
<td>3.000</td>
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<tr>
<td>RUSS 32303</td>
<td>MODERN WRITERS</td>
<td>Reading and analysis of modern Russian plays and stories. Prerequisite: RUSS 22202.</td>
<td>3.000</td>
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<td>Course Code</td>
<td>Course Title</td>
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<tr>
<td>RUSS 32421</td>
<td>RUSSIAN CIVILIZATION</td>
<td>A survey of Russian history and intellectual life. Prerequisite: RUSS 32303.</td>
<td>3.000</td>
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<td>RUSS 32501</td>
<td>RUSSIAN LITERATURE IN ENGLISH</td>
<td>This course is designed as a survey of major authors, movements and works of nineteenth and twentieth century Russian literature in English translation. No knowledge of Russian required. Prerequisite: Sophomore standing.</td>
<td>3.000</td>
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<tr>
<td>RUSS 42093</td>
<td>VARIABLE TITLE WORKSHOP IN RUSSIAN LANGUAGE AND LITERATURE</td>
<td>(Repeatable for credit) Workshops individually designed to provide instruction and training in specific areas of Russian studies. Prerequisite: Departmental special approval.</td>
<td>1.000 TO 6.000</td>
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<td>RUSS 42095</td>
<td>SPECIAL TOPICS IN RUSSIAN LANGUAGE AND LITERATURES</td>
<td>(Repeatable for credit when topic varies) Topic to be announced in schedule of classes. Prerequisite: Senior standing.</td>
<td>1.000 TO 4.000</td>
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<tr>
<td>RUSS 42096</td>
<td>INDIVIDUAL INVESTIGATION</td>
<td>(Repeatable for credit) Independent investigation of problems in Russian language or literature. Prerequisite: 6 hours of upper-division Russian (RUSS) courses and special approval of the department chairperson.</td>
<td>1.000 TO 3.000</td>
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</tbody>
</table>
Levels: Undergraduate
Schedule Types: Individual Investigation

Modern-Classical Lang Studies Department

RUSS 42211 - ADVANCED COMPOSITION AND CONVERSATION

A continuation of RUSS 32211. Prerequisite: RUSS 32211.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

RUSS 42230 - ADVANCED TRANSLATION PRACTICE: RUSSIAN

Theory and practice course that discusses translation theory and emphasizes Russian-to-English translation of selected texts in business, technology, medicine and law. Prerequisite: RUSS 32231.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

Course Attributes:
Experiential Learning Requirem, Writing Intensive Course

RUSS 42240 - BUSINESS AND SPECIAL TEXTS: RUSSIAN

Survey of the typical text types of business in the Russian culture and language. Practice sessions focus on reading and understanding specialized texts and on the translation and composition of selected special texts in Russian. Prerequisite: RUSS 32211.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

RUSS 42351 - SURVEY OF RUSSIAN AND SOVIET LITERATURE

Introduces students to the major movements and authors of Russian, Soviet and post-Soviet literature beginning with Karamizin and ending with Boris Akunin. Prerequisite: 6 hours of upper-division Russian (RUSS) courses.
4.000 Credit hours
4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department
**RUSS 42399 - RESEARCH PROJECT IN RUSSIAN LANGUAGE AND LITERATURE**

(Repeatable for credit) Thesis or other independent study. Prerequisites: 6 hours of 40000-level Russian (RUSS) courses and special approval.

3.000 Credit hours

Levels: Undergraduate

Schedule Types: Senior Project/Honors Thesis

Modern-Classical Lang Studies Department

Course Attributes:

Experiential Learning Requirem

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**RUSS 52211 - ADVANCED COMPOSITION AND CONVERSATION**

Advanced practice in written and oral expression in Russian. Prerequisite: Graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Modern-Classical Lang Studies Department

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**RUSS 62010 - THE PRACTICE OF RUSSIAN TRANSLATION**

Students apply linguistic and communication science concepts to case studies of language mediation. Prerequisite: graduate standing. Corequisite: TRST 60010.

2.000 Credit hours

2.000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Modern-Classical Lang Studies Department

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**RUSS 62091 - SEMINAR**

(Repeatable for credit when topic varies) Topic announced in schedule of classes. Prerequisite: Graduate standing.

3.000 Credit hours

3.000 Other hours

Levels: Graduate

Schedule Types: Seminar

Modern-Classical Lang Studies Department

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**RUSS 62098 - RESEARCH**

(Repeatable for credit) Research or individual investigation for master's level graduate students. Credits earned applied toward degree requirements if department approves repeat registration permitted. Prerequisite: Graduate standing and departmental special approval.

1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

Modern-Classical Lang Studies Department

**RUSS 62240 - LITERARY AND CULTURAL TRANSLATION**

Translation of documents from a variety of literary and cultural sources, including literature, expository and journalistic prose, scholarly treaties and essays. Translation into Russian will also be emphasized. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**RUSS 62250 - COMMERCIAL, LEGAL AND DIPLOMATIC TRANSLATION**

An introduction to methods and resources for the translation of commercial, economic, financial, legal, diplomatic and governmental documents. Prerequisites: TRST 60010 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**RUSS 62251 - SCIENTIFIC, TECHNICAL AND MEDICAL TRANSLATION**

An introduction to methods and resource for the translation of scientific, technical, industrial and medical documents. Prerequisite: TRST 60010 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**RUSS 62979 - CASE STUDY IN TRANSLATION**

Students will be responsible for a major translation and a terminology glossary as well as a critical analysis of the source text, the problems encountered during the translation process and the strategies used to solve them. Prerequisite: Special approval and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department
SBS 50002 - QUANTITATIVE METHODS IN SOCIAL AND BEHAVIORAL SCIENCES

Introduces basic quantitative methods used in social and behavioral scientific research. First we focus on the measurement of socio-behavioral phenomena and the relationship between measurement and statistics. Next, we examine the interrelated roles of scientific theory and the design of socio-behavioral research studies. Last, we focus on building appropriate multiple linear regression and/or analysis of variance statistical models to provide valid analysis of data collected in socio-behavioral research. Prerequisite: BST 52019; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Social and Behavioral Sciences Department

SBS 50020 - SOCIAL AND BEHAVIORAL SCIENCE THEORIES

Examines fundamental social and behavioral science theoretical frameworks that explain health behaviors with an emphasis on application through universal prevention approaches to inform both research and program evaluation designs. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Social and Behavioral Sciences Department

SBS 50030 - SEMINAR IN SOCIAL AND BEHAVIOR SCIENCES

Explores case studies in the social and behavioral sciences on topics that address the leading health indicators including substance use (alcohol, tobacco and other drugs), obesity (physical activity and nutrition), HIV and STIs, mental health, injury, immunization and access to health care, and social determinants of health. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Social and Behavioral Sciences Department

SBS 50196 - INDIVIDUAL INVESTIGATION IN SOCIAL AND BEHAVIORAL SCIENCES

(Repeatable for credit) Individual graduate investigation or research in areas related to social and behavioral sciences. Prerequisite: graduate standing and special approval.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Social and Behavioral Sciences Department

SBS 53008 - GRANT WRITING IN SOCIAL AND BEHAVIORAL SCIENCES
Students learn the basics of grant writing for federal and non-federal funding agencies with a particular emphasis on the components of most proposals for funding. This includes rationale for seeking funds, collaborations with community organizations, and working with consultants and subcontractors. Participants also learn about the basic sections of grant writing such as specific aims and hypotheses, developing a literature review, background and significance, research design and methodology, developing a budget and conducting research with human subjects. Participants have an opportunity to write sample grant proposals, learn about the review and scoring process and post-award grant management. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Social and Behavioral Sciences Department

**SBS 54634 - SOCIAL DETERMINANTS OF HEALTH BEHAVIORS**

Overviews the social determinants of health and the dynamic interplay between individual behaviors and community structures (systems orientation) including public policy, social and built environments, commercial messages, access to services, cultural norms, psychosocial hazards, and poverty both as causal effects that either provide opportunity or constraints to health. Also examines systems approaches to preventing public health threats from issues including substance use (alcohol, tobacco and other drugs), physical inactivity, poor dietary practices, unsafe sexual behaviors, violence and injury, and mental health. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Social and Behavioral Sciences Department

**SBS 60191 - VARIABLE CONTENT SEMINAR IN SOCIAL AND BEHAVIORAL SCIENCES**

(Repeatable for a maximum of 6 credit hours) Seminar on current and important topics in social and behavioral sciences. Subject matter varies depending on the topic. Prerequisites:: Graduate standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Seminar

Social and Behavioral Sciences Department

**SBS 60192 - PRACTICUM EXPERIENCE IN SOCIAL AND BEHAVIORAL SCIENCES**

Observational and participation in public health activities of a public health agency, hospital or other approved organization. The student completes the field experience with joint supervision from the university and approved organization or agency. Prerequisites: graduate standing and special approval.

6.000 Credit hours
20.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Social and Behavioral Sciences Department
SBS 60195 - SPECIAL TOPICS IN SOCIAL AND BEHAVIORAL SCIENCES

(Repeatable for a maximum of 6 credit hours) Special topics to sample new offerings on topics in social and behavioral sciences. Prerequisites: Graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Social and Behavioral Sciences Department

SBS 73018 - THEORIES OF PREVENTION SCIENCE I

Provides a background and theoretical review of prevention science as a multi-disciplinary field focusing on systematic inquiry on health behaviors including substance use (alcohol, tobacco and other drugs), physical activity, dietary practices, mental health, violence and injury, and sexual behaviors. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Social and Behavioral Sciences Department

SBS 73019 - THEORIES OF PREVENTION SCIENCE II

This course examines the methods used by prevention science researchers to determine the effectiveness of public health programs. Focus is on advanced formative, process, impact and outcome evaluation methods. Qualitative and quantitative analysis techniques used for assessing program process and effects are discussed in the context of research evaluation. Prerequisites: SBS 73018 and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Social and Behavioral Sciences Department

SBS 73020 - ADVANCED METHODS IN PREVENTION SCIENCE

Focuses primarily on advanced quantitative methods in the application of prevention science. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Social and Behavioral Sciences Department

SBS 80100 - EMERGING ISSUES IN PREVENTION SCIENCE

Survey of relevant challenges and issues facing prevention science researchers. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours
SBS 80191 - VARIABLE CONTENT SEMINAR IN SOCIAL AND BEHAVIORAL SCIENCES

(Repeatable for a maximum of 6 credit hours) Seminar on current and important topics in social and behavioral sciences. Subject matter varies depending on the topic. Prerequisites: Doctoral standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

SBS 80195 - SPECIAL TOPICS IN SOCIAL AND BEHAVIORAL SCIENCES

(Repeatable for a maximum of 6 credit hours) Special topics to sample new offerings on topics in social and behavioral sciences. Prerequisites: Doctoral standing
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

SBS 80198 - DIRECTED RESEARCH IN PREVENTION SCIENCE

(Repeatable for credit) Directed research or individual investigation for doctoral students. Prerequisite: doctoral standing.
1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

SBS 80199 - DISSERTATION I

(Repeatable for credit) Registration for two semesters required, first semester dissertation work begins and continues until completion of Dissertation II and 30 hours of total dissertation work. Prerequisite: doctoral standing and special approval.
15.000 Credit hours
15.000 Other hours

SBS 80299 - DISSERTATION II
Second course of dissertation sequence completing requirement of with 30 total hours of dissertation work. Prerequisite: SBS 80199 and special approval.

15.000 Credit hours
15.000 Other hours

Levels: Graduate
Schedule Types: Dissertation

Social and Behavioral Sciences Department

**SOC 12050 - INTRODUCTION TO SOCIOLOGY**

Scientific approach to understanding social interaction, institutions and organization. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Sociology Department

Course Attributes:
Diversity Course-Domestic, Kent Core-Social Sciences, LER-Social Sciences, TAG - Social/Behavior Sciences, Trnfr Module-Social Sciences

**SOC 22100 - SOCIOLOGICAL ANALYSIS**

Fundamental study of sociological analysis designed to provide awareness of theoretical and methodological concepts necessary in developing sociological perspective. Prerequisite: SOC 12050.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Sociology Department

**SOC 22570 - UNDERSTANDING DIFFERENCES AND INEQUALITY**

An introduction to the cultural and structural factors creating and sustaining educational, economic and political inequality by race, ethnicity, gender, class and sexual orientation with an emphasis on issues of poverty and immigration. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Sociology Department

Course Attributes:
TAG - Social/Behavior Sciences

**SOC 22778 - SOCIAL PROBLEMS**

Contemporary American and global social problems and issues are analyzed from sociological perspectives. Several cases are used to illustrate the emergence, development and decline of problems in social context.
SOC 24011 - INTERPERSONAL RELATIONSHIPS AND FAMILIES

(Equivalent to HDFS 24011) Exploration of the sociological nature of families across the lifespan, focusing on structure, diversity and life course processes such as dating, mate selection, cohabitation, marriage, parenthood, divorce, remarriage, singlehood, widowhood, parent-child interactions, sexual orientation, inequality and difference. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Sociology Department

Course Attributes:
Diversity Course-Global, Kent Core-Social Sciences, LER-Social Sciences, TAG - Social/Behavior Sciences, Trnfr Module-Social Sciences

SOC 31092 - PRACTICUM IN SOCIOLOGY

(Repeateable for credit) Individual research experience in sociology. Prerequisite: SOC 32210 and junior standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Sociology Department

Course Attributes:
Experiential Learning Requirem

SOC 32096 - INDIVIDUAL INVESTIGATION IN SOCIOLOGY

(Repeateable for credit) Readings and/or research supervised by member of sociology faculty. Prerequisite: SOC 12050, junior standing and special approval of instructor.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Sociology Department
## SOC 32210 - RESEARCHING SOCIETY

Survey of methods and techniques of research; research design and data gathering instruments; qualitative and quantitative analysis. Prerequisite: SOC 12050 and junior standing.

- 3.000 Credit hours
- 3.000 Lecture hours

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<th>Levels: Undergraduate</th>
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<td>Schedule Types: Lecture</td>
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Sociology Department

Course Attributes:

- Experiential Learning Requirem
- Writing Intensive Course

## SOC 32220 - DATA ANALYSIS


- 3.000 Credit hours
- 3.000 Lecture hours

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<th>Levels: Undergraduate</th>
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<td>Schedule Types: Lecture</td>
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Sociology Department

## SOC 32221 - DATA ANALYSIS LABORATORY

Analysis of sociological data utilizing statistical and electronic data processing tools. Corequisite: SOC 32220.

- 1.000 Credit hours
- 3.000 Lab hours

<table>
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<th>Levels: Undergraduate</th>
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<tr>
<td>Schedule Types: Laboratory</td>
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</table>

Sociology Department

## SOC 32400 - INDIVIDUAL AND SOCIETY

Foundations of social psychology; process of socialization; development of social and personal identities; small group and collective behavior; theories of deviance. Prerequisites: SOC 12050.

- 3.000 Credit hours
- 3.000 Lecture hours

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<th>Levels: Undergraduate</th>
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<tr>
<td>Schedule Types: Lecture</td>
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Sociology Department

## SOC 32510 - SOCIOLOGY OF WORK

Consideration of world of work across time and cultures with special emphasis on American society. Impact of work on individuals and other social institutions. Prerequisite: SOC 12050.

- 3.000 Credit hours
- 3.000 Lecture hours
SOC 32560 - SOCIOLOGY OF FAMILIES

Social history of the American family. Examination of how race, ethnicity, sexual orientation, class, gender and age contribute to variation in the experience and structure of family life in the U.S. Prerequisite: SOC 12050.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Sociology Department

Course Attributes:
Diversity Course-Domestic

SOC 32565 - SOCIOLOGY OF GAYS/LESBIANS

Examination of sexual identities, societal attitudes and debates, and differences of gender, race, age and class in gay/lesbian communities, using both social movements and life span perspectives. Prerequisite: SOC 12050.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Sociology Department

Course Attributes:
Diversity Course-Domestic

SOC 32569 - MINORITIES IN AMERICA

Study of such major American minorities as blacks, American Indians, Spanish-speaking Americans and American Jews. Prerequisite: SOC 12050.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Sociology Department

SOC 32570 - INEQUALITY IN SOCIETIES

Sociological analysis of stratification and inequality in societies, and the social structures that produce and maintain them. Particular emphasis on the intersections of race, class and gender in American society. Prerequisites: SOC 12050.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
Sociology Department

Course Attributes:
Diversity Course-Domestic

**SOC 32673 - URBAN SOCIOLOGY**

Examination of the history and development of urban areas, urban sociological theories and selected topics such as poverty, immigration, race relations and urban planning. Prerequisite: SOC 12050.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Sociology Department

**SOC 32762 - DEVIANT BEHAVIOR**

Overview of classical and contemporary theories and perspectives on the nature, causes and societal management of deviant behavior. Application of theories and perspectives to modern and historical social problems, methods of punishment and policy trends in social control. Prerequisites: SOC 12050.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Sociology Department

**SOC 42010 - DEATH AND DYING**

Theoretical perspectives and research in human death and dying. Emphasis on applied concerns in medical and helping professions. Topics include social death, death as taboo, medicalization and rationalization of death and dying and disenfranchised grief. Prerequisite: SOC 12050 and junior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Sociology Department

**SOC 42092 - INTERNSHIP IN SOCIOLOGY**

(Repeatable for credit)Application of sociological knowledge in the work setting. Assist professionals in sites including social services hospitals industry and government. Prerequisite: Junior standing; and sociology (SOC) major and 2.500 grade point average and special approval.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Sociology Department
Course Attributes:
Experiential Learning Requirem

### SOC 42093 - VARIABLE TITLE WORKSHOP IN SOCIOLOGY

(Repeatable for credit) Concentrates on professional or disciplinary concerns. Specific content to vary according to needs of client groups. S u/graded. Prerequisite: Permission.

1.000 TO 6.000 Credit hours  
1.000 TO 6.000 Other hours

Levels: Undergraduate  
Schedule Types: Workshop  

Sociology Department

### SOC 42095 - SPECIAL TOPICS IN SOCIOLOGY

(Repeatable for credit) Offered irregularly when unusual resources and/or opportunities permit. Topic announced when scheduled. Repeatable for a total of 12 hours for majors. Prerequisites: SOC 12050 and junior standing.

3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture  

Sociology Department

### SOC 42126 - SOCIOLOGICAL THEORIES

An examination of classical, modern and postmodern approaches to social theory. Prerequisite: SOC 12050 and junior standing.

3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture  

Sociology Department

### SOC 42224 - INTERPRETING SOCIAL DATA

Emphasis on organizing, analyzing and interpreting actual sociological research data making use of basic descriptive and inferential statistics and computer programs. Prerequisite: SOC 32210 or SOC 32220; and special approval.

3.000 Credit hours  
3.000 Other hours

Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab  

Sociology Department

### SOC 42315 - SOCIOLOGY OF CHANGING GENDER ROLES

An examination of the institutions, institutional linkages and social processes that contribute to change and stability of traditional gender roles and the consequences of changes. Prerequisite: SOC 12050 and junior
### SOC 42359 - SOCIAL MOVEMENTS

Investigation of various movements for social change. Examines the origins, developmental characteristics and the purposes of classic and contemporary movements. Prerequisite: SOC 12050 and junior standing.

3.000 Credit hours  
3.000 Lecture hours  

Levels: Undergraduate  
Schedule Types: Lecture  

Sociology Department

Course Attributes:  
Diversity Course-Domestic

### SOC 42400 - SELF AND IDENTITY

Examines theories and research on the origin and behavioral consequences of identities, self-concept and self-esteem; also examines the relationships between identities and emotions and between self-concept and mental health. Prerequisite: SOC 12050 and junior standing.

3.000 Credit hours  
3.000 Lecture hours  

Levels: Undergraduate  
Schedule Types: Lecture  

Sociology Department

### SOC 42421 - CHILDHOOD IN SOCIETY

How socio-historical circumstances shape the perception and experience of childhood as a distinct life stage. The process of childhood socialization in Western societies particularly the U.S. An exploration of the distinct role of socializing agents-parents and siblings, school, peers and media. Prerequisite: SOC 12050 and junior standing.

3.000 Credit hours  
3.000 Lecture hours  

Levels: Undergraduate  
Schedule Types: Lecture  

Sociology Department

### SOC 42478 - ADOLESCENCE IN SOCIETY

Consideration of the social, cultural and historical forces that shape the experience of this period of the life cycle. Includes examination of gender, class, and race differences in adolescence the significance of youth movements with an emphasis on music as a dominant expression of youth culture. Prerequisite: SOC 12050 and junior standing.
SOC 42558 - WEALTH, POVERTY AND POWER

Sociological examination of economic stratification; focuses on the translation of class into power via politics, education and collective struggle. Prerequisite: SOC 12050 and junior standing.

SOC 42559 - CULTURE AND SOCIETY

Overview of the sociological analysis of culture, popular culture and the media. Includes examination of key theoretical perspectives, the production and consumption of culture, culture and inequality, and other current issues in the sociological study of culture. Prerequisites: SOC 12050 and sophomore standing.

SOC 42560 - SOCIOLOGY OF FOOD

(Cross-listed with SOC 52560) Food is essential, but like every other aspect of our lives the meaning of food and the experience of its preparation and consumption are socially determined. In this course we'll explore the social dimensions of food consumption and production. We will consider the following questions and answer them by developing an understanding of sociological concepts and theories: What do our meals reveal about us – about our history, culture, our gender and race and ethnicity, socio-economic status, religious beliefs, and our family life? How does food consumption differ in different societies? How do the media and corporations influence our food choices? What does food mean symbolize and in what ways are these meanings manipulated and why? How is food production carried out in different contexts and what can we learn about the social organization of work from studying food production? How does what we eat contribute to local and global environmental problems? Prerequisite: SOC 12050.

SOC 42561 - SOCIOLOGY OF RELIGION

Social context of religious ideologies and structures with special reference to religion in America. Prerequisite: SOC 12050 and junior standing.
SOC 42562 - SOCIOLOGY OF MENTAL ILLNESS

A sociology of mental health and illness; focuses on how social factors influence and are influenced by mental health status; topics include definition and measurement, social distribution, social control of mental illness, societal reaction and media coverage. Prerequisite: SOC 12050 and junior standing.

SOC 42563 - SOCIOLOGY OF HEALTH AND HEALTH CARE

Sociological analysis of health and illness behavior, utilization of health care professions and the organizational community and societal systems which deal with health and illness. Prerequisite: SOC 12050 and junior standing.

SOC 42564 - BUREAUCRATIC ORGANIZATIONS

Analysis of structure and functioning of complex organizations in their cultural context. Prerequisite: SOC 12050 and junior standing.

SOC 42568 - RACE AND ETHNIC STUDIES

Sociological principles underlying racial and ethnic relations in the United States; emphasis on social factors of prejudice, discrimination and assimilation affecting all groups. Prerequisite: SOC 12050 and junior standing.
Course Attributes:
Diversity Course-Domestic

**SOC 42575 - FAMILY PATTERNS: A WORLD PERSPECTIVE**

Cultural variability with respect to courtship, family relationships, child rearing and other patterns in primitive
and literate societies. Prerequisite: SOC 12050 and junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Sociology Department

Course Attributes:
Diversity Course-Global

**SOC 42577 - SOCIOLOGY OF FAMILY VIOLENCE**

Sociological analysis of theories, research and social policy concerning family violence, child abuse and neglect,
spouse abuse, elderly abuse, marital rape, sexual abuse of children. Prerequisite: SOC 12050 and junior
standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Sociology Department

**SOC 42879 - AGING IN SOCIETY**

Analysis of demographic, sociological and socio-psychological dimensions of aging. Prerequisite: SOC 12050 and
junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Sociology Department

Course Attributes:
Diversity Course-Domestic

**SOC 43200 - SOCIAL STRUCTURE AND INDIVIDUAL LIVES**

Examines conceptualizations for and evidence concerning the effects of social structure on various dimensions
of individual lives. Prerequisite: SOC 12050 and junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Credit Hours</th>
<th>Levels: Graduate</th>
<th>Schedule Types: Lecture</th>
<th>Sociology Department</th>
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<td>SOC 52010 - DEATH AND DYING</td>
<td>Theoretical perspectives and research in human death and dying. Emphasis on applied concerns in medical and helping professions. Topics include social death, death as taboo, medicalization and rationalization of death and dying, and disenfranchised grief. Prerequisite: Graduate standing in sociology.</td>
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<td>SOC 52126 - SOCIOLOGICAL THEORIES</td>
<td>An examination of classical, modern and post-modern approaches to social theory. Prerequisite: Graduate standing in sociology.</td>
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<td>SOC 52315 - SOCIOLOGY OF CHANGING GENDER ROLES</td>
<td>An examination of the institutions, institutional linkages and social processes that contribute to change and stability of traditional gender roles and the consequences of changes. Prerequisite: Graduate standing in sociology.</td>
<td>3.000 Credit hours 3.000 Lecture hours</td>
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<td>SOC 52421 - CHILDHOOD IN SOCIETY</td>
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Consideration of the social, cultural and historical forces that shape the experience of this period of the life cycle. Includes examination of gender, class and race differences in adolescence, the significance of youth movements with an emphasis on music as a dominant expression of youth culture. Prerequisite: Graduate standing in sociology.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Sociology Department

SOC 52558 - WEALTH, POVERTY AND POWER
Sociological examination of economic stratification in the United States; focuses on the translation of class into power via politics, education and collective struggle. Prerequisite: Graduate standing in sociology.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Sociology Department

SOC 52560 - SOCIOLOGY OF FOOD
(Cross-listed with SOC 42560) Food is essential, but like every other aspect of our lives the meaning of food and the experience of its preparation and consumption are socially determined. In this course we'll explore the social dimensions of food consumption and production. We will consider the following questions and answer them by developing an understanding of sociological concepts and theories: What do our meals reveal about us – about our history, culture, our gender and raceethnicity, socio-economic status, religious beliefs, and our family life? How does food consumption differ in different societies? How do the media and corporations influence our food choices? What does food meansymbolize and in what ways are these meanings manipulated and why? How is food production carried out in different contexts and what can we learn about the social organization of work from studying food production? How does what we eat contribute to local and global environmental problems? Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Sociology Department

SOC 52561 - SOCIOLOGY OF RELIGION
Social context of religions and their ideologies and structures with special reference to religion in America. Prerequisite: Graduate standing in sociology.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Sociology Department

SOC 52563 - SOCIOLOGY OF HEALTH AND HEALTH CARE
Sociological analysis of health and illness behavior, utilization of health care, professions, and the organizational, community, and societal systems that deal with health and illness. Prerequisite: Graduate standing in sociology.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Sociology Department

**SOC 52564 - BUREAUCRATIC ORGANIZATIONS**

Analysis of structure and functioning of complex organizations in their cultural context. Prerequisite: Graduate standing in sociology.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Sociology Department

**SOC 52568 - RACE AND ETHNIC STUDIES**

Sociological principles underlying racial and ethnic relations in the United States; emphasis on social factors of prejudice, discrimination and assimilation affecting all groups. Prerequisite: Graduate standing in sociology.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Sociology Department

**SOC 52577 - SOCIOLOGY OF FAMILY VIOLENCE**

Sociological analysis of theories, research and social policy concerning family violence, child abuse and neglect, spouse abuse, elderly abuse, marital rape, sexual abuse of children. Prerequisite: Graduate standing in sociology.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Sociology Department

**SOC 52879 - AGING IN SOCIETY**

Analysis of demographic, sociological and sociopsychological dimensions of aging. Prerequisite: Graduate standing in sociology.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
**SOC 62002 - PROFESSIONAL AND ETHICAL ISSUES IN SOCIOLOGY**

Introduction to professional and ethical issues in the field of sociology including the logic of inquiry, developing effective approaches to independent learning and research, the human subjects review process and plagiarism. Akron 3850:628. Prerequisite: Graduate standing in sociology.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**SOC 62093 - VARIABLE TITLE WORKSHOP IN SOCIOLOGY**

(Repeatable for credit) Concentrates on professional or disciplinary concerns. Specific content to vary according to needs of client groups. Prerequisite: Graduate standing.

1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Workshop

**SOC 62100 - EARLY SOCIOLOGICAL THEORY**

An examination of the contributions by pre-1930 social thinkers to contemporary sociological theory. Akron 3850:722. Prerequisite: SOC 4/52126 and graduate standing in sociology.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

**SOC 62105 - CONTEMPORARY SOCIOLOGICAL THOUGHT**

Covers major contemporary theories and theorists. Emphasis on functionalism, conflict, exchange, interactionalism and systems theory. Neofunctionalism, neo-Marxism, structuration theory and other recent trends are treated. Akron 3850:723. Prerequisite: SOC 62100 or SOC 72100; and graduate standing in sociology.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**SOC 62199 - THESIS I**
Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester distributed over several semesters if desired. Prerequisite: Graduate standing in sociology and special approval.

2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Sociology Department

**SOC 62211 - QUANTITATIVE METHODS IN SOCIOLOGY**

Introduction to the use of quantitative research methods for analyzing sociological issues. Includes instruction on each step in the process of empirically verifying a theoretical question, from conceptualization to analysis. Akron 3850:603. Prerequisite: Graduate standing in sociology.

4.000 Credit hours
4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Sociology Department

**SOC 62217 - MULTIVARIATE TECHNIQUES IN SOCIOLOGY**

Advanced multivariate techniques and methodological problems in the analysis of sociological data. Topics include non-experimental causal models and path analysis. Akron 3850:706. Prerequisite: SOC 32220 and graduate standing in sociology.

4.000 Credit hours
4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Sociology Department

**SOC 62218 - ADVANCED DATA ANALYSIS**

Critical examination of data analytic techniques having particular relevance to research problems in sociology, with particular emphasis on multi-variate inferential statistics. Akron 3850:709. Prerequisite: SOC 6/72217 and graduate standing in sociology.

4.000 Credit hours
4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Sociology Department

**SOC 62219 - QUALITATIVE METHODS IN SOCIOLOGY**

Study of qualitative methods including interviewing, observation, use of personal documents, archival data and special problems of recording and analyzing qualitative data. Akron 3850:714. Prerequisite: Graduate standing in sociology.

4.000 Credit hours
4.000 Lecture hours
**SOC 62220 - SURVEY RESEARCH METHODS**

An in-depth study of the design and administration of social surveys. Akron 3850:711. Prerequisite: Graduate standing in sociology.

3.000 Credit hours
3.000 Other hours

**SOC 62299 - THESIS II**

Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: SOC 62199; and graduate standing in sociology; and special approval.

2.000 Credit hours
2.000 Other hours

**SOC 62323 - SOCIOLOGY OF HEALTH CARE**

A general study of the field of medical sociology with special emphasis on analysis of health and health care in the contemporary urban United States. Akron 3850:656. Prerequisite: Graduate standing in sociology.

3.000 Credit hours
3.000 Lecture hours

**SOC 62326 - SOCIOLOGY OF MENTAL HEALTH AND MENTAL DISORDERS**

Sociological examination of the social processes that affect mental health, frame cultural ideas of normality and illness, and define clinical pathology. Akron 3850: 728. Prerequisite: Graduate standing in sociology.

3.000 Credit hours
3.000 Lecture hours

**SOC 62328 - STRATIFICATION AND HEALTH**

Race, social class and gender differences in physical and mental health status, help seeking behavior and health
care. Race, class and gender stratification of health care workers. Akron 3850:726. Prerequisite: Graduate standing in sociology.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Sociology Department

**SOC 62430 - SOCIAL PSYCHOLOGY**

Examination of social psychological theory and research, both classic and contemporary. Provides student with background and working knowledge of social psychological aspects of social phenomena. Akron 3850: 631. Prerequisite: Graduate standing in sociology.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Sociology Department

**SOC 62433 - PERSONALITY AND SOCIAL SYSTEMS**

Examination of contemporary theory and research on linkages between personality and society. Emphasis will be on the dynamics of those linkages and their effects on both individuals and social structures. Akron 3850:634. Prerequisite: Graduate standing in sociology.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Sociology Department

**SOC 62435 - SOCIOLOGY OF SENTIMENTS AND EMOTIONS**

A sociological perspective is employed to analyze and understand the production, distribution and utilization of socially created sentiments and emotions. Prerequisite: Graduate standing in sociology.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Sociology Department

**SOC 62542 - SOCIOLOGY OF WORK**

Examination of work as behavioral phenomenon in human societies; contrasts with nonwork and leisure significance of occupations, professions and work types in organization of work. Akron 3850:649. Prerequisite: Graduate standing in sociology.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
SOC 62546 - SOCIAL STRATIFICATION TO SOCIAL INEQUALITIES
An overview of social inequalities -definitions, causes, identities, structures and consequences. The focus is on social class with attention to intersecting dimensions of inequality. Akron 3850:646. Prerequisite: Graduate standing in sociology.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

SOC 62566 - SOCIOLOGY OF GENDER
Examination of theories and research on gender origins, characteristics and changes. Emphasizes recent empirical research on gender role patterns and processes in various industrial societies. Akron 3850:639. Prerequisite: Graduate standing in sociology.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

SOC 62760 - DEVIANCE
Examination of nature, types and controls of deviance; analysis of conceptual levels, theoretical contributions, processes in social labeling and self-labeling, case studies, social consequences and problems. Akron 3850:663. Prerequisite: Graduate standing in sociology.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

SOC 62870 - SOCIOLOGY OF RACE AND ETHNICITY
An in-depth study of the theories, models, research approaches and substantive areas that constitute the sociology of race and ethnicity. Akron 3850:651. Prerequisite: Graduate standing in sociology.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

SOC 62877 - SOCIAL GERONTOLOGY
Impact of aging upon individuals and society. Reactions of individuals and society to aging. Akron 3850:678. Prerequisite: Graduate standing in sociology.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Sociology Department

**SOC 62894 - COLLEGE TEACHING OF SOCIOLOGY**

(Repeatable for credit) Preparation for college teaching. Maximum of 3 hours applicable toward master's degree requirements (with departmental approval). Hours do not count toward the doctoral degree. Akron 3850:700. Prerequisite: Graduate standing in sociology.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Sociology Department

**SOC 62895 - SPECIAL TOPICS**

(Repeatable for credit) Offered irregularly when unusual resources and/or opportunities permit. Topic will be announced when scheduled. Prerequisite: Graduate standing in sociology.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Sociology Department

**SOC 62896 - INDIVIDUAL INVESTIGATION**

(Repeatable for credit) Intensive pursuit of a subject matter beyond normal course coverage with the possibility of associated research. Only 3 credits count toward the Master's degree. Prerequisites: graduate standing and sociology (SOC) major and special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Sociology Department

**SOC 62898 - RESEARCH**

(Repeatable for credit) Pursuit of research interests which can include the student's project and/or a faculty member's project. Only 2 credits count toward the Master's degree. Prerequisites: graduate standing and sociology (SOC) major and special approval.
1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours
### SOC 72002 - PROFESSIONAL AND ETHICAL ISSUES IN SOCIOLOGY

Introduction to professional and ethical issues in the field of sociology including the logic of inquiry, developing effective approaches to independent learning and research, the human subjects review process and plagiarism. Akron 3850:628. Prerequisite: Doctoral standing in sociology.

3.000 Credit hours  
3.000 Lecture hours

### SOC 72093 - VARIABLE TITLE WORKSHOP IN SOCIOLOGY

(Repeatable for credit) Concentrates on professional or disciplinary concerns. Specific content to vary according to needs of client groups. Prerequisite: Doctoral standing.

1.000 TO 6.000 Credit hours  
1.000 TO 6.000 Other hours

### SOC 72100 - EARLY SOCIOLOGICAL THEORY

An examination of the contributions by pre-1930 social thinkers to contemporary sociological theory. Akron 3850:722. Prerequisite: SOC 4/52126 and doctoral standing in sociology.

3.000 Credit hours  
3.000 Other hours

### SOC 72105 - CONTEMPORARY SOCIOLOGICAL THOUGHT

Covers major contemporary theories and theorists. Emphasis on functionalism, conflict, exchange, interactionalism and systems theory. Neofunctionalism, neo-Marxism, structuration theory and other recent trends are treated. Akron 3850:723. Prerequisites: SOC 62100 or SOC 72100; and doctoral standing in sociology.

3.000 Credit hours  
3.000 Lecture hours

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Levels: Graduate  
Schedule Types: Research

Sociology Department

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Levels: Graduate  
Schedule Types: Lecture

Sociology Department

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Levels: Graduate  
Schedule Types: Workshop

Sociology Department

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Levels: Graduate  
Schedule Types: Seminar

Sociology Department

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Levels: Graduate  
Schedule Types: Lecture

Sociology Department
### SOC 72211 - QUANTITATIVE METHODS IN SOCIOLOGY

Introduction to the use of quantitative research methods for analyzing sociological issues. Includes instruction on each step in the process of empirically verifying a theoretical question, from conceptualization to analysis. Akron 3850:603. Prerequisite: doctoral standing in sociology.

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Levels: Graduate  
Schedule Types: Lecture  

Sociology Department

### SOC 72217 - MULTIVARIATE TECHNIQUES IN SOCIOLOGY

Advanced multivariate techniques and methodological problems in the analysis of sociological data. Topics include non-experimental causal models and path analysis. Akron 3850:706. Prerequisites: SOC 32220 and doctoral standing in sociology.

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Levels: Graduate  
Schedule Types: Lecture  

Sociology Department

### SOC 72218 - ADVANCED DATA ANALYSIS

Crucial examination of data analytic techniques having particular relevance to research problems in sociology, with particular emphasis on multi-variate inferential statistics. Akron 3850:709. Prerequisites: SOC 62217 or 72217; and doctoral standing in sociology.

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Levels: Graduate  
Schedule Types: Lecture  

Sociology Department

### SOC 72219 - QUALITATIVE METHODS IN SOCIOLOGY

Study of qualitative methods including interviewing, observation, use of personal documents, archival data, and special problems of recording and analyzing qualitative data. Akron 3850:714. Prerequisite: Doctoral standing in sociology.

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Levels: Graduate  
Schedule Types: Lecture  

Sociology Department

### SOC 72220 - SURVEY RESEARCH METHODS

An in-depth study of the design and administration of social surveys. Akron 3850:711. Prerequisite: Doctoral standing in sociology.

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Sociology Department
SOC 72323 - SOCIOLOGY OF HEALTH CARE

A general study of the field of medical sociology with special emphasis on analysis of health and health care in the contemporary urban United States. Akron 3850:656. Prerequisite: Doctoral standing in sociology.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Sociology Department

SOC 72326 - SOCIOLOGY OF MENTAL HEALTH AND MENTAL DISORDERS

Sociological examination of the social processes that affect mental health, frame cultural ideas of normality and illness, and define clinical pathology. Akron 3850:728. Prerequisite: Doctoral standing in sociology.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Sociology Department

SOC 72328 - STRATIFICATION AND HEALTH

Race, social, class and gender differences in physical and mental health status, help seeking behavior and health care. Race, class and gender stratification of health care workers. Akron 3850:726. Prerequisite: Doctoral standing in sociology.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Sociology Department

Course Attributes:
Joint Prgm/Consortial Agrmt

SOC 72430 - SOCIAL PSYCHOLOGY

Examination of social psychological theory and research, both classic and contemporary. Provides student with background and working knowledge of social psychological aspects of social phenomena. Akron 3850:631. Prerequisite: Doctoral standing in sociology.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
### SOC 72433 - PERSONALITY AND SOCIAL SYSTEMS

Examination of contemporary theory and research on linkages between personality and society. Emphasis will be on the dynamics of those linkages and their effects on both individuals and social structures. Akron 3850:634. Prerequisite: Doctoral standing in sociology.

- **3.000 Credit hours**
- **3.000 Lecture hours**

Levels: Graduate  
Schedule Types: Lecture

### SOC 72435 - SOCIOLOGY OF SENTIMENTS AND EMOTIONS

A sociological perspective is employed to analyze and understand the production, distribution and utilization of socially created sentiments and emotions. Prerequisite: Doctoral standing in sociology.

- **3.000 Credit hours**
- **3.000 Lecture hours**

Levels: Graduate  
Schedule Types: Lecture

### SOC 72542 - SOCIOLOGY OF WORK

Examination of work as behavioral phenomenon in human societies; contrasts with nonwork and leisure; significance of occupations, professions and work types in organization of work. Akron 3850:649. Prerequisite: Doctoral standing in sociology.

- **3.000 Credit hours**
- **3.000 Lecture hours**

Levels: Graduate  
Schedule Types: Lecture

### SOC 72546 - SOCIAL STRATIFICATION TO SOCIAL INEQUALITIES

An overview of social inequalities - definitions, causes, identities, structures, and consequences. The focus is on social class with attention to intersecting dimensions of inequality. Akron 3850:646. Prerequisite: Doctoral standing in sociology.

- **3.000 Credit hours**
- **3.000 Lecture hours**

Levels: Graduate  
Schedule Types: Lecture

### SOC 72566 - SOCIOLOGY OF GENDER
Examination of theories and research on gender origins, characteristics and changes. Emphasizes recent empirical research on gender role patterns and processes in various industrial societies. Akron 3850:639. Prerequisite: Doctoral standing in sociology.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Sociology Department

**SOC 72760 - DEVIANCE**

Examination of nature, types and controls of deviance; analysis of conceptual levels, theoretical contributions, processes in social labeling and self labeling, case studies, social consequences and problems. Akron 3850:663. Prerequisite: Doctoral standing in sociology.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Sociology Department

**SOC 72870 - SOCIOLOGY OF RACE AND ETHNICITY**

An in-depth study of the theories, models, research approaches, and substantive areas that constitute the sociology of race and ethnicity. Akron 3850:651. Prerequisite: Doctoral standing in sociology.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Sociology Department

**SOC 72877 - SOCIAL GERONTOLOGY**

Impact of aging upon individuals and society. Reactions of individuals and society to aging. Akron 3850:678. Prerequisite: Doctoral standing in sociology.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Sociology Department

**SOC 72894 - COLLEGE TEACHING OF SOCIOLOGY**

(Repeatable for credit) Preparation for college teaching. Hours do not count toward the doctoral degree. Akron 3850:700. Prerequisite: Doctoral standing in sociology.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab
**SOC 72895 - SPECIAL TOPICS**

(Repeatable for credit) Offered irregularly when unusual resources and/or opportunities permit. Topic will be announced when scheduled. Prerequisite: Doctoral standing in sociology.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**SOC 72896 - INDIVIDUAL INVESTIGATION**

(Repeatable for credit) Intensive pursuit of a subject matter beyond normal course coverage with the possibility of associated research. Only 3 credits count toward the doctoral degree. Prerequisites: doctoral standing and sociology (SOC) major and special approval.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

**SOC 72898 - RESEARCH**

(Repeatable for credit) Pursuit of research interests which can include the student's project and/or a faculty member's project. Only 4 credits count toward the doctoral degree. Prerequisites: doctoral standing and sociology (SOC) major and special approval.

1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

**SOC 82199 - DISSERTATION I**

(Repeatable for credit) Doctoral dissertation, for which registration in at least two semesters is required first of which will be semester in which dissertation is begun and continuing until 30 hours are completed. Akron 3850: 899. Prerequisite: Special approval and doctoral standing.

15.000 Credit hours
15.000 Other hours

Levels: Graduate
Schedule Types: Dissertation

**SOC 82299 - DISSERTATION II**
Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. Prerequisite: Special approval and doctoral standing.

15.000 Credit hours
15.000 Other hours

Levels: Graduate
Schedule Types: Dissertation

Sociology Department

**SPA 10002 - INTRODUCTION TO COMMUNICATION DISORDERS AND DIFFERENCES**

An introduction to communication disorders and differences using a) case studies via film and video review and critique, b) lecture, and c) class discussions. Covers speech, language, swallowing and hearing disorders and cultural and linguistic differences in communication. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Health Sciences Department

**SPA 33101 - HEARING SCIENCE**

Acoustics, psychoacoustics, bioacoustics, anatomy and physiology of the ear. Prerequisite: admittance into the SPA Professional Phase (minimum 3.000 cumulative GPA at 60 credits).

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Health Sciences Department

**SPA 34102 - APPLIED PHONETICS**

Basic principles of speech production and phonetic transcriptions of English with the international phonetic alphabet; emphasis on general American dialect. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Health Sciences Department

**SPA 34103 - ANATOMY AND PHYSIOLOGY OF SPEECH**

Functional anatomy and physiology of the respiratory, phonatory, articulatory and neural systems as they are used in speech production by talkers with normal and abnormal speech. Prerequisite: admittance into the SPA Professional Phase (minimum 3.000 cumulative GPA at 60 credits).

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
### SPA 34104 - SPEECH AND LANGUAGE ACQUISITION

Normal development and linguistic analysis of language systems including phonology, morphology, syntax, semantics, and pragmatics. Prerequisites: SPA 34102 or ENG 31001; and admittance into the SPA Professional Phase (minimum 3.000 cumulative GPA at 60 hours).

- **Credit hours:** 3.000
- **Lecture hours:** 3.000

**Levels:** Undergraduate

**Schedule Types:** Lecture

**Health Sciences Department**

### SPA 34105 - PHONEMIC BASES OF SPEECH AND LANGUAGE

Fundamental processes related to production and perception of spoken language, with parallels to writing and reading particular application to normal and hearing impaired children and adolescents. For nonmajors only. Prerequisite: None.

- **Credit hours:** 3.000
- **Lecture hours:** 3.000

**Levels:** Undergraduate

**Schedule Types:** Lecture

**Health Sciences Department**

### SPA 34106 - ARTICULATORY AND PHONOLOGICAL DISORDERS

Assessment and remediation of disorders of articulation and phonology. Prerequisites: SPA 34102 and SPA 34104; and admittance into the SPA Professional Phase (minimum 3.000 cumulative GPA at 60 credits).

- **Credit hours:** 3.000
- **Lecture hours:** 3.000

**Levels:** Undergraduate

**Schedule Types:** Lecture

**Health Sciences Department**

### SPA 34107 - LANGUAGE DISORDERS IN CHILDREN AND ADOLESCENTS

Introduction to assessment and intervention procedures associated with language disorders in children and adolescents. Prerequisite: SPA 34104; and admittance into the SPA Professional Phase (minimum 3.000 cumulative GPA at 60 credits).

- **Credit hours:** 3.000
- **Lecture hours:** 3.000

**Levels:** Undergraduate

**Schedule Types:** Lecture

**Health Sciences Department**

### SPA 34210 - SPEECH AND LANGUAGE DEVELOPMENT
Normal development and linguistic analysis of language systems including phonology, morphology, syntax, semantics, and pragmatics. This course is for non-SPA majors. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Health Sciences Department

**SPA 43402 - AUDIOMETRY**

Measurement of human hearing by pure-tone and speech audiometry; evaluation of middle ear function by immittance audiometry; screening techniques; pathologies of the conductive and sensorineural systems. Prerequisites: SPA 33101 with minimum C (2.000) grade and special approval; and admittance into the SPA Professional Phase (minimum 3.000 cumulative GPA at 60 credits).

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Health Sciences Department

**SPA 43403 - CLINICAL PREPARATION IN AUDIOLOGY**

Exercises and practical experiences in audiometric procedures, test interpretation, counseling and management of the hearing impaired. Prerequisite: special approval and admittance into the SPA Professional Phase (minimum 3.000 cumulative GPA at 60 hours). Corequisite: SPA 43402.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Health Sciences Department

Course Attributes:
Experiential Learning Requirem

**SPA 43404 - AURAL REHABILITATION**

Basic principles, variables and techniques for understanding, evaluating and improving receptive communication of hearing impaired individuals. Prerequisite: SPA 33101 and 34102 and 43402 (Speech Pathology and Audiology majors) or 43600 (Education of Hearing Impaired majors); and admittance into the SPA Professional Phase (minimum 3.000 cumulative GPA at 60 credits).

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Health Sciences Department

**SPA 43600 - FUNDAMENTALS OF EDUCATIONAL AUDIOLOGY**
Auditory development and function/dysfunction; auditory assessment and family counseling; selection and fitting of personal and classroom amplification; care and maintenance of amplification systems; collaboration of professionals in audiology and education; communication approaches according to varying levels of hearing loss; classroom environments conducive to auditory and academic learning. Prerequisite: Junior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Health Sciences Department

**SPA 44096 - INDEPENDENT STUDY: SPEECH PATHOLOGY AND AUDIOLOGY**

(Repeatable for credit)Readings and/or research on problems approved by chairman of department in consultation with student's adviser and project director. Prerequisite: Senior standing and speech pathology and audiology (SPA) major and special approval.

2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Health Sciences Department

**SPA 44110 - SPEECH SCIENCE**

Consideration of physiological and acoustic characteristics of normal speech production and perception with implications for speech and hearing disorders. Prerequisite: SPA 34102 and SPA 34106; and admittance into the SPA Professional Phase (minimum 3.000 cumulative GPA at 60 credits).

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Health Sciences Department

**SPA 44111 - NEURAL PROCESSES**

Anatomy and physiology of the nervous system underlying human neuromotor movements. Topics include: definition and fundamental concepts, afferent and efferent systems, cortical anatomy and function, cranial nerves theories of brain function and neural maturation and learning. Prerequisite: SPA 34103 or special approval of the instructor; and admittance into the SPA Professional Phase (minimum 3.000 cumulative GPA at 60 credits).

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Health Sciences Department

**SPA 44112 - AGE-RELATED CHANGES IN COMMUNICATION**

Nonpathological age-related changes in speech, language and voice. Topics include structural changes in orofacial, laryngeal and respiratory mechanism; sequelae for speech, language and voice in the elderly; effects of age on swallowing; facilitating conversational interactions with elderly individuals. Prerequisite: admittance
into the SPA Professional Phase (minimum 3.000 cumulative GPA at 60 credits).
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Health Sciences Department

**SPA 44130 - COMMUNICATION DISORDERS OF THE AGING**

Hearing, speech and language disorders in geriatric population. Symptoms, causes and treatment: normal changes in hearing, language and speech accompanying aging process. Prerequisite: Senior standing.
2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Health Sciences Department

**SPA 44310 - CLINICAL PROCEDURES**

Examination of evaluative and therapeutic procedures used with communicatively-impaired children and adults. Prerequisite: SPA 34103 or 34106; and admittance into the SPA Professional Phase (minimum 3.000 cumulative GPA at 60 credits).
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Health Sciences Department

**SPA 44311 - CLINICAL PREPARATION IN SPEECH-LANGUAGE PATHOLOGY**

Fundamental evaluation and management procedures of individuals with communication disorders, including supervised observation. Prerequisite: admittance into the SPA Professional Phase (3.000 cumulative GPA at 60 hours). Corequisite: SPA 44310.
2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Course Attributes:
Experiential Learning Requirem, Writing Intensive Course

**SPA 53402 - AUDIOMETRY**

Measurement of human hearing by pure-tone and speech audiometry; evaluation of middle ear function by immittance audiometry; screening techniques; pathologies of the conductive and sensorineural systems. Prerequisite: SPA 33101 with a grade of C (2.000) or better. Graduate standing.
3.000 Credit hours
3.000 Lecture hours
**SPA 53404 - AURAL REHABILITATION**

Basic principles, variables and techniques for understanding, evaluating and improving receptive communication of hearing impaired individuals. Prerequisite: Education of Hearing Impaired majors: SPA 43600; Speech Pathology and Audiology majors: SPA 33101 and SPA 34102 and SPA 43402. Graduate standing.

3.000 Credit hours
3.000 Lecture hours

**SPA 54096 - INDEPENDENT STUDY: SPEECH PATHOLOGY AND AUDIOLOGY**

(Repeatable for credit) Readings and/or research on problems approved by chair of department in consultation with student's adviser and project director. Prerequisite: Special approval and graduate standing.

2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

**SPA 54110 - SPEECH SCIENCE**

Consideration of physiological and acoustic characteristics of normal speech production and perception with implications for speech and hearing disorders. Prerequisite: SPA 34102 and 34106. Graduate standing.

3.000 Credit hours
3.000 Lecture hours

**SPA 54111 - NEURAL PROCESSES IN SPEECH AND LANGUAGE**

Anatomy and physiology of the nervous system underlying speech and language. Topics include: definition and fundamental concepts, afferent and efferent systems, cortical anatomy and function, cranial nerves, theories of brain function and neural maturation and learning. Prerequisite: SPA 34103 or special approval of the instructor. Graduate standing.

3.000 Credit hours
3.000 Lecture hours
**SPA 54112 - AGE-RELATED CHANGES IN COMMUNICATION**

Nonpathological age-related changes in speech, language and voice. Topics include: structural changes in orofacial, laryngeal and respiratory mechanisms; sequelae for speech, language and voice in the elderly; effects of age on swallowing; facilitating conversational interactions with elderly individuals. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

**SPA 54130 - COMMUNICATION DISORDERS OF THE AGING**

Hearing, speech and language disorders in geriatric population. Symptoms, causes and treatment: normal changes in hearing, language and speech accompanying aging process. Prerequisite: Graduate standing.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

**SPA 54310 - CLINICAL PROCEDURES**

An examination of evaluative and therapeutic procedures used with communicatively impaired children and adults. Prerequisite: SPA 34103 or SPA 34106 and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

**SPA 63691 - SEMINAR IN AUDIOLOGY**

(Repeatable for a maximum of 12 credit hours) Research, readings and discussion in any of these areas: aural rehabilitation, amplification, psychoacoustics, auditory physiology, medical audiology, hearing conservation. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Health Sciences Department

**SPA 64091 - SEMINAR IN COMMUNICATION DISORDERS**

(Repeatable for a maximum of 9 credit hours) Special topics seminar for advanced students in speech-language pathology and audiology. Presentations and discussion of research projects are required. Prerequisite: Graduate standing.

1.000 TO 3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Health Sciences Department

**SPA 64093 - WORKSHOP IN COMMUNICATION DISORDERS**

(Repeatable for credit)Variable topic workshop offered when need arises, either on or off campus to update training in a particular area of speech pathology. Prerequisite: Graduate standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Health Sciences Department

**SPA 64096 - INDIVIDUAL INVESTIGATION:SPEECH PATHOLOGY AND AUDIOLOGY**

(Repeatable for a maximum of 12 credit hours)Independent study of topics to be selected in consultation with graduate faculty. Prerequisite: Graduate standing and special approval.

1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Health Sciences Department

**SPA 64098 - RESEARCH**

(Repeatable for credit)Research or individual investigation for master's level graduate students. Prerequisite: Graduate standing and special approval.

1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

Health Sciences Department

**SPA 64191 - SEMINAR:NEUROGENIC COMMUNICATION DISORDERS**

(Repeatable for a maximum of 9 credit hours)Reading and discussion seminar on swallowing disorders and the communication disorders relating to aphasia, apraxia, dysarthria, closed head injury, right brain damage and dementia. Prerequisite: SPA 64301. Graduate standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Health Sciences Department
SPA 64199 - THESIS I

Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester distributed over several semesters if desired. Prerequisite: Graduate standing and special approval.
2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Health Sciences Department

SPA 64291 - SEMINAR: CHILD LANGUAGE

(Repeatable for a maximum of 9 credit hours) Topics are selected for class investigation from the areas of child language development or disorders. Prerequisite: Special approval and graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Health Sciences Department

SPA 64299 - THESIS II

Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: SPA 64199 and graduate standing and special approval.
2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Health Sciences Department

SPA 64301 - APHASIA

Neuroanatomy, etiologies, symptomatologies, evaluation procedures and treatment techniques relating to aphasia in adults. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

SPA 64302 - LANGUAGE ASSESSMENT AND INTERVENTION IN EARLY CHILDHOOD

Methods of language assessment and intervention for infants, toddlers and preschoolers who are either at risk or diagnosed as presenting language delays or disabilities. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
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<th>Prerequisites</th>
<th>Credit Hours</th>
<th>Lecture Hours</th>
<th>Levels</th>
<th>Schedule Types</th>
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<tr>
<td>SPA 64303</td>
<td>DISORDERS OF ARTICULATION AND PHONOLOGY</td>
<td>Diagnosis and remediation of children's articulation and phonological disorders.</td>
<td>Graduate standing</td>
<td>3.000</td>
<td>3.000</td>
<td>Graduate</td>
<td>Lecture</td>
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<tr>
<td>SPA 64304</td>
<td>ACQUIRED COGNITIVE COMMUNICATIVE IMPAIRMENTS</td>
<td>Cognitive functions and etiologies, symptomologies, evaluation and treatment methods related to adults with cognitive communicative disorders subsequent to right hemisphere damage, traumatic brain injury, dementia and related impairments.</td>
<td>Graduate standing and speech language pathology (SPA) major.</td>
<td>3.000</td>
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<td>Graduate</td>
<td>Lecture</td>
</tr>
<tr>
<td>SPA 64305</td>
<td>FLUENCY DISORDERS</td>
<td>Nature, theories and their derived therapeutic approaches to the treatment of fluency disorders.</td>
<td>speech language pathology (SLP) major and graduate standing.</td>
<td>3.000</td>
<td>3.000</td>
<td>Graduate</td>
<td>Lecture</td>
</tr>
<tr>
<td>SPA 64306</td>
<td>VOICE DISORDERS</td>
<td>Normal aspects of voice production, etiology and symptomatology of voice disorders, diagnostic procedures and management techniques.</td>
<td>Graduate standing</td>
<td>2.000</td>
<td>2.000</td>
<td>Graduate</td>
<td>Lecture</td>
</tr>
<tr>
<td>SPA 64307</td>
<td>DYSARTHRIA</td>
<td>Neuro-anatomy, etiologies, symptomatologies, evaluation procedures and treatment techniques relating to dysarthria in adults.</td>
<td>Graduate standing</td>
<td>2.000</td>
<td>2.000</td>
<td>Graduate</td>
<td>Lecture</td>
</tr>
</tbody>
</table>
SPA 64308 - LANGUAGE ASSESSMENT AND INTERVENTION WITH SCHOOL-AGE POPULATIONS

Theoretical background knowledge and practical assessment and intervention techniques for school-age children who demonstrate language disorders. Prerequisite: SPA 34107. Graduate standing.

SPA 64309 - AUTISM SPECTRUM DISORDERS: THEORY AND DIAGNOSIS

(Cross-listed with SPA 74309, SPED 44309 and SPED 64309) Provides an overview of Autism Spectrum Disorders (ASD). Examines the history, characteristics, and prevalence of ASD. The different theoretical models for understanding ASD are explored as they relate to assessment and intervention. Prerequisite: graduate standing.

SPA 64310 - AUTISM SPECTRUM DISORDERS: LIFESPAN INTERVENTIONS

Provides students with a review of the significant aspects related to educational, social, vocational transitions for children, adolescents, and young adults with ASD. Students learn skills necessary to evaluate and develop programs designed to meet the changing and long term needs of individuals with ASD. Prerequisite: graduate study.

SPA 64311 - AUTISM SPECTRUM DISORDERS

Provides an overview of the social, communication, and language needs of those with ASD. Reviews contemporary assessment and intervention strategies. This course is designed to prepare preservice speech language pathologists with foundational information about Autism Spectrum Disorders. Prerequisite: graduate standing.
SPA 64312 - MOTOR SPEECH DISORDERS IN CHILDREN AND ADULTS

(Cross-listed with SPA 74312) Anatomic and physiologic bases of congenital and acquired motor speech disorders. Etiology, symptomatology, evaluation and treatment techniques related to variety of motor speech disorders in children and adults. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

SPA 64354 - MAXILLOFACIAL ANOMALIES

Nature and rehabilitative procedures for individuals with congenital and acquired maxillofacial anomalies and resonance disorders. Prerequisite: Graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

SPA 64356 - PEDIATRIC AND ADULT DYSPHAGIA

Anatomy, etiologies, symptomatologies, evaluation procedures and treatment techniques relating to swallowing disorders in adults and children. Prerequisite: Graduate standing.
4.000 Credit hours
4.000 Lecture hours

SPA 64391 - SEMINAR:SEMINAR:ARTICULATION AND PHONOLOGY

(Repeatable for a maximum of 9 credit hours)Critical review and application of systems and methods for assessment and remediation of articulation and phonological disorders. Prerequisite: Graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

SPA 64491 - SEMINAR:ORGANIC SPEECH DISORDERS
A revolving topics seminar on theoretical and/or clinical issues related to neurogenic/organic speech and/or language disorders. Prerequisite: Graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Health Sciences Department

**SPA 64492 - CLINICAL PRACTICE IN SPEECH PATHOLOGY AND AUDIOLOGY**

(Repeatable for credit)Supervised clinical practice with patients who have speech, hearing or language problems. Prerequisite: Special approval and graduate standing.
1.000 TO 12.000 Credit hours
1.000 TO 12.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Health Sciences Department

**SPA 64500 - NORMAL LANGUAGE PROCESSES**

Examines current theory and research specific to normal human development from birth to age 21. Significant neurological, cognitive, social, linguistic, emotional, literacy, and motor developmental changes are explored. Prerequisites: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

**SPA 64501 - SOCIAL COMMUNICATION ASPECTS OF AUTISM SPECTRUM DISORDER**

(Cross-listed with SPA 74501) Provides an understanding of the social, communication, and language needs of those with ASD from childhood through adulthood. Examines the cognitive, neurological, social, and environmental components influencing social, communicative functioning. Reviews contemporary assessment and intervention strategies. Explores use of assistive technology to enhance social communicative functioning in those with ASD. Prerequisite: graduate standing
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

**SPA 64504 - ADVANCED SPEECH AND VOICE SCIENCE**

Application of normal and disordered speech, swallowing, and voice production and perception; survey of literature; theories of production and perception. Prerequisite: SPA 4/54110. Graduate standing.
3.000 Credit hours
3.000 Lecture hours
### SPA 64525 - PUBLIC SCHOOL TECHNIQUES IN COMMUNICATION DISORDERS: INQUIRY INTO PROFESSIONAL PRACTICE

Inquiry into speech pathology and audiology as practiced in the school setting; emphasis on speech language pathologist or audiologist as disciplined investigator. Combination of themes including organizational procedures, therapy techniques, collaboration, ethics and research. Prerequisite: Special approval; and graduate standing. Corequisite: SPA 64528.

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### SPA 64528 - STUDENT TEACHING IN SPEECH-LANGUAGE PATHOLOGY AND AUDIOLOGY

Inquiry into speech pathology and audiology as practiced in the school setting; emphasis on speech language pathologist or audiologist as disciplined investigator. Combination of themes including organization, procedures, therapy techniques, collaboration, ethics and research. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned “school/agency” before the first day of the semester in which student teaching/internship will take place. Prerequisite: Special approval; and Official valid certification of Child Safety Training, approved Basic Life Support and A.L.I.C.E. Training must be presented to the campus office of clinical experience or designated faculty/staff at Regional campuses as prerequisite for student teaching. Corequisite: SPA 64525.

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<tr>
<th>Credit hours</th>
<th>Other hours</th>
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### SPA 64591 - SEMINAR: FLUENCY DISORDERS

(Repeatable for a maximum 9 credit hours) Seminar dealing with the theoretical and applied aspects of fluency disorders in children and adults. Prerequisite: Graduate standing.

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<th>Credit hours</th>
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### SPA 64600 - RESEARCH METHODS IN SPEECH-LANGUAGE PATHOLOGY AND AUDIOLOGY

Methodologies for collecting, analyzing and interpreting data for clinical and research purposes in speech language pathology and audiology. Prerequisite: Graduate standing.

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<th>Credit hours</th>
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SPA 64691 - SEMINAR: VOICE DISORDERS

(Repeatable for a maximum of 9 credit hours) Current literature review and discussions dealing with varying topics ranging from normal aspects of phonation in various populations to disorders of voice and their diagnosis and treatment. Prerequisite: SPA 6/74306. Graduate standing.  
1.000 TO 3.000 Credit hours  
1.000 TO 3.000 Other hours

Health Sciences Department

SPA 64791 - SEMINAR: SPEECH SCIENCE

(Repeatable for a maximum of 9 credit hours) Consideration of selected topics related to physiological, anatomical and acoustic aspects of speech production and perception. Prerequisites: SPA 4/54110 and SPA 6/74504. Graduate standing.  
1.000 TO 3.000 Credit hours  
3.000 Other hours

Health Sciences Department

SPA 64891 - SEMINAR: COMMUNICATION MODALITIES AND ASSISTIVE TECHNOLOGY

(Repeatable for credit) Nature, etiologies and correlates of speech/language communication disorders and differences that may indicate a need for a multi-modal communication approach. Includes an emphasis on assistive technology for communication, language, learning and literacy. Prerequisite: SPA 64500 and SPA 64302; and graduate standing.  
3.000 Credit hours  
3.000 Other hours

Health Sciences Department

SPA 64991 - SEMINAR: CRITICAL TOPICS IN SPEECH LANGUAGE

(Repeatable for credit) Principles and methods of assessment and intervention for various topics in speech-language pathology from critical thinking and case-study framework. Prerequisite: Instructor special approval and speech pathology and audiology (SPA) major only and graduate standing.  
1.000 TO 3.000 Credit hours  
1.000 TO 3.000 Other hours

Health Sciences Department
SPA 65092 - CLINICAL PRACTICUM I IN SPEECH LANGUAGE PATHOLOGY

(Cross-listed with SPA 75092) (Repeatable twice for credit) Supervised, introductory clinical experience in assessment and intervention with populations within the Scope of Practice of speech language pathology per the current practice policy of the American Speech Language Hearing Association. To facilitate clinical competency and accrual of required clinical clock hours per current ASHA standards, students are expected to enroll in Clinical Practicum each semester that they are not enrolled in Externship or Student Teaching. A grade of B or better in this course is required for permission to register in SPA 65192. Prerequisite: graduate standing and special approval.

2.000 TO 3.000 Credit hours
8.000 TO 12.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Health Sciences Department

SPA 65192 - CLINICAL PRACTICUM II IN SPEECH AND LANGUAGE PATHOLOGY

(Cross-listed with SPA 75192) (Repeatable twice for credit) This course includes additional supervised, hands on clinical experience with clients in on campus clinics. Student clinicians are provided with opportunities to demonstrate increased independence in clinical decision making and performance. Practicum requirements may include attendance at a weekly Clinical Colloquium. A grade of B or better in this course is required for registration in SPA 65292. Prerequisites: graduate standing and special approval; and SPA 65092 with a minimum B grade.

2.000 TO 3.000 Credit hours
8.000 TO 12.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Health Sciences Department

SPA 65292 - CLINICAL PRACTICUM III IN SPEECH LANGUAGE PATHOLOGY

(Cross-listed with SPA 75292) (Repeatable twice for credit) Includes additional supervised, hands on clinical experience with clients in on campus clinics and or off-campus, supervised clinical experience in sites such as schools or long term care facilities. Students clinicians are provided with opportunities to demonstrate levels of independence in clinical decision making and performance that reflect readiness for Externship or Student Teaching experiences. Practicum requirements may include attendance at a weekly Clinical Colloquium. A grade of B or better in this course is required for permission to register in the following courses: Clinical Practicum IV in Speech Language Pathology SPA 65392, Externship in Speech Language Pathology: Adult SPA 65492, Externship in Speech Language Pathology: Pediatric SPA 65592, Student Teaching in Speech Language Pathology SPA 64528. Prerequisites: graduate standing and special approval; and SPA 65192 with B grade.

2.000 TO 3.000 Credit hours
8.000 TO 12.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Health Sciences Department

SPA 65392 - CLINICAL PRACTICUM IV IN SPEECH LANGUAGE PATHOLOGY

(Cross-listed with SPA 75392) (Repeatable twice for credit) This supervised, hands on clinical experience with
clients in on campus clinics or off campus sites is for second year graduate students who are not yet scheduled for Externship or Student Teaching. Students clinicians are provided with opportunities to demonstrate levels of independence in clinical decision making and performance that are reflective of readiness for Externship or Student Teaching experiences. A grade of B or better in this course is required for permission to register in the following courses: Externship in Speech Language Pathology: Adult SPA 65492, Externship in Speech Language Pathology: Pediatric SPA 65592, Student Teaching in Speech Language Pathology SPA 65428. Prerequisites: graduate standing and special approval; and SPA 65292 with a minimum B grade.

2.000 TO 3.000 Credit hours
8.000 TO 12.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Health Sciences Department

**SPA 65492 - EXTERNSHIP IN SPEECH LANGUAGE PATHOLOGY: ADULT**

(Cross-listed with SPA 75492) (Repeatable once for credit) Considered a culminating clinical experience. Includes supervised, hands-on clinical experience with patients in adult care settings such as hospitals, rehabilitation and long term care facilities. Prerequisites: graduate standing and permission; and SPA 65292 or SPA 65392 with a minimum B grade.

4.000 TO 8.000 Credit hours
20.000 TO 40.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Health Sciences Department

**SPA 65592 - EXTERNSHIP IN SPEECH LANGUAGE PATHOLOGY: PEDIATRIC**

(Cross-listed with SPA 75592) (Repeatable once for credit) Considered a culminating clinical experience. Students may choose this course as an alternative to Student Teaching in Speech-Language Pathology. Includes supervised, hands-on clinical experience with children and adolescents in pediatric care settings such as hospitals and other habilitation and rehabilitation facilities. Prerequisite: graduate standing and special approval; and SPA 65292 or SPA 65392 with a minimum B grade.

4.000 TO 8.000 Credit hours
20.000 TO 40.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Health Sciences Department

**SPA 70615 - CENTRAL AUDITORY PROCESSING EVALUATION AND MANAGEMENT**

Study of audiologic evaluation and (re)habilitation procedures for people central auditory processing disorders. Prerequisites: SPA 70705 and SPA 70706; and doctoral standing.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

**SPA 70616 - HEARING AID FITTING AND SELECTION ACROSS THE LIFESPAN**
Examination of the theory and practice of fitting hearing aids across the lifespan. Emphasis on special clinical procedures, research needs and evolving technology in hearing instruments. Prerequisites: SPA 70713; and admission to the audiology (AUD) major; and doctoral standing.

4.000 Credit hours
4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

**SPA 70618 - IMPLANTABLE TECHNOLOGY**

Study of implantable devices in children and adults including equipment, candidacy, programming, fitting, and troubleshooting. Prerequisites: admission to the audiology (AUD) major; and doctoral standing.

4.000 Credit hours
4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

**SPA 70627 - MULTICULTURAL ISSUES IN AUDIOLOGY**

An introduction to varying cultures and the audiologist's roles and responsibilities in planning treatment with a member of these cultures. Prerequisites: admission to the audiology (AUD) major; and doctoral standing.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

**SPA 70630 - PROJECT MANAGEMENT IN AUDIOLOGY**

Study of issues which impact the management of audiological practices, including establishing a private practice, reimbursement, marketing, record keeping and professional liability. Prerequisites: admission to the audiology (AUD) major; and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

**SPA 70691 - SEMINAR IN AUDIOLOGY**

(Repeatable for credit) Selected current topics in audiology with emphasis on review of current literature. Prerequisite: Admission to the AU.D. program or special approval of the instructor and doctoral standing.

2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Seminar
Health Sciences Department

**SPA 70692 - INTERNSHIP IN AUDIOLOGY**

(Repeatable for credit) Supervised practicum in audiology requiring the independent performance of basic audiologic procedures, including hearing aid management. Prerequisite: SPA 70744 and special approval and doctoral standing.

2.000 Credit hours
18.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Health Sciences Department

**SPA 70701 - BASIC AND APPLIED PHYSICAL ACOUSTICS FOR AUDIOLOGY**

Study of physical acoustics, basic electricity and electronics, as well as principles, methodology, calibration and maintenance of audiologic equipment. Prerequisite: Admission to the AU.D. program or special approval of instructor and doctoral standing.

4.000 Credit hours
4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

**SPA 70702 - ANATOMY AND PHYSIOLOGY OF PERIPHERAL AUDITORY AND VESTIBULAR SYSTEMS**

A study of the anatomy, biophysics and physiology of the auditory and vestibular systems. Prerequisite: Admission to the Au.D program or special approval of instructor and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

**SPA 70703 - ACOUSTIC PHONETICS**

Study of the acoustics, measurement and nomenclature of speech sounds and theoretical and acoustic bases of speech perception (includes 1 hour lab). Prerequisite: Admission to the AU.D. program and doctoral standing.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Health Sciences Department

**SPA 70704 - CRITICAL ANALYSIS OF RESEARCH IN AUDIOLOGY**
General introduction to the research process with an emphasis on acquiring a reading knowledge of research and an ability to evaluate research. Prerequisite: Admission to the AU.D. program and doctoral standing.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

**SPA 70705 - AUDITORY DISORDERS**

Study of conditions/diseases that can affect the auditory system. Prerequisite: Admission to the AU.D. program and doctoral standing.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

**SPA 70706 - ANATOMY AND PHYSIOLOGY UNDERLYING NEURO-OTOLOGY**

An in-depth study of the anatomy and physiology of the central auditory and vestibular nervous system (includes 1 hour lab.) Prerequisite: SPA 70702 and doctoral standing.

4.000 Credit hours
4.000 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Health Sciences Department

**SPA 70707 - PSYCHOACoustics**

Study of the principles, procedures and research of psychoacoustics; the relationships between the physical dimensions of auditory stimuli and the resultant perceptual experience with normal and impaired hearing. Prerequisite: Admission to the AU.D. program and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

**SPA 70708 - CRITICAL ANALYSIS OF RESEARCH**

Development of a reading knowledge of research and the ability to evaluate the quality of research studies. Prerequisite: SPA 70704 and doctoral standing.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
**SPA 70709 - AUDIOLOGIC ASSESSMENT**

Theoretical basis for tests underlying basic audiologic assessments. Prerequisite: Admission to the Au.D. program and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**SPA 70710 - INDUSTRY AND COMMUNITY NOISE**

Theoretical principles of noise measurement; etiology of noise-induced hearing loss and acoustic trauma; industrial hearing conservation programs; occupational safety and health act; community and recreational noise evaluation and management. Prerequisite: Admission to the AU.D. program and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**SPA 70711 - SPEECH-LANGUAGE PATHOLOGY FOR THE AUDIOLOGIST**

Examination of normal and abnormal aspects of speech and language including their impact on auditory function and testing. Prerequisite: Admission to the AU.D. program and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**SPA 70712 - DIAGNOSIS OF AUDITORY DISORDERS**

Underlying theory and principles of administration and interpretation of site-of-lesion tests. Prerequisite: SPA 70709 and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**SPA 70713 - HEARING AID TECHNOLOGY**

Study of amplification systems for the hearing impaired. Prerequisite: SPA 70701 and doctoral standing.

4.000 Credit hours
4.000 Lecture hours
### SPA 70714 - GERONTOLOGICAL ISSUES IN AUDIOLOGY

Physiological, psychological and sociological theories of aging with a focus on the etiology, symptomatology, assessment and rehabilitation of older adults with hearing impairments. Prerequisite: Admission to the AU.D. program and doctoral standing.

- 3.000 Credit hours
- 3.000 Lecture hours

### SPA 70715 - CENTRAL AUDITORY PROCESSING: EVALUATION AND MANAGEMENT

Study of audiologic evaluation and habilitation/rehabilitation procedures for people having central auditory disabilities. Prerequisite: SPA 70705 and SPA 70706 and doctoral standing.

- 3.000 Credit hours
- 3.000 Lecture hours

### SPA 70716 - ADULT HEARING-AID FITTING AND SELECTION

Examination of the theory and practice of fitting hearing aids. Emphasis on special clinical procedures research needs and evolving technology in hearing instruments. Includes a one hour lab. Prerequisite: SPA 70713 and doctoral standing.

- 3.000 Credit hours
- 3.000 Other hours

### SPA 70717 - PEDIATRIC AUDIOLOGY

Study of audiologic diagnostic and auditory habilitative protocols for the birth to 3 population. Both assessment and management strategies will be emphasized. Prerequisite: SPA 70709 and doctoral standing.

- 3.000 Credit hours
- 3.000 Lecture hours
SPA 70718 - COCHLEAR IMPLANTS

Study of cochlear implants in children and adults including equipment, candidacy, mapping and overview of (re)habilitation. Prerequisite: Admission to the Au.D. program and doctoral standing.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

SPA 70719 - COUNSELING IN AUDIOLOGY

Focus on interviewing, counseling and interacting with individuals with hearing impairments, their families and significant others. Prerequisite: Admission to the Au.D. program and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

SPA 70720 - PEDIATRIC AMPLIFICATIONS

The focus of study is on amplification systems and fitting techniques for the pediatric population. Prerequisite: SPA 70713 and SPA 70716 and SPA 70717 and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

SPA 70721 - EVALUATION AND MANAGEMENT OF BALANCE DISORDERS

Study of the balance mechanism; differential diagnostic assessment of balance disorders including electronystagmography, posturography and rotational testing; rehabilitation of the balance disordered patient (1 hour lab included.) Prerequisite: Admission to the Au.D. program or special approval of instructor and doctoral standing.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Health Sciences Department

SPA 70722 - AUDIOLOGIC MANAGEMENT OF THE SCHOOL-AGE CHILD

Focus on educational audiology. Features delivery of audilogic services designed to access the school environment for children ages 4-21. Prerequisite: SPA 70717 and doctoral standing.

3.000 Credit hours
3.000 Lecture hours
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<th>Course Title</th>
<th>Description</th>
<th>Levels</th>
<th>Schedule Types: Lecture</th>
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<tr>
<td>SPA 70723</td>
<td>AUDIOLOGIC TREATMENT OF ADULTS</td>
<td>Study of current methodologies employed in the audiologic rehabilitation of adults with hearing impairments. Implementation of remedial strategies is emphasized. Prerequisite: SPA 70716 or special approval of instructor and doctoral standing.</td>
<td>Graduate</td>
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<tr>
<td>SPA 70724</td>
<td>HISTORY OF AUDIOLOGY</td>
<td>An examination of the history of deafness/hearing impairment and the profession of audiology. Prerequisite: Admission to the AU.D. program and doctoral standing.</td>
<td>Graduate</td>
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<td>SPA 70725</td>
<td>MEDICAL MANAGEMENT OF AUDITORY DISORDERS</td>
<td>A study of the multidisciplinary approach to medical/surgical management of patients with auditory and vestibular disorders. Prerequisite: SPA 70712 and doctoral standing.</td>
<td>Graduate</td>
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<td>SPA 70726</td>
<td>ELECTROPHYSIOLOGICAL TECHNIQUES IN AUDIOLOGY</td>
<td>Study of evoked responses used in diagnostic audiology, including ABR, MLR,ECHOCHG, ENOG, ALR, P300, VER, and SSER. Prerequisite: SPA 70706 and doctoral standing.</td>
<td>Graduate</td>
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<td>3.000 Lecture hours</td>
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<tr>
<td>SPA 70727</td>
<td>CULTURAL ISSUES IN DEAFNESS</td>
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Health Sciences Department
An introduction to deaf culture and the audiologist's roles and responsibilities in planning treatment with a member of the deaf community. Prerequisite: Admission to the AU.D. program and doctoral standing.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

**SPA 70730 - PRACTICE MANAGEMENT IN AUDIOLOGY**

Study of issues which impact the management of audiological practices, including establishing a private practice, reimbursement, marketing, record keeping and professional liability. Prerequisite: Admission to the AU.D. program and doctoral standing.

4.000 Credit hours
4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

**SPA 70732 - AUDIOLOGIC TREATMENT ACROSS THE LIFESPAN**

Study of current methodologies employed in the audiologic treatment of people with hearing loss across the lifespan. Implementation of remedial strategies is emphasized. Prerequisites: SPA 70616; admission to the audiology (AUD) major; and doctoral standing.

4.000 Credit hours
4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

**SPA 70733 - ADVANCED ELECTROPHYSIOLOGIC AND VESTIBULAR MEASURES**

Advanced considerations in balance function assessment and management and in the study of evoked responses used in diagnostic audiology. Prerequisites: SPA 70726 and SPA 70721; admission into the Audiology program and doctoral standing.

4.000 Credit hours
4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

**SPA 70734 - PRINCIPLES IN PRECEPTING**

Examination of the concepts and practices essential to the preceptor role. Emphasis on professional standards, adult learning theories, communication styles, ethical principles, and the multiple roles of a preceptor (educator, role model, mentor, facilitator and evaluator). Prerequisites: SPA 70748; and admission into the audiology (AUD) major; and doctoral standing.

1.000 Credit hours
1.000 Lecture hours
SPA 70741 - DIRECTED OBSERVATION IN AUDIOLOGY I

Introduction to clinical practicum in audiology. Directed observation of clinical practice including audiologic diagnosis and audiologic rehabilitation are required. Prerequisite: Admission to the Au.D. program or special approval of the instructor and doctoral standing.
1.000 Credit hours
1.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

SPA 70742 - DIRECTED OBSERVATION IN AUDIOLOGY II

Introduction to clinical practicum in audiology. Directed observation of clinical practice including audiologic diagnosis and audiologic rehabilitation are required. Prerequisite: Admission to the Au.D. program and doctoral standing and special approval.
1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Health Sciences Department

SPA 70743 - CLERKSHIP I

Clinical practicum in audiology during which students perform discrete tasks under supervision. Prerequisites: special approval of instructor and doctoral standing. Corequisite: SPA 70709.
1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Health Sciences Department

SPA 70744 - CLERKSHIP II

Supervised clinical practicum in audiology during which students will perform discrete clinical tasks while under supervision. Prerequisite: SPA 70743 and special approval and doctoral standing.
1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Health Sciences Department
SPA 70747 - GRADUATE AUDIOLOGIST I

Supervised clinical practicum in audiology which encompasses audiologic assessments and audiologic habilitation. Prerequisite: SPA 70792 and doctoral standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Health Sciences Department

SPA 70748 - GRADUATE AUDIOLOGIST II

Supervised clinical practicum in audiology requiring the independent performance of audiologic assessment procedures, audiologic rehabilitation and vestibular assessment and rehabilitation. Prerequisite: SPA 70747 and doctoral standing and special approval.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Health Sciences Department

SPA 70749 - GRADUATE AUDIOLOGIST III

Full-time clinical practicum in audiology at an off-campus site. Prerequisite: SPA 70748 and passing score of 600 or higher on the PRAXIS examination and doctoral standing and special approval. Corequisite: SPA 70791.
8.000 Credit hours
8.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Health Sciences Department

SPA 70750 - GRADUATE AUDIOLOGIST IV

Full-time clinical practicum in audiology at an off-campus site. Students taking the course must have successfully completed the Praxis Examination. Prerequisite: SPA 70749 and doctoral standing. Corequisite: SPA 70791.
8.000 Credit hours
8.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Health Sciences Department

SPA 70751 - GRADUATE AUDIOLOGIST V

Full-time clinical practicum in audiology at an off-campus site. Prerequisite: SPA 70750 and doctoral standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
**SPA 70791 - CLINICAL SEMINAR IN AUDIOLOGY**

(Repeatable for credit) In-depth consideration of topics/issues in the practice of audiology with emphasis upon issues related to clinical rotation. Prerequisite: special approval and doctoral standing. Corequisite: SPA 70750 or SPA 70751.

1.000 Credit hours
1.000 Other hours

**Levels:** Graduate
**Schedule Types:** Seminar

Health Sciences Department

**SPA 70792 - INTERNSHIP IN AUDIOLOGY**

(Repeatable for credit) Supervised clinical practicum in audiology requiring the independent performance of diagnostic, hearing aids and audiologic rehabilitation procedures. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned "school/agency" before the first day of the semester in which student teaching/internship will take place. Prerequisite: SPA 70692 and doctoral standing.

2.000 Credit hours
18.000 Other hours

**Levels:** Graduate
**Schedule Types:** Practicum or Internship

Health Sciences Department

**SPA 70798 - RESEARCH PROJECT IN AUDIOLOGY**

(Repeatable for credit) Completion of a doctoral research project including data collection, analysis write-up and oral presentation. Prerequisite: Admission to the AU.D.. program and doctoral standing.

3.000 Credit hours
3.000 Other hours

**Levels:** Graduate
**Schedule Types:** Research

Health Sciences Department

**SPA 70892 - INTERNSHIP III**

Clinical practicum in audiology during which students perform discrete tasks undersupervision. Prerequisites: admission to the audiology (AUD) major; and doctoral standing; and special approval.

2.000 Credit hours
18.000 Other hours

**Levels:** Graduate
**Schedule Types:** Practicum or Internship

Health Sciences Department
**SPA 70992 - INTERNSHIP IV**

Clinical practicum in audiology during which students perform discrete tasks under supervision. Prerequisite: doctoral standing and special approval.

2.000 Credit hours
18.000 Other hours

Levels: Graduate  
Schedule Types: Practicum or Internship

Health Sciences Department

**SPA 73691 - SEMINAR IN AUDIOLOGY**

(Repeatable for a maximum of 12 credit hours) Research, readings and discussion in any of these areas: aural rehabilitation, amplification, psychoacoustics, auditory physiology, medical audiology, hearing conservation. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Other hours

Levels: Graduate  
Schedule Types: Seminar

Health Sciences Department

**SPA 74093 - WORKSHOP IN COMMUNICATION DISORDERS**

(Repeatable for credit) Variable topic workshop offered when need arises, either on or off campus to update training in a particular area of speech pathology. Prerequisite: Doctoral standing.

1.00 TO 3.00 Credit hours
1.00 TO 3.00 Other hours

Levels: Graduate  
Schedule Types: Workshop

Health Sciences Department

**SPA 74191 - SEMINAR: NEUROGENIC COMMUNICATION DISORDERS**

(Repeatable for a maximum of 9 credit hours) Reading and discussion seminar on swallowing disorders and the communication disorders relating to aphasia, apraxia, dysarthria, closed head injury, right brain damage and dementia. Prerequisite: SPA 64301 and doctoral standing.

1.00 TO 3.00 Credit hours
1.00 TO 3.00 Other hours

Levels: Graduate  
Schedule Types: Seminar

Health Sciences Department

**SPA 74291 - SEMINAR: CHILD LANGUAGE**

(Repeatable for a maximum of 9 credit hours) Topics are selected for class investigation from the areas of child language, development or disorders. Prerequisite: Special approval and doctoral standing.

1.00 TO 3.00 Credit hours
1.00 TO 3.00 Other hours
SPA 74301 - APHASIA

Neuroanatomy, etiologies, symptomatologies, evaluation procedures and treatment techniques relating to aphasia in adults. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

SPA 74302 - LANGUAGE ASSESSMENT AND INTERVENTION IN EARLY CHILDHOOD

Methods of language assessment and intervention for infants, toddlers and preschoolers who are either at risk or diagnosed as presenting language delays or disabilities. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

SPA 74303 - DISORDERS OF ARTICULATION AND PHONOLOGY

Diagnosis and remediation of children's articulation and phonological disorders. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

SPA 74304 - ACQUIRED COGNITIVE COMMUNICATIVE IMPAIRMENTS

Cognitive functions and etiologies, symptomatologies, evaluation and treatment methods related to adults with cognitive communicative disorders subsequent to right hemisphere damage, traumatic brain injury, dementia and related impairments. Prerequisite: Doctoral standing and speech language pathology (SLP) major.
3.000 Credit hours
3.000 Lecture hours

SPA 74305 - FLUENCY DISORDERS

Nature, theories and their derived approaches to the assessment and treatment of fluency disorders.
Prerequisite: speech language pathology (SLP) major and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

SPA 74306 - VOICE DISORDERS
Normal aspects of voice production, etiology and symptomatology of voice disorders, diagnostic procedures and management techniques. Prerequisite: Doctoral standing.
2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

SPA 74307 - DYSARTHRIA
Neuro-anatomy, etiologies, symptomatologies, evaluation procedures and treatment techniques relating to dysarthria in adults. Prerequisite: Doctoral standing.
1.000 Credit hours
1.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

SPA 74308 - LANGUAGE ASSESSMENT AND INTERVENTION WITH SCHOOL-AGE POPULATIONS
Theoretical background knowledge and practical assessment and intervention techniques for school-age children who demonstrate language disorders. Prerequisite: SPA 34107 and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

SPA 74309 - AUTISM SPECTRUM DISORDERS: THEORY AND DIAGNOSIS
(Cross-listed with SPED 44309, SPED 64309 and SPA 64309) Provides an overview of Autism Spectrum Disorders (ASD). Examines the history, characteristics, and prevalence of ASD. Assessment and intervention models are explored as they relate to various theoretical models for understanding ASD. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
SPA 74310 - AUTISM SPECTRUM DISORDERS: LIFESPAN INTERVENTIONS

Provides students with a review of the significant aspects related to educational, social, vocational transitions for children, adolescents, and young adults with ASD. Students learn skills necessary to evaluate and develop programs designed to meet the changing and long term needs of individuals with ASD. Prerequisite: doctoral study.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

SPA 74312 - MOTOR SPEECH DISORDERS IN CHILDREN AND ADULTS

(Cross-listed with SPA 64312) Anatomic and physiologic bases of congenital and acquired motor speech disorders. Etiology, symptomatology, evaluation and treatment techniques related to variety of motor speech disorders in children and adults. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

SPA 74354 - MAXILLOFACIAL ANOMALIES

Nature and rehabilitative procedures for individuals with congenital and acquired maxillofacial anomalies and resonance disorders. Prerequisite: Doctoral standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

SPA 74356 - PEDIATRIC AND ADULT DYSPHAGIA

Anatomy, etiologies symptomatologies evaluation procedures and treatment techniques relating to swallowing disorders in adults and children. Prerequisite: Doctoral standing.

4.000 Credit hours
4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

SPA 74391 - SEMINAR: ARTICULATION AND PHONOLOGY

(Repeatable for a maximum of 9 credit hours) Critical review and application of systems and methods for
assessment and remediation of articulation and phonological disorders. Prerequisite: Doctoral standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Health Sciences Department

**SPA 74491 - SEMINAR: ORGANIC SPEECH DISORDERS**

(Repeatable for credit) A revolving topics seminar on theoretical and/or clinical issues related to neurogenic/organic speech and/or language disorders. Prerequisite: Doctoral standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Health Sciences Department

**SPA 74492 - CLINICAL PRACTICE IN SPEECH PATHOLOGY AND AUDIOLOGY**

(Repeatable for credit) Supervised clinical practice with patients who have speech, hearing or language problems. Prerequisite: Special approval and doctoral standing.

1.000 TO 12.000 Credit hours
1.000 TO 12.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Health Sciences Department

**SPA 74500 - NORMAL LANGUAGE PROCESSES**

Examines current theory and research specific to normal human development from birth to age 21. Significant neurological, cognitive, social, linguistic, emotional, literacy, and motor developmental changes are explored. Prerequisites: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Health Sciences Department

**SPA 74501 - SOCIAL COMMUNICATION ASPECTS OF AUTISM SPECTRUM DISORDER**

Provides an understanding of the social, communication, and language needs of those with ASD from childhood through adulthood. Examines the cognitive, neurological, social, and environmental components influencing social, communicative functioning. Reviews contemporary assessment and intervention strategies. Explores use of assistive technology to enhance social communicative functioning in those with ASD. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
**SPA 74504 - ADVANCED SPEECH AND VOICE SCIENCE**

Application of normal and disordered speech, swallowing, and voice production and perception; survey of literature; theories of production and perception. Prerequisite: SPA 4/54110 and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**SPA 74591 - SEMINAR: FLUENCY DISORDERS**

(Repeatable for a maximum of 9 credit hours) Seminar dealing with the theoretical and applied aspects of fluency disorders in children and adults. Prerequisite: Doctoral standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

**SPA 74592 - CLERKSHIP I**

Introduction to clinical practicum in audiology. Directed observation of clinical practice including audiologic diagnosis and audiologic rehabilitation are required. Prerequisite: admission to the audiology (AUD) major; and doctoral standing; and special approval.

1.000 Credit hours
18.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

**SPA 74600 - RESEARCH METHODS IN SPEECH-LANGUAGE PATHOLOGY**

Methodologies for collecting, analyzing and interpreting data for clinical and research purposes in speech language pathology and audiology. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**SPA 74691 - SEMINAR: VOICE DISORDERS**

(Repeatable for a maximum of 9 credit hours) Current literature review and discussions dealing with varying
topics ranging from normal aspects of phonation in various populations to disorders of voice and their diagnosis and treatment. Prerequisite: SPA 6/74306 and doctoral standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Health Sciences Department

**SPA 74692 - CLERKSHIP II**

Introduction to clinical practicum in audiology. Directed observation of clinical practice including audioligic diagnosis and audioligic rehabilitation are required. Prerequisites: admission to the audiology (AUD) major; and doctoral standing; and special approval.

1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Health Sciences Department

**SPA 74791 - SEMINAR:SPEECH SCIENCE**

(Repeatable for a maximum of 9 credit hours)Consideration of selected topics related to physiological, anatomical and acoustic aspects of speech production and perception. Prerequisites: SPA 4/54110 or SPA 6/74504 and doctoral standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Health Sciences Department

**SPA 74792 - GRADUATE AUDIOLOGIST III**

Supervised clinical practicum in audiology which encompasses the entire range of audioligic procedures including neurophysiological based procedures. Prerequisites: SPA 70748; and passing score of 600 or higher on the PRAXIS examination; and doctoral standing; and special approval. Corequisite: SPA 70791.

6.000 Credit hours
18.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Health Sciences Department

**SPA 74891 - SEMINAR:COMMUNICATION MODALITIES AND ASSISTIVE TECHNOLOGY**

(Repeatable for credit)Nature, etiologies and correlates of speech language communication disorders and differences that may indicate a need for a multi-modal communication approach. Includes an emphasis on assistive technology for communication language, learning and literacy. Prerequisite: speech language pathology (SLP) major and doctoral standing.

3.000 Credit hours
3.000 Other hours
SPA 74892 - GRADUATE AUDIOLOGIST V

Full-time external audiology clinical placement with a licensed and appropriately credentialed preceptor who provides clinical teaching. This experience provides a capstone learning experience in the full scope of practice in the profession of audiology. Prerequisites: SPA 70750; and doctoral standing; and special approval.

8.000 Credit hours
24.000 Other hours

SPA 74991 - SEMINAR: CRITICAL TOPICS IN SPEECH LANGUAGE PATHOLOGY

(Repeatable for credit) Principles and methods of assessment and intervention for various topics in speech-language pathology from critical thinking and case-study framework. Prerequisite: Instructor special approval and speech pathology and audiology (SPA) major and doctoral standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

SPA 75092 - CLINICAL PRACTICUM I IN SPEECH LANGUAGE PATHOLOGY

(Cross-listed with SPA 65092) (Repeatable twice for credit) Supervised, introductory clinical experience in assessment and intervention with populations within the Scope of Practice of speech language pathology per the current practice policy of the American Speech Language Hearing Association. To facilitate clinical competency and accrual of required clinical clock hours per current ASHA standards, students are expected to enroll in Clinical Practicum each semester that they are not enrolled in Externship or Student Teaching. A grade of B or better in this course is required for permission to register in CLIN PR II SPE LANG PATH-SPA 65192. Prerequisites: doctoral standing and special approval.

2.000 TO 3.000 Credit hours
8.000 TO 12.000 Other hours

SPA 75192 - CLINICAL PRACTICUM II IN SPEECH LANGUAGE PATHOLOGY

(Cross-listed with SPA 65192) (Repeatable twice for credit) This course includes additional supervised hands on clinical experience with clients in on campus clinics. Student clinicians are provided with opportunities to demonstrate increased independence in clinical decision making and performance. Practicum requirements may include attendance at a weekly Clinical Colloquium. A grade of B or better in this course is required for permission to enroll in Clinical Practicum III in Speech Language Pathology SPA 75292. Prerequisites: doctoral standing and special approval; and SPA 75092 with a minimum B grade.
SPA 75292 - CLINICAL PRACTICUM III IN SPEECH LANGUAGE PATHOLOGY

(Cross-listed with SPA 65292) (Repeatable twice for credit) Includes additional supervised, hands-on clinical experience with clients in on campus clinics and or off campus, supervised clinical experience in sites such as schools or long-term care facilities. Students clinicians are provided with opportunities to demonstrate levels of independence in clinical decision-making and performance that reflect readiness for Externship or Student Teaching experiences. Practicum requirements may include attendance at a weekly Clinical Colloquium. A grade of B or better in this course is required for permission to register in the following courses: Clinical Practicum IV in Speech Language Pathology SPA 75392, Externship in Speech Language Pathology: Adult SPA 75492, Externship in Speech Language Pathology: Pediatric SPA 75592, Student Teaching in Speech Language Pathology SPA 64528. Prerequisites: doctoral standing and special approval; and SPA 75192 with a minimum B grade.

SPA 75392 - CLINICAL PRACTICUM IV IN SPEECH LANGUAGE PATHOLOGY

(Repeatable for credit) This supervised, hands on clinical experience with clients in on campus clinics or off campus sites is for second year graduate students who are not yet scheduled for Externship or Student Teaching. Students clinicians are provided with opportunities to demonstrate levels of independence in clinical decision making and performance that are reflective of readiness for Externship or Student Teaching experiences. A grade of B or better in this course is required for permission to register in the following courses: Externship in Speech Language Pathology: Adult SPA 75492, Externship in Speech Language Pathology: Pediatric SPA 75592, Student Teaching in Speech Language Pathology SPA 64528. Prerequisites: doctoral standing and special approval; and SPA 75292 or SPA 75392 with a minimum B grade.

SPA 75492 - EXTERNSHIP IN SPEECH LANGUAGE PATHOLOGY: ADULT

(Cross-listed with SPA 65492) (Repeatable once for credit) Considered a culminating clinical experience. Includes supervised, hands on clinical experience with patients in adult care settings such as hospitals, rehabilitation and long term care facilities. Prerequisites: doctoral standing and special approval; and SPA 75292 or SPA 75392 with a minimum B grade.
**SPA 75592 - EXTERNSHIP IN SPEECH LANGUAGE PATHOLOGY: PEDIATRIC**

(Cross-listed with SPA 65592) (Repeatable once for credit) Considered a culminating clinical experience. Students may choose this course as an alternative to Student Teaching in Speech Language Pathology. Includes supervised, hands on clinical experience with children and adolescents in pediatric care settings such as hospitals and other habilitation and rehabilitation facilities. Prerequisites: doctoral standing and special approval; SPA 75292 or SPA 75392 with a minimum B grade.
4.000 TO 8.000 Credit hours
20.000 TO 40.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

**SPA 75792 - INTERNSHIP I**

Clinical practicum in audiology during which students perform discrete tasks undersupervision. Prerequisites: admission to the audiology (AUD) major; and doctoral standing; and special approval. Corequisite: SPA 70709.
1.000 Credit hours
18.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

**SPA 76792 - INTERNSHIP II**

Supervised clinical practicum in audiology during which students will perform discrete clinical tasks while under supervision. Prerequisites: SPA 75792; and admission to the audiology (AUD) major; and doctoral standing; and special approval.
1.000 Credit hours
18.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

**SPA 84091 - SEMINAR IN COMMUNICATION DISORDERS**

(Repeatable for a maximum 9 credit hours) Special topics seminar for advanced students in speech-language pathology and audiology. Presentations and discussion of research projects are required. Prerequisite: Doctoral standing.
2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Seminar

**SPA 84096 - INDIVIDUAL INVESTIGATION-SPEECH PATHOLOGY AND AUDIOLOGY**
Independent study of topics to be selected in consultation with graduate faculty. Prerequisite: Doctoral standing.
1.00 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Health Sciences Department

**SPA 84098 - RESEARCH**

(Repeatable for credit)Research opportunities for doctoral students who have not yet passed their candidacy examination. Prerequisite: Doctoral standing and special approval.
1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

Health Sciences Department

**SPA 84199 - DISSERTATION I**

(Repeatable for credit)Doctoral dissertation for which registration in at least two semesters is required, first of which will be semester in which dissertation work is begun and continuing until the completion of 30 hours. Prerequisite: Doctoral standing and special approval.
15.000 Credit hours
15.000 Other hours

Levels: Graduate
Schedule Types: Dissertation

Health Sciences Department

**SPA 84299 - DISSERTATION II**

(Repeatable for credit)Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. Prerequisite: SPA 84199 and doctoral standing and special approval.
15.000 Credit hours
15.000 Other hours

Levels: Graduate
Schedule Types: Dissertation

Health Sciences Department

**SPAD 15000 - INTRODUCTION TO SPORT ADMINISTRATION**

This course is designed to introduce students to the field of sport administration. Students will be made aware of the career options available to them in the sport management profession. All course materials, assignments and class discussions will emphasize both the understanding and application of key concepts across various aspects of the sport industry. Students will also be introduced to the sport administration major curriculum and requirements. Recommend first course in the sport administration program sequences. Prerequisite: None.
3.000 Credit hours
**SPAD 15015 - ORIENTATION TO PROFESSIONAL GOLF MANAGEMENT**

An overview of opportunities and responsibilities in the golf profession. Emphasis on concepts, techniques and practices of teaching golf skills; understanding the PGA Constitution, rules of golf, tournament golf operations and golf car fleet management. Prerequisite: Special approval.

1.000 Credit hours

Levels: Undergraduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**SPAD 25000 - SPORT IN SOCIETY**

Analysis of how sport relates to the social relations and cultural values of United States society. The course is framed by a critical evaluative perspective, examining how social class, ethnicity, race and gender relations contour sport practices. Prerequisite: None.

3.000 Credit hours

Levels: Undergraduate
Schedule Types: Lecture

Foundations Leadership Admin Department

Course Attributes:

Diversity Course-Domestic

**SPAD 25092 - PRACTICUM I IN SPORT ADMINISTRATION**

(Repeatable for credit) A 105-hour (per credit) field experience in a sport management setting. Prerequisite: special approval from instructor.

1.000 TO 3.000 Credit hours
7.000 TO 21.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Foundations Leadership Admin Department

Course Attributes:
Experiential Learning Requirem

**SPAD 25192 - PRACTICUM IN PROFESSIONAL GOLF MANAGEMENT I**

(Repeatable for a maximum of 3 credit hours) A cumulative 105-hour (per credit) on-campus seminar and field experience in a professional golf management setting. Prerequisite: SPAD 15015 and SPAD 25015 and special approval.

1.000 TO 3.000 Credit hours
SPAD 35021 - GOVERNANCE IN SPORT

Issues of governance in amateur and professional sports. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Foundations Leadership Admin Department

SPAD 35025 - FACILITY MANAGEMENT

Overview of planning, staffing, marketing and managing sport facilities and complexes. The primary emphasis in this course is on management, personnel and operations issues. Prerequisite: Junior or senior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Foundations Leadership Admin Department

SPAD 35065 - HISTORY AND PHILOSOPHY OF SPORT AND PHYSICAL ACTIVITY

Historical and philosophical foundations of sport and physical education; a study of factors influencing pedagogical, curricular and evaluation decisions in sport and physical education programs today. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Foundations Leadership Admin Department

Course Attributes:
Writing Intensive Course

SPAD 35092 - PRACTICUM II IN SPORT ADMINISTRATION

(Repeatable for credit) A 105-hour (per credit) field experience in a sport management setting. Prerequisite: SPAD 25092 and special approval from instructor.
1.000 TO 3.000 Credit hours
7.000 TO 21.000 Other hours

Levels: Undergraduate
**SPAD 35192 - PRACTICUM IN PROFESSIONAL GOLF MANAGEMENT II**

(Repeatable for a maximum of 3 credit hours) A cumulative 105-hour (per credit) on-campus seminar and field experience in a professional golf management setting. Prerequisite: SPAD 15015 and SPAD 25015 and SPAD 25192 and special approval.

1.000 TO 3.000 Credit hours
7.000 TO 21.000 Other hours

**SPAD 45015 - GOLF MANAGEMENT II**

An in-depth study of the business of golf. Topics include maintaining a high performance work environment and motivating techniques for staff, delegating assignments, managing performance problems, merchandise assortment plans, vendor relations, inventory management and merchandise display and promotion. Prerequisite: SPAD 15015 and SPAD 25015 and SPAD 35015.

2.000 Credit hours
1.000 Lecture hours
1.000 Lab hours

**SPAD 45021 - ORGANIZATION AND ADMINISTRATION OF ATHLETICS**

An understanding of theories necessary to run an efficient athletic department at all levels, including budgeting, leadership and administrative theory, organizational structure, personnel, legal issues and facilities. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

**SPAD 45022 - EVENT PLANNING AND PRODUCTION**

(Cross-listed with SRM 55022) Students learn the proper planning process that all sports events undergo. Students then apply these concepts in actual events that they develop and hold. Prerequisites: junior or senior standing and MKTG 25010.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Foundations Leadership Admin Department

**SPAD 45023 - SPORT MARKETING**

The course, which is designed around market planning, examines how to formulate market ideas, incorporate market research, select segmentation, targeting and positioning strategies, implement sales and promotion strategies and assess control procedures within the sport and entertainment industry. Prerequisite: MKTG 25010.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**SPAD 45024 - SPORT IN GLOBAL PERSPECTIVE**

(Cross-listed with SRM 55024) Students critically analyze how sport relates to general features of globalization and the connection between global and local politics (including ethnic, religious, gender, environmental and sociospacial politics). The underlying assumption is that sport is part of a growing network of global interdependencies that bind human beings together. Prerequisite: Senior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**SPAD 45026 - SPORT AND THE MEDIA**

(Cross-listed with SRM 55026) An introduction to current scholarship and issues concerning sport and the media, including critical analysis of media representations with attention to gender, race, sexuality and disability, an examination of the structure of sports journalism and production; and a general analysis of the role of mediated sport in our culture. As such, the roles of institutions, producers, texts and audiences and their relationships to each other are examined. Prerequisite: Junior or senior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**SPAD 45027 - PUBLIC RELATIONS AND PROMOTION IN SPORT**

Issues in public relations and promotion of sport such as advertising, crisis management, sales promotion and atmospherics. Prerequisite: MKTG 25010.

3.000 Credit hours
3.000 Lecture hours
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisites</th>
<th>Credit Hours</th>
<th>Lecture Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAD 45029</td>
<td>History and Current Issues in Collegiate Athletics</td>
<td>Examination of the historical development of athletics within American institutions of higher learning with an emphasis upon concepts and ideals that underlie the developments and the major problems affecting contemporary intercollegiate athletics. Prerequisite: none.</td>
<td>none</td>
<td>3.000</td>
<td>3.000</td>
</tr>
<tr>
<td>SPAD 45030</td>
<td>Sport Enterprise</td>
<td>This is a capstone course for sport administration majors. The course which is designed around business planning for sport, examines how to formulate business ideas, select a legal form of organization, locate financing sources, assess the market, develop a human resource management system and establish budget control. Prerequisite: Senior standing and special approval.</td>
<td>Senior standing and special approval</td>
<td>3.000</td>
<td>3.000</td>
</tr>
<tr>
<td>SPAD 45031</td>
<td>Sport Tourism</td>
<td>Incorporates both theoretical learning of travel for sports as a global phenomenon and application of such knowledge in hosting a sporting event with travel as the focus. The experiential, cultural, and economic aspects of sport tourism are examined. Students demonstrate their ability to prepare a sport tourism plan upon the completion of the course. Prerequisite: junior or senior standing.</td>
<td>junior or senior standing</td>
<td>3.000</td>
<td>3.000</td>
</tr>
<tr>
<td>SPAD 45032</td>
<td>Sales Management in Sport and Entertainment</td>
<td>Introduce students to the area of sales-force management in sport and entertainment. Historical, theoretical and conceptual frameworks will be thoroughly examined, as well as functions, activities, and skills of the professional salesperson in this modern age of information and technology. Prerequisite: junior or senior standing.</td>
<td>junior or senior standing</td>
<td>3.000</td>
<td>3.000</td>
</tr>
</tbody>
</table>
**SPAD 45033 - CHANGE YOUR MIND, GAME AND LIFE**

Focuses on mental training to enhance sport performance and also it provides personal growth experiences that impact all of life. The course is designed to assist students in tapping into their inner potential by refocusing their mind. It teaches students that they are responsible for their own life experiences. Students learn that the things they want most in their lives are found within themselves and that they can take responsibility for their upsets. Prerequisite: none.

1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**SPAD 45091 - SEMINAR FOR INTERNSHIP PREPARATION**

(Repeatable for credit) is course prepares the students for the internship experience in sport administration. Students must successfully complete this course prior to registering for internship. Students must complete all requirements for the Business minor before registering for this course. Prerequisite: 2.500 cumulative GPA; and senior standing and special approval.

1.000 Credit hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

Foundations Leadership Admin Department

**SPAD 45092 - INTERNSHIP IN SPORT ADMINISTRATION**

(Repeatable for credit) Supervised full-time experience providing knowledge of overall agency operation in approved sport management setting. 50 contact hours per credit hour. Students must complete all requirements for the Business minor before registering for this course. Prerequisite: SPAD 35092 and SPAD 45091; 2.500 cumulative GPA; and special approval.

3.000 TO 12.000 Credit hours
10.000 TO 40.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Foundations Leadership Admin Department

Course Attributes:
Experiential Learning Requirem

**SPAD 45096 - INDIVIDUAL INVESTIGATION IN SPORT ADMINISTRATION**

(Repeatable for a maximum of 12 credit hours) Individual investigation in sport administration. Faculty approval is required. Prerequisites: sport administration (SPAD) major and special approval.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Foundations Leadership Admin Department

**SPAD 45192 - INTERNSHIP IN PROFESSIONAL GOLF MANAGEMENT**

(Repeatable for credit)Supervised full-time experience providing knowledge of overall agency operation in approved sport administration, professional golf management setting. 100 contact hours per credit hour with seminar interactive requirements. Prerequisite: SPAD 15015 and SPAD 25015 and SPAD 25192 and special approval.

2.000 TO 12.000 Credit hours
13.000 TO 80.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Foundations Leadership Admin Department

Course Attributes:
Experiential Learning Requirem

**SPAD 46028 - SPORT IN FILM**

Critically evaluates the role of sport in film as it relates to a variety of issues in society. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**SPAD 46080 - LEGAL ISSUES IN SPORT AND RECREATION**

A discussion of legal issues as they apply to the sport and recreation industries. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**SPAD 46095 - SPECIAL TOPICS IN SPORT ADMINISTRATION**

(Repeatable for credit)Special topics in sport administration. Prerequisite: none.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Foundations Leadership Admin Department
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisite(s)</th>
<th>Credit Hours</th>
<th>Lecture Hours</th>
<th>Level</th>
<th>Schedule Types</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 18201</td>
<td>ELEMENTARY SPANISH I</td>
<td>An introduction to the Spanish language in the context of Hispanic cultures. Prerequisite: None.</td>
<td>None</td>
<td>4.00</td>
<td>4.00</td>
<td>Undergraduate</td>
<td>Lecture</td>
<td>Modern-Classical Lang Studies Department</td>
</tr>
<tr>
<td>SPAN 18202</td>
<td>ELEMENTARY SPANISH II</td>
<td>A continuation of the introduction to the Spanish language in the context of Hispanic cultures. Prerequisite: SPAN 18201.</td>
<td>None</td>
<td>4.00</td>
<td>4.00</td>
<td>Undergraduate</td>
<td>Lecture</td>
<td>Modern-Classical Lang Studies Department</td>
</tr>
<tr>
<td>SPAN 18301</td>
<td>SPANISH FOR HEALTH CARE I</td>
<td>Introduction to the Spanish language in the context of health care situations, tasks and terminology and Hispanic cultures. Prerequisite: none.</td>
<td>None</td>
<td>4.00</td>
<td>4.00</td>
<td>Undergraduate</td>
<td>Lecture</td>
<td>Modern-Classical Lang Studies Department</td>
</tr>
<tr>
<td>SPAN 18302</td>
<td>SPANISH FOR HEALTH CARE II</td>
<td>A continuation of the introduction to the Spanish language in the context of health care situations, tasks and terminology and Hispanic cultures. Prerequisite: SPAN 18301.</td>
<td>None</td>
<td>4.00</td>
<td>4.00</td>
<td>Undergraduate</td>
<td>Lecture</td>
<td>Modern-Classical Lang Studies Department</td>
</tr>
<tr>
<td>SPAN 28201</td>
<td>INTERMEDIATE SPANISH I</td>
<td>A continuation of the development of listening, speaking, reading and writing skills using a variety of material on the Spanish language in the context of Hispanic cultures. Prerequisite: SPAN 18202.</td>
<td>None</td>
<td>3.00</td>
<td>3.00</td>
<td>Undergraduate</td>
<td>Lecture</td>
<td>Modern-Classical Lang Studies Department</td>
</tr>
</tbody>
</table>
**SPAN 28202 - INTERMEDIATE SPANISH II**

A continuation of the development of listening, speaking, reading and writing skills using a variety of material on the Spanish language in the context of Hispanic cultures and specific areas of study like culture, business, justice, etc. Credit may be given for SPAN 28202 or SPAN 28206 but not for both. Prerequisite: SPAN 28201.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

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**SPAN 28206 - SPANISH READING FOR COMPREHENSION**

Further develops skills and techniques for understanding written Spanish; conducted in English. Credit not applicable toward Spanish major or minor. Students may obtain credit in SPAN 28202 or SPAN 28206 but not both. Prerequisite: SPAN 28201.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

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**SPAN 38211 - SPANISH GRAMMAR AND COMPOSITION**

This course provides an intensive grammar study and further written practice to help advanced intermediate students express complex ideas in Spanish. Prerequisite: SPAN 28202.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

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**SPAN 38213 - SPANISH READING AND CONVERSATION**

This course provides reading techniques and develops oral skills to help advanced intermediate students express complex ideas in Spanish. Prerequisite: SPAN 38211.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

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**SPAN 38215 - SPANISH PHONETICS AND DICTION**

Study of the modern Spanish sound system with special emphasis on pronunciation and intonation. Prerequisite: SPAN 38211.
SPAN 38231 - TRANSLATION PRACTICE: SPANISH
Translation practice with Spanish texts using principles and techniques learned in the lecture class. To be taken concurrently with TRST 30230. Corequisite: TRST 30230.
1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

SPAN 38240 - CONVERSATION FOR BUSINESS AND SPECIAL PURPOSES: SPANISH
Introduction to the special vocabulary of business and other special subject areas; introduces the concept of language for special purposes and emphasizes the use of special vocabularies in conversations in business and other settings. Prerequisite: SPAN 38213.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

SPAN 38330 - EARLY SPANISH LITERATURE
Outline of development, reading of representative works to 1700. Prerequisite: SPAN 38211.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

Course Attributes:
Experiential Learning Requirem, Writing Intensive Course

SPAN 38331 - RECENT SPANISH LITERATURE
Outline of development, reading of representative works 1700 present. Prerequisite: SPAN 38211.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department
**SPAN 38334 - EARLY SPANISH-AMERICAN LITERATURE**

Outline of development, reading of representative works including indigenous literature, 1492-1882. Prerequisite: SPAN 38211.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**Course Attributes:**
Experiential Learning Requirem, Writing Intensive Course

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**SPAN 38335 - RECENT SPANISH-AMERICAN LITERATURE**

Outline of the development of modern Spanish-American literature (1882 to the present). Reading of representative works. Prerequisite: SPAN 38211.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**Course Attributes:**
Experiential Learning Requirem, Writing Intensive Course

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**SPAN 38421 - CIVILIZATION OF SPAIN**

General survey of evolution of Spanish civilization from antiquity to present day. Prerequisite: SPAN 38211.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

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**SPAN 38424 - CULTURE AND CIVILIZATION OF LATIN AMERICA**

A thematic approach to the study of four or five representative Latin American countries focusing on 19th-and 20th-century Latin American culture and society. Prerequisite: SPAN 38211.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department
SPAN 48093 - VARIABLE TITLE WORKSHOP IN SPANISH
(Repeatable for credit) Workshops individually designed to provide instruction and training in specific areas of hispanic studies. S u graded. Prerequisite: Departmental permission.
1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Undergraduate
Schedule Types: Workshop
Modern-Classical Lang Studies Department

SPAN 48095 - SELECTED TOPICS IN SPANISH
(Repeatable for a maximum of 9 credit hours) Topic announced in Schedule of Classes. Prerequisite: 9 hours above 20000-level of Spanish (SPAN) courses.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
Modern-Classical Lang Studies Department

SPAN 48096 - INDIVIDUAL INVESTIGATION
(Repeatable for a maximum of 6 credit hours) Allows the advanced, serious student to carry out research study project on Spanish literature language or culture. Prior approval of supervising faculty member department required. Prerequisite: Special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation
Modern-Classical Lang Studies Department

SPAN 48215 - ADVANCED SPANISH COMPOSITION AND CONVERSATION
Focuses on description, summary, narration, exposition and argumentation on topics dealing with diverse areas of Hispanic culture as presented through literary and non-fiction texts. Prerequisite: SPAN 38211 and SPAN 38213; and one of SPAN 38330 or SPAN 38331 or SPAN 38334 or SPAN 38335; and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
Modern-Classical Lang Studies Department

SPAN 48216 - CONTEMPORARY HISPANIC CULTURE
A study of selected sociological, political, cultural or economic issues in the contemporary Hispanic world. Prerequisite: 6 hours from 30000-level Spanish courses.
3.000 Credit hours
3.000 Lecture hours
SPAN 48230 - ADVANCED TRANSLATION PRACTICE: SPANISH

Theory and practice course that discusses translation theory and emphasizes Spanish-to-English translation of selected texts in business, technology, medicine and law. Prerequisite: SPAN 38231.
3.000 Credit hours
3.000 Lecture hours

SPAN 48240 - BUSINESS AND SPECIAL TEXTS: SPANISH

Survey of the typical text types of business in the Spanish culture and language. Practice sessions focus on reading and understanding specialized texts and on the translation and composition of selected special texts in Spanish. Prerequisite: SPAN 38211.
3.000 Credit hours
3.000 Lecture hours

SPAN 48376 - CONTEMPORARY SPANISH-AMERICAN SHORT STORY

The development of the Spanish-American short story from 1917 to the present. Prerequisite: 6 hours from SPAN 38330 and SPAN 38331 and SPAN 38334 and SPAN 38335.
3.000 Credit hours
3.000 Lecture hours

SPAN 48378 - U.S. LATINA/O WRITERS

The course focuses on a representative selection of literary pieces in Spanish by recent U.S. Latino writers developing oral and listening skills in Spanish and strengthening critical thinking on various cultural and literary matters. Prerequisites: SPAN 38211 and SPAN 38213; and one of the following: SPAN 38330 or SPAN 38331 or SPAN 38334 or SPAN 38335.
3.000 Credit hours
3.000 Lecture hours
**SPAN 48422 - EARLY SPANISH-AMERICAN DISCOURSE**

This course provides a critical analysis of cultural and literary issues on texts dealing with early colonial Spanish-American expression. Prerequisite: SPAN 38213 and SPAN 38334.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**SPAN 58095 - SELECTED TOPICS IN SPANISH**

(Repeatable for a maximum of 15 credit hours) Topic to be announced in semester schedule of classes. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**SPAN 58216 - CONTEMPORARY HISPANIC CULTURE**

A study of selected sociological, political, cultural or economic issues in the contemporary Hispanic world. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**SPAN 58376 - CONTEMPORARY SPANISH-AMERICAN SHORT STORY**

The development of the Spanish-American short story from 1917 to the present. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**SPAN 58378 - U.S. LATINA/O WRITERS**

The course focuses on a representative selection of literary pieces in Spanish by recent U.S. Latino writers developing oral and listening skills in Spanish and strengthening critical thinking on various cultural and literary matters. Prerequisite: Graduate standing.

3.000 Credit hours
SPAN 58422 - EARLY SPANISH-AMERICAN DISCOURSE

This course provides a critical analysis of cultural and literary issues on texts dealing with early colonial Spanish-American expression. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

SPAN 68010 - THE PRACTICE OF SPANISH TRANSLATION

Students apply linguistic and communication science concepts to case studies of language mediation. Prerequisite: graduate standing. Corequisite: TRST 60010.
2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

SPAN 68093 - VARIABLE TITLE WORKSHOP IN SPANISH

(Repeatable for credit) Workshops individually designed to provide instruction and training in specific areas of Spanish studies. S u graded. Prerequisite: Permission.
1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Modern-Classical Lang Studies Department

SPAN 68095 - SELECTED TOPICS

(Repeatable for credit) Selected topics on Spanish literature or linguistics. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

SPAN 68098 - RESEARCH


(Repeatable for credit) Research or individual investigation for master's level graduate students. Credits earned applied toward degree requirements if department approves. Prerequisite: special approval.
1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

Modern-Classical Lang Studies Department

SPAN 68191 - SEMINAR IN FICTION

(Repeatable for credit) Intensive study of one or two major writers or of a movement in the history of Spanish and Spanish-American fiction. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Modern-Classical Lang Studies Department

SPAN 68199 - THESIS I

Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester distributed over several semesters if desired. Prerequisite: Graduate standing.
2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Modern-Classical Lang Studies Department

SPAN 68215 - ADVANCED SPANISH COMPOSITION AND CONVERSATION

Focuses on description, summary, narration, exposition and argumentation on topics dealing with diverse areas of Hispanic culture as presented through literary and non-fiction texts. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

SPAN 68231 - TRANSLATION INTO SPANISH

Provides advanced intensive practice in the translation of a variety of texts into Spanish. Translation issues and appropriate strategies are identified. Also provides practice in the evaluation of translations, the identification of professional issues, and an advanced review of linguistic and grammatical aspects of Spanish as they apply to translation. Class meetings are conducted in a workshop format based on weekly assignments of readings and translation exercises. Prerequisites: TRST 60010 and SPAN 68010; and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
**SPAN 68240 - LITERARY AND CULTURAL TRANSLATION**

Translating documents from a variety of literary and cultural sources, including literature, expository and journalistic prose, scholarly treatises and essays. Translation into Spanish will also be emphasized. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**SPAN 68250 - COMMERCIAL, LEGAL AND DIPLOMATIC TRANSLATION**

An introduction to methods and resources for the translation of commercial, economic, financial, legal, diplomatic, and governmental documents. Prerequisite: TRST 60010 and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**SPAN 68251 - SCIENTIFIC, TECHNICAL AND MEDICAL TRANSLATION**

An introduction to methods and resources for the translation of scientific, technical, industrial and medical documents. Prerequisite: TRST 60010 and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

**SPAN 68299 - THESIS II**

Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: SPAN 68199 and graduate standing.

2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Modern-Classical Lang Studies Department

**SPAN 68391 - SEMINAR IN THEATRE**

(Repeatable for credit) Intensive study of one or two major dramatists or movements in the history of Spanish
and Spanish-American theatre. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Modern-Classical Lang Studies Department

SPAN 68591 - SEMINAR IN POETRY

(Repeatable for credit) Intensive study of one or two major poets or of a movement in the history of Spanish and Spanish-American poetry. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Modern-Classical Lang Studies Department

SPAN 68979 - CASE STUDY IN TRANSLATION

Students will be responsible for a major translation and a terminology glossary as well as a critical analysis of the source text, the problems encountered during the translation process and the strategies used to solve them. Prerequisite: Special approval and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

SPED 23000 - INTRODUCTION TO EXCEPTIONALITIES

Introduction to student exceptionalities, service delivery/placement options and multidisciplinary team process. Focus on identification of characteristics definition and identification procedures of students with exceptionalities. 15 clinical hours. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Clinic, Lecture

Lifespan Dev and Educ Sciences Department

Course Attributes:
Diversity Course-Domestic, TAG - Education

SPED 40093 - WORKSHOP IN SPECIAL EDUCATION

(Repeatable for credit) Topics of special interest to students desiring to intensify their knowledge in particular areas. Presenters include Kent State University faculty and other institutions. Offered irregularly. Prerequisite: None.
1.000 TO 5.000 Credit hours
SPED 43010 - FAMILY AND PROFESSIONAL COLLABORATION

This course provides knowledge and strategies for working with family members of exceptional individuals and members of related professions which provide services to them. Use of collaborative, interdisciplinary and interagency models in special education. 20 clinical and 10 field hours. Prerequisite: SPED 23000 and admission to advanced study.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

SPED 43020 - ASSESSMENT IN SPECIAL EDUCATION

Use/interpretation normed, criterion-referenced and informal curriculum-based assessments for students with mild/moderate disabilities. Standards-based alternative assessments for student with intensive needs. 10 field and 20 clinical hours. Prerequisites: Prerequisite: CI 47501 and 47504. Corequisite: SPED 43992 or 43392 or 44092 or 44192.
3.000 Credit hours
1.000 Lecture hours
2.000 Other hours

Levels: Undergraduate
Schedule Types: Field Experience, Lecture

Lifespan Dev and Educ Sciences Department

Course Attributes:
Writing Intensive Course

SPED 43021 - ASSESSMENT FOR INDIVIDUALS WITH MODERATE TO INTENSIVE NEEDS

(Cross-listed with SPED 53021) Investigates issues and methods for assessing the academic, behavioral, physiological, mental health, and life skills of individuals with moderate to intensive disabilities. Interpretation of norm- and criterion formal assessments, creation of alternative assessments, modification of informal assessments, ecological and community-based assessments specific to individuals with low incidence and multiple disabilities. Prerequisite: SPED 23000.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

SPED 43030 - APPLIED BEHAVIOR ANALYSIS I: THEORY AND TECHNIQUES

Theory and techniques associated with applied behavior analysis. Approaches for establishing, implementing,
maintaining and monitoring skill development are emphasized. Procedures for assessing and modifying classroom environments/instructional techniques to enhance learning/behavior of individuals with disabilities, with specific emphasis on preventing, increasing positive and decreasing inappropriate behavior are introduced. 25 field hours. Prerequisite: SPED 23000 and admission to advanced study.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Field Experience, Lecture

Lifespan Dev and Educ Sciences Department

**SPED 43031 - APPLIED BEHAVIOR ANALYSIS II: APPLICATION**

Equips students with the skills necessary to integrate the technology of applied behavior analysis (as learned in SPED 43030, Applied Behavior Analysis I) with the analytical skills necessary to prevent, teach, manage and assess behavior. Specific behavioral interventions are presented. Includes 40 field hours. Prerequisites: SPED 43030 and admission to advanced study.

3.000 Credit hours
1.000 Lecture hours
2.000 Other hours

Levels: Undergraduate
Schedule Types: Field Experience, Lecture

Lifespan Dev and Educ Sciences Department

**SPED 43040 - LANGUAGE AND READING IN SPECIAL EDUCATION**

Instructional approaches to teaching reading/language arts to students with disabilities. Emphasis on adapting instructional techniques, materials, assessments to meet the needs of learners with disabilities. Contains 15 clinical and 15 field hours. Prerequisite: Admission to advanced study and ECED 40105 and 40126; and CI 47504.

3.000 Credit hours
1.000 Lecture hours
2.000 Other hours

Levels: Undergraduate
Schedule Types: Clinic, Field Experience, Lecture

Lifespan Dev and Educ Sciences Department

**SPED 43050 - CHARACTERISTICS OF STUDENTS WITH MILD/MODERATE INTERVENTION NEEDS**

Definitions, causes and characteristics and social and educational implications of learning developmental and emotional/behavioral disorders of students identified with mild/moderate disabilities. Methods of assessment and interventions current issues. 10 clinical and 10 field hours. Prerequisite: SPED 23000.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**SPED 43051 - CHARACTERISTICS OF STUDENTS WITH MODERATE/INTENSIVE INTERVENTION NEEDS**
Overview of specific facets and causes of severe disabilities, physical/psychological aspects, family societal responses political trends etiology and medical implications educational and vocational programming assessment and treatment planning assistive technology. 10 clinical 10 field hours. Prerequisite: SPED 23000.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**SPED 43060 - CURRICULUM METHODS IN SPECIAL EDUCATION**

Curriculum development, programming, delivery for students with mild, moderate or intensive disabilities. Emphasis on application of state standards to IEP development. Adapting instructional techniques, materials, assessment to meet needs. 33 field/clinical hours. Prerequisite: admission to advanced study.

3.000 Credit hours
1.000 Lecture hours
2.000 Other hours

Levels: Undergraduate
Schedule Types: Field Experience, Lecture

Lifespan Dev and Educ Sciences Department

**SPED 43062 - CURRICULUM METHODS MILD/MODERATE INTERVENTION**

Delivery and adaptation of evidence-based practices for students with mild/moderate disabilities. Emphasis on achievement in general curriculum. Training to mentor other professionals. Prerequisite: SPED 43060 and admission to advanced study.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**SPED 43063 - CURRICULUM METHODS MODERATE/INTENSIVE INTERVENTION**

(Cross-listed with SPED 53063) Delivery and adaptation of evidence based practices for students with moderate to intensive educational needs. An emphasis is placed on instruction of functional academic and life skills within naturalistic contexts. Prerequisite: SPED 43060 and admission to advanced study.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**SPED 43070 - PLANNING AND PROGRAMMING FOR TRANSITIONS**

This course addresses lifespan community participation and the planning, support development and services available to accomplish it. Introduction to community agencies and adult services. 10 clinical and 15 field hours. Prerequisite: SPED 43050 or SPED 43051 and admission to advanced study.

3.000 Credit hours
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture
Lifespan Dev and Educ Sciences Department

SPED 43080 - ASSISTIVE TECHNOLOGY FOR STUDENTS WITH DISABILITIES

Examines application of high and low technology assistive devices for students with intensive intervention needs. Analysis of technology needs; selection/development of technology; training/evaluation of technology use by students. 20 clinical hours. Prerequisite: SPED 43050 or SPED 43051 and admission to advanced study.
3.000 Credit hours
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture
Lifespan Dev and Educ Sciences Department

SPED 43092 - DEAF RESIDENTIAL SCHOOL FIELD EXPERIENCE

(Repeatable for credit) Week-long practicum at a residential school for the deaf; 24-hour interaction with deaf students and adults. Students stay on campus. Conduct, interaction, sign language skills, maturity, responsibility and performance are evaluated by staff at the school. Prerequisites: ASL 49309 or SPED 43309; and admission to advanced study; and pre/corequisite: ASL 29202.
1.000 Credit hours
1.000 Other hours
Levels: Undergraduate
Schedule Types: Practicum or Internship
Lifespan Dev and Educ Sciences Department
Course Attributes:
Experiential Learning Requirem

SPED 43100 - SURVEY OF THE INTERPRETING PROFESSION

(Cross-listed with SPED 53100) Introduction to the field of ASL-English interpreting. The following will be discussed: the history of the interpreting profession; the varied roles and responsibilities of interpreters; issues & concerns facing interpreters; legal mandates & constraints governing the provision of interpreters; ethical guidelines and their application to educational environments. Since interpreters are expected to be fluent in both English and ASL, this course will strive to enhance students' facility with both languages. Prerequisite: ASL 19202. Corequisite: SPED 43106. Pre/Corequisite: ASL 29201.
3.000 Credit hours
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture
Lifespan Dev and Educ Sciences Department

SPED 43102 - INTERPRETING PROCESSES I

(Cross-listed with SPED 53102) Beginning level interpreting course that examines the models of interpreting and their application to practice. Consecutive and simultaneous interpreting strategies are used to develop
processing skills for both English to ASL and ASL to English interpretations. Samples of narrative genre are the
texts used for interpretations as students examine the linguistic and cultural differences between ASL and
English narratives. Prerequisites: ASL 29202; and SPED 43100; and SPED 43107; and admission to advanced
study. Corequisite: ASL 39201; and SPED 43105.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

SPED 43103 - INTERPRETING PROCESSES II

(Cross-listed with SPED 53103) Intermediate level interpreting course that challenges students to interpret the
more complex genres including expository, procedural, and argumentative texts. Students will study and apply
contextualization strategies. Discourse that is common to both the adult deaf community and educational
settings will be interpreted and transliterated. Students will be assigned to a thirty-hour practicum placement.
Prerequisite: ASL39201; and SPED 43102 and SPED 43105; and SPED 43111; and admission to advanced
study. Corequisite: ASL 39202; and SPED 43110.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

SPED 43104 - INTERPRETING PROCESS III

(Cross-listed with SPED 53104) Advanced level interpreting course focused on enhancing students’ English to
ASL and ASL to English skills in a variety of settings. Complex texts are selected from a variety of disciplines
from both community and educational settings. Students build on previously developed self-assessment skills to
create detailed and analytical diagnostic charts of their interpreted work. Students will be assigned to a 30-hour
practicum placement. Prerequisite: ASL 39202; and SPED 43103; and SPED 43110 and admission to advanced
study. Corequisite: ASL 49108.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

SPED 43105 - TRANSLITERATING

(Cross-listed with SPED 53105) Receptive and expressive use of English-based sign language systems; ASL root
words, prefix/ suffix use, simultaneous speaking and signing. Explanation and demonstration of Cued speech;
exploration of the research related to individuals who use Cued speech. Prerequisites: ASL 29202; and SPED
43107; and admission to advanced study. Corequisites: ASL 39201; and SPED 43102.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department
SPED 43106 - SCHOOL SETTING INTERPRETING

(Cross-listed with SPED 53106) Issues, challenges, roles, responsibilities, and ethics of classroom-based educational interpreting are explored. Students are exposed to the variety of classroom designs where interpreters work such as mainstreaming, inclusion, resource room, and self-contained classrooms. K-12 settings place additional expectations for interpreter participation including IEP meetings, counseling, school assemblies and performing arts presentations. Prerequisites: ASL 19202; and ASL/English Interpreting concentration (ASEI) within the Special Education (SPED) major. Pre/corequisite: ASL 29201; and SPED 43100.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

SPED 43107 - COMMUNITY SETTING INTERPRETING

(Cross-listed with SPED 53107) This course explores the various venues that interpreters can work in the community. Emphasis will be given to the development of specialized vocabulary. Students participate in mock interpreting situations common to community interpreting in order to identify ethical dilemmas, demands, and controls. Prerequisites: ASL 29201; and SPED 43100; and SPED 43106; and enrolled in the ASL/English Interpreting (ASEI) concentration within the Special Education (SPED) major. Corequisite: ASL 29202.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

SPED 43110 - DISCOURSE ANALYSIS FOR INTERPRETERS

(Cross-listed with SPED 53110) This course will explore the field of discourse analysis and its relation to the work of an interpreter. Students will complete the course with an understanding of terminology specific to discourse analysis, a better understanding of one’s own discourse style, and a better idea of how English and ASL use various discourse features. These features include the following: Turn-taking, Conversational Repair-false starts, Discourse Markers, Constructing Dialogue & Action, Cohesion, Rhythm, Rhyme, & Repetition. Prerequisite: ASL 39201; and SPED 43100; and SPED 43102; and SPED 43106; and SPED 43107. Corequisite: SPED 43103.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

SPED 43111 - THE PROFESSIONAL INTERPRETER

(Cross-listed with SPED 53111) Covers current trends in the field regarding situational and ethical issues. Demand-control schema and the RID Code of Professional Conduct are key components of the students' investigation and application. Students receive guidance in preparing for the RID NIC and participate in practicing for the RID performance test. Prerequisite: ASL 29202; and SPED 43100; and SPED 43107; and admission to advanced study.

3.000 Credit hours
3.000 Lecture hours
Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**SPED 43112 - INTERACTIVE INTERPRETING**

(Cross-listed with SPED 53112) Guides students through a process of examining the complex nature of interpreting interactive discourse. Discussions will focus on managing this multi-layered process when participants' roles, assumptions, and goals can be congruent or adversarial. Student will learn to navigate contrasting cultural, linguistic, and discourse expectations. This course will present numerous interactive scenarios for students to interpret typical of a variety of settings with different participant configurations. Prerequisites: ASL 29202; and SPED 43100; and SPED 43103; and SPED 43110 with a grade of C (2.000) or better.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**SPED 43113 - ASL TO ENGLISH INTERPRETING PROCESSES**

(Cross-listed with SPED 53113) Guides students in developing interpreting skills from their L2 (ASL) to their L1 (English). Students will learn strategies for increasing their ASL and English vocabularies for the purposes of understanding equivalents when applying English vocabulary to ASL signs. Students will examine their ability to apply this proficiency to various registers of ASL. Course will also emphasize incorporating Academic English into written scholarly papers to increase students' abilities to apply this to their interpretations. Prerequisites: ASL 29202 and SPED 43100.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**SPED 43192 - ADVANCED PRACTICUM: ASL ENGLISH INTERPRETING**

(Repeatable for maximum of 9 credit hours) Field-based practicum experience provides pre-service educational interpreters with opportunity to participate with currently practicing master educational interpreters. Students placed in education and-or community settings. University supervisor and teacher mentor observe and assess student skill. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school-agency before the first day of the semester in which student teaching internship will take place. Official valid certification of Child Safety Training, approved Basic Life Support and A.L.I.C.E. Training must be presented to the campus office of clinical experience or designated faculty-staff at Regional campuses as prerequisite for student teaching." Prerequisites: ASL 29202; and SPED 43100; and admission to advanced study.

1.000 TO 9.000 Credit hours
3.000 TO 27.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Lifespan Dev and Educ Sciences Department
**SPED 43309 - INTRODUCTION TO DEAF STUDIES**

(Cross-listed with ASL 49309 and SPED 53309) Introductory survey course provides informational base and understanding of experiences of deaf people as a cultural minority. Includes etiology and prevalence data, service delivery systems, diagnosis and assessment of issues and communication systems. 20 field hours.

Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

Course Attributes:
Writing Intensive Course

**SPED 43310 - LANGUAGE DEVELOPMENT FOR DEAF AND HARD-OF-HEARING STUDENTS**

(Cross-listed with SPED 53310) Reviews research, theories and theorists in the field of language development for hearing and deaf children; develops awareness of language differences commonly demonstrated by deaf and hard-of-hearing children; demonstrates ways to assess linguistic differences and facilitate instruction. Six topic areas include theories of language development (review), language and cognition, normal language acquisition in signed and spoken languages, child-caregiver interaction, language learning in a bilingual setting and language assessment. Students gain foundational understanding of language development and awareness of classroom applications for this knowledge. Includes 20 hours of field-lab experience. Deaf Education majors must achieve a minimum grade of B (3.000) in SPED 43309 before registering for this course. Prerequisites: SPED 43309; and ASL 19202; and admission to advanced study.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**SPED 43311 - INSTRUCTION OF DEAF/HARD-OF-HEARING STUDENTS WITH SPECIAL NEEDS**

IEP and transition planning strategies and program content for deaf/hard-of-hearing students w/ADHD, BD, DD, VI, DB, LD, CMI, TBI, chronically health impaired/medically fragile, gifted. Curriculum and lesson development and adaptation for impacted areas. Prerequisite: SPED 43313 with a minimum grade of B (3.000); and admission to advanced study. Corequisite: 2 credit hours of SPED 43392.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**SPED 43313 - LITERACY ASSESSMENT AND INTERVENTION FOR DEAF/HARD-OF-HEARING STUDENTS**

(Cross-listed with SPED 53313) Theoretical overview of integrated linguistics curriculum and reading theories.
Strategies to address DHH difficulties and barriers, instructional planning and materials design, and ongoing assessment strategies. Course includes a practicum placement. Prerequisites: SPED 43310 with a minimum grade of B (3.000); and CI 47504 or ECED 40126; and admission to advanced study; and pre/corequisite ASL 29202. Corequisite: 2 credit hours of SPED 43392. Pre/Corequisite: ASL 29202.

6.000 Credit hours
6.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**SPED 43324 - CURRICULUM METHODS AND MATERIALS FOR DEAF/HARD-OF-HEARING STUDENTS**

Designed to provide students with basic knowledge and skills needed to effectively design and implement instruction for deaf and hard-of-hearing students. Conducted through a combination of lectures, discussions, demonstrations and group activities. Upon successful completion, students possess foundational understanding of how to design and implement lessons and curriculum with students who are deaf and hard of hearing. Prerequisites: SPED 43313 with a minimum grade of B (3.000); CI 47501 and 47502; and admission to advanced study. Corequisite: 2 credit hours of SPED 43392.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**SPED 43392 - PRACTICUM: DEAF EDUCATION**

(Repeatable for a maximum of 3 credit hours) This classroom and field-based experience is designed to provide students pre-service deaf education teachers with the opportunity to develop professional-level skills in working with deaf and hard-of-hearing (DHH) students. The field component will provide experience in working with DHH students with diverse needs, disabilities and ethnic-cultural backgrounds. The class will address appropriate lesson planning and implementation and meets at least 6 times per semester. Prerequisite: none.

1.000 TO 3.000 Credit hours
3.000 TO 9.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Lifespan Dev and Educ Sciences Department

Course Attributes:
Experiential Learning Requirem

**SPED 43529 - NATURE AND NEEDS OF GIFTED CHILDREN**

Personal characteristics, abilities and potentialities of gifted through review of related research. Evaluation of research findings and implications for psycho-educational development. Prerequisite: PSYC 11762 and sophomore standing and admission to advanced study.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department
### SPED 43530 - INSTRUCTIONAL PROCESSES FOR GIFTED CHILDREN


3.000 Credit hours 3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

### SPED 43981 - STUDENT TEACHING IN SPECIAL EDUCATION

Provides opportunity to demonstrate skills in teaching. Students placed in education-based settings; assume total teaching responsibilities of students with exceptionalities for 480 clock hours under the supervision of the school-based mentor teacher and the university supervisor. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school-agency before the first day of the semester in which student teaching internship will take place. Official valid certification of Child Safety Training, approved Basic Life Support and A.L.I.C.E. Training must be presented to the campus office of clinical experience or designated faculty/staff at Regional campuses as prerequisite for student teaching. Prerequisite: Admission to advanced study; and Official valid certification of Child Safety Training, approved Basic Life Support and A.L.I.C.E. Training must be presented to the campus office of clinical experience or designated faculty/staff at Regional campuses as prerequisite for student teaching. Corequisite: SPED 49525.

4.000 TO 9.000 Credit hours 17.000 TO 35.000 Other hours

Levels: Undergraduate  
Schedule Types: Practicum or Internship

Lifespan Dev and Educ Sciences Department

Course Attributes:  
Experiential Learning Requirem

### SPED 43991 - SEMINAR IN SPECIAL EDUCATION

(Repeatable for credit)Undergraduate seminar in special education; varied topics. Prerequisite: Admission to advanced study.

1.000 TO 3.000 Credit hours 1.000 TO 3.000 Other hours

Levels: Undergraduate  
Schedule Types: Seminar

Lifespan Dev and Educ Sciences Department

### SPED 43992 - FIELD EXPERIENCE IN SPECIAL EDUCATION

Provides opportunity to observe master teachers and begin working with students. Students are placed in education-based settings and work with a team of professionals to understand techniques for providing services to students with exceptionalities. Additional seminar meetings. Prerequisite: Admission to advanced study.

3.000 Credit hours 9.000 Other hours
SPED 43996 - INDIVIDUAL INVESTIGATION IN SPECIAL EDUCATION

(Repeatable for credit) (Cross-listed with ASL 49096) Prerequisite: special approval.
1.000 TO 10.000 Credit hours
1.000 TO 10.000 Other hours

SPED 44092 - FIELD EXPERIENCE FOR MILD/MODERATE INTERVENTION SPECIALIST

Field assignments in conjunction with mild-moderate coursework. Evaluates students in personal conduct, communication skills, instructional design and methods, and impact on student learning aligned with CEC standards. Prerequisite: SPED 43992 and 43060 and admission to advanced study.
3.000 Credit hours
9.000 Other hours

SPED 44192 - FIELD EXPERIENCE FOR MODERATE/INTENSIVE INTERVENTION SPECIALIST

(Repeatable for credit) Field assignments in conjunction with moderate-intensive coursework. Evaluates students in personal conduct, communication skills, instructional design and methods, and impact on student learning aligned with CEC standards. Prerequisite: SPED 43992 and 43060 and admission to advanced study.
3.000 Credit hours
9.000 Other hours

SPED 44309 - AUTISM SPECTRUM DISORDERS: THEORY AND DIAGNOSIS

(Cross-listed with SPED 64309, SPA 64309 and SPA 74309) Provides an overview of Autism Spectrum Disorders (ASD). Examines the history, characteristics, and prevalence of ASD. Assessment and intervention models are explored as they relate to various theoretical models for understanding ASD. Prerequisite: none.
SPED 49525 - INQUIRY SEMINAR INTO PROFESSIONAL PRACTICE

Focus on effective, ethical and responsible implication of professional practice. Provides vehicle to articulate and demonstrate professional competencies, commitment and ethical decision making for providing services to students. Prerequisite: Admission to advanced study. Corequisite: SPED 43981.

Levels: Undergraduate
Schedule Types: Lecture

SPED 49625 - INQUIRY SEMINAR FOR ASL-ENGLISH INTERPRETERS

Final semester course to coincide with the advanced practice. Students present a professional description of their interpreting site analyzing students' needs, school and instructor expectations or barriers, application of the Demand – Control Schema, and ethical challenges. Current research in the field of interpreting is examined and a diagnostic chart of a work sample is created. Students explore the EIPA exam, its theoretical foundations, and participate in practicing for the EIPA. Prerequisites: ASL 49108; and SPED 43104; and SPED 43111; and admission into advanced study status. Corerequisite: SPED 43192.

Levels: Undergraduate
Schedule Types: Seminar

SPED 50093 - VARIABLE TITLE WORKSHOP IN SPECIAL EDUCATION

(Repeatable for credit) Topics of special interest to students desiring to intensify their knowledge in particular areas. Presenters include Kent State University and other institution faculty. Offered irregularly. Prerequisite: Graduate standing.

Levels: Graduate
Schedule Types: Workshop

SPED 53010 - FAMILY AND PROFESSIONAL COLLABORATION

This course provides knowledge and strategies for working with family members of exceptional individuals and members of related professions which provide services to them. Use of collaborative interdisciplinary and interagency models in special education. 20 clinical and 10 field hours. Prerequisite: SPED 63200 and graduate standing.

Levels: Undergraduate
Schedule Types: Lecture
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**SPED 53020 - ASSESSMENT IN SPECIAL EDUCATION**

Use/interpretation normed, criterion-referenced and informal curriculum-based assessments for students with mild/moderate disabilities. Standards-based alternative assessments for student with intensive needs. 10 field and 20 clinical hours. Prerequisite: graduate standing.

3.000 Credit hours
1.000 Lecture hours
2.000 Other hours

Levels: Graduate
Schedule Types: Field Experience, Lecture

Lifespan Dev and Educ Sciences Department

**SPED 53021 - ASSESSMENT FOR INDIVIDUALS WITH MODERATE TO INTENSIVE NEEDS**

(Cross-listed with SPED 43021) Investigates issues and methods for assessing the academic, behavioral, physiological, mental health, and life skills of individuals with moderate to intensive disabilities. Interpretation of norm- and criterion formal assessments, creation of alternative assessments, modification of informal assessments, ecological and community-based assessments specific to individuals with low incidence and multiple disabilities. Prerequisite: SPED 63000 and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**SPED 53030 - APPLIED BEHAVIOR ANALYSIS I: THEORY AND TECHNIQUES**

Theory and techniques associated with applied behavior analysis. Approaches for establishing, implementing, maintaining and monitoring skill development are emphasized. Procedures for assessing and modifying classroom environments/instructional techniques to enhance learning/behavior of individuals with disabilities, with specific emphasis on preventing, increasing positive and decreasing inappropriate behavior are introduced. 25 field hours. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**SPED 53031 - APPLIED BEHAVIOR ANALYSIS II: APPLICATION**

Equips students with the skills necessary to integrate the technology of applied behavior analysis (as learned in SPED 43030, Applied Behavior Analysis I) with the analytical skills necessary to prevent, teach, manage and assess behavior. Specific behavioral interventions are presented. Includes 40 field hours. Prerequisite: SPED 53030 and graduate standing.
SPED 53040 - LANGUAGE AND READING IN SPECIAL EDUCATION

Instructional approaches to teaching reading/language arts to students with disabilities. Emphasis on adapting instructional techniques, materials, assessments to meet the needs of learners with disabilities. Contains 15 clinical and 15 field hours. Prerequisite: graduate standing.

Levels: Graduate
Schedule Types: Clinic, Field Experience, Lecture

SPED 53050 - CHARACTERISTICS OF STUDENTS WITH MILD/MODERATE INTERVENTION NEEDS

Definitions, causes, characteristics; social, educational implications of learning developmental and emotional behavioral disorders of students identified with mild/moderate disabilities. Methods of assessment and interventions; current issues. 10 clinical and 10 field hours. Prerequisite: graduate standing.

Levels: Graduate
Schedule Types: Lecture

SPED 53051 - CHARACTERISTICS OF STUDENTS WITH MODERATE/INTENSIVE INTERVENTION NEEDS

Overview of specific facets and causes of severe disabilities, physical/psychological aspects family/societal responses, political trends, etiology and medical implications, educational and vocational programming, assessment and treatment planning, assistive technology. 10 clinical 10 field hours. Prerequisite: graduate standing.

Levels: Graduate
Schedule Types: Lecture

SPED 53060 - CURRICULUM METHODS IN SPECIAL EDUCATION

Curriculum development, programming, delivery for students with mild to moderate disabilities. Introduction to transition planning. Emphasis on functional curriculum and adapting instructional techniques, materials, assessment to meet needs. 33 field clinical hours. Prerequisite: graduate standing.

Levels: Graduate
Schedule Types: Lecture
SPED 53062 - CURRICULUM METHODS MILD/MODERATE INTERVENTION

Delivery and adaptation of evidence-based practices for students with mild/moderate disabilities. Emphasis on achievement in general curriculum. Training to mentor other professionals. Prerequisite: Graduate standing.

Levels: Graduate
Schedule Types: Lecture

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

SPED 53063 - CURRICULUM METHODS MODERATE/INTENSIVE INTERVENTION

(Cross-listed with SPED 43063) Delivery and adaptation of evidence based practices for students with moderate to intensive educational needs. An emphasis is placed on instruction of functional academic and life skills within naturalistic contexts. Prerequisite: SPED 53060 and graduate standing.

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

SPED 53070 - PLANNING AND PROGRAMMING FOR TRANSITIONS

This course addresses life-span community participation and the planning, support, development, and services available to accomplish it. Introduction to community agencies and adult services. 10 clinical 15 field hours. Prerequisite: Graduate standing.

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

SPED 53080 - ASSISTIVE TECHNOLOGY FOR STUDENTS WITH DISABILITIES

Examines application of high and low technology assistive devices for students with intensive intervention needs. Analysis of technology needs; selection/development of technology; training/evaluation of technology use by students. 20 clinical hours. Prerequisite: SPED 53050 or SPED53051 and graduate standing.

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department
SPED 53092 - DEAF RESIDENTIAL SCHOOL FIELD EXPERIENCE

(Slashed with SPED 43092) Week-long practicum at a residential or post-secondary school for the deaf; 24-hour per day interaction with deaf students and adults to learn about and participate in activities, resources, and programs and interact with staff with expertise in deafness. Prerequisites: SPED 53309; and graduate standing. Pre/corequisite: ASL 29202. 
1.000 Credit hours
8.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Lifespan Dev and Educ Sciences Department

SPED 53100 - SURVEY OF INTERPRETING PROFESSION

(Cross-listed with SPED 43100) Introduction to the field of ASL-English interpreting. The following will be discussed: the history of the interpreting profession; the varied roles-responsibilities of interpreters; issues and concerns facing interpreters; legal mandates and constraints governing the provision of interpreters; ethical guidelines and their application to educational environments. Since interpreters are expected to be fluent in both English and ASL, this course will strive to enhance students’ facility with both languages. Prerequisite: ASL 19202; and graduate standing. Pre/Corequisite: ASL 29201. Corequisite: SPED 53106.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

SPED 53101 - DEAF CULTURE AND COMMUNITY

(Cross-listed with ASL 49401) Exploration of historical events and figures from deaf community perspective. Life experiences of “typical” deaf individuals as minority culture representatives interacting with majority culture institutions and processes as depicted in narrative storytelling and folklore. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

SPED 53102 - INTERPRETING PROCESSES I

(Cross-listed with SPED 43102) Beginning level interpreting course that examines the models of interpreting and their application to practice. Consecutive and simultaneous interpreting strategies are used to develop processing skills for both English to ASL and ASL to English interpretations. Samples of narrative genre are the texts used for interpretations as students examine the linguistic and cultural differences between ASL and English narratives. Prerequisite: ASL 29202; and SPED 53100; and SPED 53107; and graduate standing. Corequisite: ASL 39201 and SPED 53105.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
SPED 53103 - INTERPRETING PROCESSES II

(Cross-listed with SPED 43103) Intermediate level interpreting course that challenges students to interpret the more complex genres including expository, procedural, and argumentative texts. Students will study and apply contextualization strategies. Discourse that is common to both the adult deaf community and educational settings will be interpreted and transliterated. Students will be assigned to a thirty-hour practicum placement. Prerequisite: ASL 39201; and SPED 53102; and SPED 53105; and SPED 53107; and SPED 53111 and graduate standing. Corequisite: ASL 39202 and SPED 53110.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

SPED 53104 - INTERPRETING PROCESS III

(Cross-listed with SPED 43104) Advanced level interpreting course focused on enhancing students’ English to ASL and ASL to English skills in a variety of settings. Complex texts are selected from a variety of disciplines from both community and educational settings. Students build on previously developed self-assessment skills to create detailed and analytical diagnostic charts of their interpreted work. Students will be assigned to a 30-hour practicum placement. Prerequisite: ASL 39202 and SPED 53103; and SPED 53110 and graduate standing. Corequisite: ASL 49108.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

SPED 53105 - TRANSLITERATING

(Cross-listed with SPED 43105) Students are exposed to the various English-based sign systems that are used in the education of deaf students as well as variations of sign communication in the deaf community. Focus is placed on developing transliterating skills utilizing conceptually accurate signed English. Students examine the implications of a diverse sign continuum and the professional expectation of identifying and meeting the language preferences of deaf consumers. Prerequisite: SPED 53100 and ASL 29202 and graduate standing. Corequisite: ASL 39201 and SPED 53102.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

SPED 53106 - SCHOOL SETTING INTERPRETING

(Cross-listed with SPED 43106) Issues, challenges, roles, responsibilities, and ethics of classroom-based educational interpreting are explored. Students are exposed to the variety of classroom designs where interpreters work such as mainstreaming, inclusion, resource room, and self-contained classrooms. K-12 settings place additional expectations for interpreter participation including IEP meetings, counseling, school assemblies and performing arts presentations. Prerequisite: ASL 19201; asl english interpreting (ASEI)
concentration within the special education (SPED) major and graduate standing. Pre/corequisite: SPED 53100 and ASL 29201.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**SPED 53107 - COMMUNITY SETTING INTERPRETING**

(Cross-listed with SPED 43107) This course explores the various venues that interpreters can work in the community. Emphasis will be given to the development of specialized vocabulary. Students participate in mock interpreting situations common to community interpreting in order to identify ethical dilemmas, demands and controls. Prerequisite: ASL 29201; SPED 53100; and SPED 53106; and admission to the asl english interpreting (ASEI) concentration with the special education (SPED) major and graduate standing. Corequisite: ASL 29202.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**SPED 53108 - AMERICAN SIGN LANGUAGE LINGUISTICS AND USAGE**

(Cross-listed with ASL 49108) Analytical study of American Sign Language syntactic, semantic, morphology and pragmatics; comparison of spoken languages and ASL using the Stokoe system, impact of educational-setting characteristics on linguistic processes. Prerequisite: SPED 4/53100 and SPED 29202 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**SPED 53110 - DISCOURSE ANALYSIS FOR INTERPRETERS**

(Cross-listed with SPED 43110) This course will explore the field of discourse analysis and its relation to the work of an interpreter. Students will complete the course with an understanding of terminology specific to discourse analysis, a better understanding of one's own discourse style, and a better idea of how English and ASL use various discourse features. These features include the following: Turn-taking, Conversational Repair - false starts, Discourse Markers, Constructing Dialogue & Action, Cohesion, Rhythm, Rhyme, and Repetition. Prerequisite: ASL 39201; and SPED 53100 and SPED 53102 and SPED 53106 and SPED 53107. Corequisite SPED 53103.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**SPED 53111 - THE PROFESSIONAL INTERPRETER**
Covers current trends in the field regarding situational and ethical issues. Demand-Control Schema and the RID Code of Professional Conduct are key components of the students' investigation and application. Students receive guidance in preparing for the RID performance test. Prerequisite: ASL 29202 and SPED 53100 and SPED 53107; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**SPED 53112 - INTERACTIVE INTERPRETING**

(Cross-listed with SPED 43112) Guides students through a process of examining the complex nature of interpreting interactive discourse. Discussions will focus on managing this multi-layered process when participants' roles, assumptions, and goals can be congruent or adversarial. Students will learn to navigate contrasting cultural, linguistic, and discourse expectations. This course will present numerous interactive scenarios for students to interpret typical of a variety of settings with different participant configurations. Prerequisites: ASL 29202; and SPED 53100; and SPED 53103; and SPED 53110 with a grade of C (2.000) or better. Corequisite: SPED 53102.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**SPED 53113 - ASL TO ENGLISH INTERPRETING PROCESSES**

(Slashed with SPED 43113) Guides students in developing interpreting skills from their L2 (ASL) to their L1 (English). Students will learn strategies for increasing their ASL and English vocabularies for the purposes of understanding equivalents when applying English vocabulary to ASL signs. Students will examine their ability to apply this proficiency to various registers of ASL. Course will also emphasize incorporating Academic English into written scholarly papers to increase students' abilities to apply this to their interpretations. Prerequisites: ASL 29202 and SPED 53100; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**SPED 53192 - ADVANCED PRACTICUM: ASL ENGLISH INTERPRETING**

(Repeatable for a maximum of 9 credit hours) Field-based practicum experience provides pre-service educational interpreters with opportunity to participate with currently practicing master educational interpreters. Students placed in education and-or community settings. University supervisor and teacher mentor observe and assess student skill. Prerequisite: ASL 29202 and graduate standing.

1.000 TO 9.000 Credit hours
3.000 TO 27.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Lifespan Dev and Educ Sciences Department
SPED 53309 - INTRODUCTION TO DEAF STUDIES

Introductory survey course provides informational base and understanding of experiences of deaf people as a cultural minority. Includes etiology and prevalence data, service delivery systems, diagnosis and assessment of issues and communication systems. 20 field hours. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

SPED 53310 - LANGUAGE DEVELOPMENT FOR DEAF AND HARD-OF-HEARING STUDENTS

Reviews research, theories and theorists in the field of language development for hearing and deaf children; develops awareness of language differences commonly demonstrated by deaf and hard-of-hearing children; demonstrates ways to assess linguistic differences and facilitate instruction. Six topic areas include theories of language development (review), language and cognition, normal language acquisition in signed and spoken languages, child-caregiver interaction, language learning in a bilingual setting and language assessment. Students gain foundational understanding of language development and awareness of classroom applications for this knowledge. Includes 20 hours of field-lab experience. Deaf Education majors must achieve a minimum grade of B (3.000) in SPED 53309 before registering for this course. Prerequisite: SPED 53309; and ASL 19202; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

SPED 53311 - INSTRUCTION OF DEAF/HARD-OF-HEARING STUDENTS WITH SPECIAL NEEDS

IEP and transition planning strategies and program content for deaf/hard-of-hearing students with ADHD, BD, DD,VI,DB, LD, CMI, TBI, chronically health impaired/medically fragile, gifted. Curriculum and lesson development and adaptation for impacted areas. Prerequisite: SPED 53313 with a minimum grade of B (3.000) and graduate standing. Corequisite: 2 credit hours of SPED 63392.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

SPED 53313 - LITERACY ASSESSMENT AND INTERVENTION FOR DEAF/HARD-OF-HEARING STUDENTS

Theoretical overview of integrated linguistics curriculum and reading theories. Strategies to address DHH difficulties and barriers, instructional planning and materials design, and ongoing assessment strategies. Course includes a practicum placement. Prerequisite: SPED 53310 with a minimum grade of B (3.000); and CI 67310 or CI 57504; and graduate standing. Pre/corequisite: ASL 29202 and 2 credit hours of SPED 63392.

6.000 Credit hours
6.000 Lecture hours

Levels: Graduate
SPED 53316 - EARLY CHILDHOOD DEAF EDUCATION: FAMILY AND CHILD SERVICE PROVISION

Targets the issues and needs of young deaf/hard-of-hearing children and their families. Topics covered relate to service provision in the home and classroom for deaf/hard-of-hearing children from birth to 5 years of age. Includes 30 hours of work in a practicum placement with a young D/HH child and his/her family. Prerequisites: SPED 4/53310; ASL/SPED 29202 or Sign Language Proficiency Interview (SLPI) at intermediate or above; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

SPED 53324 - CURRICULUM METHODS AND MATERIALS FOR DEAF/HARD OF HEARING STUDENTS

Designed to provide students with basic knowledge and skills needed to effectively design and implement instruction for deaf and hard-of-hearing students. Conducted through a combination of lectures, discussions, demonstrations and group activities. Upon successful completion, students possess foundational understanding of how to design and implement lessons and curriculum with students who are deaf and hard of hearing. Prerequisite: SPED 53313 with a minimum grade of B (3.000); and CI 57501 and 57502; and graduate standing. Corequisite: 2 credit hours of SPED 63392.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

SPED 53529 - NATURE AND NEEDS OF GIFTED CHILDREN

Personal characteristics, abilities and potentialities of gifted children through review of related research. Evaluation of research findings and implications for psychoeducational development. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

SPED 53530 - INSTRUCTIONAL PROCESSES FOR GIFTED CHILDREN


3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
SPED 53534 - SOCIAL/EMOTIONAL COMPONENTS OF GIFTEDNESS

Affective growth of gifted persons is reviewed through research literature and analysis of case studies. Reviews adjustment problems of gifted youth and adults. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

SPED 54161 - TRANSITIONAL PROGRAMMING AND SERVICES FOR DISABLED YOUTH

Transition from school to work and community life; vocational exploration/assessment and preparation/placement methods and techniques for secondary and postsecondary disabled youth. Prerequisites: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

SPED 60199 - THESIS I

Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester distributed over several semesters if desired. Prerequisite: Graduate standing and special approval.
2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

SPED 60299 - THESIS II

Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: SPED 60199 and graduate standing.
2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

SPED 62951 - EARLY INTERVENTION IN NATURAL ENVIRONMENTS

This seminar targets early childhood special education and intervention professionals that comprise the field of
early intervention from practitioners to future leaders in the field. Recommended practice guidelines of the Division for Early Childhood (DEC) indicate that interventions should be embedded and distributed within and across the routines, activities and places that are part of the child’s daily experience. In keeping with DEC recommendations, this course will explore issues related to the various natural environments of the children in search of the routines, activities, and places that offer the maximum learning and practice opportunities that are family centered, developmentally and individually appropriate, culturally sensitive, and least intrusive.

Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

SPED 63030 - PHARMACOLOGICAL INTERVENTIONS IN SPECIAL EDUCATION

Introduce mechanisms by which drugs act; identify benefits/side effects; implications for delivery/ intervention; monitoring in classroom. Classes of drugs examined; issues examined; delineation of responsibilities and prohibitions. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

SPED 63031 - PROGRAM DEVELOPMENT AND ETHICAL APPLICATION OF APPLIED BEHAVIOR ANALYSIS

Describe and apply methodology and research design in monitoring the effectiveness of behavioral interventions and to use such information to evaluate overall program efficacy. Consideration is given to student characteristics (e.g., underlying disability) when developing and evaluating behavior programs based. Use of specific tools for prioritizing behaviors, evaluating progress, and making treatment program decisions are presented. Issues related to ethics, treatment implementation fidelity, and behavioral program development are also emphasized. Prerequisites: SPED 53030 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

SPED 63032 - ADVANCED INTERVENTIONS FOR ADDRESSING SEVERE BEHAVIOR

Use and interpretation of functional behavioral assessment in educational settings to lead to the identification of empirically-supported interventions to address the behavioral needs of children. The development, implementation and analysis of functional analysis procedures. Special emphasis given to identifying designing, implementing and assessing the effectiveness of advanced behavioral interventions in consultation. 20 field hours. Prerequisite: SPED 53030, SPED 53031, SPED 63031, SPED 63301 and SPED 63033; and graduate standing.
3.000 Credit hours
3.000 Lecture hours
SPED 63033 - ETHICAL AND PROFESSIONAL CONDUCT IN APPLIED BEHAVIOR ANALYSIS

This course provides an intensive focus on ethical and professional conduct as it applies to day-to-day implementation of applied behavior analytic strategies by professional behavior analysts. Responsible conduct of a behavior analyst, ethical responsibilities to clients, colleagues, the field of applied behavior analysis, and society are featured. BACB Guidelines for Responsible Conduct for Behavior Analyst and BACB Disciplinary and Ethical Standards are reviewed and studied. This course focuses on meeting the updated standards for ethics set forth by the Behavior Analyst Certification Board in the BACB Fourth Edition Task List. Prerequisites: SPED 53030 and SPED 63031; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

SPED 63092 - FIELD EXPERIENCE IN SPECIAL EDUCATION

Provides opportunity to observe master teachers and begin working with students. Students are placed in education-based settings and work with a team of professionals to understand techniques for providing services to students with exceptionalities. Additional seminar meetings. Prerequisite: graduate standing.

3.000 Credit hours
9.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

SPED 63101 - ADMINISTRATION AND SUPERVISION IN SPECIAL EDUCATION

Administration of educational programs for exceptional children; improvement of teacher competencies; function of special education supervisors; and special education operations at local, state and national levels. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

SPED 63200 - INTRODUCTION TO EXCEPTIONALITIES

Introduction to exceptionalities of student development. Focus on foundations/theories associated with characteristics and accommodations for human exceptionalities. Collaborative/multidiscipline educational service design. Fifteen clinical/field hours. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
**SPED 63201 - CONTEMPORARY ISSUES IN SPECIAL EDUCATION**

(Slashed with SPED 83201) Surveys current research, literature and policy issues that affect identification, assessment and service provision to students with exceptionalities. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

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**SPED 63300 - RESEARCH APPLICATIONS IN SPECIAL EDUCATION**

Culminating experience in which students apply their content, methods and research skills to develop a final project that addresses an area of special education. Focuses on techniques for answering research questions, developing curriculum, and assimilating knowledge through applied projects. Prerequisite: graduate standing; and EDPF 65510 or 65511.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

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**SPED 63301 - SINGLE SUBJECT RESEARCH METHODS**

(Repeatable 2 times for credit) Research designs and techniques associated with behavioral observation and a description of single subject experimental methodology are presented. The study of this methodology includes topics related to applied behavior analysis, assessment, experimental design and data evaluation. In addition, single subject methods are discussed in relations to other research designs. 20 field hours. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

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**SPED 63392 - PRACTICUM IN DEAF EDUCATION**

(Repeatable for a maximum of 3 credit hours) This classroom and field-based experience is designed to provide students pre-service deaf education teachers with the opportunity to develop professional-level skills in working with deaf and hard-of-hearing (DHH) students. The field component will provide experience in working with DHH students with diverse needs, disabilities and ethnic-cultural backgrounds. The class will address appropriate lesson planning and implementation and meets at least 6 times per semester. Prerequisite: graduate standing.

1.000 TO 3.000 Credit hours
3.000 TO 9.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship
SPED 63531 - CURRICULUM DEVELOPMENT FOR GIFTED LEARNERS

Focus on design/development of curriculum for gifted learners; adapt/modify existing curricula; design curricular materials through predetermined process assessment of suitability of materials. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

SPED 63532 - GIFTED PROGRAM DESIGN AND ADMINISTRATION

Fundamentals of designing gifted programs are reviewed. Topics include student identification in service advocacy, program evaluation, compliance with state standards and teacher preparation. Prerequisite: SPED 53529 and SPED 53530 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

SPED 63533 - GIFTED SUBPOPULATIONS

The characteristics and needs of intellectually gifted individuals who often are not high academic achievers are studied with consideration of the implications for school practices. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

SPED 63892 - EARLY INTERVENTION INTERNSHIP

(Repeatable for a maximum of 9 credit hours) The Early Intervention Internship involves supervised observation and participation in an early intervention setting(s) for children ages birth to three with developmental delays and disabilities or supervised observation and participation in research and scholarly activities related to the development, delivery, and evaluation of early intervention services to children and their families. Students may be placed at a county board of developmental disabilities, center-, community-, or home-based early intervention program, a developmental center, childcare center, a neonatal intensive care unit (NICU) or other approved placement. The Early Intervention internship will provide students practical experience in an Early Intervention professional setting, one that allows students to develop and refine a variety of skills when working with infants and toddlers with disabilities and their families. Prerequisite: graduate standing and special approval.
3.000 Credit hours
9.000 Other hours

Levels: Graduate
Schedule Types: Field Experience
SPED 63949 - AUTISM SPECTRUM DISORDER CAPSTONE

Knowledge and skills gained through participation in the Autism Spectrum Disorders (ASD) program are utilized to develop a project related to the education of individuals with ASD and-or the individuals who support them. Prerequisite: graduate standing.
1.000 TO 3.000 Credit hours
3.000 TO 9.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

SPED 63950 - CURRICULUM AND INTERVENTION IN EARLY CHILDHOOD SERVICES

Overview and comparison of early childhood service approaches including: history and issues in delivering services, developmentally appropriate practice, environmental arrangement and how to modify curriculum. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

SPED 63952 - FAMILY AND PROFESSIONAL COLLABORATION IN EARLY CHILDHOOD

(Cross-listed with ECED 60159 and SPED 73952) Examines issues facing families and professionals serving young children who are at-risk, disabled and typically developing. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

SPED 63953 - PRACTICAL APPLICATIONS: BIRTH TO FIVE

Practical application of recommended practices for young children birth-five. Observation of young children in natural environments. Plan and evaluate intervention with families and professionals. Sixty field hours. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

SPED 63954 - PRACTICAL APPLICATIONS: TEAMING
The purpose of this course is to help students understand and apply the principles of effective collaborative teaming as related to their professional roles and responsibilities in a variety of educational settings serving young children with disabilities. A range of topics will be addressed throughout the course, including giving and receiving feedback, reflective practices, effective meeting, conflict resolution and communication skills, developing and providing quality professional development, supervising, coaching, mentoring, working with para-professionals, itinerant teaching, service coordination, and consulting with general educators. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**SPED 63955 - TYPICAL AND ATYPICAL DEVELOPMENT IN YOUNG CHILDREN**

Overview of typical and atypical development pathways from birth to grade 3 including: theories of behavior, implications of atypical development on play, learning, early childhood development within ecological framework. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**SPED 63956 - FOUNDATIONS IN EARLY CHILDHOOD SERVICES**

(Cross-listed with ECED 60156 and SPED 73956) Overview of issues facing young children within context of family/society including: history, early childhood services, theoretical perspectives, implications of childhood disabilities, and recommended assessment intervention and evaluation. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**SPED 63957 - ASSESSMENT AND EVALUATION OF EARLY CHILDHOOD SERVICES**

(Cross-listed with ECED 60157 and SPED 73957) Examines a range of systems for comparing and observing early childhood services, practices, young children and families: types and purposes of assessment procedures and instruments, monitoring progress. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**SPED 63958 - EARLY CHILDHOOD INTERVENTION METHODS**

Specific strategies for working with children birth to eight with intensive needs (e.g. cerebral palsy, spina bifida,
autism). 30 clinical hours will provide students with the opportunity to practice newly acquired intervention strategies, knowledge and skills. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**SPED 63959 - MEDICAL ASPECTS OF LIFESPAN DISABILITIES**

Description of medical issues facing individuals with lifespan disabilities and their families. Examination of etiology, co-occurring disabilities and disorders, and treatment options in relation to individuals with Autism Spectrum Disorders and other developmental disabilities. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**SPED 63991 - SEMINAR IN SPECIAL EDUCATION**

(Repeatable for credit) Various topics include: behavior modification, research problems in special education, theories in special education, social processes in special education. Prerequisite: Graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Lifespan Dev and Educ Sciences Department

**SPED 63992 - STUDENT TEACHING IN SPECIAL EDUCATION**

(Repeatable for maximum of 8 credit hours) Provides opportunity to demonstrate skills in teaching. Students placed in education-based settings; assume total teaching responsibilities of students with exceptionalities for 480 clock hours under the supervision of the school-based mentor teacher and the university supervisor. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school agency before the first day of the semester in which student teaching internship will take place. Official valid certification of Child Safety Training, approved Basic Life Support and A.L.I.C.E. Training must be presented to the campus office of clinical experience or designated faculty/staff at Regional campuses as prerequisite for student teaching. Prerequisite: Graduate standing and special approval; and Official valid certification of Child Safety Training, approved Basic Life Support and A.L.I.C.E. Training must be presented to the campus office of clinical experience or designated faculty/staff at Regional campuses as prerequisite for student teaching. Corequisite: SPED 69525.
4.000 TO 8.000 Credit hours
17.000 TO 35.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Lifespan Dev and Educ Sciences Department
SPED 63995 - SPECIAL TOPICS IN SPED

(Repeatable for credit) Specialized offerings in response to emerging or selected program needs. Prerequisite: Graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

SPED 63996 - INDIVIDUAL INVESTIGATION IN SPECIAL EDUCATION

(Repeatable for credit) Prerequisite: graduate standing and special approval.
1.000 TO 10.000 Credit hours
1.000 TO 10.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Lifespan Dev and Educ Sciences Department

SPED 63998 - RESEARCH: SPECIAL EDUCATION

(Repeatable for credit) Prerequisite: Graduate standing and special approval.
1.000 TO 10.000 Credit hours
1.000 TO 10.000 Other hours

Levels: Graduate
Schedule Types: Research

Lifespan Dev and Educ Sciences Department

SPED 64309 - AUTISM SPECTRUM DISORDERS: THEORY AND DIAGNOSIS

(Cross-listed with SPED 44309, SPA 64309 and SPA 74309) Provides an overview of Autism Spectrum Disorders (ASD). Examines the history, characteristics, and prevalence of ASD. Assessment and intervention models are explored as they relate to various theoretical models for understanding ASD. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

SPED 64310 - AUTISM SPECTRUM DISORDERS: LIFESPAN INTERVENTIONS

Provides students with a review of the significant aspects related to educational, social, vocational transitions for children, adolescents, and young adults with ASD. Students learn skills necessary to evaluate and develop programs designed to meet the changing and long term needs of individuals with ASD. Prerequisite: graduate study.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
SPED 64892 - ADVANCED PRACTICUM

(Repeatable for credit) The purpose of this advanced practicum is to integrate the knowledge and skills acquired through prior curricula to a field-based setting assisting individuals with disabilities. Settings may include, but are not limited to, general education and special education classrooms as well as therapeutic, residential and vocational programs. Prerequisite: graduate standing and special approval.

3.000 OR 4.000 Credit hours
9.000 OR 12.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

SPED 64951 - DEVELOPING IFSPS AND IEPS FOR YOUNG CHILDREN

This course is designed to increase students understanding regarding federal and state rules for developing IEPs and IFSPs for young children and their families. Students will learn how to write functional and measurable IEP goals, objectives and IFSP outcomes, and to use assessment information directly for identifying, writing, and monitoring IFSP outcomes and IEP goals. This course will also teach how to form partnerships with families around developing, implementing and evaluating the IFSP and IEP. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

SPED 69525 - INQUIRY PROFESSIONAL PRACTICE

This course is to support students during their student teaching experience in the last semester of the program. Planning for instruction and assessment, instructing and engaging students in various special education settings, and assessing learning outcomes are the focus of this course. The course also includes information specific to the professional responsibilities in their placements. Prerequisite: graduate standing. Corequisite: SPED 63992.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

SPED 70093 - VARIABLE TITLE WORKSHOP IN SPECIAL EDUCATION

(Repeatable for credit) Topics of special interest to students desiring to intensify their knowledge in particular areas. Presenters include Kent State University and other institution faculty. Offered irregularly. Prerequisite: Doctoral standing.

1.000 TO 5.000 Credit hours
1.000 TO 5.000 Other hours

Levels: Graduate
### SPED 70094 - COLLEGE TEACHING

(Repeatable for credit) (Cross-listed with EPSY 70094 and SPSY 60094 and SPSY 70094) Discusses major aspects of teaching in higher education, including such topics as students, philosophy of teaching, principles of adult learning, instructional strategies, students assessment and others. Prerequisite: Doctoral standing.

- **3.000 Credit hours**
- **3.000 Lecture hours**

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

### SPED 73030 - PHARMACOLOGICAL INTERVENTIONS IN SPECIAL EDUCATION

Introduce mechanisms by which drugs act; identify benefits/side effects; implications for delivery/intervention; monitoring in classroom. Classes of drugs examined; issues examined; delineation of responsibilities and prohibitions. Prerequisite: Doctoral standing.

- **3.000 Credit hours**
- **3.000 Lecture hours**

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

### SPED 73533 - GIFTED SUBPOPULATIONS

The characteristics and needs of intellectually gifted individuals who often are not high academic achievers are studied with consideration of the implications for school practices. Prerequisite: Doctoral standing.

- **3.000 Credit hours**
- **3.000 Lecture hours**

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

### SPED 73950 - CURRICULUM AND INTERVENTION IN EARLY CHILDHOOD SERVICES

Overview and comparison of early childhood service approaches, including history and issues in delivering services, developmentally appropriate practice, environmental arrangement and how to modify curriculum. Prerequisite: Doctoral standing.

- **3.000 Credit hours**
- **3.000 Lecture hours**

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

### SPED 73956 - FOUNDATIONS IN EARLY CHILDHOOD SERVICES
Overview of issues facing young children within context of family/society including: history, early childhood services, theoretical perspectives, implications of childhood disabilities, and recommended assessment intervention and evaluation. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**SPED 73957 - ASSESSMENT AND EVALUATION OF EARLY CHILDHOOD SERVICES**

(Cross-listed with ECED 60156 and SPED 63956) Examines a range of systems for comparing and observing early childhood services, practices, young children and families: types and purposes of assessment procedures and instruments monitoring progress. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**SPED 73991 - SEMINAR IN SPECIAL EDUCATION**

(Repeatable for credit) Various topics include: behavior modification, research problems in special education, theories in special education, social processes in special education. Prerequisite: Doctoral standing.

1.000 OR 3.000 Credit hours
1.000 OR 3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Lifespan Dev and Educ Sciences Department

**SPED 73995 - SPECIAL TOPICS IN SPED**

(Repeatable for credit) Specialized offerings in response to emerging or selected program needs. Prerequisite: Doctoral standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**SPED 73996 - INDIVIDUAL INVESTIGATION IN SPECIAL EDUCATION**

(Repeatable for credit) Prerequisite: Doctoral standing and special approval.

1.000 TO 10.000 Credit hours
1.000 TO 10.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation
**SPED 80001 - SPECIAL EDUCATION RESIDENCY**

This course is designed to provide beginning SPED doctoral students skills and knowledge in the following global areas: information literacy and plagiarism, basic APA style writing and building a writing routine. Additionally, the course will prepare students in the following SPED specific areas: effectively synthesizing intervention based empirical research, establishing a line of inquiry in the disability related fields, and developing a CV for disability related positions in Higher Education. Overall, the course will help students to understand life in academia during the doctoral studies in SPED and life after graduation conducting timely SPED research and teaching SPED content (e.g., institutional differences for SPED higher education jobs, tenure, work and life balance, time management, etc). In-progress (IP) mark permissible. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

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**SPED 80002 - ANALYSIS OF THE LITERATURE IN SPECIAL EDUCATION**

This course is designed to assist doctoral students in the acquisition, organization, and interpretation of information about research in special education. The seminar introduces students to the nature of inquiry and the process of generating questions about a broad array of disability-related research topics. Students will gain knowledge to analyze critically the outcomes of research in special education. In-progress (IP) mark permissible. Prerequisite: SPED 80001; and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

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**SPED 80003 - IMPLEMENTATION SCIENCE IN SPECIAL EDUCATION**

This course is designed to provide students an overview of implementation science, and seminal leadership and systems change literature. The course will describe current state of the science of implementation, and identify strategies that foster the effective transmission and implementation of innovative programs in intervention focused disability studies special education fields. Students analyze and apply the literature at the teacher, family, school building, district, state and federal levels. Students will gain skills and knowledge in implementation drivers that have the potential in reducing the research to practice gap, and increasing the integration of evidence based practices. Strategies for developing and mobilizing stakeholders to support the process of change will be covered. Prerequisite: doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

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**SPED 80005 - EMPIRICAL INVESTIGATIONS IN SPECIAL EDUCATION**

The course is intended to help students solidify their knowledge, skills, and dispositions related to research design, research methods, and scholarly writing by applying and expanding them in the context of special
education research. Students will review and analyze quality indicators for special education research, critique select special education research literature, and develop a preliminary research proposal. Satisfactory/unsatisfactory (S/U) graded; In-progress (IP) mark permissible. Prerequisite: SPED 80002; and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**SPED 80040 - RESEARCH GRANT DEVELOPMENT FOR DISABILITY PROGRAMS**

Students develop and write research proposals for grant competitions focusing on disability issues. Considerations for types of competitions and funding sources are discussed. Focus of instruction is related to how to describe the importance of the research proposed, research methods identified, budget, administration of grant activities and evaluation of implementation. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Lifespan Dev and Educ Sciences Department

**SPED 80090 - DOCTORAL RESIDENCY SEMINAR**

Provides students with the opportunity to synthesize courses, research and practice by focusing on diverse issues and topics. Ordinarily, SPED 80090 is taken no earlier than the second year of doctoral studies as a culminating course in the doctoral sequence. Prerequisite: Doctoral standing and special approval.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Lifespan Dev and Educ Sciences Department

**SPED 80092 - PRACTICUM IN COLLEGE TEACHING**

(Repeatable for credit) This course will provide the student supervised experience in design, delivery, and evaluation of a college course in special education. The student will demonstrate skills learned in the pre-requisite course (SPED 70094) under the supervision of a designated special education faculty member. Satisfactory/unsatisfactory (S/U) graded. Prerequisite: doctoral standing. Pre/corequisite: SPED 70094
3.000 Credit hours
9.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Lifespan Dev and Educ Sciences Department

**SPED 80199 - DISSERTATION I**

(Repeatable for credit) Doctoral dissertation for which registration in at least two semesters is required, first of which will be semester in which dissertation work is begun and continuing until the completion of 30 hours.
Prerequisite: Doctoral standing.
15.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Dissertation
Lifespan Dev and Educ Sciences Department

**SPED 80299 - DISSERTATION II**

(Repeatable for credit) Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. Prerequisite: Doctoral standing and SPED 80199.
15.000 Credit hours
15.000 Other hours

Levels: Graduate
Schedule Types: Dissertation
Lifespan Dev and Educ Sciences Department

**SPED 83201 - CONTEMPORARY ISSUES IN SPECIAL EDUCATION**

(Slashed with SPED 63201) This course is designed to help doctoral students to develop (a) foundational knowledge for understanding important and controversial issues in special education and related disciplines; (b) skills in critical analysis and synthesis of research; and, (c) skills in effective oral and written communication about historical and contemporary issues in special education. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
Lifespan Dev and Educ Sciences Department

**SPED 83301 - SINGLE SUBJECT RESEARCH METHODS**

(Repeatable for credit) Research designs and techniques associated with behavioral observation and a description of single subject experimental methodology are presented. The study of this methodology includes topics related to applied behavior analysis, assessment, experimental design and data evaluation. In addition, single subject methods are discussed in relation to other research designs. 20 field hours. Prerequisite: doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
Lifespan Dev and Educ Sciences Department

**SPED 83952 - THE LAW AND SPECIAL EDUCATION**

Selected principles of constitutional, statutory, case and common law affecting handicapped and special education students, teachers and administrators are studied. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours
SPED 83991 - SEMINAR IN SPECIAL EDUCATION

(Repeatable for credit) Prerequisite: Doctoral standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

SPED 83992 - INTERNSHIP IN SPECIAL EDUCATION

(Repeatable for credit) A college-university doctoral-level supervised teaching experience. The candidates participate fully in the course and material development as well as delivery and grading of an undergraduate or masters level course under the direct supervision of a faculty member assigned to teach the class. Candidates are expected to partially participate in the delivery of a third of the course and fully deliver at least a third of the course under the observation and supervision of a faculty member. Prerequisite: Doctoral standing and special approval.
2.000 TO 8.000 Credit hours
12.000 TO 24.000 Other hours

SPED 83998 - RESEARCH: SPECIAL EDUCATION

(Repeatable for credit) Prerequisite: Doctoral standing and special approval.
1.000 TO 10.000 Credit hours
1.000 TO 10.000 Other hours

SPSY 60093 - VARIABLE TITLE WORKSHOP IN SCHOOL PSYCHOLOGY

(Repeatable for credit) Prerequisite: Grading standing and special approval.
1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

SPSY 60094 - COLLEGE TEACHING
(Repeatable for credit) (Cross-listed with EPSY 70094 and SPED 70094 and SPSY 70094) Discusses major aspects of teaching in higher education, including such topics as students philosophy of teaching, principles of adult learning, instructional strategies, students assessment and others. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

SPSY 60162 - DEVELOPMENTAL ASSESSMENT

Reviews the educational, family and regulatory forces that influence success at each significant transition for preschool, kindergarten and primary grade children. 24 clinical/field hours. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

SPSY 60165 - PRINCIPLES OF SOCIAL LEARNING

The main focus is to provide students with an understanding of behavioral and social learning principles within the context of the school psychologist's professional practice. 19 clinical/field hours. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

SPSY 60191 - SEMINAR: SCHOOL PSYCHOLOGY

(Repeatable for credit) Seminar in school psychology. Varied topics. Prerequisite: Graduate standing and special approval.
1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Lifespan Dev and Educ Sciences Department

SPSY 67592 - FIELD EXPERIENCE IN EDUCATION FOR SCHOOL PSYCHOLOGISTS

This field experience provides students with the opportunity to observe various school and educational settings that reflect the typical work scope for school psychologists. Required for those students in school psychology who do not have teaching certificates and have not spent extensive time in public schools. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned "school-agency" before the first day of the semester in which student teaching internship will take place. Prerequisites: graduate standing and school psychology (SPSY) major.
### SPSY 67692 - PRACTICUM I IN SCHOOL PSYCHOLOGY

(Repeatable for credit) (Cross-listed with SPSY 77692) This course provides students with experience, support, and opportunities for reflection related to the foundational domains of the practice of school psychology and ongoing professional development. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel prior to the beginning of any field-based activities. Prerequisite: Graduate standing and school psychology (SPSY) major.

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<th>Credit hours</th>
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Levels: Graduate  
Schedule Types: Field Experience  
Lifespan Dev and Educ Sciences Department

### SPSY 67792 - PRACTICUM II IN SCHOOL PSYCHOLOGY

(Repeatable for credit) (Cross-listed with SPSY 77792) Provides students with applied experience and professional development related to foundational domains of school psychology practice. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel prior to beginning any field-based activities. Prerequisites: SPSY 67692 or SPSY 77692 and graduate standing; and school psychology (SPSY) major.

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Levels: Graduate  
Schedule Types: Practicum or Internship  
Lifespan Dev and Educ Sciences Department

### SPSY 67892 - ADVANCED PRACTICUM IN SCHOOL PSYCHOLOGY

(Repeatable for credit) (Cross-listed with SPSY 77892) Provides students with advanced applied experience in educational, mental health, or behavioral health settings. 60 clock hours per credit hour. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel prior to beginning any field-based activities. Prerequisite: SPSY 67792; and special approval; and graduate standing; and school psychology (SPSY) major.

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Levels: Graduate  
Schedule Types: Practicum or Internship  
Lifespan Dev and Educ Sciences Department

### SPSY 67912 - ROLE OF THE SCHOOL PSYCHOLOGIST

Study of role and functions of school psychologists in American education. Includes history of school psychology
and future orientation. Five clinical/field hours. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**SPSY 67920 - DIAGNOSIS OF CHILDHOOD DISORDERS IN SCHOOLS**

Provides overview of diagnosis of child and adolescent behavior disorders (ADHD, conduct problems) emotional and social disorders (depression, anxiety, phobias) and developmental acquired disorders (autism, mental retardation). Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**SPSY 67925 - INTRODUCTION TO NEUROPSYCHOLOGY FOR SCHOOL PSYCHOLOGISTS**

Introduces basic concepts in child neuropsychology with relevance for applied school psychological practice. Topics include biological bases of behavior and implications for educational interventions. Prerequisite: Graduate standing.

1.000 Credit hours
1.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**SPSY 67928 - GROUP COUNSELING TECHNIQUES FOR REHABILITATION COUNSELORS AND SCHOOL PSYCHOLOGISTS**

Review of group counseling techniques for rehab counselors and school psychologists. Skills developed in group process and group leadership. A variety of group interventions will be examined including techniques for persons with disabilities. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**SPSY 67929 - INDIVIDUAL COUNSELING TECHNIQUES FOR REHABILITATION COUNSELORS AND SCHOOL PSYCHOLOGISTS**

(Slashed with SPSY 77929) (Cross-listed with RHAB 67731 and RHAB 77731) Review of individual counseling techniques. Skills developed in communication, interviewing, problem identification, goal setting and program development are fostered by lecture, video feedback and simulation. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours
SPSY 67931 - PROGRAM DEVELOPMENT AND ETHICAL APPLICATION OF APPLIED BEHAVIOR ANALYSIS

Describe and apply methodology and research design in monitoring the effectiveness of behavioral interventions and to use such information to evaluate overall program efficacy. Consideration is given to student characteristics (e.g., underlying disability) when developing and evaluating behavior programs based. Use of specific tools for prioritizing behaviors, evaluating progress, and making treatment program decisions are presented. Issues related to ethics, treatment implementation fidelity, and behavioral program development are also emphasized. Prerequisite: SPED 53030 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

SPSY 67932 - ADVANCED INTERVENTIONS FOR ADDRESSING SEVERE BEHAVIOR

Use and interpretation of functional behavioral assessment in educational settings to lead to the identification of empirically-supported interventions to address the behavioral needs of children. The development, implementation and analysis of functional analysis procedures. Special emphasis given to identifying/designing, implementing and assessing the effectiveness of advanced behavioral interventions in consultation. 20 field hrs. Prerequisite: SPED 53030 and SPSY 67920/77920 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

SPSY 67951 - COGNITIVE ASSESSMENT OF CHILDREN IN SCHOOLS

Training and experience in administrating, scoring and interpreting cognitive measures for children and adolescents and writing reports. 30 clinical/field hours. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

SPSY 67955 - INSTRUCTIONAL ASSESSMENT FOR SCHOOL PSYCHOLOGISTS

Training in administration, scoring and interpretation of normative and non-normative measures of academic achievement, instructional environment and writing psychoeducational and team reports. 25 clinical/field hours. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours
SPSY 67960 - INTERVENTIONS WITH CULTURALLY DIVERSE STUDENTS

Introduces skills to effectively and ethically implement educational and psychological interventions with culturally diverse children in educational settings. 5 clinical/field hours. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

SPSY 67965 - INSTRUCTIONAL INTERVENTIONS FOR SCHOOL PSYCHOLOGISTS

Describes design and implementation of evidence-based interventions, methods of data collection and progress monitoring for school based academic referrals within a problem solving model. Requires 25 clinical field hours. Prerequisite: SPSY 67955 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

SPSY 67970 - LEGAL, ETHICAL AND PROFESSIONAL ISSUES IN SCHOOL PSYCHOLOGY

Ethical, legal and professional issues of school psychologists and counselors will be explored. Considerations of law, regulations, ethical standards and codes of professional practice of related professional organizations will be addressed. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

SPSY 67971 - ISSUES AND APPROACHES IN SCHOOL PSYCHOLOGY

(Repeatable for a maximum of 6 credit hours) This course describes and illustrates contemporary elements and forces that impact professional service in school psychology practice. Students register for two consecutive semesters in conjunction with internship. Prerequisite: Graduate standing and special approval.
3.000 Credit hours
3.000 Other hours
SPSY 67972 - SOCIAL-EMOTIONAL ASSESSMENT FOR SCHOOL PSYCHOLOGISTS

Training in administration, scoring and interpretation of techniques for assessment of social emotional functioning and adaptive behavior and writing evaluation team reports. 25 clinical/field hours. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned "school/agency" before the first day of the semester in which student teaching/ internship will take place. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

SPSY 67973 - CONSULTATION IN THE HELPING PROFESSIONS

Students learn consultation skills and processes utilizing a number of professional models such as Caplan's model, behavior and problem solving models and crisis consultation. 20 clinical/field hours. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned "school/agency" before the first day of the semester in which student teaching/ internship will take place. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Lifespan Dev and Educ Sciences Department

SPSY 67974 - SOCIAL-EMOTIONAL INTERVENTIONS IN SCHOOL PSYCHOLOGY

Describes design and implementation of social-emotional interventions for childhood disorders. Reviews progress monitoring for school-based social and emotional referrals within an eco-behavioral problem-solving model. 25 clinical field hours. Prerequisite: SPSY 67972 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

SPSY 67995 - SPECIAL TOPICS IN SCHOOL PSYCHOLOGY

(Repeatable for credit) Presentations of special interest to students. Offered irregularly. Topics will be announced in schedule of classes booklet. Prerequisite: Graduate standing and special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department
SPSY 67996 - INDIVIDUAL INVESTIGATION IN SCHOOL PSYCHOLOGY

(Repeatable for credit) Independent reading and/or research directed by a graduate faculty member. Prerequisite: Graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Lifespan Dev and Educ Sciences Department

SPSY 67998 - INDIVIDUAL RESEARCH IN SCHOOL PSYCHOLOGY

(Repeatable for credit) Student pursues research project on selected aspect of school psychology under supervision of instructor. Arrangements with instructor must be made prior to registration. Prerequisite: Graduate standing and special approval.
1.000 TO 9.000 Credit hours
1.000 TO 9.000 Other hours

Levels: Graduate
Schedule Types: Research

Lifespan Dev and Educ Sciences Department

SPSY 70093 - VARIABLE TITLE WORKSHOP IN SCHOOL PSYCHOLOGY

(Repeatable for credit) Prerequisite: Doctoral standing and special approval.
1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Lifespan Dev and Educ Sciences Department

SPSY 70094 - COLLEGE TEACHING

(Repeatable for credit) (Cross-listed with EPSY 70094 and SPED 70094 and SPSY 60094) Discusses major aspects of teaching in higher education, including such topics as students philosophy of teaching, principles of adult learning, instructional strategies, students assessment and others. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

SPSY 70162 - DEVELOPMENTAL ASSESSMENT

Reviews the educational, family and regulatory forces that influence success at each significant transition for preschool kindergarten and primary grade children. 24 clinical field hours. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Lifespan Dev and Educ Sciences Department

**SPSY 70165 - PRINCIPLES OF SOCIAL LEARNING**

The main focus is to provide students with an understanding of behavioral and social learning principles within the context of the school psychologist's professional practice. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**SPSY 70191 - SEMINAR: SCHOOL PSYCHOLOGY**

(Repeatable for credit) Seminar in school psychology. Varied topics. Prerequisite: Doctoral standing and special approval.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Lifespan Dev and Educ Sciences Department

**SPSY 77592 - FIELD EXPERIENCE IN EDUCATION FOR SCHOOL PSYCHOLOGISTS**

This field experience provides students with the opportunity to observe various school and educational settings that reflect the typical work scope for school psychologists. Required for those students in school psychology who do not have teaching certificates and have not spent extensive time in public schools. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned "school-agency" before the first day of the semester in which student teaching internship will take place. Prerequisites: doctoral standing and school psychology (SPSY) major.

2.000 Credit hours
8.000 Other hours

Levels: Graduate
Schedule Types: Field Experience

Lifespan Dev and Educ Sciences Department

**SPSY 77692 - PRACTICUM I IN SCHOOL PSYCHOLOGY**

(Repeatable for credit) (Cross-listed with SPSY 67692) This course provides students with experience, support, and opportunities for reflection related to the foundational domains of the practice of school psychology and ongoing professional development. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel prior to the beginning of any field-based activities. Prerequisite: Doctoral standing and school psychology (SPSY) major.

3.000 Credit hours
9.000 Other hours

Levels: Graduate
**SPSY 77792 - PRACTICUM II IN SCHOOL PSYCHOLOGY**

(Repeatable for credit) (Cross-listed with SPSY 67792) Provides students with applied experience and professional development related to foundational domains of school psychology practice. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel prior to beginning any field-based activities. Prerequisites: SPSY 677692 or SPSY 77692; and doctoral standing; and school psychology (SPSY) major.

3.000 Credit hours
9.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Lifespan Dev and Educ Sciences Department

**SPSY 77892 - ADVANCED PRACTICUM IN SCHOOL PSYCHOLOGY**

(Repeatable for credit) (Cross-listed with SPSY 67892) Provides students with advanced applied experience in educational, mental health, or behavioral health settings. 60 clock hours per credit hour. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel prior to beginning any field-based activities. Prerequisite: SPSY 77792 and special approval and doctoral standing; and school psychology (SPSY) major.

3.000 TO 6.000 Credit hours
12.000 TO 24.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Lifespan Dev and Educ Sciences Department

**SPSY 77912 - ROLE OF THE SCHOOL PSYCHOLOGIST**

Study of role and functions of school psychologists in American education. Includes history of school psychology and future orientation. Five clinical field hours. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**SPSY 77920 - DIAGNOSIS OF CHILDHOOD DISORDERS IN SCHOOLS**

Provides overview of diagnosis of child and adolescent behavior disorders (ADHD, conduct problems) emotional and social disorders (depression, anxiety, phobias) and developmental acquired disorders (autism, mental retardation). Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
**SPSY 77925 - INTRODUCTION TO NEUROPSYCHOLOGY FOR SCHOOL PSYCHOLOGISTS**

Introduces basic concepts in child neuropsychology with relevance for applied school psychological practice. Topics include biological bases of behavior and implications for educational interventions. Prerequisite: Doctoral standing.

1.000 Credit hours
1.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**SPSY 77928 - GROUP COUNSELING TECHNIQUES FOR REHABILITATION COUNSELORS AND SCHOOL PSYCHOLOGISTS**

Review of group counseling techniques for rehab counselors and school psychologists. Skills developed in group process and group leadership. A variety of group interventions will be examined including techniques for persons with disabilities. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**SPSY 77929 - INDIVIDUAL COUNSELING TECHNIQUES FOR REHABILITATION COUNSELORS AND SCHOOL PSYCHOLOGISTS**

(Slashed with SPSY 67929) (Cross-listed with RHAB 67731 and RHAB 77731) Review of individual counseling techniques. Skills developed in communication interviewing problem identification goal setting and program development are fostered by lecture, video feedback and simulation. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**SPSY 77931 - PROGRAM DEVELOPMENT AND ETHICAL APPLICATION OF APPLIED BEHAVIOR ANALYSIS**

Describe and apply methodology and research design in monitoring the effectiveness of behavioral interventions and to use such information to evaluate overall program efficacy. Consideration is given to student characteristics (e.g., underlying disability) when developing and evaluating behavior programs based. Use of specific tools for prioritizing behaviors, evaluating progress, and making treatment program decisions are presented. Issues related to ethics, treatment implementation fidelity, and behavioral program development are also emphasized. Prerequisites: SPED 53030 and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
SPSY 77932 - ADVANCED INTERVENTIONS FOR ADDRESSING SEVERE BEHAVIOR

Use and interpretation of functional behavioral assessment in educational settings to lead to the identification of empirically-supported interventions to address the behavioral needs of children. The development, implementation and analysis of functional analysis procedures. Special emphasis given to identifying/designing, implementing and assessing the effectiveness of advanced behavioral interventions in consultation. 20 field hrs. Prerequisite: SPED 53030 and SPSY 67920/77920 and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

SPSY 77951 - COGNITIVE ASSESSMENT OF CHILDREN IN SCHOOLS

Training and experience in administering, scoring and interpreting cognitive measures for children and adolescents and writing reports. 30 clinical/field hours. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

SPSY 77955 - INSTRUCTIONAL ASSESSMENT FOR SCHOOL PSYCHOLOGISTS

Training in administration, scoring and interpretation of normative and non-normative measures of academic achievement instructional environment and writing psychoeducational and team reports. 25 clinical field hours. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

SPSY 77960 - INTERVENTIONS WITH CULTURALLY DIVERSE STUDENTS

Introduces skills to effectively and ethically implement educational and psychological interventions with culturally diverse children in educational settings. 5 clinical/field hours. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

SPSY 77965 - INSTRUCTIONAL INTERVENTIONS FOR SCHOOL PSYCHOLOGISTS
Describes design and implementation of evidence-based interventions, methods of data collection and progress monitoring for school-based academic referrals within a problem-solving model. Requires 25 clinical field hours.

Prerequisite: SPSY 77955 and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**SPSY 77970 - LEGAL, ETHICAL AND PROFESSIONAL ISSUES IN SCHOOL PSYCHOLOGY**

Ethical, legal and professional issues of school psychologists and counselors will be explored. Considerations of law, regulations, ethical standards and codes of professional practice of related professional organizations will be addressed. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**SPSY 77971 - ISSUES AND APPROACHES IN SCHOOL PSYCHOLOGY**

(Repeatable for a maximum of 6 credit hours) This course describes and illustrates contemporary elements and forces that impact professional service in school psychology practice. Students register for two consecutive semesters in conjunction with internship. Prerequisite: Doctoral standing and permission.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Lifespan Dev and Educ Sciences Department

**SPSY 77972 - SOCIAL-EMOTIONAL ASSESSMENT FOR SCHOOL PSYCHOLOGISTS**

Training in administration, scoring and interpretation of techniques for assessment of social, emotional functioning and adaptive behavior and writing evaluation team reports. 25 clinical/field hours. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned “school/agency” before the first day of the semester in which student teaching/internship will take place. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**SPSY 77973 - CONSULTATION IN THE HELPING PROFESSIONS**

Students learn consultation skills and processes utilizing a number of professional models such as Caplan's model, behavior and problem-solving models and crisis consultation. 20 clinical/field hours. Students are
required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned "school/agency" before the first day of the semester in which student teaching/ internship will take place.

Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Lifespan Dev and Educ Sciences Department

**SPSY 77974 - SOCIAL-EMOTIONAL INTERVENTIONS IN SCHOOL PSYCHOLOGY**

Describes design and implementation of social-emotional interventions for childhood disorders. Reviews progress monitoring for school-based social and emotional referrals within an eco-behavioral problem-solving model. 25 clinical/field hours. Prerequisite: SPSY 77972 and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**SPSY 77980 - INTEGRATING EXPERIENCE IN SCHOOL PSYCHOLOGY**

This course requires student to research, study and develop expertise in a particular facet of school psychology and to present these findings at the conclusion of his her training program. Restricted to students in school psychology Ed.S. program. 38 clinical field hours. Prerequisite: Doctoral standing and special approval.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Lifespan Dev and Educ Sciences Department

**SPSY 77992 - SPECIALIST INTERNSHIP IN SCHOOL PSYCHOLOGY**

(Repeatable for credit) The internship experience provides students with the opportunity to develop and practice the professional roles and functions of a school psychologist in an approved school setting. Students complete one academic year of internship in schools (minimum of 1,200 clock hours) under the supervision of a university supervisor and a certified school psychologist who is employed by a school system. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned "school-agency" before the first day of the semester in which student teaching internship will take place. Prerequisites: Doctoral Standing and SPSY major; Guest Students with Permission. Prerequisite: Doctoral standing and school psychology (SPSY) major.

1.000 TO 6.000 Credit hours
7.000 TO 40.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Lifespan Dev and Educ Sciences Department
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<th>Course Code</th>
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</thead>
</table>
| SPSY 77995      | SPECIAL TOPICS IN SCHOOL PSYCHOLOGY                          | (Repeatable for credit) Presentations of special interest to students. Offered irregularly. Topics will be announced in schedule of classes booklet. Prerequisite: Doctoral standing and special approval.  
1.000 TO 3.000 Credit hours  
1.000 TO 3.000 Lecture hours                                                                 |         |             | Graduate     | Lecture                  | Lifespan Dev and Educ Sciences Department |
| SPSY 77996      | INDIVIDUAL INVESTIGATION IN SCHOOL PSYCHOLOGY                | (Repeatable for credit) Independent reading and/or research directed by a graduate faculty member. Prerequisite: Doctoral standing.  
1.000 TO 3.000 Credit hours  
3.000 Other hours                                                                 |         |             | Graduate     | Individual Investigation | Lifespan Dev and Educ Sciences Department |
| SPSY 77998      | INDIVIDUAL RESEARCH IN SCHOOL PSYCHOLOGY                     | (Repeatable for credit) Student pursues research project on selected aspect of school psychology under supervision of instructor. Arrangements with instructor must be made prior to registration. Prerequisite: Doctoral standing and special approval.  
1.000 TO 9.000 Credit hours  
1.000 TO 9.000 Other hours                                                                 |         |             | Graduate     | Research                | Lifespan Dev and Educ Sciences Department |
| SPSY 80090      | DOCTORAL RESIDENCY SEMINAR                                   | Exploration of philosophical, definitional and attitudinal issues in the helping professions. Involvement in current activities of professional life through collaborative work with professors other students and practitioners. Prerequisite: Doctoral standing.  
3.000 Credit hours  
3.000 Other hours                                                                 |         |             | Graduate     | Seminar                 | Lifespan Dev and Educ Sciences Department |
| SPSY 80199      | DISSERTATION I                                                | (Repeatable for credit) Doctoral dissertation for which registration in at least two semesters is required, first of which will be semester in which dissertation work is begun and continuing until the completion of 30 hours. Prerequisite: Doctoral standing.  
15.000 Credit hours  
3.000 Other hours                                                                 |         |             | Graduate     |                        | Lifespan Dev and Educ Sciences Department |
Levels: Graduate  
Schedule Types: Dissertation  

Lifespan Dev and Educ Sciences Department

**SPSY 80299 - DISSERTATION II**

(Repeatable for credit) Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until all dissertation requirements are met. Prerequisite: Doctoral standing and SPSY 80199.

15.000 Credit hours  
15.000 Other hours

Levels: Graduate  
Schedule Types: Dissertation  

Lifespan Dev and Educ Sciences Department

**SPSY 87987 - PROFESSIONAL SEMINAR IN SCHOOL PSYCHOLOGY**

A professional seminar focused on the identity, history and development of school psychology with special emphasis on current professional issues. Prerequisite: Doctoral standing.

3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture  

Lifespan Dev and Educ Sciences Department

**SPSY 87992 - DOCTORAL INTERNSHIP IN SCHOOL PSYCHOLOGY**

Repeatable for credit) The internship experience provides students with the opportunity to develop and practice the professional roles and functions of a school psychologist in an approved school setting. Students complete one academic year of internship in schools (minimum of 1,500 clock hours) under the supervision of a university supervisor and a licensed school psychologist who is employed by a school system. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned "school-agency" before the first day of the semester in which student teaching internship will take place. Prerequisites: doctoral standing and school psychology (SPSY) major.

1.000 TO 6.000 Credit hours  
10.000 TO 60.000 Other hours

Levels: Graduate  
Schedule Types: Practicum or Internship  

Lifespan Dev and Educ Sciences Department

**SPSY 87998 - RESEARCH SEMINAR IN SCHOOL PSYCHOLOGY**

(Repeatable for credit) Selected research topics in school psychology. Significant research literature is reviewed; research design methods and issues are presented and small research projects are conducted. Prerequisite: Doctoral standing.

3.000 Credit hours  
3.000 Other hours
SRM 53093 - VARIABLE TITLE WORKSHOP IN EXERCISE, LEISURE AND SPORT

(Repeatable for credit) (Cross-listed with CI 53093) Workshop in exercise, leisure and sport studies topics vary. Maximum 4 hours may be applied to degree. Prerequisite: Graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

SRM 55022 - EVENT PLANNING AND PRODUCTION

(Cross-listed with SPAD 45022) Students will learn the proper planning process that all sport events undergo. Students will then apply these concepts in actual events that they develop and hold. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

SRM 55023 - MARKETING AND PROMOTIONS IN SPORT AND RECREATION

Analysis of marketing from a sport and recreation manager's perspective. Emphasis on marketing strategy and tactics in sport and recreation systems. Extensive use of case studies. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

SRM 55024 - SPORT IN GLOBAL PERSPECTIVE

(Cross-listed with SPAD 45024) This course is designed to encourage students to critically analyze how sport relates to general features of globalization and to provide insight into the connection between global and local politics (including ethnic, religious, gender, environmental and sociospatial politics). The underlying assumption is that sport is part of a growing network of global interdependencies that bind human beings together. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours
SRM 55026 - SPORT AND THE MEDIA

(Cross-listed with SPAD 45026) Course offers an introduction to current scholarship and issues concerning sport and the media, including critical analysis of media representations with attention to gender, race, sexuality and disability; an examination of the structure of sports journalism and production and an analysis of the role of mediated sport in our culture more generally. As such the roles of institutions, producers, texts and audiences and their relationships to each other are examined. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

SRM 55029 - HISTORY AND CURRENT ISSUES IN COLLEGIATE ATHLETICS

Examination of the historical development of athletics within American institutions of higher learning with an emphasis upon concepts and ideals that underlie the developments and the major problems affecting contemporary intercollegiate athletics. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

SRM 55031 - SPORT TOURISM

Incorporates both theoretical learning of travel for sports as a global phenomenon and application of such knowledge in hosting a sporting event with travel as the focus. The experiential, cultural, and economic aspects of sport tourism are examined. Students demonstrate their ability to prepare a sport tourism plan upon the completion of the course. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

SRM 55032 - SALES MANAGEMENT IN SPORT AND ENTERTAINMENT

Designed to introduce students to the area of sales-force management in sport and entertainment. Historical, theoretical and conceptual frameworks will be thoroughly examined, as well as functions, activities, and skills of the professional salesperson in this modern age of information and technology. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department
SRM 55033 - CHANGE YOUR MIND, GAME AND LIFE

Focuses on mental training to enhance sport performance and also it provides personal growth experiences that impact all of life. The course is designed to assist students in tapping into their inner potential by refocusing their mind. It teaches students that they are responsible for their own life experiences. Students learn that the things they want most in their lives are found within themselves and that they can take responsibility for their upsets. Prerequisite: graduate standing.
1.000 Credit hours
1.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

SRM 56000 - TOURISM DEVELOPMENT AND RECREATIONAL TRAVEL

Investigation of travel and tourism development using an interdisciplinary social science approach. Prerequisite: RPTM 36060. Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

SRM 56001 - PRINCIPLES AND METHODS OF COMMUNITY INCLUSION

Interdisciplinary approach to the principles and methods of designing an inclusive environment. Focus is on characteristics of disability groups and societal consideration to making adaptations and accommodations. Students complete a service learning component that focuses on inclusion of people with disabilities in community life. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

SRM 56028 - SPORT IN FILM

Critically evaluates the role of sport in film as it relates to a variety of issues in society. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

SRM 56030 - DYNAMICS OF LEISURE BEHAVIOR

(Cross-listed with RPTM 46030) Analysis of leisure behavior through examination of social-psychological theories and research. Prerequisite: RPTM 36040 and 36075; and graduate standing.
SRM 56060 - ADMINISTRATION OF LEISURE SERVICES

Administrative practices of private and public leisure service agencies. Organization, philosophy, personnel and fiscal management, public relations and legal concerns will be examined. Prerequisite: RPTM 36040, 36075, 36092 or 36192. Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

SRM 56070 - PARK PLANNING

(Cross-listed with RPTM 46070) Understanding the relationship between recreation places and the people who use them. This includes the planning, design and functioning of public and commercial recreation places. Prerequisite: RPTM 36040 and 36075; graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

SRM 56080 - LEGAL ISSUES IN SPORT AND RECREATION

A discussion of legal issues as they apply to the sport and recreation industries. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

SRM 63018 - ETHICS IN EXERCISE, LEISURE AND SPORT

Examination of selected situations in exercise, leisure and sport from an ethical reasoning perspective. A problem-oriented case study approach based upon contemporary moral issues and moral theory. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department
### SRM 63095 - RESEARCH SEMINAR

(Repeatable for credit) (Cross-listed with ATTR 63095 and ATTR 73095 and EXPH 63095 and EXPH 73095 and SRM 73095) Presentation and discussion of research by faculty and students. A total of 2 credits may be applied toward degree requirements. Prerequisite: Graduate standing.

- **1.000 Credit hours**
- **1.000 Other hours**

**Levels:** Graduate  
**Schedule Types:** Seminar

Foundations Leadership Admin Department

### SRM 63096 - INDIVIDUAL INVESTIGATION IN EXERCISE, LEISURE AND SPORT

(Repeatable for a maximum of 6 credit hours) Independent study completed under the supervision of a faculty member. Written approval of supervising faculty member and school director required prior to registration. Prerequisite: Graduate standing and special approval.

- **1.000 TO 3.000 Credit hours**
- **1.000 TO 3.000 Other hours**

**Levels:** Graduate  
**Schedule Types:** Individual Investigation

Foundations Leadership Admin Department

### SRM 63098 - RESEARCH

(Repeatable for credit) (Cross-listed with ATTR 63098 and EXPH 63098 and EXPH 83098) Research or individual investigation. Prerequisite: Graduate standing.

- **1.000 TO 15.000 Credit hours**
- **1.000 TO 15.000 Other hours**

**Levels:** Graduate  
**Schedule Types:** Research

Foundations Leadership Admin Department

### SRM 63195 - SPECIAL TOPICS IN EXERCISE, LEISURE AND SPORT

(Repeatable for credit) Selected and varied topics of relevance in exercise, leisure and sport. Prerequisite: Graduate standing.

- **1.000 TO 3.000 Credit hours**
- **1.000 TO 3.000 Lecture hours**

**Levels:** Graduate  
**Schedule Types:** Lecture

Foundations Leadership Admin Department

### SRM 63199 - THESIS I

(Cross-listed with ATTR 63199 and EXPH 63199) Thesis students must register for a total of 6 hours, 2 to 6 hours in a semester distributed over several semesters if desired. Prerequisite: Graduate standing.

- **2.000 TO 6.000 Credit hours**
2.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Foundations Leadership Admin Department

**SRM 63299 - THESIS II**

(Cross-listed with ATTR 63299 and EXPH 63299) Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: SRM 63199 and graduate standing.

2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Foundations Leadership Admin Department

**SRM 65006 - CONTEMPORARY ISSUES IN SPORT MANAGEMENT**

A comprehensive examination of current topics impacting administrations of professional and amateur sport programs from the local to international level. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**SRM 65008 - SOCIOLOGY OF SPORT AND PHYSICAL ACTIVITY**

Sociological analysis of sport from a theoretical and empirical perspective. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**SRM 65021 - ORGANIZATION/MANAGEMENT OF SPORTS PROGRAMS**

A study of the pragmatic understanding necessary in the organization and management of a sports program at the high school, college or professional level. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**SRM 65033 - LEGAL ISSUES IN SPORT AND RECREATION**
Provides students with a basic understanding of tort, contract and constitutional law in relation to sport and leisure. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**SRM 65034 - CONTEMPORARY SPORT LAW**

Legal principles of antitrust law, injunctions, labor law and agency in sport, with a focus on professional sports. Prerequisite: SRM 65033 and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**SRM 65036 - SPORT IN HIGHER EDUCATION**

Identification of contemporary problems and issues in collegiate sport, their history and the role of sport in colleges and universities now and in the future. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**SRM 65038 - SPORT PROMOTION AND FUNDRAISING**

Analysis of contemporary sports promotions strategies, as well as promotion of fund raising tactics. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**SRM 65039 - FINANCIAL ASPECTS OF SPORT AND RECREATION**

Review of basic accounting, sources and uses of funds, capital budgeting, leasing and investments as they apply in a sports and recreation context. Financial software used in the sport and recreation industry will be introduced. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
SRM 65040 - SPORT ECONOMICS

Provides students with key economic theories and principles as applied to the sport industry. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

SRM 65041 - TOURISM AND HOSPITALITY REVIEW

Reviews academic tourism and hospitality literature to provide students with a theoretical and empirical understanding of the tourism phenomenon. Issues include tourist motivations; the social, cultural and environmental impacts of tourism; tourism and development; and the impact of hospitality services on tourism. Prerequisites: RPTM 46000 or ELS 56000; and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

SRM 65042 - LEADERSHIP OF SPORT AND RECREATION

Study of theoretical and applied constructs foundational to the leadership behavior applied to sport and recreation. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

SRM 65045 - SPORT MARKETING

Develops an understanding of strategic marketing concepts and principles as they apply to the context of sport and entertainment. Examines a variety of topics related to the marketing mix, consumer/fan behavior, research methodology, as well as explore sport, entertainment and business organization relationships. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

SRM 65046 - FACILITY MANAGEMENT AND OPERATIONS
Analysis of management competencies necessary to operate sport, recreation, convocation or convention facilities. Conceptual and technical aspects of planning and design introduced. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**SRM 65047 - GLOBAL ISSUES OF TOURISM TRADE**

An examination of international and intercultural changes due to travel and tourism, particularly in economic, social and environmental areas. The studies include theories and cases and form the basis upon which a sustainable tourism policy is developed. The goal of the course is to prepare students for a leadership role in tourism policy making. The course has an emphasis on reading and discussion. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**SRM 65048 - INTRAMURAL AND CLUB SPORT ADMINISTRATION**

Students focus on developing an understanding of how these programs work and what role they play in various recreational environments. Emphasizes decision-making techniques and communication skills leading to effective planning, organizing, and managing a recreational sports-related service or product. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**SRM 65061 - PHILOSOPHICAL AND SOCIAL BASES OF LEISURE AND SPORT**

Overview of philosophical and social foundations of leisure and sport. Contemporary theories and perspectives will be examined. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Foundations Leadership Admin Department

**SRM 65092 - INTERNSHIP IN SPORT AND RECREATION MANAGEMENT**

(Repeatable for credit) Field experience involving supervised contact with sport and recreation administrators. Students will work as an understudy with these administrators in all phases of their positions. Prerequisite: Graduate standing and special approval.

2.000 TO 4.000 Credit hours
SRM 65792 - INTERNSHIP:SPORT STUDIES
(Repeatable for credit) Supervised field experience in a sport, recreation, or physical education setting. 100 hours of involvement per credit. Students may be required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school-agency before the first day of the semester in which student teaching internship will take place. Prerequisites: graduate standing and special approval.
1.000 TO 4.000 Credit hours
7.000 TO 27.000 Other hours
Levels: Graduate
Schedule Types: Practicum or Internship
Foundations Leadership Admin Department

SRM 73018 - ETHICS IN EXERCISE, LEISURE AND SPORT
Examination of selected situations in exercise, leisure and sport from an ethical reasoning perspective. A problem-oriented, case study approach based upon contemporary moral issues and moral theory. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture
Foundations Leadership Admin Department

SRM 73095 - RESEARCH SEMINAR
(Repeatable for credit) (Cross-listed with ATTR 63095 and ATTR 73095 and EXPH 63095 and EXPH 73095 and SRM 63095) Presentation and discussion of research by faculty and students. A total of 2 credits may be applied toward degree requirements. Prerequisite: Doctoral standing.
1.000 Credit hours
1.000 Other hours
Levels: Graduate
Schedule Types: Seminar
Foundations Leadership Admin Department

SRM 75008 - SOCIOLOGY OF SPORT AND PHYSICAL ACTIVITY
Sociological analysis of sport from a theoretical and empirical perspective. Prerequisite: SRM 6/75006 and doctoral standing.
3.000 Credit hours
3.000 Lecture hours
Levels: Graduate
Schedule Types: Lecture
SRM 75038 - SPORT PROMOTION AND FUNDRAISING

Analysis of contemporary sports promotions strategies, as well as fund raising tactics. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

SRM 75061 - PHILOSOPHICAL AND SOCIAL BASES OF LEISURE AND SPORT

Overview of philosophical and social foundations of leisure and sport. Contemporary theories and perspectives will be examined. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

SUR 80221 - INTRODUCTION TO PODIATRIC SURGERY

This course is designed to provide the 2nd year podiatric medical student with a comprehensive understanding of the basic and fundamental principles and techniques of surgery, with emphasis on wound healing, closure techniques, hemostasis, lower extremity tourniquets and basic surgical procedures. Surgical and hospital protocol, charting, instrumentation and injection techniques are taught in this course, along with basic forefoot surgery, including nail disorders, soft tissue, skin tumors and digital surgery. The use of local anesthetic agents including indications, classification, pharmacology, adverse reactions (and treatment of such reactions) and injection techniques will be discussed. In addition, the course provides an orientation to operating room protocol, allowing students to master necessary techniques of asepsis, gowning, gloving and surgical scrubbing. Introduction to these skills will be taught in weekly workshops in the surgical skills lab. Prerequisite: enrolled in the College of Podiatric Medicine.
2.000 Credit hours
2.000 Lecture hours

Levels: Professional
Schedule Types: Lecture

Podiatric Medicine Department

SUR 80313 - PODIATRIC SURGERY

A comprehensive working knowledge of common deformities of the foot is essential to the podiatric physician in providing comprehensive care of patients. This course provides the 3rd year podiatric medical student with the knowledge of surgical management of patients and their foot deformities. The course includes material on the etiology, clinical and radiographic evaluation, indications and contraindications, as well as postoperative considerations and care. These courses discuss the surgical management of deformities of the foot, ankle and lower leg and include surgical complications. In addition, several lectures are dedicated to special topics, such as AO/ASIF Fixation, Bio-materials, Arthroscopic surgical procedures and reconstructive foot and ankle procedures. Weekly skills workshops will be held in the surgical skills laboratory. Emphasis is placed on current
and prevailing concepts and techniques employed by the podiatric physician. Prerequisite: enrolled in the College of Podiatric Medicine.
2.000 Credit hours
2.000 Lecture hours

Levels: Professional
Schedule Types: Lecture

Podiatric Medicine Department

**SUR 80323 - PODIATRIC SURGERY**

A comprehensive working knowledge of common deformities of the foot is essential to the podiatric physician in providing comprehensive care of patients. This course provides the 3rd year podiatric medical student with the knowledge of surgical management of patients and their foot deformities. The course includes material on the etiology, clinical and radiographic evaluation, indications and contraindications, as well as postoperative considerations and care. These courses discuss the surgical management of deformities of the foot, ankle and lower leg and include surgical complications. In addition, several lectures are dedicated to special topics, such as AO/ASIF Fixation, Bio-materials, Arthroscopic surgical procedures and reconstructive foot and ankle procedures. Weekly skills workshops will be held in the surgical skills laboratory. Emphasis is placed on current and prevailing concepts and techniques employed by the podiatric physician. Prerequisite: enrolled in the College of Podiatric Medicine.
2.000 Credit hours
2.000 Lecture hours

Levels: Professional
Schedule Types: Lecture

Podiatric Medicine Department

**SUR 80325 - TRAUMATOLOGY**

The purpose of the course is to provide the 3rd year podiatric medical students with a broad overview and appreciation of the major trauma areas of the foot, including the midfoot, rearfoot, ankle and lower leg. A strong effort is made to correlate the mechanical, surgical, physiologic and anatomic principles of surgery with emphasis on their implications and applications in major reconstructive surgery and the management of the trauma patient who presents with foot and or ankle trauma. Surgical procedures for the management of specific trauma situations will be discussed, as well as indications, contraindications, and post-operative management. An overall view of the trauma patient as viewed in a Level I trauma center will also be included as this is a major responsibility for the podiatric physician treating the trauma patient. Prerequisite: enrolled in the College of Podiatric Medicine.
2.000 Credit hours
2.000 Lecture hours

Levels: Professional
Schedule Types: Lecture

Podiatric Medicine Department

**SVCD 45011 - SUMMER DESIGN STUDIO**

(Repeatable for a maximum of 16 credit hours). Summer course offerings investigating specialized areas of graphic design, illustration or photography taught primarily by guest faculty. Prerequisite: none.
1.000 TO 4.000 Credit hours
7.500 TO 30.000 Lecture hours
12.500 TO 45.000 Other hours

Levels: Undergraduate
SVCD 55011 - SUMMER DESIGN STUDIO

(Repeatably for a maximum of 16 credit hours). Summer course offerings investigating specialized areas of graphic design, illustration or photography taught primarily by guest faculty. Prerequisite: graduate standing.
1.000 TO 4.000 Credit hours
7.500 TO 30.000 Lecture hours
12.500 TO 45.000 Other hours

Levels: Graduate
Schedule Types: Lecture, Studio

SVCD 65011 - SUMMER DESIGN STUDIO

(Repeatably for a maximum of 16 credit hours). Summer course offerings investigating specialized areas of graphic design, illustration or photography taught primarily by guest faculty. Prerequisite: graduate standing.
1.000 TO 4.000 Credit hours
7.500 TO 30.000 Lecture hours
12.500 TO 45.000 Other hours

Levels: Graduate
Schedule Types: Lecture, Studio

TAS 37900 - TECHNICAL AND APPLIED STUDIES CORNERSTONE

Cornerstone course instructs students about how the work role in industrial and information societies has evolved to its current organization. Students personalize the information by reflecting on the role of work in their own lives by reviewing theory and application of their own career management; examine the stages of career development; job stress; entrepreneurial careers; and organization. Prerequisite: Technical and Applied Studies (TAS) or Engineering Technology (ENGT) major.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

TAS 47900 - TECHNICAL AND APPLIED STUDIES CAPSTONE

Designed to help students articulate and integrate the competencies that are part of their bachelor's degree program. In part, an electronic portfolio is used to help describe familiarity with the competencies. Prerequisites: Technical and Applied Studies (TAS) or Engineering Technology (ENGT) major.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
**TECH 10001 - INFORMATION TECHNOLOGY**

Introduction to the operation and use of computer systems in technology-related applications. Laboratory assignments include the use of microcomputers for solving technical problems. Prerequisite: None.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Applied Eng/Sustainabilit/Tech Department

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**TECH 11071 - WOODS TECHNOLOGY I**

Provides experience in fundamental hand and machine processes in wood-fabrication. Projects are designed, planned and constructed by the student according to curricular needs and interests. Prerequisite: None.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Applied Eng/Sustainabilit/Tech Department

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**TECH 13580 - ENGINEERING GRAPHICS I**

Technique of engineering drawing, lettering, instrument use, freehand drawing, orthogonal projection, sections, single and double auxiliaries, dimensioning, screw threads, charts and graphs. Prerequisite: None.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Applied Eng/Sustainabilit/Tech Department

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**TECH 20001 - ENERGY/POWER**

Study of basic thermodynamic laws and how they apply to the conversion and transfer of heat energy into useful power. Prerequisite: TECH 21021.
3.000 Credit hours
5.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Applied Eng/Sustainabilit/Tech Department

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**TECH 20002 - MATERIALS AND PROCESSES**
Study and practice addressing the nature of basic manufacturing materials and the processes by which they are converted into manufactured products. Includes laboratory experience. Prerequisite: None.

3.000 Credit hours
2.000 Lecture hours
4.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Applied Eng/Sustainabilit/Tech Department

Course Attributes:
TAG - Engineering Technology

### TECH 20004 - FUNDAMENTALS OF ELECTRONIC CIRCUITS

Introduction to electronic circuits consisting of resistors, capacitors and inductors. Calculation of voltages and currents in the circuits for the case of constant and time varying currents. Prerequisite: MATH 11010 and 11022. Corequisite: MATH 12002.

4.000 Credit hours
3.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Applied Eng/Sustainabilit/Tech Department

Course Attributes:
TAG - Engineering Technology

### TECH 21021 - SURVEY OF ELECTRICITY AND ELECTRONICS

Survey of DC and AC circuits, semiconductors, and electronic devices, including diodes and transistors. Includes laboratory. Prerequisite: PHY 13002.

4.000 Credit hours
3.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Applied Eng/Sustainabilit/Tech Department

### TECH 22095 - SPECIAL TOPICS IN TECHNOLOGY

(repeated registration permitted) various special topics to be announced in the schedule of classes, offering current topics in technology based areas of study. Prerequisite: Permission.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Applied Eng/Sustainabilit/Tech Department
**TECH 23010 - COMPUTER HARDWARE I**

Introduction to the hardware, architecture and operation of the personal computer and associated devices. Topics include personal computer architecture and operation fundamentals; basic hardware; data buses and ports; hardware component packaging; auxiliary hardware components; computer assembly; basic hardware installation and configuration; and basic troubleshooting. Prerequisite: TECH 21021.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Applied Eng/Sustainabilit/Tech Department

**TECH 23581 - COMPUTER-AIDED ENGINEERING GRAPHICS**

Study of working drawings, descriptive geometry, geometrical tolerancing, structural/weldments, cams, gears, piping and considerable time with the Hewlett Packard 900 CAD system. Prerequisites: TECH 10001 and TECH 13580.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

**TECH 26010 - INTRODUCTION TO COMPUTER ENGINEERING TECHNOLOGY**

Describes Computer Engineering Technology concepts and principles. Topics include computer hardware, computer hardware operations, digital systems design, networking hardware, technology of networking, computer aided design and embedded systems. Pre/corequisite: MATH 11022.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

**TECH 26301 - NETWORKING HARDWARE I**

A hands-on, applied engineering-focused course emphasizing the operation, maintenance, and performance aspects of personal computer networking hardware. Topics include networking hardware operation, characteristics, configuration, and troubleshooting fundamentals. Course also includes network standards, protocols, configuration, topologies, and administrative fundamentals as related to networking hardware systems. Note: This course is part of the Networking Hardware course sequence required for students enrolled in the Computer Engineering Technology concentration. Prerequisite: TECH 16010 or 21021 or DSCI 26010.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Applied Eng/Sustainabilit/Tech Department
### TECH 26310 - WEB DESIGN AND DEVELOPMENT

An introduction to Web Programming. Concepts, principles, techniques, and methods associated with the design and implementation of Web pages and Internet-based applications. Includes fundamentals of web site and web page creation, development, and maintenance; Web page programming languages; Web design software and production tools; creation of dynamic, interactive web-based multimedia presentations; and Web client and server technologies. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

### TECH 27210 - INTRODUCTION TO SUSTAINABILITY

Introduces the students to the concepts of sustainability and its three pillars, namely, economic growth, environmental protection, and social equality. Students taking the course will understand the language and concepts of sustainability and will acquire the knowledge to further study sustainability. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

### TECH 31000 - CULTURAL DYNAMICS OF TECHNOLOGY

Study of technology and the forces it exerts upon society. Prerequisite: ENG 11011 or ENG 02007.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

Course Attributes:
Diversity Course-Domestic, Writing Intensive Course

### TECH 31010 - ENGINEERING AND PROFESSIONAL ETHICS

Applications of codes of ethics in the engineering and technology professions reflective of social and moral responsibilities to the public, and accountability in engineering practice. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

### TECH 31016 - MANUFACTURING TECHNOLOGY
Classroom, laboratory and field experiences involving the major aspects of a manufacturing enterprise including product design, production financing and marketing. Prerequisite: TECH 10001 and TECH 13580 and TECH 20002.

3.000 Credit hours
5.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Applied Eng/Sustainabililty/Tech Department

**TECH 31020 - AUTOMATED MANUFACTURING**

Theory and operation of computer controlled machine tools, robots and processes. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabililty/Tech Department

**TECH 31032 - POWER TECHNOLOGY**

Principles of energy conversion and power application. Overview of basic heat engines, machines and transmission devices. Alternative energy systems and conservation techniques. Prerequisites: TECH 20001 and TECH 20004.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Applied Eng/Sustainabililty/Tech Department

**TECH 31043 - PRINCIPLES OF CONCRETE CONSTRUCTION**

An introductory course on the use of concrete in the construction industry. Students will gain a basic understanding of the strength and behavior of reinforced concrete members and simple reinforced concrete structural systems. Prerequisite: TECH 21071.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabililty/Tech Department

**TECH 31065 - CAST METALS**

Principles and processes of metal casting with a focus on current industrial practices. Includes laboratory experience with nonferrous metals and industrial tours. Prerequisite: TECH 20002.

3.000 Credit hours
5.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Credit Hours</th>
<th>Schedule Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>TECH 31067</td>
<td>MACHINING TECHNOLOGY I</td>
<td>Lecture and laboratory experiences in basic machine tool principles and processes. Prerequisite: None.</td>
<td>3.000</td>
<td>Combined Lecture and Lab</td>
</tr>
<tr>
<td>TECH 31071</td>
<td>WOODS TECHNOLOGY II</td>
<td>Emphasis on basic woodworking machinery processes, fundamental construction and materials. Project design and development. Prerequisite: TECH 11071.</td>
<td>2.000</td>
<td>Combined Lecture and Lab</td>
</tr>
<tr>
<td>TECH 31087</td>
<td>DESIGN FOR TECHNOLOGY</td>
<td>Design as creative process. Individual and group experiences in problem solving. Relevance to art industry and education. Prerequisite: none.</td>
<td>3.000</td>
<td>Lecture</td>
</tr>
<tr>
<td>TECH 32002</td>
<td>MATERIALS AND PROCESSES II</td>
<td>Advanced study and practice in materials and processes. Emphasis will be upon developing skills and knowledge in producing a product and conducting problem solving activities. Prerequisite: TECH 20002.</td>
<td>3.000</td>
<td>Combined Lecture and Lab</td>
</tr>
<tr>
<td>TECH 32101</td>
<td>POLYMERS I</td>
<td>Description of various polymers, thermoplastics and thermosets. Processes used to produce products. Outline of polymer chemistry including methods of testing and identification. Prerequisite: None.</td>
<td>3.000</td>
<td>Lecture</td>
</tr>
</tbody>
</table>
**TECH 32105 - CONSTRUCTION JOBSITE MANAGEMENT**

Course concentrates on the procedures and methods that are used by the construction contractor during the construction and post-construction phases of a project. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

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**TECH 33010 - COMPUTER HARDWARE**

Introduction to the hardware, architecture and operation of the personal computer and associated devices. Topics include personal computer architecture and operation fundamentals, basic hardware, data busses and ports, hardware component packaging, auxiliary hardware components, computer assembly, basic hardware installation, configuration and troubleshooting. Prerequisite: junior standing.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

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**TECH 33016 - PC/NETWORK ENGINEERING AND TROUBLESHOOTING**

Covers the service, maintenance, upgrade and optimization of personal computers. Specification, installation and maintenance of local area networks are covered. Students learn communication protocols and network architecture. Two lectures and two labs a week. Prerequisite: EERT 22014 or TECH 33010.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

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**TECH 33020 - COMPUTER HARDWARE II**

An in-depth look at personal computer design and hardware components, and an introduction to the fundamentals of personal computer networks. Topics include the operation, assembly, configuration, diagnosis, and unit-level troubleshooting of personal computers and their associated hardware components. Also includes an introduction to PC network configuration, hardware, and troubleshooting fundamentals. Prerequisite: TECH 23010

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
### TECH 33030 - COMPUTER PERIPHERALS AND SPECIAL USE HARDWARE

Operation, installation, hardware configuration, software configuration, fault analysis, troubleshooting, and repair of various peripheral devices, interface cards, and special use hardware components used by personal computers. Prerequisite: TECH 23010 and TECH 26301.

- 3.000 Credit hours
- 2.000 Lecture hours
- 2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

### TECH 33031 - PROGRAMMABLE LOGIC CONTROLLERS

An introduction to programmable logic controllers (PLCs) covering hardware, ladder logic programming, networking and communications. Programming timers, counters and sequencers and an introduction to human machine interfaces (HMIS). Prerequisites: TECH 10001 and TECH 21021.

- 3.000 Credit hours
- 3.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

### TECH 33032 - PROGRAMMABLE LOGIC CONTROLLERS II

Advanced principles and applications of programmable logic controllers with a focus on using sequential function charts to control complex industrial processes. Includes real time control issues, PLC networking, programming languages other than ladder logic, standards, motion control, supervisory control and data acquisition, process control, alarm management, power failure strategies and safety. Prerequisite: TECH 33031.

- 3.000 Credit hours
- 2.000 Lecture hours
- 2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

### TECH 33033 - HYDRAULICS/PNEUMATICS

Fluid properties, hydraulic design, viscosity, hydraulic components, pumps, systems and circuits, maintenance and safety, pneumatics, air systems control and design. Prerequisite: MATH 11022; and PHY 13001 or PHY 23101.

- 3.000 Credit hours
- 3.000 Lecture hours
- 2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture
**TECH 33040 - MOTORS AND CONTROLLERS**

AC and DC motors, motor control, and machine operations in mechatronic systems. Includes introduction to basic control system terms and devices, input and output transducers, signal conditioning, open loop and closed loop control, stability and performance. Prerequisite: TECH 21021.

3.000 Credit hours  
2.000 Lecture hours  
2.000 Lab hours

Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab

**TECH 33092 - COOPERATIVE EDUCATION - PROFESSIONAL DEVELOPMENT**

(Repeatable for a maximum of 6 credit hours) Supervised work-study experience in approved business or industrial environment relative to the student's major. The 3 credit hour co-op experience must be for a period of at least 12 consecutive weeks at 40 hours per week, or 30 hours per week for 15 weeks, totaling not less than 450 hours. Most co-ops occur during the summer. Students can earn up to an additional 3 credit hours (one to three per co-op – 150 work hours per credit hour) over the course of their college career as long as each co-op has a different focus. Prerequisite: sophomore standing; 2.25 GPA; and special approval.

1.000 TO 3.000 Credit hours  
10.000 TO 30.000 Other hours

Levels: Undergraduate  
Schedule Types: Field Experience

**TECH 33095 - SPECIAL TOPICS: APPLIED SCIENCE AND TECHNOLOGY**

(Repeatable for credit) Special topics of immediate interest in applied science and technology. Prerequisite: Junior standing and special approval.

1.000 TO 3.000 Credit hours  
1.000 TO 3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

**TECH 33111 - STRENGTH OF MATERIALS**

An analytical study of the relaxation between the external forces applied to elastic materials and the resulting deformations and stresses. Prerequisite: PHY 13001.

3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture
TECH 33220 - ELECTRONIC DEVICES

Introduction to electronic non-linear devices including, diodes, transistors, opotoelectronic devices and operational amplifiers. Use and application of these devices in different types of application like rectifiers, amplifiers and linear integrated circuits. Prerequisite: TECH 20004. Corequisite: TECH 23200. 
4.000 Credit hours  
3.000 Lecture hours  
2.000 Lab hours  

Levels: Undergraduate  
Schedule Types: Laboratory, Lecture

TECH 33222 - DIGITAL DESIGN FOR COMPUTER ENGINEERING

Introduction to digital design. The operation and use of digital devices and components as used in microprocessors and digital computers. Topics include binary arithmetic operations, Boolean algebra, logic gates, combinational and sequential logic, buffers, registers, memory devices, counters, latches, timers, comparators, encoders, decoders, multiplexers and demultiplexers. Prerequisite: TECH 21021. 
3.000 Credit hours  
2.000 Lecture hours  
2.000 Lab hours  

Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab

TECH 33223 - ELECTRONIC COMMUNICATION

Principles of digital and analog telecommunications and data signals. Topics include electromagnetic signal time and frequency characteristics, signal propagation, signal modulation, transmission lines, wireless signals, antennas, digital signal characteristics and protocols, signal multiplexing, microwave devices and applications. Prerequisite: TECH 21021. 
3.000 Credit hours  
2.000 Lecture hours  
2.000 Lab hours  

Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab

TECH 33363 - METALLURGY AND MATERIALS SCIENCE

Scientific study of modern manufacturing materials (metals, plastics and ceramics) and the laboratory test methods used to determine their manufacturing specifications and properties. Prerequisite: Junior standing. 
3.000 Credit hours  
3.000 Other hours

Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab
**TECH 33657 - INTRODUCTION TO LEAN SIX SIGMA**

An introduction to lean six sigma. Including understanding the systems, measuring and defining performance, analyzing, improving, and controlling processes, and leading six sigma initiatives. Prerequisite: MATH 11010.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**TECH 33700 - QUALITY TECHNIQUES**

Introduction to quality management and the tools and techniques including the basic tools identified by ASQ (American Society for Quality) as well as an introduction to Lean and Six Sigma. Information presented helps prepare the student to qualify for the Quality Process Analyst Certification. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**TECH 33870 - FACILITY DESIGN AND MATERIAL HANDLING**

Provides students with a fundamental understanding of how layout affects the flow through a system. Both qualitative and quantitative tools are presented for complete approach to facility design and material handling. Prerequisite: junior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**TECH 34002 - ADVANCED CAD II**

Continuation of CADT 22000 with an emphasis on the use of a Parametric-based CAD software (PRO-ENGINEER) for the design and modeling of industrial products. Prerequisite: MERT 12001 and CADT 22000; or TECH 23581.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**TECH 35765 - QUALITY AND RELIABILITY ENGINEERING**

Introduction to reliability and quality engineering with an emphasis on manufacturing and techniques for
improving quality and reliability. Includes reliability, reliability prediction, quality techniques, modeling statistical process control, control charts, sampling, experimental design, and designing and manufacturing for quality and reliability. Prerequisite: MATH 11010.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

**TECH 36302 - NETWORKING HARDWARE II**

Continuation of TECH 26301. In-depth coverage of personal computer-based enterprise networking systems hardware with a focus on network hardware and software configuration, fault analysis, diagnostics, and troubleshooting. Topics include router and switch operation, programming, configuration, and troubleshooting, along with overall enterprise network maintenance, troubleshooting, and repair. Course also includes WAN and VLAN fundamentals, intermediate TCP_IP, and network administration and maintenance as related to fielding and maintaining networking hardware components and systems. Prerequisite: TECH 26301.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Applied Eng/Sustainabilit/Tech Department

**TECH 36620 - PROJECT MANAGEMENT IN ENGINEERING AND TECHNOLOGY**

The planning, organizing, directing, and controlling of company technology resources for project-based management functions. Includes project coordination requirements, management and planning methods and the use of various management and planning tools. Prerequisite: Junior standing or Senior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

**TECH 41001 - METHODS IN TECHNOLOGY EDUCATION**

Methods of teaching curriculum development and evaluation which are unique to the profession of technology education. Prerequisite: Special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

Course Attributes:
Writing Intensive Course

**TECH 41002 - ORGANIZATION IN TECHNOLOGY EDUCATION**
Principles and practices involved in housing, equipping, organizing, maintaining, and operating industrial arts technology education courses. Prerequisite: Junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

**TECH 41003 - METHODS AND ORANIZATION IN TECHNOLOGY EDUCATION**

Curriculum development, organization, and evaluation for technology education's role in STEM. Includes demonstration techniques and safety instruction, lesson plan development and facility design principles. Prerequisite: Junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

**TECH 41051 - FOUNDATIONS AND CONTEMPORARY THEORIES OF TECHNOLOGY EDUCATION**

This course explores the history, contemporary theories, and practices of technology education. Included are site visits to exemplary technology education programs. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

**TECH 41052 - TECHNOLOGY AND ENGINEERING FOR K TO 8 STEM**

Using discussion, laboratory experience, and field experiences this course explores technology education as it relates to all content areas of the K-12 curriculum. Prerequisite: None.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Applied Eng/Sustainabilit/Tech Department

**TECH 41055 - INDUSTRIAL PRACTICE**

Practical experience in industry of cooperative work-study nature. Repeatable for a total of 8 hours. Prerequisite: Junior standing.
1.000 TO 8.000 Credit hours
1.000 TO 8.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship
TECH 41093 - VARIABLE TITLE WORKSHOP IN TECHNOLOGY

(Repeatable for credit) Specialized instructional unit oriented toward the application of current technology concepts. Prerequisite: None.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Workshop

TECH 41096 - INDIVIDUAL INVESTIGATION IN TECHNOLOGY EDUCATION

(Repeatable for a maximum of 4 credit hours) Individual investigation course. Prerequisite: Special approval.
1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

TECH 41196 - INDIVIDUAL INVESTIGATION IN TECHNOLOGY EDUCATION

(Repeatable for a maximum of 4 credit hours) Individual investigation course. Prerequisite: Special approval by department.
1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

TECH 42100 - TRAINING TOPICS IN TECHNOLOGY

(Repeatable for credit) Specialized advanced instruction oriented primarily to the theoretical base and application of current technology developed by experts in the specific technology. This course requires substantial base knowledge. Prerequisite: Permission.
1.000 TO 4.000 Credit hours
1.000 TO 4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

TECH 42103 - CONSTRUCTION SPECIFICATIONS AND SERVICES

Educates the student in the fundamental tenants that all the stakeholders in the design and construction industry hold to. With a firm understanding of what the roles and responsibilities that each stakeholder has to the others the student participates in the process of construction confident that they understand what they are expected to do in their role as well as what they can expect of the architect, the owner and the various trades.
Prerequisite: TECH 22200.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

TECH 42200 - RADIATION PROCESSING OF MATERIALS

Description of the radiation sources used in radiation technology and the study of the effects of electrons and gamma rays on materials of technological interest. Experiments deal with the effects of radiation in different materials. Prerequisite: PHY 13002 or PHY 12202; and MATH 12002 or MATH 19002; and TECH 32100 and TECH 33363.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Applied Eng/Sustainabilit/Tech Department

TECH 42400 - RADIATION DOSIMETRY AND SAFETY

(Slashed with TECH 52400) Basic concepts of dosimetry and its units as applied to radiation technology, including theory of dosimeter response. Safety principles and practices followed in radiation environments, including terminology, policies and procedures to minimize exposure to radiation. Prerequisite: TECH 42200.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Applied Eng/Sustainabilit/Tech Department

TECH 43016 - ADVANCED PC-NETWORK ENGINEERING AND TROUBLESHOOTING

An in-depth look at the architecture, operation, configuration, fault analysis, troubleshooting and repair of personal computer and computer network hardware components. Topics include the operation, assembly, configuration, diagnosis, and unit-level troubleshooting of personal computer hardware, computer networking hardware, and related hardware components. Prerequisite: TECH 33020 and TECH 36302.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Applied Eng/Sustainabilit/Tech Department

TECH 43026 - MICROPROCESSOR SYSTEMS

Introduction to the architecture, operation and applications of an advanced microprocessor, focusing on assembly language programming and interfacing of standard programmable peripherals. Prerequisites: TECH 33222 and TECH 46330.
### TECH 43030 - MECHATRONICS

Application of automation concepts in motion control, electrical circuits, fundamental mechanics, control systems and programming including modeling, interfacing and signal conditioning. Prerequisites: PHY 23102, TECH 33032 and TECH 33040.

<table>
<thead>
<tr>
<th>Credit hours</th>
<th>Lecture hours</th>
<th>Lab hours</th>
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<tbody>
<tr>
<td>3.000</td>
<td>2.000</td>
<td>1.000</td>
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</tbody>
</table>

Levels: Undergraduate  
Schedule Types: Laboratory, Lecture  
Applied Eng/Sustainabilit/Tech Department

### TECH 43031 - MECHATRONICS II

Advanced modeling, system response, closed loop control and system software for mechatronic systems. Prerequisite: TECH 43030.

<table>
<thead>
<tr>
<th>Credit hours</th>
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<th>Lab hours</th>
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<tbody>
<tr>
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</tbody>
</table>

Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab  
Applied Eng/Sustainabilit/Tech Department

### TECH 43050 - INVENTIVE PROBLEM SOLVING

Theory of Inventive Problem Solving, TRIZ, is a collection of powerful problem-solving tools for a broad range of inventive problems. Capstone web-based course for students finishing their bachelor’s degree. Assists students in utilizing material learned in earlier courses to solve many real world problems in multiple disciplines. Prerequisite: Junior or senior standing.

<table>
<thead>
<tr>
<th>Credit hours</th>
<th>Lecture hours</th>
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<tbody>
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</tbody>
</table>

Levels: Undergraduate  
Schedule Types: Lecture  
Applied Eng/Sustainabilit/Tech Department

### TECH 43060 - MANAGEMENT OF TECHNOLOGY INNOVATION

Subjects covered in this course are case studies of innovative companies, elements of an innovation process, review of major problem solving methods, technical opportunity analysis, technical planning, technological forecasting, concept development and elements of patents. A project is included that utilizes TRIZ software and innovation model elements. Prerequisite: Junior or senior standing.

<table>
<thead>
<tr>
<th>Credit hours</th>
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</tbody>
</table>
TECH 43080 - INDUSTRIAL AND ENVIRONMENTAL SAFETY

Examines the occupational safety and health act and fundamentals of industrial safety programs. Prerequisite: None.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

TECH 43096 - INDIVIDUAL INVESTIGATION IN APPLIED SCIENCE AND TECHNOLOGY

(Repeatable for credit) Work study of an individual nature on a topic in a field of applied science and technology. Prerequisite: Junior standing and special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Applied Eng/Sustainabilit/Tech Department

TECH 43220 - ELECTRICAL MACHINERY

Principles of operation and application of motors, generators, transformers and other magnetic devices; electrical power generation, distribution and use. Prerequisite: TECH 23224.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

TECH 43221 - DIGITAL CONTROL SYSTEMS AND INSTRUMENTATION

Focuses on applications of instrumentation and control systems using computers and cirocontrollers including sensors, transducers, instruments, data acquisition boards, software programs, signal conditioning and transmission methods. Prerequisite: TECH 43026 and MATH 12003 and PHY 23102. Corequisite: TECH 33223.
4.000 Credit hours
3.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Applied Eng/Sustainabilit/Tech Department
TECH 43222 - COMPUTER HARDWARE ENGINEERING AND ARCHITECTURE

Internal architecture and operation of digital computers. Topics include computer processor datapaths and control, computer memory datapaths and control, pipelining and parallel processing, memory architecture and management, IO control, system bus architecture and properties, and computer control timing and synchronization. Prerequisite: TECH 26010 or TECH 33222.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Applied Eng/Sustainabilit/Tech Department

TECH 43550 - COMPUTER-AIDED MANUFACTURING

The application of computers to the preparation of machine tool control programs. Prerequisite: TECH 10001 and TECH 20002.

3.000 Credit hours
5.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Applied Eng/Sustainabilit/Tech Department

TECH 43580 - COMPUTER-AIDED MACHINE DESIGN

Application of the principles of mechanics and strength of materials, with computer assistance to the design and selection of machine components under both static and dynamic loads. Prerequisites: TECH 10001 and TECH 33111 and TECH 34002 and MATH 12002 and PHY 13001.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

TECH 43700 - COMPUTER INTEGRATED MANUFACTURING

Study of the computer integrated manufacturing system as it relates to product design, estimating inventory, machining and assembly, quality control and distribution. Prerequisite: TECH 43550.

3.000 Credit hours
5.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Applied Eng/Sustainabilit/Tech Department

TECH 43800 - APPLIED ENGINEERING TECHNOLOGY SEMINAR

As the capstone course in Applied Engineering, students will develop and participate in all aspects of a project involving the solution of a problem through application of technology. Students must pass the ATMAE Cetrified
Technical Manager (CTM) exam. Prerequisite: applied engineering technology (AENG) major and senior standing.
3.000 Credit hours
1.000 Lecture hours
2.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation, Lecture

Applied Eng/Sustainabilit/Tech Department

Course Attributes:
Experiential Learning Requirem

**TECH 46031 - STUDENT TEACHING**

Provides a 12 week student teaching experience in technology education program. All professional courses must be completed along with 75% of all technology courses and 100 hours of technology education program visits. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned "school/agency" before the first day of the semester in which student teaching/internship will take place. Prerequisite: Special approval by department; and Official valid certification of Child Safety Training, approved Basic Life Support and A.L.I.C.E. Training must be presented to the campus office of clinical experience or designated faculty/staff at Regional campuses as prerequisite for student teaching. Corequisite: TECH 49525.
9.000 Credit hours
9.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Applied Eng/Sustainabilit/Tech Department

Course Attributes:
Experiential Learning Requirem

**TECH 46170 - CASE STUDIES IN FRAUD EXAMINATION**

Application of principles of fraud examination, detection and evaluation of recommended action plans to specific fraud cases. Prerequisite: TECH 36110 and TECH 36318.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

**TECH 46312 - WIRELESS NETWORK AND TELECOMMUNICATION SYSTEMS**

Topics covered include the Public Switch Telephone Network infrastructure, electronic switching systems, transmission systems and emerging wireless networks. Note: This course is part of the Networking Hardware course sequence required for students enrolled in the Computer Engineering Technology concentration.
Prerequisites: TECH 36302
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
**TECH 46330 - VISUAL BASIC PROGRAMMING IN ENGINEERING TECHNOLOGY**

The course content includes programming in a high-level object-oriented, event-driven visual programming language, Visual Basic 2010 Express, conditional statements, iterative statements, arrays, object oriented programming, classes, objects, methods, inheritance, exception handling, graphical user interfaces with Windows Forms. Prerequisite: TECH 10001 or TECH 16010.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

**TECH 46350 - NETWORK MANAGEMENT AND DESIGN TECHNOLOGY**

Course covers the technical aspects of centrally managed and distributed Wide Area Networks, with an emphasis on the techniques used to maintain and improve the performance of telecommunications and data networks. Students will use software packages to monitor the real-time performance of a network and to diagnose various networking hardware and software problems. Topics include the five stacks of network management (fault management, configuration management, performance management, security management, and accounting management). Examples of current specific network management products are reviewed. Prerequisite: TECH 36302.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

**TECH 46411 - REQUIREMENTS ENGINEERING AND ANALYSIS**

Describes requirements engineering concepts for practical systems. Topics include identifying stakeholders and how to work with them effectively, requirements elicitation techniques, requirements engineering in the Problem Domain, developing Use-Case scenarios, reference models, systems requirements specifications, validating and prototyping requirements and case study presentations by Industry SMEs. Some knowledge of a programming language or good analytical background is assumed. Prerequisite may be waived for students with industry experience in software development or consent from the instructor. Prerequisites: minimum C (2.000) grade in TECH 16010 or DSCI 15310 or CS 13001.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

**TECH 47200 - SYSTEMS ENGINEERING**

Systems engineering as a method to solve problems. Introduction to the fundamental systems engineering principles, processes, and methodologies used to analyze, design, develop, and deploy complex, sustainable
systems. Focuses on systems engineering as a logical, disciplined, systematic, and coherent approach to the design and development of a system, across the full life cycle of the system. Special emphasis is made on the concepts, methods, and activities used to analyze systems, to define and allocate requirements, to transform requirements into a system design, and to verify and validate the system. Prerequisite: junior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

**TECH 47210 - SUSTAINABLE ENERGY I**

A comprehensive overview of energy sources and energy systems, with an emphasis on renewable energy and the implementation and sustainability of various forms of energy. Examines the characteristics of conventional non-renewable energy systems, along with alternate, renewable energy sources and systems. Includes fundamental energy concepts and the conversion, delivery, distribution, and storage of energy. Explores the technological application of various sources of energy and compares their benefits and limitations. Also presents an overview of present U.S. and global energy needs and demands, and the sustainable energy technologies that may be used to meet future energy demands. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

**TECH 47211 - SUSTAINABLE ENERGY II**

An in-depth study of the analysis, selection, and implementation of various energy and power sources, with an emphasis on the use of renewable, sustainable energy systems. Focuses on determining energy needs, and on assessing and comparing energy systems with respect to efficiency, technical feasibility, available resources, cost and sustainability characteristics. Includes economics of energy systems, methods for determining costs, and cost-benefit analysis of various energy and power systems. Also includes the social, economic and environmental impact associated with the development, implementation and use of various forms of energy. Prerequisite: TECH 47210.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

**TECH 49525 - INQUIRY INTO PROFESSIONAL PRACTICE**

Seminar during student teaching to explore issues and techniques appropriate to teaching technology education. Corequisite: TECH 46031.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisites</th>
<th>Credit Hours</th>
<th>Lecture Hours</th>
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<tbody>
<tr>
<td>TECH 50000</td>
<td>QUALITY STANDARDS</td>
<td>This course introduces students to issues in quality standards, quality assurance and statistical inference in applied technology and process control. Topics include systems reliability, quality control, SPC, control charts, principles and methods of statistical analysis and prediction, and hypothesis testing. Prerequisite: Graduate standing.</td>
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<tr>
<td>TECH 51001</td>
<td>METHODS IN TECHNOLOGY EDUCATION</td>
<td>Methods of teaching curriculum development and evaluation which are unique to the profession of technology education. Prerequisite: Graduate standing.</td>
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<td>Schedule Types: Lecture</td>
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<td>TECH 51002</td>
<td>ORGANIZATION IN TECHNOLOGY EDUCATION</td>
<td>Principles and practices involved in curriculum and facility design appropriate for technology education including equipment maintenance. Prerequisite: Graduate standing.</td>
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<tr>
<td>TECH 51003</td>
<td>METHODS AND ORGANIZATION IN TECHNOLOGY EDUCATION</td>
<td>Curriculum development, organization, and evaluation for technology education's role in STEM. Includes demonstration techniques and safety instruction, lesson plan development and facility design principles. Prerequisite: graduate standing.</td>
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<tr>
<td>TECH 51051</td>
<td>FOUNDATIONS AND CONTEMPORARY THEORIES OF TECHNOLOGY EDUCATION</td>
<td>This course explores the history, contemporary theories and practices of technology education. Included are site visits to exemplary technology education programs. Prerequisite: Graduate standing.</td>
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3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Applied Eng/Sustainability/Tech Department

**TECH 51052 - TECHNOLOGY AND ENGINEERING FOR K TO 8 STEM**

Using discussion, laboratory experience and field experiences this course explores technology education as it relates to all content areas of the K-12 curriculum. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Applied Eng/Sustainability/Tech Department

**TECH 51055 - INDUSTRIAL PRACTICE**

Practical experience in industry of cooperative work-study nature. Not available for persons who have taken TECH 33056. Prerequisite: Graduate standing and special approval.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Applied Eng/Sustainability/Tech Department

**TECH 51093 - VARIABLE TITLE WORKSHOP IN TECHNOLOGY**

(Repeatable for credit) Specialized instructional unit oriented toward the application of current technology concepts. Prerequisite: Graduate standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Applied Eng/Sustainability/Tech Department

**TECH 52200 - RADIATION PROCESSING OF MATERIALS**

Description of the radiation sources used in radiation technology and the study of the effects of electrons and gamma rays on materials of technological interest. Experiments deal with the effects of radiation in different materials. Prerequisite: Graduate standing.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Applied Eng/Sustainability/Tech Department
TECH 52400 - RADIATION DOSIMETRY AND SAFETY

Basic concepts of dosimetry and its units as applied to radiation technology, including theory of dosimeter response and use of dosimeters in radiation environments. Safety principles and practices followed in radiation environments, including terminology, maximum exposure limits, and procedures to minimize exposure to radiation. Prerequisites: TECH 52200 and graduate standing.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Applied Eng/Sustainabilit/Tech Department

TECH 53026 - INTRODUCTION TO MICROPROCESSORS

Introduction to the architecture, operation and applications of an advanced microprocessor, focusing on assembly language programming and interfacing of standard programmable peripherals. Prerequisites: TECH 33222 and 46330.

4.000 Credit hours
3.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Laboratory, Lecture

Applied Eng/Sustainabilit/Tech Department

TECH 53221 - DIGITAL CONTROL SYSTEMS AND INSTRUMENTATION

Focuses on applications of instrumentation and control systems using computers and microcontrollers including sensors, transducers, instruments, data acquisition boards, software programs, signal conditioning and transmission methods. Prerequisites: TECH 33223; and TECH 43026 or 53026; and graduate standing.

4.000 Credit hours
3.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Laboratory, Lecture

Applied Eng/Sustainabilit/Tech Department

TECH 53222 - COMPUTER HARDWARE ENGINEERING AND ARCHITECTURE

Internal architecture and operation of digital computers. Topics include computer processor datapaths and control, computer memory datapaths and control, pipelining and parallel processing, memory architecture and management, IO control, system bus architecture and properties, computer control timing, and synchronization of controls. Prerequisite: graduate standing.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Applied Eng/Sustainabilit/Tech Department
**TECH 53550 - COMPUTER-AIDED MANUFACTURING**

The application of computers to the preparation of machine tool control programs, rapid prototyping and robotic control. Two hours lecture and two hours lab. Prerequisite: TECH 23581 and graduate standing.

3.000 Credit hours
4.000 Other hours

Levels: Graduate  
Schedule Types: Combined Lecture and Lab

Applied Eng/Sustainabilit/Tech Department

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**TECH 53700 - COMPUTER INTEGRATED MANUFACTURING**

The study of computer integrated manufacturing as system control, product design, machining, assembly, material logistics, quality, information usage and system integration relates to it. Prerequisite: TECH 31020 and TECH 53550 and graduate standing.

3.000 Credit hours
4.000 Other hours

Levels: Graduate  
Schedule Types: Combined Lecture and Lab

Applied Eng/Sustainabilit/Tech Department

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**TECH 53800 - APPLIED ENGINEERING TECHNOLOGY SEMINAR**

An individual or group project involving the solution of a problem through the application of technology. Prerequisite: Special approval and graduate standing.

2.000 Credit hours
2.000 Other hours

Levels: Graduate  
Schedule Types: Seminar

Applied Eng/Sustainabilit/Tech Department

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**TECH 55551 - INTRODUCTION TO NANOTECHNOLOGY**

Provides an in-depth overview of the fundamentals of nanoscience and nanotechnology. Includes a survey of developments within the breadth of the nanotechnology in various fields such as electronics, materials, energy, and biomedical science, etc. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

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**TECH 56312 - WIRELESS NETWORK AND TELECOMMUNICATION SYSTEMS**

Wireless and telecommunication electronic systems technologies. Topics covered include the Public Switch Telephone Network infrastructure, electronic switching systems, transmission systems, and emerging wireless networks. Prerequisite: graduate standing.

3.000 Credit hours
TECH 56321 - WEB DATABASE INTEGRATION

Laboratory course focused on integrating data sources into web sites. Current topics include server-side processing principles, Web forms, database programming objects and structured query language. Prerequisite: COMT 21005 and COMT 21036 and graduate standing.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

TECH 56330 - VISUAL BASIC PROGRAMMING IN ENGINEERING TECHNOLOGY

The course content includes programming in a high-level object-oriented, event-driven visual programming language, Visual Basic 2010 Express, conditional statements, iterative statements, arrays, object oriented programming, classes, objects, methods, inheritance, exception handling, graphical user interfaces with Windows Forms. Includes a graduate-level VB programming project. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

TECH 56350 - NETWORK MANAGEMENT AND DESIGN TECHNOLOGY

The technical aspects of centrally managed and distributed Wide Area Networks, with an emphasis on the techniques used to maintain and improve the performance of telecommunications and data networks. Students will use software packages to monitor the real-time performance of a network and to diagnose various networking hardware and software problems. Topics include the five stacks of network management (fault management, configuration management, performance management, security management, and accounting management). Examples of current specific network management products are reviewed. Prerequisite: graduate standing.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

TECH 56411 - REQUIREMENTS ENGINEERING AND ANALYSIS TECHNOLOGY

Techniques to conceptualize, develop and analyze requirements engineering specifications for practical systems. Topics covered include identifying stakeholders and how to effectively work with them, requirements elicitation techniques; requirements engineering in the problem and solution domains. The students are provided with an
opportunity to participate in formal review of their projects by industry experts. Strong analytic skills, algorithms or programming experience is recommended. Prerequisite: TECH 46330 or TECH 56330 or CS 61002; and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

<table>
<thead>
<tr>
<th>TECH 57000 - SUSTAINABLE SYSTEMS AND TECHNOLOGY</th>
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<tr>
<td>Introduction to the fundamental concepts and principles of sustainability, sustainable technologies and sustainable systems. Provides students with an understanding of the basic principles and key issues of environmental, social and economic sustainability. Closely examines sustainability as it applies to the relationships among human beings, technology and the environment, with a special emphasis on sustainability in the context of &quot;meeting humanity's current needs.&quot; Also stresses the ethics and importance of sustainability and the use of sustainable systems. Prerequisite: graduate standing.</td>
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Levels: Graduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

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<tr>
<th>TECH 57010 - ETHICS, TECHNOLOGY AND THE ENVIRONMENT</th>
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<tr>
<td>Explores the fundamental issues of the interconnections between human beings and the environment, with an emphasis on the ethics and the importance of the sustainability. Takes an in-depth look at basic environmental concepts, ethics and values, as they relate to a wide range of practical subject matters, including technology, from global and national perspectives. Provides an in-depth look at sustainable systems and the ethical issues associated with sustainability as it relates to technology by focusing on common and future impacts as they apply to ethics, values and justice. Prerequisite: graduate standing.</td>
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<td>3.000 Credit hours</td>
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Levels: Graduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

<table>
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<tr>
<th>TECH 57200 - SYSTEMS ENGINEERING</th>
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<tr>
<td>Systems engineering as a method to solve problems. Introduction to the fundamental systems engineering principles, processes, and methodologies used to analyze, design, develop, and deploy complex, sustainable systems. Focuses on systems engineering as a logical, disciplined, systematic, and coherent approach to the design and the development of a system, across the full life cycle of the system. Special emphasis is made on the concepts, methods and activities used to analyze systems, to define and allocate requirements, to transform requirements into a system design, and to verify and validate the system. Prerequisite: graduate standing.</td>
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<td>3.000 Credit hours</td>
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<td>3.000 Lecture hours</td>
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Levels: Graduate
Schedule Types: Lecture
## TECH 57210 - SUSTAINABLE ENERGY I

(Cross-listed with TECH 47210) A comprehensive overview of energy sources and energy systems, with an emphasis on renewable energy and the implementation and sustainability of various forms of energy. Examines the characteristics of conventional non-renewable energy systems, along with alternate, renewable energy sources and systems. Includes fundamental energy concepts and the conversion, delivery, distribution, and storage of energy. Explores the technological application of various sources of energy and compares their benefits and limitations. Also presents an overview of presents U.S. and global energy needs and demands, and the sustainable energy technologies that may be used to meet future energy demands. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

## TECH 57211 - SUSTAINABLE ENERGY II

(Cross-listed with TECH 47211) An in-depth study of the analysis, selection, and implementation of various energy and power sources, with an emphasis on the use of renewable, sustainable energy systems. Focuses on determining energy needs, and on assessing and comparing energy systems with respect to efficiency, technical feasibility, available resources, cost and sustainability characteristics. Includes economics of energy systems, methods for determining costs, and cost-benefit analysis of various energy and power systems. Also includes the social, economic, and environmental impact associated with the development, implementation, and use of various forms of energy. Prerequisites: graduate standing and TECH 57210.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

## TECH 60000 - PROJECT MANAGEMENT IN A TECHNOLOGICAL ENVIRONMENT

The planning, organizing, directing and controlling of company technology resources for relatively short term objectives. Students will also learn to make application of current projects. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

## TECH 60001 - QUANTITATIVE METHODS IN TECHNOLOGY

Descriptive and inferential statistics used in technology and engineering. Emphasis is on the methods of analysis and the interpretation of data associated with research and development in technological and engineering environments. Course topics include representation of data, descriptive statistics, probability and probability distributions, inferential statistics, statistical design, and the analysis of experiments. No previous familiarity with probability or statistics is assumed. The ability to utilize basic algebra is required. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

TECH 60003 - SIX-SIGMA: TOOLS AND APPLICATIONS FOR TECHNOLOGY MANAGEMENT

Principles and concepts of six-sigma to improve organizational efficiency, effectiveness and productivity by improving quality, reducing waste, defects and failures. Prerequisites: TECH 50000 and 60001; and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

TECH 60078 - RESEARCH METHODS IN TECHNOLOGY

Research techniques for the technologist. Methods for designing, conducting, analyzing and interpreting results of technological research. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

TECH 61000 - INDUSTRIAL TECHNOLOGY EDUCATION

This course provides students with an understanding of the rationale and issues related to developing the industrial technology education program. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

TECH 61095 - SPECIAL TOPICS IN TECHNOLOGY

(Repeatable for credit) Study of special topics in technology including technological tours offered irregularly as interest and opportunities permit. When offered contact College of Technology office for details. Prerequisite: Graduate standing.
1.000 TO 4.000 Credit hours
1.000 TO 4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department
TECH 61098 - RESEARCH

(Repeatable for credit) Research or individual investigation for master's level graduate students. Credits earned may be applied toward meeting degree requirements if department approves. Prerequisite: Graduate standing.

1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

Applied Eng/Sustainability/Tech Department

TECH 61199 - THESIS I

Thesis option student must register for a total of 6 hours, 2 to 6 in a single semester or to be distributed over several semesters if desired. Prerequisite: Advisor's special approval and graduate standing.

2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Applied Eng/Sustainability/Tech Department

TECH 61299 - THESIS II

Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: TECH 61199 and graduate standing.

2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Applied Eng/Sustainability/Tech Department

TECH 62396 - INDIVIDUAL INVESTIGATION IN ELECTRONIC TECHNOLOGY

(Repeatable for credit) Individual investigation of a student-selected topic oriented toward the technical aspects of electronics. Prerequisite: TECH 53221 and graduate standing.

2.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Applied Eng/Sustainability/Tech Department

TECH 63010 - COMPUTER HARDWARE

Introduction to the hardware, architecture and operation of the personal computer and associated devices. Topics include personal computer architecture and operation fundamentals, basic hardware, data buses and ports, hardware component packaging, auxiliary hardware components, and computer assembly, basic hardware installation, configuration and troubleshooting. Prerequisite: graduate standing.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Applied Eng/Sustainabilit/Tech Department

**TECH 63020 - FIBER OPTIC SYSTEMS**

Principles and characteristics of fiber optics, fiber optic system components and applications of fiber optics in electronic communication systems. Prerequisites: TECH 33220 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

**TECH 63031 - PROGRAMMABLE LOGIC CONTROLLERS**

Programmable logic controllers (PLCS) covering hardware, ladder logic programming, networking and communications. Programming timers, counters and sequencers and an introduction to human machine interfaces (HMIS). An understanding of basic electricity and computer technology is required. Prerequisite: graduate standing.
3.000 Credit hours
2.000 Lecture hours
1.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Applied Eng/Sustainabilit/Tech Department

**TECH 63032 - ADVANCED PROGRAMMABLE LOGIC CONTROLLERS**

Advanced principles and applications of programmable logic controllers with a focus on using sequential function charts to control complex industrial processes. Includes real time control issues, PLC networking, programming languages other than ladder logic, standards, motion control, supervisory control and data acquisition, process control, alarm management, power failure strategies and safety. Prerequisites: TECH 33031 or TECH 63031; and graduate standing.
3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Applied Eng/Sustainabilit/Tech Department

**TECH 63040 - ELECTRONIC COMMUNICATIONS**

Study of electronic communications systems fundamentals, characteristics, design considerations and implementation. Topics include signal modulation and demodulation, multiplexing, noise, transmitters, receivers, signal propagation, digital communications, transmission lines, antennas and practical applications. Prerequisites: TECH 33223 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

**TECH 63041 - MOTORS AND CONTROLLERS**

Theory and application of AC and DC motors, motor control, and machine operations in mechatronic systems. Includes introduction to basic control system terms and devices, input and output transducers, signal conditioning, open loop and closed loop control, stability and performance. Prerequisites: TECH 21021 and graduate standing.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Applied Eng/Sustainabilit/Tech Department

**TECH 63045 - MECHATRONICS**

Application of automation concepts in motion control, electrical circuits, fundamental mechanics, control systems and programming including modeling, interfacing and signal conditioning. Prerequisites: TECH 33032 or TECH 63932; and TECH 33040 or TECH 63040; and PHY 23102; and graduate standing.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Applied Eng/Sustainabilit/Tech Department

**TECH 63046 - ADVANCED MECHATRONICS**

Advanced modeling, system response, closed loop control and system software for mechatronic systems. Prerequisites: TECH 43030 or TECH 63045; and graduate standing.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Applied Eng/Sustainabilit/Tech Department

**TECH 63050 - TRIZ-THEORY OF INVENTIVE PROBLEM SOLVING**

Theory of Inventive Problem Solving, TRIZ, is a collection of powerful problem-solving tools for a broad range of inventive problems. The theory originated in Russia by the study of over 2 million patents. Web-based capstone for students finishing their master's degree. Students utilize material learned in earlier courses to solve real world problems in multiple disciplines. Prerequisite: graduate standing.

3.000 Credit hours
**TECH 63060 - MANAGEMENT OF TECHNOLOGY INNOVATION**

Subjects covered in this course include: case studies of innovative companies, elements of an innovation process, review of major problem solving methods, technical opportunity analysis, technical planning, technological forecasting, concept development and elements of patents. A project is included that utilizes TRIZ software and innovation model elements. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

**TECH 63070 - COMPUTER HARDWARE DESIGN AND INTEGRATION**

In-depth study of personal computer (PC) and computer networking hardware. Topics include PC design, basic and auxiliary PC hardware components, PC assembly, PC upgrade and optimization, and PC repair, diagnosis and troubleshooting. Additional topics include computer networking hardware, network architecture, network communication protocols, and network installation, configuration and maintenance. Includes laboratory. Prerequisite: EERT 22014 or TECH 33010; and graduate standing.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

**TECH 63100 - COMPUTER-AIDED DESIGN**

Study of modern industrial practice using computers in advanced graphics, design and analysis including geometric dimensioning and tolerancing, parametric design, solid modeling and finite element analysis. Two hours lecture and two hours lab. Prerequisite: TECH 23581 and graduate standing.

3.000 Credit hours
1.000 Lecture hours
3.000 Lab hours

**TECH 63496 - INDIVIDUAL INVESTIGATION IN ENERGY/POWER TECHNOLOGY**

(Repeatable for credit) Individual investigation of selected topics within the energy/power technology systems. Prerequisite: TECH 31032 and graduate standing.

2.000 Credit hours
3.000 Other hours
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Level</th>
<th>Schedule Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>TECH 63870</td>
<td>FACILTY DESIGN AND MATERIAL HANDLING</td>
<td>Intended to provide students with a fundamental understanding of how layout affects the flow through a system. Both qualitative and quantitative tools are presented for a complete approach to facility design and material handling. Prerequisite: graduate standing.</td>
<td>Graduate</td>
<td>Individual Investigation</td>
</tr>
</tbody>
</table>
|              |                                                                  | 3.000 Credit hours
|              |                                                                  | 3.000 Lecture hours
| TECH 64010   | CONNECTIVITY AND INTEROPERABILITY IN INDUSTRY                    | This course focuses on integrating and administering multiple systems in an industrial environment. Two-and-a-half-hour lecture and 30-minute lab weekly. Prerequisite: TECH 46311 and graduate standing. | Graduate | Lecture                                     |
|              |                                                                  | 3.000 Credit hours
|              |                                                                  | 3.000 Other hours
| TECH 64012   | INFORMATION TECHNOLOGY AND AUTOMATION IN INDUSTRY                | This course will focus on developing systems that analyze and automate industrial processes and provide decision support. Two and one half hours lecture and one half hour lab. Prerequisite: Special approval and graduate standing. | Graduate | Combined Lecture and Lab                     |
|              |                                                                  | 3.000 Credit hours
|              |                                                                  | 3.000 Other hours
| TECH 64095   | SPECIAL TOPICS IN COMPUTER TECHNOLOGY                            | (Repeatable for credit)Study of various topics that focus on current computer technologies. Prerequisite: Graduate standing.                                                                 | Graduate | Lecture                                     |
|              |                                                                  | 1.000 TO 4.000 Credit hours
|              |                                                                  | 1.000 TO 4.000 Lecture hours
TECH 64312 - ADVANCED WIRELESS TELECOMMUNICATION SYSTEM AND NETWORK TECHNOLOGIES

Describes technologies associated with wireless and telecommunications systems. Topics covered include Public Switch Telephone Network Infrastructures, Intelligent Networks, Wireless Technologies in Manufacturing Enterprises, 3GPP Standards, ITU Standards. Prerequisites: TECH 56312 and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

TECH 64396 - INDIVIDUAL INVESTIGATION IN COMMUNICATION TECHNOLOGY

(Repeatable for credit) Independent research consisting of a problem statement followed by literature search and application of an industrial practice. A proposal must be developed and a written paper project presented to faculty and industrial representatives. Prerequisite: Special approval and graduate standing.

2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Applied Eng/Sustainabilit/Tech Department

TECH 65330 - ADVANCED VISUAL BASIC PROGRAMMING IN ENGINEERING TECHNOLOGY

Advanced concepts in Visual Basic Programming for solving engineering problems. Topics covered include classes and objects; SQL server databases, Language Integrated Query, creating web apps, programming web forms, and security. Familiarity with Visual Basic Programming in Engineering Technology (TECH 56330) is strongly recommended. Prerequisites: graduate standing and TECH 56330.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Applied Eng/Sustainabilit/Tech Department

TECH 65400 - EVALUATING QUALITY SYSTEM THROUGH PROCESS CONTROL

Evaluating industrial quality through statistical process control. Methods to produce design process control and process capability are analyzed and evaluated for industrial quality control. Use of inspection equipment and assurance of receiving fabricating and shipping acceptable materials products and systems. Scientific management. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Applied Eng/Sustainabilit/Tech Department

TECH 65500 - QUALITY SYSTEMS AND INDUSTRIAL PRODUCTIVITY
Tools and techniques for increasing industrial productivity through total quality management. Productivity improvement techniques involving human, technology, material, product and processes, utilizing value engineering, analytical models and scientific management tools in high-technology environment. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

**TECH 65550 - DESIGN AND ANALYSIS OF EXPERIMENTS IN TECHNOLOGY**

Introduces planning and conducting experiments, as well as analyzing the resulting data using statistical techniques to obtain valid and objective conclusions. Also focuses on experiments performed in areas such as product design, manufacturing process development and process improvement. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

**TECH 65700 - APPLIED RELIABILITY ENGINEERING**

Designed to provide technical managers, applied engineers, technologists and manufacturing personnel practical working knowledge of reliability measurement and testing. Concepts of reliability engineering are analyzed to determine failure rates for various types of destructive and nondestructive testing. Prerequisite: TECH 65400 and graduate standing.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Applied Eng/Sustainabilit/Tech Department

**TECH 65800 - BURN-IN/STRESS TESTING FOR RELIABILITY**

Comprehensive course on reliability testing to analyze and establish reliability standards for components, products and systems. Specific emphasis on burn-in and stress testing procedures to perform effective reliability statistical calculations will be the major focus of the course. Prerequisite: TECH 65700 and graduate standing.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Applied Eng/Sustainabilit/Tech Department

**TECH 66350 - ADVANCED NETWORK MANAGEMENT AND DESIGN TECHNOLOGY**

Covers network management techniques including the TMN framework and the ISO Model for managing WAN
communication networks. Topics covered include network management technologies, TMN protocols, Common Management Information Protocol, ISO Model, Management Information Base (MIB) architecture, Network Operations Center and Network Design. Examples of current network management tools are reviewed. Upon completion of this course, students will have a good understanding of network management framework and network management technologies for communication networks. Prerequisites: TECH 56350; and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

**TECH 66380 - ADVANCED NETWORKING**

Provides student with experience in fundamental and advanced computer networking techniques including network architectures, LAN systems, network security, and network management and administration. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

**TECH 66411 - WIRELESS AND TELECOMMUNICATION SYSTEMS REQUIREMENTS ENGINEERING**

Methods and techniques to develop requirements engineering specifications for wireless and telecommunication systems. Topics covered include Industry standards for telecom and wireless communications, reference data models, functional requirements specifications, performance analysis, the requirements review process, and systems verification. Familiarity with Requirements Engineering and Analysis (TECH 56411) concepts is recommended. Prerequisite: TECH 56411 and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Applied Eng/Sustainabilit/Tech Department

**TECH 66596 - INDIVIDUAL INVESTIGATION IN MATERIALS TECHNOLOGY**

(Repeatable for credit) Research directed toward the study and application of metallic and nonmetallic materials. Prerequisite: TECH 20002 or TECH 33363 and graduate standing.
2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Applied Eng/Sustainabilit/Tech Department

**TECH 66796 - INDIVIDUAL INVESTIGATION IN INDUSTRIAL PROCESSES**

(Repeatable for credit) Individual investigation of a student-selected topic oriented towards
industrial/manufacturing processes. Prerequisite: TECH 20002 and graduate standing.

Levels: Graduate
Schedule Types: Individual Investigation

Applied Eng/Sustainability/Tech Department

**TECH 67220 - LIFE CYCLE DESIGN I**

An in-depth investigation of Life Cycle Design of sustainable systems. Explores the cradle to cradle path of products with an emphasis on system Life Cycle stages and processes from a sustainability perspective. Examines how environmentally conscious system design can be accomplished by considering the environmental impact of technology and engineering as the part of the sustainable design process. Includes the study of sustainable development with respect to Green Technologies, hazardous materials and processes and reducing the environmental impact of product development and utilization. Also includes an introduction to Life Cycle Assessment and various Environmental and Life Cycle standards. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Applied Eng/Sustainability/Tech Department

**TECH 67221 - LIFE CYCLE DESIGN II**

An in-depth study of environmental performance, environmentally conscious design and sustainable development. Focuses on Life Cycle Analysis and Assessment as a means to determine the potential economic, environmental, and ecological impact of products, processes, and activities across their entire life cycle. Takes a close look at the beneficial and detrimental effects of various technologies, materials, products and processes with special attention to the reduction of harmful effects to human beings, the ecosystem, and the environment. Covers the analysis and assessment of energy consumption, natural resource depletion, and environmental degradation., and ways to minimize detrimental effects on the environment. Includes the use of various life cycle engineering and assessment processes, models and analytical tools to identify, evaluate, and compare the environmental consequences associated with various products/activities, across a wide range of impact categories, to assist in design and decision making. Prerequisite: graduate standing and TECH 67220.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Applied Eng/Sustainability/Tech Department

**TECH 67496 - INDIVIDUAL INVESTIGATION IN CONSTRUCTION TECHNOLOGY**

(Repeatable for credit)Provides advanced work in a selected investigation in one or more of the many areas of construction technology. In some instances an introduction to construction technology is considered depending upon student needs. "IP" permissible. Prerequisite: Special approval and graduate standing.

2.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Applied Eng/Sustainability/Tech Department
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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Levels</th>
<th>Schedule Types</th>
<th>Department</th>
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</thead>
<tbody>
<tr>
<td>TECH 67596</td>
<td>INDIVIDUAL INVESTIGATION IN MANUFACTURING TECHNOLOGY</td>
<td>(Repeatable for credit) Independent study related to manufacturing industries. The study may include the development of a product for manufacture (or service) or the in-depth examination of an element of manufacturing. Prerequisite: Graduate standing. 2.000 Credit hours 3.000 Other hours</td>
<td>Graduate</td>
<td>Individual Investigation</td>
<td>Applied Eng/Sustainabilit/Tech Department</td>
</tr>
<tr>
<td>TECH 68196</td>
<td>INDIVIDUAL INVESTIGATION IN ENGINEERING GRAPHICS</td>
<td>(Repeatable for credit) Investigation of selected topics within engineering graphics including computer-aided design. Prerequisite: TECH 31087 and graduate standing. 2.000 Credit hours 3.000 Other hours</td>
<td>Graduate</td>
<td>Individual Investigation</td>
<td>Applied Eng/Sustainabilit/Tech Department</td>
</tr>
<tr>
<td>TECH 68796</td>
<td>INDIVIDUAL INVESTIGATION IN INDUSTRIAL TECHNOLOGY SYSTEMS DESIGN</td>
<td>(Repeatable for credit) The study of two- and three-dimensional design as related to manufacturing construction, communication, and energy power including patents, creativity, and problem-solving approaches. Prerequisite: Graduate standing. 2.000 Credit hours 3.000 Other hours</td>
<td>Graduate</td>
<td>Individual Investigation</td>
<td>Applied Eng/Sustainabilit/Tech Department</td>
</tr>
<tr>
<td>THEA 11000</td>
<td>THE ART OF THE THEATRE</td>
<td>Using the life-centered nature of theatre as a medium of analysis, this course is designed to develop critically engaged audience members who are aware of the impact, significance, and historical relevance of the interconnection between culture and theatre performance. Prerequisite: None. 3.000 Credit hours 3.000 Lecture hours</td>
<td>Undergraduate</td>
<td>Lecture</td>
<td>Theatre and Dance Department</td>
</tr>
<tr>
<td>THEA 11100</td>
<td>MAKING THEATRE: CULTURE AND PRACTICE</td>
<td></td>
<td></td>
<td></td>
<td>Course Attributes: Diversity Course-Global, Kent Core-Fine Arts, LER-Fine Arts, Trnfr Module-Fine Arts</td>
</tr>
</tbody>
</table>
Overview of theatre practices through creative experiential learning. The focus and course content combines practical and cultural experiences and culminates with a performance event that provides a solid foundation in the artistic process and an identity for the first-year theatre student. Prerequisite: special approval.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Theatre and Dance Department

THEA 11303 - THE ART OF ACTING

General introduction to acting: the actor’s instrument, sensory awareness, personal and group response, objectives and tactics. Basic scene work. Prerequisite: Special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Theatre and Dance Department

Course Attributes:
TAG - Arts/Humanities

THEA 11521 - GRAPHICS FOR THE THEATRE

An introduction to computer software currently used by professional theatre designers and technicians. These applications include image processing software, computer-aided design software and 3D visualization software. Prerequisite: special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Theatre and Dance Department

THEA 11722 - FUNDAMENTALS OF PRODUCTION I: SCENERY, STAGECRAFT AND SOUND

An introduction to professional theatre production principles and practices in the areas of scenery, stagecraft and sound. Prerequisite: special approval.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Theatre and Dance Department

Course Attributes:
TAG - Arts/Humanities

THEA 11723 - FUNDAMENTALS OF PRODUCTION LABORATORY I: SCENERY
Practice in theatre production techniques in the area of scenery. Prerequisite: special approval. Corequisite: THEA 11722.
1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Theatre and Dance Department

Course Attributes:
TAG - Arts/Humanities

THEA 11724 - FUNDAMENTALS OF PRODUCTION LABORATORY II: PROPS AND SCENIC ART

Practice in theatre production techniques in the area of properties and scenic art. Prerequisite: special approval. Corequisite: THEA 11722.
1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Theatre and Dance Department

Course Attributes:
TAG - Arts/Humanities

THEA 11732 - FUNDAMENTALS OF PRODUCTION II: COSTUMES, LIGHTING AND PROJECTIONS

An introduction to professional theatre production principles and practices in the areas of costumes, lighting and projections. Prerequisite: special approval.
2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Theatre and Dance Department

THEA 11733 - FUNDAMENTALS OF PRODUCTION LABORATORY III: COSTUMES

Practice in theatre production techniques in the area of costumes. Prerequisite: special approval. Corequisite: THEA 11732.
1.000 Credit hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

Theatre and Dance Department

THEA 11734 - FUNDAMENTALS OF PRODUCTION LABORATORY IV: LIGHTING, SOUND AND PROJECTIONS

Practice in theatre production techniques in the area of lighting, sound and projections. Prerequisite: special approval. Corequisite: THEA 11732.
THEA 13092 - BACHELOR OF FINE ARTS FRESHMAN PRACTICUM: DESIGN AND TECHNOLOGY

(Repeatable for credit) Practical experience at the freshman level in theatre and dance production. S/U Grading. Prerequisites: special approval; and Bachelor of Fine Arts in Theatre Studies (THEA) major with a concentration in Design and Technology (DT).

3.000 Credit hours
6.666 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Theatre and Dance Department

Course Attributes:
Experiential Learning Requirem

THEA 20202 - MUSIC THEORY FOR MUSICAL THEATRE I

Study the basic principles and applications of music theory as it may apply to the work of a professional singing actor. It will begin by gaining a thorough understanding of the rudiments of music and progress to studying the objective and subjective aspects of music and its structure, principally pertaining to the world of musical theatre. The course is intended to establish fundamental concepts to be further explored in Music Theory for Theatre II. Prerequisite: special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Theatre and Dance Department

THEA 20203 - MUSIC THEORY FOR MUSICAL THEATRE II

Study the basic principles and applications of music theory as it may apply to the work of a professional singing actor. The course will focus on the interpretation of music for musical theater and serve as a continuation of the material presented in Music Theory for Theatre I (20202). Prerequisite: special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Theatre and Dance Department

THEA 21016 - MAKEUP FOR STAGE AND SCREEN

Study of stage, TV and photographic makeup techniques and materials. Four lecture demonstration laboratory hours per week; special projects as assigned. Prerequisite: Special approval.

3.000 Credit hours
THEA 21095 - SPECIAL TOPICS IN THEATRE

(Repeatable for credit) Offered irregularly when unusual resources permit a topic different from existing courses. Topic will be announced when scheduled. Prerequisite: special approval.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Theatre and Dance Department

THEA 21111 - SCRIPT ANALYSIS

Principles, theories and techniques of play script analysis for theatrical production. Prerequisite: special approval; and THEA 11100.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Theatre and Dance Department

Course Attributes:
TAG - Arts/Humanities

THEA 21201 - INTRODUCTION TO AMERICAN MUSICAL THEATRE

The evolution of the American musical from comic opera, European operetta and African American jazz to today's commercial Broadway stage. Students engage in the traditions, identity, and socio-economic development of the quintessential American art form: Musical Theatre. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Theatre and Dance Department

THEA 21303 - ACTING PROCESS

Fundamentals of naturalistic acting and interaction; development of spontaneity, believability and a sense of truth; game playing and basic stage technique. Prerequisites: special approval.

3.000 Credit hours
2.000 Lecture hours
1.000 Lab hours

Levels: Undergraduate
Schedule Types: Studio
<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisites</th>
<th>Credit Hours</th>
<th>Lecture/Lecture hours</th>
<th>Other hours</th>
<th>Levels:</th>
<th>Schedule Types:</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEA 21306</td>
<td>MUSICAL THEATRE PERFORMANCE I</td>
<td>Performance-oriented class that will focus on techniques and styles of performance in musical theatre and cabaret from Gilbert and Sullivan to present. Prerequisite: Musical Theatre major.</td>
<td>3.000 Credit hours, 3.000 Other hours</td>
<td>Undergraduate</td>
<td>Studio</td>
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<td>Studio</td>
<td>Studio</td>
</tr>
<tr>
<td>THEA 21501</td>
<td>SOPHOMORE PORTFOLIO REVIEW</td>
<td>Preparation and review of a portfolio of work, judged by the design technology faculty at the beginning of the spring semester. Student must pass to remain in the BFA design technology program. Prerequisite: special approval.</td>
<td>1.000 Credit hours, 1.000 Other hours</td>
<td>Undergraduate</td>
<td>Studio</td>
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<td>Studio</td>
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</tr>
<tr>
<td>THEA 21521</td>
<td>THEATRICAL DRAFTING</td>
<td>Drafting techniques for all design and technology students. Includes plans, elevations, sections, detailed drawings, light plots. Prerequisite: special approval; and THEA 11521, THEA 11722, and THEA 11723.</td>
<td>3.000 Credit hours, 3.000 Lecture hours</td>
<td>Undergraduate</td>
<td>Lecture</td>
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<tr>
<td>THEA 21522</td>
<td>LIGHTING DESIGN</td>
<td>Exploration of the tools of the lighting designer applied to design choices; frequent paper design projects. Prerequisites: special approval; and THEA 11732 and THEA 11734l.</td>
<td>3.000 Credit hours, 3.000 Lecture hours</td>
<td>Undergraduate</td>
<td>Lecture</td>
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<td>Lecture</td>
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<tr>
<td>THEA 21523</td>
<td>COSTUME TECHNOLOGY</td>
<td>Study of the basics of costume construction, pattern drafting, tailoring and millinery for costumes in the</td>
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<td>Undergraduate</td>
<td>Lecture</td>
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performing arts. A variety of historical periods and styles will be covered. Students will create portfolio-quality projects. Prerequisite: special approval; and THEA 11732.

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</tr>
</thead>
<tbody>
<tr>
<td>THEA 21524</td>
<td>COSTUME DESIGN</td>
<td>Theory and practice of costume design. Emphasis on play text analysis, formation of concepts, use of design elements and principles, period styles. Prerequisites: special approval; and THEA 11732.</td>
</tr>
<tr>
<td>THEA 21621</td>
<td>SCENE PAINTING</td>
<td>Techniques of scene painting; emphasis on a variety of techniques through practical projects. Prerequisite: THEA 11722 and THEA 11724; and special approval.</td>
</tr>
<tr>
<td>THEA 21622</td>
<td>SCENE DESIGN</td>
<td>Theory and practice of scene design; emphasis on script analysis, formation of concepts, use of design elements and principles in period styles and genres. Prerequisite: THEA 11722 and THEA 11723; and special approval.</td>
</tr>
<tr>
<td>THEA 21700</td>
<td>MOVEMENT I</td>
<td>Beginning exploration of technical skills emphasizing the physical components of expressive action through integration of breath, text and body conditioning. Prerequisite: special approval.</td>
</tr>
</tbody>
</table>

Levels: Undergraduate
Schedule Types: Lecture

Theatre and Dance Department
**THEA 21736 - STAGE MANAGEMENT**

Introduction to the skills and techniques necessary to stage manage a theatrical production. Focus on the production process, preparing for and running rehearsals and performances, paperwork and communication skills. Prerequisite: special approval.

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<th>3.000 Credit hours</th>
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<tr>
<td>3.000 Lecture hours</td>
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</tbody>
</table>

Levels: Undergraduate  
Schedule Types: Lecture

Theatre and Dance Department

**THEA 21800 - VOICE I**

Breathing, physical alignment, sound and text explorations designed to develop relaxed, free and fully connected voice production for the actor. Proper use and care of the voice. Prerequisite: special approval.

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<td>3.000 Other hours</td>
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</table>

Levels: Undergraduate  
Schedule Types: Studio

Theatre and Dance Department

**THEA 22092 - PRACTICUM: DESIGN AND TECHNOLOGY**

(Repeatable for credit) Practical experience in theatre production under faculty supervision. Available for lower-division students only. Required of all theatre majors. Prerequisite: special approval.

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<tr>
<th>1.000 TO 3.000 Credit hours</th>
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<td>1.000 TO 3.000 Other hours</td>
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</table>

Levels: Undergraduate  
Schedule Types: Practicum or Internship

Theatre and Dance Department

Course Attributes:  
Experiential Learning Requirem, TAG - Arts/Humanities

**THEA 22192 - PRACTICUM I:PERFORMANCE**

(Repeatable for credit) Practical experience in theatre performance under faculty supervision. Available for lower-division students only. Prerequisite: Special approval.

<table>
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<tbody>
<tr>
<td>3.000 Lecture hours</td>
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</tbody>
</table>

Levels: Undergraduate  
Schedule Types: Practicum or Internship

Theatre and Dance Department

Course Attributes:  
Experiential Learning Requirem, TAG - Arts/Humanities
THEA 22929 - PRACTICUM I: THEATRE MANAGEMENT

(Repeatable for a maximum of 12 credit hours) Practical experience in theatre management under faculty supervision. Prerequisite: Freshmen or sophomores only and special approval.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Theatre and Dance Department

Course Attributes:
Experiential Learning Requirem

THEA 23092 - BACHELOR OF FINE ARTS SOPHOMORE PRACTICUM: DESIGN AND TECHNOLOGY

(Repeatable for credit) Practical experience at the sophomore level in theatre and dance production. SU Grading. Prerequisite: special approval; and Bachelor of Fine Arts in Theatre Studies (THEA) major with a concentration in Design and Technology (DT).

3.000 Credit hours
6.666 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Theatre and Dance Department

Course Attributes:
Experiential Learning Requirem

THEA 31110 - HISTORY OF THEATRE AND DRAMA I

Theatre history and drama in Europe from antiquity through the renaissance. Prerequisites: special approval; and junior standing; and THEA 21111.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Theatre and Dance Department

THEA 31111 - HISTORY OF THEATRE AND DRAMA II

Theatre history and drama in Europe and the United States from 1700 to the present. Prerequisites: special approval; and junior standing; and THEA 21111.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Theatre and Dance Department

THEA 31112 - HISTORY OF THEATRE AND DRAMA I
Theatre history and drama in Europe from antiquity through the renaissance. Prerequisite: THEA 21111, junior standing and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Theatre and Dance Department

**THEA 31113 - HISTORY OF THEATRE AND DRAMA II**

Theatre history and drama in Europe and the United States from 1660 to 1900. Prerequisite: special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Theatre and Dance Department

**THEA 31114 - HISTORY OF THEATRE AND DRAMA III**

Theatre history and drama in Europe and the United States from 1900 to the present. Prerequisite: special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Theatre and Dance Department

**THEA 31303 - CHARACTER AND SCENE STUDY I**

The development of character in the realistic scene. Prerequisite: THEA 21303 and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Theatre and Dance Department

**THEA 31304 - CHARACTER AND SCENE STUDY II**

Further character and scene exploration; spontaneity and creative choice making. Prerequisite: THEA 31303 and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Theatre and Dance Department
THEA 31401 - DIRECTING

Theoretical and practical work in the process of play direction; the director's mission; play analysis and design collaboration; the rehearsal process. Prerequisite: special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Theatre and Dance Department

THEA 31501 - JUNIOR PORTFOLIO REVIEW

Review of a portfolio of theatre and related work, and a review of the student's academic progress and coursework judged by the design/technology faculty at the beginning of the spring semester. Student must pass to remain in the BFA Design Technology program. Prerequisite: Junior standing and BFA design/technology student and special approval.
1.000 Credit hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Theatre and Dance Department

THEA 31701 - MOVEMENT II

Development of movement exploration and improvisation skills which focus on physical relationships in performance and utilize the components of energy, space and time. Prerequisites: THEA 11303 or 21306; and special approval.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Theatre and Dance Department

THEA 31801 - VOICE II

Continuation of Voice I. Explorations involve various texts and incorporation of voice principles at a more detailed level. Prerequisites: THEA 21301 and THEA 21800 and special approval.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Theatre and Dance Department

THEA 33092 - BACHELOR OF FINE ARTS JUNIOR PRACTICUM: DESIGN AND TECHNOLOGY

(Repeatable for credit) Practical experience at the junior level in theatre and dance production. S/U Grading. Prerequisite: special approval; and Bachelor of Fine Arts in Theatre Studies (THEA) major with a concentration in Design and Technology (DT).
3.000 Credit hours
THEA 40091 - VARIABLE TOPICS SEMINAR: DEVISING THEATRE

A devised theatre event is work that has emerged and been generated by a group of people working in collaboration. Devising Theatre explores the processes of creating original performances defined and determined by its makers. Process and product originate from stimuli other than traditional play scripts. Students learn specialist techniques by developing solo and group performance pieces. Alternative modes of making theatre performances are considered. Prerequisite: special approval.

3.000 Credit hours
3.000 Other hours

THEA 41010 - THEATRE AND SOCIAL CHANGE

This course interweaves the history, theory, practice and play text development in the field of Theatre and Social Change. Prerequisite: THEA 11000 or THEA 11100.

3.000 Credit hours
3.000 Lecture hours

THEA 41026 - PLAYWRITING

(Repeatable for a total of 6 credit hours) Principles underlying playwriting for the contemporary theatre; analysis of short play form. Prerequisite: special approval.

3.000 Credit hours
3.000 Lecture hours

THEA 41027 - ADVANCED PLAYWRITING

(Repeatable for a maximum of 6 credit hours) Application of principles of playwriting to the longer play and to variations from traditional realism; play analysis and composition. Prerequisites: THEA 41026 and special approval.
THEA 41095 - SPECIAL TOPICS IN THEATRE

(repeated registration permitted) offered irregularly when unusual resources permit a topic different from existing courses. Topic will be announced when scheduled. Prerequisite: Permission.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Theatre and Dance Department

THEA 41096 - INDEPENDENT STUDY IN THEATRE

(repeatable for a total of 6 hours) selected research topics in theatre; to be elected only after all coursework in study area completed. Prerequisite: Permission.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Theatre and Dance Department

THEA 41113 - THEATRE IN A MULTICULTURAL AMERICA

A study of theatre and drama in the Native American, Hispanic-American, African-American and Asian-American communities in the United States from 1980 to the present. Prerequisite: Special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Theatre and Dance Department

Course Attributes:
Diversity Course-Domestic

THEA 41115 - LGBTQ THEATRE

Studies of various theatrical representations of Lesbian, Gay, Bisexual, Transgender and Queer people as seen through the frameworks of history, gender theory, identity, politics, psychology, law, and justice. Prerequisite: junior standing and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
THEA 41130 - THEATRE AND DRAMA IN AMERICA

The history of theatre and drama in America from their beginnings to the present. Prerequisite: THEA 21111 and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

THEA 41140 - AMERICAN MUSICAL THEATRE HISTORY

Comprehensively examines the history of American musical theater and incorporates the exploration of musical literature in production and performance. Prerequisites: junior standing; and theatre major.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

THEA 41191 - VARIABLE CONTENT SEMINAR: THEATRE HISTORY/LITERATURE/THEORY

(Repeatable for credit) Seminar in theatre history and literature providing an in-depth focus on selected topics such as: African-American theatre, women in theatre, politics and theatre, theatre in a multicultural society, costume history on stage and screen. Prerequisite: special approval.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

THEA 41301 - ACTING FOR THE CAMERA I

Introduction to the specific techniques used in film acting. The course provides students with the necessary tools to make the transition from stage acting to camera acting. Prerequisite: special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
THEA 41302 - ACTING FOR THE CAMERA II
Further development on the specific techniques used in film acting. The course continues to assist students in making the transition from stage acting to camera acting. Prerequisite: special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Theatre and Dance Department

THEA 41304 - ACTING II-SCENE STUDY-MODERN AMERICAN REALISM
The application of the Stanislavski and Michael Chekhov Techniques to in-depth scene study using the plays of Odets, Miller, Williams, Shanley and others. Prerequisite: THEA 41303.
3.000 Credit hours
4.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Theatre and Dance Department

THEA 41305 - PROFESSIONAL ASPECTS:PERFORMANCE
A study of the practical demands and requirements of a professional acting career with particular emphasis on audition skills. Also covered: pictures and resumes, making rounds, professional unions, casting directors, agents and managers, the job market and career prospects. Prerequisite: Junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Theatre and Dance Department

THEA 41306 - PROFESSIONAL ASPECTS:DESIGN AND TECHNOLOGY
A study of the practical demands and requirements of a professional career in design and technology, including portfolio development, resumes, unions, job market, financial matters and career prospects. Use of computers as a resource and tool emphasized. Prerequisite: Junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Theatre and Dance Department

THEA 41307 - MUSICAL THEATRE PERFORMANCE II
Advanced work in musical theatre performance techniques for junior- and senior-level students. Course content includes selecting appropriate musical theatre audition material and developing contrasting selections from the musical theatre repertory. Preparation for musical theatre auditions is included. Prerequisites: THEA 21306 and
THEA 41308 - MUSICAL THEATRE AUDITION
(Repeatable for a maximum of 4 credit hours) Explore the various genres and styles of American musical theatre songs with specific emphasis on finding practical audition repertoire for each student. Performance and research will be the primary activities in the class. Prerequisite: special approval.
2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Theatre and Dance Department

THEA 41401 - ADVANCED DIRECTING
Advanced work in directing for the theatre. Topics include the director as creative/interpretative artist and the director and the actor; students direct individual projects. Prerequisites: THEA 11303 and THEA 31401 and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Theatre and Dance Department

THEA 41420 - THEATRICAL DRAFTING II
(Slashed with THEA 41420) Advanced 2D and 3D drafting techniques for technical directors and theatre designers. Representation of scenery through drafting using current AutoCAD software. Prerequisite: THEA 21521.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Theatre and Dance Department

THEA 41430 - ADVANCED CONSTRUCTION THEORY
(Slashed with THEA 51430) The theory and practice of structural and mechanical design for theatre production. Related issues in resource management for the professional shop, including reliably predicting the performance of untraditional, unusual or unfamiliar structures and use of mathematical models, formulas, and representative diagrams. Prerequisites: THEA 11722 and THEA 415600; and special approval.
3.000 Credit hours
3.000 Lecture hours
THEA 41499 - MUSICAL THEATRE SHOWCASE

(Repeatable for credit) Development, promotion, and presentation of a Musical Theatre showcase for industry casting personnel in New York City. Audition required prior to registration for this course. Prerequisite: senior standing and special approval.
2.000 Credit hours
3.000 Other hours

THEA 41501 - SENIOR PORTFOLIO REVIEW

Review of a portfolio of theatre and related work, and a review of the student's academic progress coursework and professional potential judged by the design technology faculty at the end of the fall semester. Student must pass to remain eligible for the bfa design technology degree. Prerequisite: Senior standing and BFA Design Technology student and special approval.
1.000 Credit hours
1.000 Other hours

THEA 41521 - ADVANCED LIGHTING TECHNOLOGY I

Advanced study of the technologies used in lighting design; conventional and intelligent fixtures, electricity, projection techniques and special effects. Prerequisites: special approval; and THEA 11732 and THEA 11734.
3.000 Credit hours
3.000 Lecture hours

THEA 41522 - DESIGN STUDIO: LIGHTING

Advanced study of lighting design, emphasizing artistic style and concept through a variety of design problems. Prerequisite: THEA 21522 and special approval.
3.000 Credit hours
3.000 Lecture hours
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisites</th>
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<tr>
<td>THEA 41523</td>
<td>SOUND DESIGN AND TECHNOLOGY I</td>
<td>Sound design for the theatre, sound production and sound reinforcement techniques. Introduction to electronic equipment mixing consoles amplifiers speakers. Prerequisite: Permission.</td>
<td>3.000 Credit hours; 3.000 Lecture hours</td>
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<tr>
<td>THEA 41524</td>
<td>DESIGN STUDIO: COSTUME</td>
<td>Advanced study in costume design. Genres styles in the context of performance spaces with an emphasis on research, practical considerations of costume production and communication between designer shop/personnel and designer director. Prerequisite: THEA 21524 and special approval.</td>
<td>3.000 Credit hours; 3.000 Lecture hours</td>
<td>3.000</td>
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<td>THEA 41525</td>
<td>PROPS AND CRAFTS</td>
<td>Examination of the processes related to the creation and procurement of scenic and costume props. Prerequisite: THEA 11722 and THEA 11732; and special approval.</td>
<td>3.000 Credit hours; 3.000 Lecture hours</td>
<td>3.000</td>
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<tr>
<td>THEA 41526</td>
<td>ADVANCED LIGHTING TECHNOLOGY II</td>
<td>This class will focus on the practice of intelligent lighting programming and the technology of intelligent lighting fixtures. Prerequisite: special approval.</td>
<td>3.000 Credit hours; 3.000 Lecture hours</td>
<td>3.000</td>
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<tr>
<td>THEA 41527</td>
<td>SOUND DESIGN AND TECHNOLOGY II</td>
<td>Studies in sound design, sound production and reinforcement for live performance. Advanced software applications will be explored. Prerequisite: THEA 41523 and special approval.</td>
<td>3.000 Credit hours</td>
<td>3.000</td>
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</tbody>
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### THEA 41528 - THEATRE SOUND REINFORCEMENT

Studies in the theories and practice of audio mixing in support of live vocal and musical performance. Topics include wired and wireless microphones and real time digital processing of audio. Prerequisite: THEA 41523 and special approval.  
3.000 Credit hours  
3.000 Lecture hours

#### Levels: Undergraduate  
#### Schedule Types: Lecture

Theatre and Dance Department

### THEA 41529 - ADVANCED WIG AND MAKEUP TECHNIQUES-STAGE AND SCREEN

Advanced study of the process of designing and executing wigs and makeup with an emphasis on standards in the profession. Some prosthetic work required. Prerequisite: Junior standing and special approval.  
3.000 Credit hours  
3.000 Lecture hours

#### Levels: Undergraduate  
#### Schedule Types: Lecture

Theatre and Dance Department

### THEA 41531 - THEATRICAL RIGGING

(Slashed with THEA 51531) Theatrical Rigging is designed to teach students the principles of stage rigging; knot tying and counterweight rigging systems used in theatrical and other live entertainment situations. Content will examine the process involved in overhead applications for the theatre industry. Through the explanation of tools, equipment, hardware and safety practices, the student will learn the proper method to design and rig in theatrical environments. Prerequisite: special approval.  
3.000 Credit hours  
3.000 Lecture hours

#### Levels: Undergraduate  
#### Schedule Types: Lecture

Theatre and Dance Department

### THEA 41560 - THEATRE FABRICATION TECHNOLOGY

History of technical production practice, materials theory and application in scenic construction technology. Prerequisite: THEA 11622 and THEA 21521 and special approval.  
3.000 Credit hours  
3.000 Lecture hours

#### Levels: Undergraduate  
#### Schedule Types: Lecture
### THEA 41620 - HISTORY OF PERIOD STYLES FOR THEATRE DESIGNERS

Students explore the way in which theatre designers approach period style in their own creative work. Prerequisites: theatre (THEA) major with junior standing; and special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

| Course Attributes: |
| Writing Intensive Course |

### THEA 41621 - PRESENTATION MEDIA

Advanced process techniques in rendering, model building and design presentation for the scenic costume and lighting designer in traditional and new media. Prerequisites: THEA 11722, THEA 11732 and THEA 21521; and special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

### THEA 41622 - DESIGN STUDIO: SCENERY

Advanced study in scenic design. Explores genres styles performance spaces including practical considerations. Prerequisite: THEA 21622 and special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

### THEA 41624 - HISTORY OF COSTUME AND TEXTILES FOR THEATRE

(Slashed with THEA 51624) Overview of the history of period costume and textiles in Western civilization from 1700 to 1970, a span of time commonly regarded as “popular time periods” in the practice and cannon of Western drama and the history of costume. Emphasis will be placed on how theatre practitioners recreate the silhouettes of these periods in ways that make sense to a contemporary audience while using textiles available today. The course will examine the social and cultural influences of clothing, recognition of historic silhouette, and parallels in the artwork, literature, politics, economy, and craft movements of each era of study. Prerequisite: special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture
**THEA 41702 - MOVEMENT AND DANCE FOR ACTORS**

(Repeatable for a maximum of 6 credit hours) Designed to acquaint actors with theatre dance techniques and choreographic styles by concentrating on vernacular dances used throughout musical theatre. Course combines basic ballet, jazz and tap terminology. Prerequisite: special approval.

3.000 Credit hours
4.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Theatre and Dance Department

**THEA 41703 - STAGE COMBAT**

(Repeatable for a maximum of 6 credit hours) This introductory stage combat course focuses on creating the illusion of violence for the stage and screen. Basic instruction is given in Unarmed and Armed stage combat. Emphasis is on the development of technique; the process of the work, and the performance, with a focus on safety, accuracy, and the fundamental techniques recognized by the Society of American Fight Directors (SAFD). Basic techniques will be incorporated into short scenes to provide experience performing fights in production. Prerequisite: special approval.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

Theatre and Dance Department

**THEA 41726 - THEATRE MANAGEMENT**

Principles and practices of managing theatrical-producing organizations. Problems of finance, personnel, policy, program building and public relations. Production participation as assigned. Prerequisite: Junior standing and special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Theatre and Dance Department

**THEA 41736 - PRODUCTION AND STAGE MANAGEMENT**

Advanced investigation of the methodology used in stage managing professional theatrical productions and production management processes. Focus on production processes for various theatre, dance, opera and entertainment genres. Prerequisite: special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Theatre and Dance Department
THEA 41801 - VOICE AND SPEECH I-THE ACTOR’S INSTRUMENT

The use of exercise and specific text work to explore ‘centering’ as it related to the vocal, physical and emotional process of the actor. Focus on extremes of emotional sounds and eliminating barriers and detrimental vocal habits/speech patterns. Prerequisite: THEA 31801 and special approval.

3.000 Credit hours
4.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Theatre and Dance Department

THEA 41802 - ENSEMBLE SINGING FOR MUSICAL THEATRE

(Repeatable for a maximum of 6 credit hours) The study and performance of diverse styles specific to the musical theatre canon for mixed voices. Prerequisite: special approval.

1.000 Credit hours
2.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Theatre and Dance Department

THEA 41808 - ACTING STYLES I-SHAKESPEARE

The application of acting, movement, and voice and speech techniques to sonnets, monologues, soliloquies, and scenes from Shakespeare. Prerequisite: special approval.

3.000 Credit hours
4.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Theatre and Dance Department

THEA 41900 - CAPSTONE PROJECT

The capstone project represents a culminating event for the student. Capstone projects can be undertaken in the junior or senior year and are identified in consultation with a faculty advisor. Honor Students may combine the capstone project with an Honors thesis. Prerequisite: Junior standing and special approval.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship, Senior Project/Honors Thesis

All Sections for this Course

Theatre and Dance Department

Course Attributes:
Experiential Learning Requirem

THEA 41992 - THEATRE PRODUCTION INTERNSHIP
(Repeatable for a maximum of 12 credit hours) Intensive advanced training in practical aspects of production. Periodic seminars, laboratory sessions and performance in a theatre company. Prerequisite: Junior standing and special approval.

1.000 TO 6.000 Credit hours
1.000 TO 6.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture, Practicum or Internship

Theatre and Dance Department

Course Attributes:
Experiential Learning Requirem

THEA 42092 - PRACTICUM II: DESIGN AND TECHNOLOGY

(Repeatable for credit) Advanced practical experience in theatre production under faculty supervision. Available for upper division students only. Required of all theatre majors. Prerequisite: Juniors or seniors only and special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Theatre and Dance Department

Course Attributes:
Experiential Learning Requirem

THEA 42192 - PRACTICUM II: PERFORMANCE

(Repeatable for credit) Advanced practical experience in theatre performance under faculty supervision. Available for upper division students only. Prerequisite: Junior or senior standing and special approval.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Theatre and Dance Department

Course Attributes:
Experiential Learning Requirem

THEA 42292 - PRACTICUM II: THEATRE MANAGEMENT

(Repeatable for a maximum of 12 credit hours) Advanced practical experience in theatre management under faculty/staff supervision. Available for upper division students only. Prerequisite: Special approval.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Theatre and Dance Department
THEA 43092 - BACHELOR OF FINE ARTS SENIOR PRACTICUM: DESIGN AND TECHNOLOGY

(Repeatable for credit) Practical experience at the junior level in theatre and dance production. S/U Grading. Prerequisite: special approval. Corequisites: THEA 41900.
3.000 Credit hours
6.666 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Theatre and Dance Department

THEA 50091 - VARIABLE TOPIC SEMINAR: DEVISING THEATRE

A devised theatre event is work that has emerged and been generated by a group of people working in collaboration. Devising Theatre explores the processes of creating original performances defined and determined by its makers. Process and product originate from stimuli other than traditional play scripts. Students learn specialist techniques by developing solo and group performance pieces. Alternative modes of making theatre performances are considered. Prerequisite: graduate standing; and special approval.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Theatre and Dance Department

THEA 51010 - THEATRE AND SOCIAL CHANGE

The course interweaves the history, theory, practice and play text development in the field of Theatre and Social Change. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Theatre and Dance Department

THEA 51026 - PLAYWRITING

(Repeatable once for credit) Principles underlying playwriting for the contemporary theatre; analysis of short play form. Prerequisite: Special approval of instructor and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Theatre and Dance Department
THEA 51027 - ADVANCED PLAYWRITING

(Repeatable once for credit) Application of principles of playwriting to the longer play and to variations from traditional realism; play analysis and composition. Prerequisite: THEA 51026 and special approval of instructor and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Theatre and Dance Department

THEA 51095 - SPECIAL TOPICS

(Repeatable for credit) Offered irregularly when unusual resources permit a topic. Prerequisite: Graduate standing and special approval.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Theatre and Dance Department

THEA 51113 - THEATRE IN A MULTICULTURAL AMERICA

A study of theatre and drama in the Native American, Hispanic American, African-American, and Asian American communities in the United States from 1980 to the present. Prerequisite: graduate standing and special approval of instructor.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Theatre and Dance Department

THEA 51115 - LGBTQ THEATRE

Studies of various theatrical representations of Lesbian, Gay, Bisexual, Transgender and Queer people as seen through the frameworks of history, gender theory, identity, politics, psychology, law, and justice. Prerequisite: graduate standing and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Theatre and Dance Department

THEA 51130 - THEATRE AND DRAMA IN AMERICA

The history of theatre and drama in America from their beginnings to the present. Prerequisites: graduate standing and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Theatre and Dance Department

THEA 51191 - VARIABLE CONTENT SEMINAR: THEATRE HISTORY/LITERATURE/THEORY

(Repeatable for credit) Seminar focuses on selected topics in these areas, for example performance art, performance theory or theatre in a multicultural society. Prerequisite: Graduate standing and special approval.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Theatre and Dance Department

THEA 51301 - ACTING FOR THE CAMERA I

An introduction to the specific techniques used in film acting. The course provides students with the necessary tools to make the transition from stage acting to camera acting. Prerequisite: graduate standing and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Theatre and Dance Department

THEA 51302 - ACTING FOR THE CAMERA II

Further development on the specific techniques used in film acting as applied to the Graduate Actor. The course continues to assist in making the transition from stage acting to camera acting. Prerequisites: graduate standing and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Theatre and Dance Department

THEA 51303 - ACTING I FOUNDATIONS/STANISLAVSKI AND MICHAEL CHEKHOV

The Stanislavski and Michael Chekhov Techniques: A thorough exploration of Stanislavski's Method of Psycho-Physical Action, and the Michael Chekhov technique including atmosphere, psychological gesture, and qualities of movement. Prerequisite: special approval special approval of instructor and graduate standing.
3.000 Credit hours
4.000 Other hours

Levels: Graduate
Schedule Types: Studio

Theatre and Dance Department
THEA 51304 - ACTING II: SCENE STUDY-MODERN AMERICAN REALISM

The application of the Stanislavski and Michael Chekhov Techniques to in-depth scene study using the plays of Odets, Miller, Williams, Shanley and others. Prerequisite: special approval of instructor and graduate standing.
3.000 Credit hours
4.000 Other hours

Levels: Graduate
Schedule Types: Studio

Theatre and Dance Department

THEA 51305 - PROFESSIONAL ASPECTS: PERFORMANCE

A study of the practical demands and requirements of a professional acting career with particular emphasis on audition skills. Also covered pictures and resumes, making rounds, professional unions, casting directors, agents and managers, the job market and career prospects. Prerequisite: Special approval of instructor and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Theatre and Dance Department

THEA 51306 - PROFESSIONAL ASPECTS: DESIGN AND TECHNOLOGY

A study of the practical demands and requirements of a professional career in design and technology, including portfolio development, resumes, unions, job market, financial matters and career prospects. Use of computers as a resource and tool emphasized. Prerequisite: special approval of instructor and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Theatre and Dance Department

THEA 51308 - MUSICAL THEATRE AUDITION

(Repeatable for a maximum of 4 credit hours) Explore the various genres and styles of American musical theatre songs with specific emphasis on finding practical audition repertoire for each student. Performance and research will be the primary activities in the class. Prerequisite: special approval and graduate standing.
2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Theatre and Dance Department

THEA 51309 - MUSICAL THEATRE SHOWCASE

Development, promotion, and presentation of a Musical Theatre showcase for industry personnel in New York
City. Prerequisite: graduate standing and special approval.
2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Senior Project/Honors Thesis, Studio

Theatre and Dance Department

THEA 51401 - ADVANCED DIRECTING

Advanced work in directing for the theatre. Topics include director as creative interpretative artist, the director and the actor. Students direct individual projects. Prerequisite: Special approval of instructor and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Theatre and Dance Department

THEA 51420 - THEATRICAL DRAFTING II

(Slashed with THEA 41420) Advanced 2D and 3D drafting techniques for technical directors and theatre designers. Representation of scenery through drafting using current AutoCAD software. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Theatre and Dance Department

THEA 51430 - ADVANCED CONSTRUCTION THEORY

(Slashed with THEA 41430) The theory and practice of structural and mechanical design for theatre production. Related issues in resource management for the professional shop, including reliably predicting the performance of untraditional, unusual or unfamiliar structures and use of mathematical models, formulas, and representative diagrams. Graduate Students will cover steel construction, and cables. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Theatre and Dance Department

THEA 51499 - MUSICAL THEATRE SHOWCASE

Development, promotion and presentation of a Musical Theatre showcase for industry casting personnel in New York City. Audition required prior to registration for this course. Prerequisites: Graduate Standing and special approval.
2.000 Credit hours
2.000 Other hours
THEA 51521 - ADVANCED LIGHTING TECHNOLOGY I

Advanced study of the technologies used in lighting design; conventional and intelligent fixtures, electricity, projection techniques and special effects. Prerequisite: Graduate standing and special approval.
3.000 Credit hours
3.000 Lecture hours

THEA 51522 - DESIGN STUDIO: LIGHTING

Advanced study of lighting design, emphasizing artistic style and concept through a variety of design problems. Prerequisite: Special approval and graduate standing.
3.000 Credit hours
3.000 Lecture hours

THEA 51523 - SOUND DESIGN AND TECHNOLOGY I

Sound design for the theatre, sound production and sound reinforcement techniques. Introduction to electronic equipment, mixing consoles, amplifiers, speakers. Prerequisite: Graduate standing and special approval.
3.000 Credit hours
3.000 Lecture hours

THEA 51524 - DESIGN STUDIO: COSTUME

Advanced study in costume design. Genres, styles, in the context of performance spaces with an emphasis on research, practical considerations of costume production and communication between designer/shop personnel and designer/director. Prerequisite: Special approval and graduate standing.
3.000 Credit hours
3.000 Lecture hours

THEA 51525 - PROPS AND CRAFTS
Examination of the processes related to the creation and procurement of scenic and costume props. Prerequisite: special approval of instructor and graduate standing. 3.000 Credit hours 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Theatre and Dance Department

**THEA 51526 - ADVANCED LIGHTING TECHNOLOGY II**

This class will focus both on the practice of intelligent lighting programming and the technology of intelligent lighting fixtures. Prerequisites: graduate standing and special approval. 3.000 Credit hours 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Theatre and Dance Department

**THEA 51527 - SOUND AND DESIGN TECHNOLOGY II**

Studies in sound design, sound production and reinforcement for live performance. Advanced software applications will be explored. Prerequisite: THEA 51523 and special approval and graduate standing. 3.000 Credit hours 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Theatre and Dance Department

**THEA 51528 - THEATRE SOUND REINFORCEMENT**

Studies in the theories and practice of audio mixing in support of live vocal and musical performance. Topics include wired and wireless microphones and real time digital processing of audio. Prerequisite: Graduate standing and special approval. 3.000 Credit hours 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Theatre and Dance Department

**THEA 51529 - ADVANCED WIG AND MAKEUP TECHNIQUES-STAGE AND SCREEN**

Advanced study of the process of designing and executing wigs and makeup with an emphasis on standards in the profession. Some prosthetic work required. Prerequisite: special approval of instructor and graduate standing. 3.000 Credit hours 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
THEA 51531 - THEATRICAL RIGGING

(Slashed with THEA 41531) Theatrical Rigging is designed to teach students the principles of stage rigging; knot tying and counterweight rigging systems used in theatrical and other live entertainment situations. Content will examine the process involved in overhead applications for the theatre industry. Through the explanation of tools, equipment, hardware and safety practices, the student will learn the proper method to design and rig in theatrical environments. Prerequisite: graduate standing and special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

THEA 51560 - THEATRE FABRICATION TECHNOLOGY

History of technical production practice, materials theory and application in scenic construction technology. Prerequisite: special approval of instructor and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

THEA 51620 - HISTORY OF PERIOD STYLES FOR THEATRE DESIGNERS

A survey of visual styles as related to historical and contemporary culture from antiquity through the 20th century with an emphasis on their application to theatrical design. Prerequisite: special approval of instructor and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

THEA 51621 - PRESENTATION MEDIA

Advanced process techniques in rendering, model building and design presentation for the scenic costume and lighting designer in traditional and new media. Prerequisite: special approval and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

THEA 51622 - DESIGN STUDIO:SCENERY

Theatre and Dance Department
Advanced study in scenic design. Explores genres, styles, performance spaces, including practical considerations. Prerequisite: Special approval and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Theatre and Dance Department

THEA 51624 - HISTORY OF COSTUME AND TEXTILES FOR THEATRE

(Slashed with THEA 41624) Overview of the history of period costume and textiles in Western civilization from 1700 to 1970, a span of time commonly regarded as “popular time periods” in the practice and cannon of Western drama and the history of costume. Emphasis will be placed on how theatre practitioners recreate the silhouettes of these periods in ways that make sense to a contemporary audience while using textiles available today. The course will examine the social and cultural influences of clothing, recognition of historic silhouette, and parallels in the artwork, literature, politics, economy, and craft movements of each era of study. Prerequisite: graduate standing and special approval.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Theatre and Dance Department

THEA 51701 - MOVEMENT, FORM AND SPACE I-THE ACTOR'S PHYSICAL INSTRUMENT

Development of technical skills emphasizing the physical components of expressive action through integration of breath, voice and body conditioning. Prerequisite: Special approval.

3.000 Credit hours
4.000 Other hours

Levels: Graduate
Schedule Types: Studio

Theatre and Dance Department

THEA 51702 - MOVEMENT AND DANCE FOR ACTORS

(Repeatable for a maximum of 6 credit hours) Designed to acquaint actors with theatre dance techniques and choreographic styles by concentrating on vernacular dances used throughout musical theatre. Course combines basic ballet, jazz, and tap terminology. Prerequisite: graduate standing and special approval.

3.000 Credit hours
4.000 Other hours

Levels: Graduate
Schedule Types: Studio

Theatre and Dance Department

THEA 51703 - STAGE COMBAT

(Repeatable for a maximum of 6 credit hours) This introductory stage combat course focuses on creating the illusion of violence for the stage and screen. Basic instruction is given in Unarmed and Armed stage combat. Emphasis is on the development of technique; the process of the work, and the performance, with a focus on
safety, accuracy, and the fundamental techniques recognized by the Society of American Fight Directors (SAFD). Basic techniques will be incorporated into short scenes to provide experience performing fights in production. Prerequisite: special approval and graduate standing.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Laboratory, Lecture

Theatre and Dance Department

THEA 51736 - PRODUCTION AND STAGE MANAGEMENT

Advanced investigation of the methodology used in stage managing professional theatrical productions and production management processes. Focus on production processes for various theatre, dance, opera and entertainment genres. Prerequisite: special approval and graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Theatre and Dance Department

THEA 51801 - VOICE AND SPEECH I-THE ACTOR'S INSTRUMENT

The use of exercise and specific text work to explore ¿centering¿ as it related to the vocal, physical and emotional process of the actor. Focus on extremes of emotional sounds and eliminating barriers and detrimental vocal habits/speech patterns. Prerequisite: special approval and graduate standing.

3.000 Credit hours
4.000 Other hours

Levels: Graduate
Schedule Types: Studio

Theatre and Dance Department

THEA 51802 - ENSEMBLE SINGING FOR MUSICAL THEATRE

(Repeatable 6 times for credit) The study and performance of diverse styles specific to the musical theatre canon for mixed voices. Prerequisite: graduate standing and special approval.

1.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Studio

Theatre and Dance Department

THEA 51808 - ACTING STYLES I-SHAKESPEARE

The application of acting, movement, and voice and speech techniques to sonnets, monologues, soliloquies, and scenes from Shakespeare. Prerequisite: graduate standing an special approval.

3.000 Credit hours
4.000 Other hours
Theatre and Dance Department

THEA 60196 - INDIVIDUAL INVESTIGATION-HISTORIC TEXTILES

(Repeatable for credit) Identification and analysis of textile fabric as the reflection of culture. Prerequisite: Graduate standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Theatre and Dance Department

THEA 60199 - M.F.A. THESIS PROJECT

(Repeatable for credit) Students must register for course during the semester of their M.F.A. thesis project. Prerequisite: Special approval of adviser and graduate standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Theatre and Dance Department

THEA 60992 - PROFESSIONAL THEATRE INTERNSHIP I

(Repeatable once) Intensive advanced training in practical aspects of production. Periodic seminars, laboratory sessions and performance in the Porthouse Theatre Company. Prerequisite: special approval of instructor and graduate standing.
3.000 OR 6.000 Credit hours
3.000 OR 6.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Theatre and Dance Department

THEA 61000 - INTRODUCTION TO GRADUATE STUDY IN THEATRE

Orientation to bibliography and research in the field of theatre with emphasis on application of research to performance. Prerequisite: special approval of instructor and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Theatre and Dance Department

THEA 61094 - COLLEGE TEACHING IN THEATRE
(Repeatable for credit) Strategies for teaching, issues on implications of pedagogical practice and responsibilities of academic leadership. Prerequisite: special approval of instructor and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Theatre and Dance Department

THEA 61095 - SPECIAL TOPICS

(Repeatable for credit) Offered irregularly when unusual resources permit a topic different from existing courses. Topic will be announced when scheduled. Prerequisite: special approval of instructor and graduate standing.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Theatre and Dance Department

THEA 61096 - INDIVIDUAL INVESTIGATION: THEATRE AND DRAMA

(Repeatable for a maximum of 6 credit hours) Independent study of an area or problem approved by divisional graduate coordinator in consultation with project director. Prerequisite: Special approval and graduate standing.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation

Theatre and Dance Department

THEA 61098 - RESEARCH

(Repeatable for credit) Research or individual investigation for master's-level graduate students. Credits may be applied toward meeting degree requirements if school approves. Prerequisite: special approval of instructor and graduate standing.

1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

Theatre and Dance Department

THEA 61110 - HISTORY OF THEORIES OF ACTING AND SPACE I

History of theories of acting and space in the theatre from the beginning to ca. 1850. Prerequisite: special approval of instructor. Prerequisite: special approval of instructor and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
### THEA 61111 - HISTORY OF THEORIES OF ACTING AND SPACE II

History of theories of acting and space in the theatre. Prerequisite: special approval of instructor and graduate standing.

- 3.000 Credit hours
- 3.000 Lecture hours

**Levels:** Graduate  
**Schedule Types:** Lecture

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### THEA 61201 - SOFTWARE APPLICATIONS

A survey of current software used in theatre production with an emphasis on applications for management, design and technical direction. Prerequisite: Special approval and graduate standing.

- 3.000 Credit hours
- 3.000 Lecture hours

**Levels:** Graduate  
**Schedule Types:** Lecture

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### THEA 61303 - ACTING III SCENE STUDY-NATURALISM AND ABSURD

In-depth scene study in the genres of Naturalism and Absurd theatre. Exploration of the works of Chekhov, Strindberg, Beckett and others. Prerequisite: Special approval of instructor and graduate standing.

- 3.000 Credit hours
- 4.000 Other hours

**Levels:** Graduate  
**Schedule Types:** Studio

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### THEA 61305 - ACTING STYLES II: GREEK AND COMEDY OF MANNERS

Application of acting, movement, and speech techniques to these specific genres. Focus on style and physicalization using Greek and English Restoration playwrights as well as Molière, Wilde and others. Prerequisite: special approval of instructor and graduate standing.

- 3.000 Credit hours
- 3.000 Lecture hours

**Levels:** Graduate  
**Schedule Types:** Lecture

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### THEA 61309 - MASTER OF FINE ARTS COMPREHENSIVE PROJECT IN ACTING

Intensive work in the development of the practical aspects of production; includes performance or exhibition of work, documentation of that work in a format appropriate for area and project, and an exit interview.
Prerequisite: THEA 61000; special approval of instructor and graduate standing.
1.000 TO 3.000 Credit hours
3.000 TO 9.000 Lab hours

Levels: Graduate
Schedule Types: Laboratory

Theatre and Dance Department

THEA 61310 - MASTER OF FINE ARTS DESIGN AND TECHNOLOGY CULMINATING PROJECT

An intensive experience in the development of design and/or technical aspects of a theatrical production; the scope of work may include but not necessarily be limited to research, drawings and drafting, renderings and associated digital image, video or audio files. Documentation, appropriate for the area and project, is presented at an exit interview. Prerequisite: THEA 61000; special approval of instructor and graduate standing.
3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Individual Investigation, Masters Thesis, Studio

Theatre and Dance Department

THEA 61525 - MILLINERY AND 3-D CHARACTERS

Advanced studies of techniques of millinery construction and 3D character construction with an emphasis on current practice in the industry. Prerequisite: special approval of instructor and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Theatre and Dance Department

THEA 61527 - SHOP MANAGEMENT

Study of resource management for the professional shop. Topics business planning labor relations accounting budgeting and productivity techniques. Prerequisite: Special approval and graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Theatre and Dance Department

THEA 61528 - DESIGN PROCESS AND COLLABORATION

This course introduces students to the design process and collaboration in a theatrical production. The student will have the opportunity to analyze best practices, strategies and the strengths and challenges of designers. Prerequisite: THEA 61000; graduate standing and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
THEA 61531 - PERIOD STYLE FOR THEATRE DESIGNERS

An exploration of the relationship of period style, historical context, and the designer’s artistic choices in contemporary interpretations of period plays. Prerequisite: special approval and graduate standing in the Design/Technology - Costume Design (DTCD), Design/Technology - Lighting Design (DTLT), Design/Technology - Scene Design (DTSC), or Design/Technology - Technical Direction (DTTD) concentrations in the Theatre Studies (THEA) major within the Master of Fine Arts (MFA) degree.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Theatre and Dance Department

THEA 61623 - DIGITAL RENDERING THEATRE DESIGN

Digital Rendering for Theatre Design explores a variety of digital rendering methods for artistic 2D and 3D graphics visualization of theatrical design concepts. Prerequisite: special approval and graduate standing in the Design/Technology - Costume Design (DTCD), Design/Technology - Lighting Design (DTLT), Design/Technology - Scene Design (DTSC), or Design/Technology - Technical Direction (DTTD) concentrations in the Theatre Studies (THEA) major within the Master of Fine Arts (MFA) degree.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Theatre and Dance Department

THEA 61701 - MOVEMENT, FORM AND SPACE II-NEUTRAL AND CHARACTER MASK

Advanced skills and conditioning focusing on the physical and vocal qualities of characterization achieved through performance in masks. Prerequisite: THEA 51701; special approval of instructor and graduate standing.

3.000 Credit hours
4.000 Other hours

Levels: Graduate
Schedule Types: Studio

Theatre and Dance Department

THEA 61702 - MUSICAL THEATRE STYLES

The study of diverse styles of choreography for the actor performing in Musical Theatre. Prerequisite: special approval of instructor and graduate standing.

3.000 Credit hours
4.000 Other hours

Levels: Graduate
Schedule Types: Studio

Theatre and Dance Department
THEA 61801 - VOICE AND SPEECH II-VOCAL DEMANDS AND DIALECTS

Voice principles are covered in depth and detail with emphasis on their applications to dialects, singing and media voice work. Prerequisite: special approval of instructor and graduate standing.

3.000 Credit hours
4.000 Other hours

Levels: Graduate
Schedule Types: Studio

Theatre and Dance Department

THEA 61802 - VOICE AND SPEECH III-THE ACTOR/SINGER

Training in methods and skills necessary for the singing actor. Focus on the integration and physicalization of lyrics and music. Prerequisite: THEA 51801; special approval of instructor and graduate standing.

3.000 Credit hours
4.000 Other hours

Levels: Graduate
Schedule Types: Studio

Theatre and Dance Department

THEA 61806 - SINGING FOR THE ACTOR

A comprehensive study of performance techniques and repertoire appropriate to the singing actor. Prerequisite: THEA 51801; special approval of instructor and graduate standing.

1.000 Credit hours
1.000 Other hours

Levels: Graduate
Schedule Types: Studio

Theatre and Dance Department

THEA 61992 - PROFESSIONAL THEATRE INTERNSHIP II

(Repeatable for credit) Intensive advanced training in practical aspects of production. Periodic seminars, laboratory sessions and performance in a professional theatre company. Prerequisite: special approval and graduate standing.

3.000 OR 6.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Practicum or Internship

Theatre and Dance Department

THEA 62092 - PRACTICUM:DESIGN/TECHNOLOGY

(Repeatable for credit) Practical experience for the graduate student in theatre design and technology under faculty supervision. SU grading, IP permissible. Prerequisite: special approval of instructor and graduate standing.

3.000 Credit hours
3.000 Lecture hours
THEA 62192 - PRACTICUM:PERFORMANCE

(Repeatable for credit; cross-listed with KBT 62192) Practical experience for the graduate student in theatre performance under faculty supervision. Prerequisite: special approval of instructor and graduate standing.
3.000 Credit hours
3.000 Lecture hours

THEA 62292 - PRACTICUM:THEATRE MANAGEMENT

(Repeatable for a maximum of 12 credit hours) Practical experience for the graduate student in theatre management under faculty/staff supervision. Prerequisite: Special approval and graduate standing.
3.000 Credit hours
3.000 Other hours

THEA 62892 - THEATRE PRACTICUM

(Repeatable twice for credit) Practical experience for the graduate student in cocurricular theatre activities, under faculty supervision. Prerequisite: Special approval and graduate standing.
1.000 Credit hours
1.000 Lecture hours

THEA 62992 - THEATRE PRODUCTION INTERNSHIP

(Repeatable for a maximum of 12 credit hours) Intensive advanced training in practical aspects of production. Periodic seminars, laboratory sessions and performance in a theatre company or touring with Kent Theatre Ensemble. Prerequisite: Special approval of adviser and graduate standing.
1.000 TO 6.000 Credit hours
1.000 TO 6.000 Lecture hours

THEA 63192 - MENTORSHIP IN PERFORMANCE
THEA 64192 - MENTORSHIP AT PORTHOUSE

(Repeatable for a total of 6 credit hours) Development of advanced skills and abilities to mentor student performers in aspects of the profession, including professional behavior, understanding of the business and the actor’s creative process. Major work done while participating in rehearsal of Porthouse productions. May be taken with THEA 62192 Practicum: Performance. Prerequisites: graduate standing and special approval of instructor.
3.000 Credit hours
6.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Theatre and Dance Department

THEA 65000 - HISTORY, HISTORICISM, THEORY AND PRACTICE IN THEATRE AND DRAMA

This course will cover the breadth of theatre history and historicism and application of theatre theory to practice by focusing on the six major stylistic periods: Greek and Roman, Medieval, Renaissance, Romanticism, Realism and Non Realism (Symbolism, Expressionism, Surrealism, Absurdism) and Contemporary period (Postmodernism, Feminism, and Interculturalism, Multiculturalism). Using lecture, scholarly articles, video viewing, and practical writing projects, students will learn about and practice each style, which would be in turn applied to students’ respective areas of graduate study (i.e. actor, director, designer). Prerequisites: THEA 61000; and graduate standing and special approval.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Research, Seminar

Theatre and Dance Department

THEA 65192 - TEACHING PRACTICUM

(Repeatable for a total of 6 credit hours) Application of strategies for teaching at the college level. Development of advanced skills in course preparation, classroom management and pedagogical practice. Major work done teaching or assisting with undergraduate classes. SU graded. Prerequisite: graduate standing; THEA 61094 or special approval of instructor.
3.000 Credit hours
6.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship
THE A 72992 - THEATRE PRODUCTION INTERNSHIP

(Repeatable for a total of 12 credit hours) Intensive advanced training in practical aspects of production. Periodic seminars, laboratory sessions and performance in a theatre company or touring with Kent Theatre Ensemble. Prerequisite: special approval of adviser and doctoral standing.
1.000 TO 6.000 Credit hours
1.000 TO 6.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture, Practicum or Internship

Modern-Classical Lang Studies Department

TRST 20009 - MULTILINGUAL INFORMATION LIFECYCLE

Introduction to the multilingual information cycle, including general technological issues, text preparation, translation in markup languages, computer-assisted translation tools and multilingual information flow for multilingual and multicultural work. Course is taught in English. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

TRST 30230 - APPROACHES TO TRANSLATION

Introduction to foreign language translation. Introduces concepts, resources, principles and techniques of text analysis and translation strategies applicable to various types of texts. Prerequisite: junior standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

TRST 30330 - CROSS-LANGUAGE MEDIATION

An exploration of textual and contextual factors impacting cross-language mediation. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

TRST 38303 - MEDICAL SPANISH TRANSLATION AND INTERPRETING

Translation, cross-cultural health literacy, text analysis, familiarization with common medical text types and terminology; text production in English of Spanish medical documents, focusing on strategies of research, documentation and transfer. The rudiments of interpreting in health care environments, including protocol.
Course is taught primarily in English. Prerequisite: SPAN 28202.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

TRST 50031 - PROFESSIONAL EDITING FOR TRANSLATORS

Provides practical instruction in the editing of translated texts representing a variety of text types. Using the best practices of professional translation, the skills and techniques required for all stages of the editing process are covered. Topics include the stages of editing from rough translation to finished draft, electronic tools for multilingual translation editing, translation style guides, pre- and post-editing of machine translation. Interactive lecture and workshop formats. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

TRST 60001 - GRADUATE RESEARCH AND WRITING IN TRANSLATION STUDIES

Individual instruction and assistance with problems encountered in academic research and writing in translation. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

TRST 60009 - DOCUMENTS IN MULTILINGUAL CONTEXTS

An in-depth study of the role of documents in the multilingual information cycle as manifested in word-processing, desktop publishing and web based environment. Prerequisite: Graduate standing.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

TRST 60010 - THEORY OF TRANSLATION AND INTERPRETING

Introduction to the theoretical bases and methods of language mediation. Prerequisite: Graduate standing.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisites</th>
<th>Credit Hours</th>
<th>Other Hours</th>
<th>Levels</th>
<th>Schedule Types</th>
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<tbody>
<tr>
<td>TRST 60011</td>
<td>Terminology and Computer Applications in Translation</td>
<td>Practice-oriented introduction to terminology management and translation tools, such as term extraction, translation memory and machine translation. Prerequisite: TRST 60009 and graduate standing.</td>
<td>TRST 60009 and graduate standing</td>
<td>3.000</td>
<td>3.000</td>
<td>Graduate</td>
<td>Combined Lecture and Lab</td>
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<tr>
<td>TRST 60012</td>
<td>Software Localization</td>
<td>Introduction to localization, the translation and adaptation of products including software and Web pages for sale or dissemination in specific target-language markets. Course introduces the basic concepts and techniques of localization and provides a hands-on introduction to relevant computer software. Prerequisite: TRST 60011 with minimum B (3.0) grade and graduate standing.</td>
<td>TRST 60011 with minimum B (3.0) grade and graduate standing</td>
<td>3.000</td>
<td>3.000</td>
<td>Graduate</td>
<td>Combined Lecture and Lab</td>
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<tr>
<td>TRST 60013</td>
<td>Language Project Management</td>
<td>Introduction to project management in the language industry. Course covers the body of knowledge and skills, including the use of project management software, required to perform the duties of a translation or localization project manager. Beginning with an overview of the language industry, the course examines the language industry project. Prerequisites: TRST 60011 with minimum B (3.0) grade and graduate standing.</td>
<td>TRST 60011 with minimum B (3.0) grade and graduate standing</td>
<td>3.000</td>
<td>3.000</td>
<td>Graduate</td>
<td>Combined Lecture and Lab</td>
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<tr>
<td>TRST 60095</td>
<td>Special Topics in Translations Studies</td>
<td>(Repeatable for a maximum of 12 credit hours) Content varies with the topic, which may include any aspect of translation studies (practical or theoretical). Topics are taught in English and some topics may be team taught. Prerequisite: graduate standing.</td>
<td></td>
<td>1.000 TO 3.000</td>
<td>1.000 TO 3.000</td>
<td>Graduate</td>
<td>Lecture</td>
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<tr>
<td>TRST 60098</td>
<td>Research in Translation Studies</td>
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Research for M.A. translation students. Credits earned may be applied toward degree if department approves. Prerequisite: graduate standing.

1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

Modern-Classical Lang Studies Department

TRST 60298 - APPLIED TRANSLATION RESEARCH

(Repeatable for a maximum of 3 credit hours) Research experience in translation or interpreting in a corporate, translation bureau or freelance setting, supervised by a faculty member. Prerequisite: graduate standing and TRST 60010.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Research

Modern-Classical Lang Studies Department

TRST 70001 - APPLIED LINGUISTICS AND TRANSLATION INFORMATICS

Advanced topics in applied linguistics, including corpus and text linguistics as they apply to translation. Advanced topics in translation informatics in multilingual environments. Prerequisite: TRST 60011 and doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

TRST 70002 - THE LANGUAGE INDUSTRY

Study of the socio-economic context of professional translation and the language services business sector. Includes in-depth study of the language industry drawing on industry analysis and business case studies. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

TRST 70003 - TERMINOLOGY STUDIES

Advanced topics in terminology, lexicography, ontology and knowledge organization systems. Prerequisite: TRST 60011 and doctoral standing.

3.000 Credit hours
3.000 Lecture hours
TRST 70004 - TRANSLATION PEDAGOGY
Teaching methods and curriculum design for translation programs. Prerequisite: Doctoral standing.
3.000 Credit hours
3.000 Lecture hours

TRST 70005 - CURRENT TRENDS IN TRANSLATION STUDIES
A critical examination of the main trends in translation theory and an exploration of emerging developments in translation studies. Prerequisite: TRST 60010 and doctoral standing.
3.000 Credit hours
3.000 Lecture hours

TRST 70006 - EMPIRICAL METHODS FOR TRANSLATION STUDIES
Study of the methods and research designs used to conduct empirical research in translation, with an emphasis on experimental design of cross-language tasks, the use and analysis of bilingual verbal protocols, the application of new methods such as keystroke-logging and eye-tracking and the particular empirical and methodological issues involved in cross-language research data-gathering and statistical analysis. Prerequisite: doctoral standing and Translation Studies major (TRST).
3.000 Credit hours
3.000 Other hours

TRST 70007 - CORPORA IN TRANSLATION
Exploration of corpus-based applications in translation studies research and the practice of translation. Competence in utilizing translation-oriented corpus-based tools and corpus building will be fostered. Prerequisite: doctoral standing and Translation Studies major.
3.000 Credit hours
3.000 Lecture hours
TRST 70008 - TRANSLATION AND COGNITION

Study of foreign language translation and interpreting from a cognitive science perspective. Includes discussion of current empirical research, application of selected models of cognition to problems in translation studies and research design in translation process research. Prerequisite: doctoral standing and Translation Studies major (TRST).

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Modern-Classical Lang Studies Department

TRST 80091 - SEMINAR IN TRANSLATION STUDIES

(Repeatable for credit) Seminar for doctoral students to present and discuss research related to specific areas of Translation Studies. May be taken for a total of 6 semester hours alone or in combination with TRST 80191. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Modern-Classical Lang Studies Department

TRST 80098 - RESEARCH IN TRANSLATION STUDIES

(Repeatable for credit) Research for doctoral students. Credits earned may be applied toward degree if department approves. Prerequisite: Doctoral standing.

1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Research

Modern-Classical Lang Studies Department

TRST 80191 - SEMINAR IN TRANSLATION INFORMATICS

(Repeatable for credit) Seminar for doctoral students to present and discuss research related to specific areas of translation informatics. May be taken for a total of 6 semester hours alone or in combination with TRST 80191. Prerequisite: Doctoral standing.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Modern-Classical Lang Studies Department

TRST 80199 - DISSERTATION I

(Repeatable for credit) Doctoral dissertation. Registration in at least two semesters is required the first of which will be the semester in which dissertation work begins and continuing until 30 hours are completed. Prerequisite: Special approval and doctoral standing.
TRST 80299 - DISSERTATION II

(Repeatable for credit) Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation, continuing until all degree requirements are met. Prerequisite: TRST 80199 and doctoral standing.

15.000 Credit hours
15.000 Other hours

UD 55705 - FORCES THAT SHAPE CITIES

(Repeatable for maximum 3 credit hours) Course examines the forces that have shaped urban form through history, how they impact our cities today and the challenges they will pose for the future. Prerequisite: graduate standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

UD 60701 - URBAN DESIGN STUDIO I

Introduction to urban design and its relationship to other design disciplines through the analysis of neighborhoods and the definition of comprehensive area improvement programs. Prerequisite: graduate standing.

3.000 TO 6.000 Credit hours
6.000 TO 10.000 Other hours

UD 60702 - URBAN DESIGN STUDIO II

Urban design explorations of the formal relationships between buildings, open spaces and streets in the development of high density, mixed-use projects. Prerequisite: UD 60701 and graduate standing.

3.000 TO 6.000 Credit hours
6.000 TO 10.000 Other hours
**UD 60703 - URBAN DESIGN STUDIO III**

Design of a comprehensive redevelopment strategy and implementation strategies for an urban area of diverse existing character. Prerequisite: UD 55705 and 60702 and 65102 and graduate standing.

3.000 TO 6.000 Credit hours
3.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Studio

**UD 60705 - CAPSTONE PROJECT PREPARATION**

(Repeatable for maximum three credit hours) Development of a rationale and structure for the independent design project to be completed in the final semester of the program. Prerequisite: UD 60703; and graduate standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

**UD 60798 - MASTERS PROJECT IN URBAN DESIGN**

Independent urban design project, completed under the direction of an individual advisor selected from the graduate faculty. Prerequisite: UD 60703 and 60705 and graduate standing.

6.000 TO 9.000 Credit hours
10.000 TO 15.000 Other hours

Levels: Graduate
Schedule Types: Master's Project

**UD 65101 - COMMUNITY DEVELOPMENT PROCESS**

Advanced course on comprehensive community development. Case study analysis, qualitative research and work with community initiatives are required. Prerequisite: UD 55705 and 60703 and 65102 and graduate standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

**UD 65102 - URBAN SYSTEMS**

Introduction to urban systems in its socio-economic, environmental and engineering aspects: residential fabric, commercial sector, open space network, transportation systems, infrastructures. Prerequisite: graduate
UD 65632 - URBAN ECOLOGICAL SYSTEMS

Study of how ecological systems in highly anthropocentric environments provide necessary ecological services. Emphasized is the role that water plays in activating the supporting, provisioning, regulating, and cultural ecosystem services required for human well-being. Prerequisites: UD 65102 and graduate standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Architecture Department

UD 66995 - SPECIAL TOPICS IN URBAN DESIGN

(Repeatable for credit) Special topics in urban design. Prerequisite: graduate standing.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours

Levels: Graduate
Schedule Types: Seminar

Architecture Department

US 00003 - CORE READING STRATEGIES FOR COLLEGE SUCCESS

Development of reading strategies necessary for successful completion of college coursework. Emphasis on improving reading comprehension. The credit hours completed for this course does not count toward graduation. Prerequisite: ACT Reading score of 0-13; or SAT Critical Reading or Verbal score of 0-350; or Compass score of 0-60 (required if student does not have ACT or SAT score); and special approval.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

University College Department

US 00006 - STUDY STRATEGIES FOR COLLEGE SUCCESS

Development and application of content area reading and study strategies for successful completion of college coursework. Emphasis on application of study strategies. The credit hours completed for this course do not count toward graduation. Prerequisite: ACT Reading score of 14-17; or SAT Critical Reading or Verbal Score of 360-440; or Compass score of 61-79 (required if student does not have ACT or SAT score); and special approval.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours
### US 00009 - SWIFT KICK STUDY SKILLS

Development of study strategies necessary for successful completion of college coursework. The credit hour completed for this course does not count toward graduation. Prerequisite: none.

- **1.000 Credit hours**
- **1.000 Lecture hours**

### US 10002 - ADULT STUDENT ORIENTATION

(Equivalent to US 10097) This course focuses on balancing adult roles and responsibilities with college demands. Students will sharpen learning skills and study strategies while making connections with other adult students at Kent State. Prerequisite: None.

- **1.000 Credit hours**
- **1.000 Lecture hours**

### US 10095 - SPECIAL TOPICS IN UNDERGRADUATE STUDIES

(Repeatable for credit) This program, administered by the dean is intended to encourage interdisciplinary study to cover areas not treated adequately in traditional coursework and to make available promptly the new and significant experience of the faculty. Prerequisite: none.

- **1.000 TO 3.000 Credit hours**
- **1.000 TO 3.000 Lecture hours**

### US 10096 - INDIVIDUAL INVESTIGATION

(Repeatable for a maximum of 6 credit hours) Experiential learning opportunity, working with a faculty member in his or her area of expertise. Prerequisite: none.

- **1.000 TO 6.000 Credit hours**
- **1.000 TO 6.000 Other hours**

### US 10097 - DESTINATION KENT STATE: FIRST YEAR EXPERIENCE
(Equivalent to US 10002 AND 20007) Assists student in making a successful academic transition to the university through experiential or intellectually engaging discipline-based content. Required of all first year students. Not required of transfer students with 25 or more credit hours. Prerequisite: none.

1.000 Credit hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Colloquium

University College Department

**US 10177 - EXPERIENTIAL LEARNING PLUS-1 CREDIT**

(Repeatable 1 time) The Plus - 1 Credit permits students to add experiential learning to any undergraduate course for one (1) additional credit. The course involves applying the knowledge and skills developed in a course to support local initiative through civic engagement. Students consider the knowledge base of the "primary" course and-or discipline and how it is applied in real practice. Reflective activities are used to challenge students to consider larger questions and the interdisciplinary nature of complex problems and solutions. NOTE: This course is not a stand alone course. It must be appended to a primary course. Prerequisite: special approval.

1.000 Credit hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Field Experience, Practicum or Internship, Research

University College Department

Course Attributes:
Experiential Learning Requirem

**US 20007 - LIFE BEYOND KSU**

(Equivalent to US 10097) Equips students with the knowledge and tools critical for entering the professional world through research and application of career-related concepts and activities. Reserved for students who have not successfully completed the Destination Kent State: First Year Experience orientation course. Prerequisite: junior or senior standing.

1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

University College Department

**US 20008 - CAREER CONSTRUCTION**

Students increase self-awareness equipping them to navigate a lifetime of meaningful occupational realities. Through experiential activities, discussions, and reflective exercises students gain self-understanding and connect academic opportunities to careers and narrow down specializations in career fields in order to select a major or evaluate career changes. Designed for students in the following majors: AEDG, EHSG, CCIG, PREP, CAG, PFDM, PGA, and EXPL. Also appropriate for any student interested in finding personal meaning and mattering in occupational and life decisions. Prerequisite: none.

1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
US 20009 - CAREER AND LIFE PLANNING: CHANGE, CHANCE AND CHOICE

Navigating a career and life planning are highly complex. Designed to equip students with knowledge and skills useful in decision making about how to use opportunities to build meaningful futures and how to maintain flexibility and adaptability in the complex work environment. Designed for students in the following majors: AEDG, EHSG, CCIG, PREP, CAG, PFDM, PGA, and EXPL. Also appropriate for any student contemplating or engaged in life and career exploration or change. Prerequisite: US 20008.
1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

University College Department

US 20010 - CAREER NAVIGATION: CONSTRUCTING POSSIBILITIES

Navigating a career and life planning are highly complex. The course is designed to equip students with self-awareness, knowledge, and skills useful in decision making about how to use opportunities to build meaningful futures and how to maintain flexibility and adaptability in complex work environment. Students learn how to balance planning with uncertainty and navigate a lifetime of meaningful occupational realities. Through experiential activities, discussions, and reflective exercises students gain self-understanding and connect academic opportunities to careers and narrow down specializations in career fields in order to select a major or evaluate career changes. Designed for students in: AEDG, EHSG, CCIG, PREP, CAG, PFDM, PGA, and EXPL majors. Also appropriate for students interested in finding personal meaning and mattering in occupational and life decisions or contemplating or engaged in life and career exploration or change. Prerequisite: none.
2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

University College Department

US 20095 - SPECIAL TOPICS IN UNDERGRADUATE STUDIES

(Repeatable for credit)This program, administered by the dean is intended to encourage interdisciplinary study to cover areas not treated adequately in traditional coursework and to make available promptly the new and significant experience of the faculty. Prerequisite: None.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

University College Department

US 20193 - VARIABLE TITLE WORKSHOP IN UNDERGRADUATE STUDIES

(Repeatable for credit)Workshop focused on variable topics. Prerequisite: None.
1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
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<tbody>
<tr>
<td>US 20201</td>
<td>DESTINATION KENT STATE STUDENT LEADER TRAINING</td>
<td>Prepares students to develop a solid foundation in Destination Kent State programs, KSU knowledge, leadership and communication skills in order to support the DKS programs. May include Saturday sessions. Prerequisites: US 10097.</td>
<td>Undergraduate</td>
<td>Workshop</td>
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<tr>
<td>US 20203</td>
<td>THEORY AND PRACTICE OF PEER TUTORING</td>
<td>Preparation for tutoring in several academic areas. Emphasis on the student as learner. Introduction to current learning theories. Opportunities provided to adapt learning strategy to particular disciplines. Field experience included. Prerequisite: None.</td>
<td>Undergraduate</td>
<td>Lecture</td>
</tr>
<tr>
<td>US 20277</td>
<td>EXPERIENTIAL LEARNING PLUS-1 CREDIT</td>
<td>(Repeatable 1 time) The Plus - 1 Credit permits students to add experiential learning to any undergraduate course for one (1) additional credit. The course involves applying the knowledge and skills developed in a course to support local initiative through civic engagement. Students consider the knowledge base of the “primary” course and or discipline and how it is applied in real practice. Reflective activities are used to challenge students to consider larger questions and the interdisciplinary nature of complex problems and solutions. NOTE: The Plus-1 Credit is not a stand alone course. It must be appended to a primary course. Prerequisite: special approval.</td>
<td>Undergraduate</td>
<td>Field Experience, Practicum or Internship, Research</td>
</tr>
<tr>
<td>US 30202</td>
<td>DESTINATION KENT STATE STUDENT SUCCESS LEADER SEMINAR</td>
<td>(Repeatable a maximum of 2 times) Required of all Student Success Leaders who have previously taken and passed US 20201 and who are paired with a faculty member in assisting with DKS: First Year Experience course. Students need to meet the minimum requirements for the college or department in which they serve as a Student Success Leader for the DKS: FYE course (US 10097). Prerequisite: US 20201.</td>
<td>Undergraduate</td>
<td>Lecture</td>
</tr>
</tbody>
</table>
US 30377 - EXPERIENTIAL LEARNING PLUS-1 CREDIT

(Repeatable for credit) The Plus - 1 Credit permits students to add experiential learning to any undergraduate course for one (1) additional credit. The course involves applying the knowledge and skills developed in a course to support local initiative through civic engagement. Students consider the knowledge base of the “primary” course and-or discipline and how it is applied in real practice. Reflective activities are used to challenge students to consider larger questions and the interdisciplinary nature of complex problems and solutions. NOTE: The Plus-1 Credit is not a stand-alone course. It must be appended to a primary course. Prerequisite: special approval.

Levels: Undergraduate
Schedule Types: Seminar

US 40201 - DESTINATION KENT STATE STUDENT LEADER TRAINING

Experienced Destination Kent State student leaders selected to be trainers are required to take this course. It provides training and skill development for assisting with training future Destination Kent State student leaders. Prerequisites: US 30202.

Levels: Undergraduate
Schedule Types: Lecture

US 40202 - DESTINATION KENT STATE INTERN SEMINAR

Experienced student success leaders selected to be student interns are required to take this course. This course extends training and skill development for students who assume responsibility for assisting Student Success Leaders. Prerequisites: US 30202.

Levels: Undergraduate
Schedule Types: Lecture

US 40477 - EXPERIENTIAL LEARNING PLUS-1 CREDIT

(Repeatable for credit) The Plus - 1 Credit permits students to add experiential learning to any undergraduate
course for one (1) additional credit. The course involves applying the knowledge and skills developed in a 
course to support local initiative through civic engagement. Students consider the knowledge base of the 
“primary” course and-or discipline and how it is applied in real practice. Reflective activities are used to 
challenge students to consider larger questions and the interdisciplinary nature of complex problems and 
solutions. NOTE: The Plus-1 Credit is not a stand-alone course. It must be appended to a primary course. 
Prerequisite: special approval.
1.000 Credit hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Field Experience, Practicum or Internship, Research

University College Department

Course Attributes:
Experiential Learning Requirem

VCD 13000 - INTRODUCTION TO VISUAL COMMUNICATION DESIGN

Introduction to the fields of design and illustration as well as the related professional practices. Focus on 
historical overview, industry standards, ethics, employment opportunities, creative design processes and skills. 
Prerequisite: photo illustration (PHOI) or visual communication design (VCD) major or design (DSGN) minor.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Visual Communication Design Department

VCD 13001 - INTRODUCTION TO VISUAL COMMUNICATION DESIGN STUDIO

Introduction to basic design processes using research, writing conceptual problem solving and format 
organization of two dimensional space utilizing type and imagery. Prerequisite: photo illustration (PHOI) major, 
visual communication design (VCD) major, or design minor (DSGN).
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Visual Communication Design Department

VCD 14001 - VISUAL DESIGN LITERACY

Examines the topics visual communication design theory, two-dimensional graphic design, environmental 
graphic design, typography, illustration, photographic illustration, and interactive media. Introduction to how 
and why professionals in the field of visual communication design create meaning and context through their 
work. Students explore the language of visual communication, how it is influenced by form, content and 
context. Prerequisite: none.
3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Visual Communication Design Department
### VCD 14002 - COMMUNICATING WITH COLOR

Introduction to color as it applies to fields of design and related areas. Topics covered include the vocabulary of color, the primary elements of color theory, color systems, color printing, color in film and online, and the effects of lighting on color. Students gain an appreciation for how color influences design and commerce through an understanding of basic practices of color forecasting and a study of how color perception is influenced by cultural differences. Prerequisite: none.

3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture

Visual Communication Design Department

### VCD 17000 - COLOR: THEORY AND APPLICATION

Color and its interaction through a series of nonapplied (abstract) exercises. Prerequisite: None.

3.000 Credit hours  
3.000 Other hours

Levels: Undergraduate  
Schedule Types: Studio

Visual Communication Design Department

### VCD 20000 - BASIC COMPUTER-GRAPHIC DESIGN AND ILLUSTRATION

Introduction of basic operating system of Macintosh hardware and major design software for creation of layouts, vector and raster graphics. Explore production and peripheral equipment including scanners and printers. Prerequisite: visual communication design (VCD) or photo illustration (PHOI) majors.

3.000 Credit hours  
2.000 Lecture hours  
2.000 Lab hours

Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab

Visual Communication Design Department

### VCD 20003 - INTERMEDIATE COMPUTER-GRAPHIC DESIGN/ILLUSTRATION

A technical, studio course designed to teach the fundamentals of Web design in GoLive and Flash. Material is presented throughout a series of demos, exercises and projects. Prerequisite: VCD 20000.

3.000 Credit hours  
2.000 Lecture hours  
2.000 Lab hours

Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab

Visual Communication Design Department

### VCD 20010 - INTRODUCTION TO DESIGN RESEARCH

Introduction to research methods used in the professional practice of visual communication design. Students
are exposed to strategies, tactics and frameworks used in the creation of design artifacts. Prerequisites: VCD 23001 and visual communication design (VCD) or photo illustration (PHOI) major or information design (INFD) minor.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Visual Communication Design Department

**VCD 20096 - PHOTO ILLUSTRATION SOPHOMORE PORTFOLIO REVIEW**

VCD faculty review student portfolios of work from prerequisite and corequisite courses. A diagnostic examination to evaluate technical proficiency and formal organizational ability also is included in this review. Prerequisite: VCD 28002 and photo illustration (PHOI) major. Corequisites: VCD 20010 and 38003.

1.000 Credit hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Visual Communication Design Department

**VCD 20196 - VCD SOPHOMORE PORTFOLIO REVIEW**

Projects from Visual Communication Design freshman- and sophomore-level studio courses will comprise a portfolio to be critiqued by VCD faculty. A successful portfolio review will determine if the student is to advance in the BA program or enter the BFA program. Prerequisites: visual communication design majors (VCD); and VCD 22000; and VCD 23001 with a minimum grade of B (3.000). Corequisites: VCD 33000 and VCD 22001.

1.000 Credit hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Visual Communication Design Department

**VCD 22000 - DESIGN/ILLUSTRATION TECHNIQUES I**

Introductory course in design/illustration. Object drawing with emphasis toward rendering materials and techniques used in reproduction, perspective, spacial organization and use of reference material. Prerequisite: VCD 13000; and VCD 13001 with a minimum B- grade; and visual communication design (VCD) major or design (DSGN) minor.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Visual Communication Design Department

**VCD 22001 - DESIGN/ILLUSTRATION TECHNIQUES II**

Continuation of Design Illustration Techniques I with expanded emphasis on black and white media used for illustration purposes with emphasis on media capable of reproduction by traditional printing methods. Prerequisite: VCD 22000 and 23001; and visual communication design (VCD) major. Corequisites: VCD 33000
VCD 23000 - INTERMEDIATE STUDIO SKILLS: GRAPHIC DESIGN AND ILLUSTRATION

A technical lecture course designed to outline the process and describe and discuss the technologies and vocabulary used in the printing industry. Prerequisite: VCD 23001.

Levels: Undergraduate
Schedule Types: Studio

VCD 23001 - INTRODUCTION TO TYPOGRAPHY

Historical study of letter forms and their application to the development of new forms. Execution and use of letter forms as design elements in layout and illustration using fundamental typographic theories and rules of spatial organization. Prerequisites: VCD 13000; and VCD 13001 with a minimum grade of B- (2.700); and photo illustration (PHOI) or visual communication design (VCD) or design (DSGN) minor.

Levels: Undergraduate
Schedule Types: Studio

VCD 28000 - PHOTOGRAPHY

Basic camera techniques to provide a better understanding of photography as a creative skill in visual communication. Prerequisites: visual communication design (VCD) major; or photo illustration (PHOI) major; or photo illustration (PHOI) minor.

Levels: Undergraduate
Schedule Types: Studio

VCD 28002 - PHOTOGRAPHY II

Course elaborates upon the basic technical information covered in Photography, VCD 28000. Through a set of sequential and interrelated problems, the class is designed to touch upon a series of photographic situations that frequently affect the working professional in the studio, or in the field. Prerequisite: VCD 28000 or JMC 22001; and visual communication design (VCD) major; or photo illustration (PHOI) major or minor.

Levels: Undergraduate
Schedule Types: Studio
Visual Communication Design Department

**VCD 28004 - PHOTOGRAPHIC PERSPECTIVES**

Examines the use of the photographic medium in the context of the commercial marketplace. Discusses the advancement of material processes, provides a comprehensive overview of commercial imagery and market development, examines industry trends, and introduces several theoretical criticisms pertaining to constructed photography. Prerequisite: photo illustration (PHOI) major or minor; or photo journalism (PHOJ) major or minor.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Visual Communication Design Department

**VCD 30008 - JUNIOR PORTFOLIO REVIEW-PHOTO ILLUSTRATION**

Required portfolio review in conference, with the School of Visual Communication Design Faculty, of work completed in VCD 38004 and VCD 38001. Students successfully passing review may continue in the B.S. degree program in Photo Illustration. Students not receiving a passing grade in the review may not continue in the program. Prerequisites: VCD 38004 and photo illustration (PHOI) major. Corequisite: VCD 38001.

1.000 Credit hours
2.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Visual Communication Design Department

**VCD 30009 - JUNIOR PORTFOLIO REVIEW:GRAPHIC DESIGN/ILLUSTRATION**

Required portfolio review in conference, with the school of Visual Communication Design Faculty, of work completed in VCD 32000, 32001, 33000 and 33001. Students successfully passing review may continue in the B.A. degree. To change to the B.F.A. program, students must be nominated by a majority of the VCD faculty. Students not receiving a passing grade in the review may not continue in the program. Prerequisites: visual communication design (VCD) major; VCD 32000 and 33000 and corequisites VCD 32001 and 33001.

1.000 Credit hours
1.000 Lecture hours

Levels: Undergraduate
Schedule Types: Studio

Visual Communication Design Department

**VCD 32000 - ILLUSTRATION I**

Continuation of Design Illustration Techniques I and II with emphasis on technique and creative solutions as they apply to specific illustration areas: narrative, editorial, book, advertising and institutional. Prerequisite: visual communication design (VCD) major; and VCD 20196 and VCD 20010 and VCD 22001 and VCD 33000.

3.000 Credit hours
5.000 Other hours
Visual Communication Design Department

**VCD 32001 - ILLUSTRATION II**

Illustration as communication: conceptual problem-solving visualizations of ideas utilizing felt tip markers as the medium of expression. Prerequisite: VCD 32000.

- 3.000 Credit hours
- 3.000 Other hours

Visual Communication Design Department

**VCD 33000 - GRAPHIC DESIGN I**

Continuation of Introduction to Graphic Design and Introduction to Typography in the structuring of 2-D communication design utilizing headline, body copy and illustration with the addition of limited conceptual content. Prerequisite: VCD 22000; and VCD 23001 with a minimum grade of B (3.000); and visual communication design (VCD) major. Corequisites: VCD 20196 and VCD 22001.

- 3.000 Credit hours
- 5.000 Other hours

Visual Communication Design Department

**VCD 33001 - GRAPHIC DESIGN II**

Continuation of Graphic Design I, utilizing basic layout with emphasis on concept as applied to problem-solving methodologies through a series of exercises and problems. Prerequisites: visual communication design (VCD) major; and VCD 20196 and VCD 20010 and VCD 22001 and VCD 33000.

- 3.000 Credit hours
- 5.000 Other hours

Visual Communication Design Department

**VCD 34004 - VISUAL ETHICS**

An extension of the information covered in the course Visual Literacy or Introduction to Visual Communication Design. Topics include the understanding of visual form, responsibility of the designer, photographer, and illustrator and those working in collaboration with visual communicators. Looks at image manipulation, copyright laws and ethical and professional guidelines. Also covered are topics such as sustainable design practices, acting as an advocate of the consumer and audience member. Discussion topics include credibility, dignity and developing a personal philosophy towards visual ethics. Prerequisite: VCD 14001 or VCD 13000.

- 3.000 Credit hours
- 3.000 Lecture hours

Visual Communication Design Department
VCD 34005 - INTRODUCTION TO 3D GRAPHIC DESIGN

Continuation of Graphic Design I and Introduction to Typography with application of typography and imagery to 3-D form. Prerequisites: visual communication design (VCD) major; and VCD 20196 and VCD 20010 and VCD 22001 and VCD 33000.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

VCD 34006 - MOTION DESIGN

A studio course designed to teach the fundamentals of motion graphic design. Materials and information are delivered through a series of lectures, demos and hands-on exercises. Prerequisite: VCD 33000 or VCD 28002.

3.000 Credit hours
5.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

VCD 37000 - VISUAL DESIGN FOR MEDIA:ADVANCED

A lab course in which students apply design concepts to computer-generated communication pieces using a layout software program. May not be used toward degree requirements by visual communication design majors. Prerequisite: none.

3.000 Credit hours
2.000 Lecture hours
1.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

VCD 38001 - PHOTOGRAPHICS

This course explores basic studio setups and controlled lighting with special emphasis on the inter-relationship of photography and typography in communication. Unique solutions are created through the use of the camera and image manipulation programs. Prerequisites: VCD 13001 and VCD 20009 and VCD 28000 and VCD 38004.

3.000 Credit hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory

VCD 38003 - PHOTO TECHNOLOGY
Photo technology is a professional course serving visual communication design students within photo-illustration. The course is designed to give students an advanced working knowledge of digital and film photographic systems through testing procedures and use of special purpose materials. Prerequisites: VCD 28000; and photo illustration (PHOI) major or minor; or visual communication design (VCD) major.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Visual Communication Design Department

**VCD 38004 - ADVANCED PHOTOGRAPHY**

Use of specialized equipment, materials and techniques. Development of conceptual abilities and problem solving skills. Special equipment furnished. Prerequisites: VCD 13001 and VCD 28000.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Visual Communication Design Department

**VCD 38009 - INTERNSHIP SEMINAR-PHOTO ILLUSTRATION**

Under the supervision of faculty, student prepare materials such as cover letters, resumes, applications for employment and individual portfolios in preparation for interviewing for an internship in their field of study. Prerequisite: VCD 38004 and photo illustration (PHOI) majors. Corequisite: VCD 38001.

1.000 Credit hours
1.000 Other hours

Levels: Undergraduate
Schedule Types: Seminar

Visual Communication Design Department

**VCD 40025 - PROFESSIONAL PORTFOLIO**

Develop a senior-level professional portfolio through a selection and refinement of previously completed classroom work. Development of projects in areas of deficiency with emphasis on organization and presentation. Prerequisite: special approval; and photo illustration (PHOI) or visual communication design (VCD) major.

2.000 Credit hours
2.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Visual Communication Design Department

**VCD 40052 - GRAPHIC DESIGN-TRAVEL AND FIELD EXPERIENCE**

Development of awareness and understanding in the practical application of graphic design and communication through directed field trip experience. Prerequisite: none.

1.000 TO 16.000 Credit hours
1.000 TO 16.000 Other hours
Levels: Undergraduate  
Schedule Types: Studio

Visual Communication Design Department

**VCD 40053 - GRAPHIC DESIGN STUDIO-GLYPHIX**

(Repeatable for a maximum of 24 credit hours) Professional experience through an internal design studio. Involves responsibilities and procedures for the production of communication materials for off-campus clients including nonprofit organizations, charities, arts groups and selected on-campus groups and departments. Prerequisite: none.  
1.000 TO 8.000 Credit hours  
1.000 TO 8.000 Other hours

Levels: Undergraduate  
Schedule Types: Studio

Visual Communication Design Department

**VCD 40092 - INTERNSHIP I-GRAPHIC DESIGN/ILLUSTRATION**

(Repeatable for credit) Preparation for experience in design studio, agency or company involving design responsibilities and procedures to broaden a student’s understanding of the profession through real job situations. Prerequisite: none.  
1.000 Credit hours  
1.000 Other hours

Levels: Undergraduate  
Schedule Types: Practicum or Internship

Visual Communication Design Department

Course Attributes:  
Experiential Learning Requirem

**VCD 40095 - SPECIAL TOPICS:GRAPHIC DESIGN/ILLUSTRATION**

(Repeatable for a maximum of 9 credit hours) To broaden the course offerings into specialized areas of study in graphic design and illustration taught by experts in the profession as guest faculty. Primarily used to fulfill electives in graphic design or illustration. Prerequisite: special approval.  
3.000 Credit hours  
5.000 Other hours

Levels: Undergraduate  
Schedule Types: Studio

Visual Communication Design Department

**VCD 40096 - INDIVIDUAL INVESTIGATION IN GRAPHIC DESIGN AND ILLUSTRATION**

(Repeatable for a maximum of 16 credit hours) Individual study related to topics of graphic design and illustration approved by and under the direction of a faculty member. Prerequisite: none.  
1.000 TO 8.000 Credit hours  
1.000 TO 8.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Visual Communication Design Department

**VCD 40192 - INTERNSHIP II-GRAPHIC DESIGN/ILLUSTRATION**

(Repeatable for credit) Three credit hours required; maximum of 6 credit hours allowable in BFA degree only. Experience in design studio, agency or company involving design responsibilities and procedures to broaden a student's understanding of the profession through a real job situation. Prerequisite: VCD 40092.

1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Visual Communication Design Department

Course Attributes:
Experiential Learning Requirem

**VCD 40193 - VARIABLE TITLE WORKSHOP IN VCD**

(Repeatable for credit) Workshop setting dealing with intensive examination of special topics in VCD. Prerequisite: none.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Undergraduate
Schedule Types: Workshop

Visual Communication Design Department

**VCD 40195 - SELECTED TOPICS:GRAPHIC DESIGN/ILLUSTRATION**

(Repeatable for credit) Variable topics related to graphic design and illustration. Prerequisite: none.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Visual Communication Design Department

**VCD 42000 - ADVANCED ILLUSTRATION:MEDIA**

Discussions and practice of media and grounds as they pertain to the illustration field. Discussion also centers around the problems in developing work for reproduction. Prerequisite: special approval; and Bachelor of Fine Arts (BFA) visual communication design (VCD) and junior standing.

3.000 Credit hours
5.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Visual Communication Design Department
VCD 42002 - EDITORIAL ILLUSTRATION

Exploration and discussion of various illustration techniques and their application in the publishing field. Emphasis is placed on client needs, concept and intended audience. Prerequisite: special approval; and Bachelor of Fine Arts (BFA) visual communication design (VCD) and junior standing.

3.000 Credit hours
5.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Visual Communication Design Department

VCD 42003 - ADVERTISING ILLUSTRATION

Exploration and discussion of various illustration techniques and their application in advertising. Emphasis is placed on client need, concept of solution and intended audience. Prerequisite: special approval; and Bachelor of Fine Arts (BFA) visual communication design (VCD) major and junior standing.

3.000 Credit hours
5.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Visual Communication Design Department

VCD 42005 - CHARACTER DEVELOPMENT AND DESIGN

(Slashed with VCD 52005) Focuses on the application of the fundamental design principles and mechanics used when designing characters for film animation, television animation, computer animation, video games, comic strips, comic books, advertising, editorial illustration and book illustration. Prerequisites: VCD 22000, VCD 22001, and VCD 32000.

3.000 Credit hours
6.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Visual Communication Design Department

VCD 43000 - STUDIO PRODUCTION

A technical lecture course designed to teach the fundamental techniques and processes of electronic prepress and printing production. Material is presented through lectures, demos, tests and field trips. Prerequisite: special approval; and visual communication design (VCD) major and junior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Visual Communication Design Department

VCD 43001 - INTERACTION DESIGN: COMMUNITIES AND CULTURE

Interaction design for screen based media that explores communities and culture. Prerequisite: VCD 33001 and special approval.
VCD 43002 - TYPOGRAPHIC/PHOTOGRAPHIC GRAPHIC DESIGN

The use of typography (rather than visual imagery) as the primary design form in solving graphic design communication problems. Prerequisite: special approval; and Bachelor of Fine Arts (BFA) visual communication design (VCD) and junior standing.

3.000 Credit hours
5.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Visual Communication Design Department

VCD 43003 - CORPORATE IDENTITY/GRAPHIC DESIGN

Use of graphic design forms (typography, photography and illustration) in the development of corporate identification for total advertising programs. Prerequisite: special approval; and Bachelor of Fine Arts (BFA) visual communication design (VCD) and junior standing.

3.000 Credit hours
5.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Visual Communication Design Department

VCD 43004 - ISSUES FOR GRAPHIC DESIGN BUSINESSES

Designed to familiarize students with the basic business, marketing, legal and ethical standards in the graphic design industry. Prerequisite: junior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Visual Communication Design Department

VCD 43005 - PACKAGING, PROMOTION AND RETAIL ENVIRONMENTS

Use of typography and visual images, photography and illustrations in the structure of information for communication on 3D surfaces: direct mail, packaging and point of purchase display. Prerequisite: special approval; and visual communication design (VCD) major and VCD 13000, VCD 13001, VCD 20009, VCD 22000, VCD 22001, VCD 23001, VCD 32000, VCD 33000, VCD 33001 and VCD 34005.

3.000 Credit hours
5.000 Other hours

Levels: Undergraduate
Schedule Types: Studio
**VCD 43006 - ENVIRONMENTAL GRAPHIC DESIGN**

Aims at coordinating architectural planning, interior design systems analysis and graphic communications. Prerequisite: none.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

**VCD 43007 - INFORMATION GRAPHICS**

Introduction to shapes, color type and combinations of these for computer-designed news graphics; maps, charts, graphs and diagrams. Prerequisites: JMC 20004 and JMC 20007; and VCD 13001 or VCD 27001.
3.000 Credit hours
3.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture

**VCD 43008 - BRANDED IDENTITY**

The examination and development of graphic design forms as they pertain to corporate branding. Related methods of visual communication explored through studio. Prerequisite: Bachelor of Arts (BA) in the visual communication design (VCD) major and VCD 13000, 13001, 20009, 22000, 23001.
3.000 Credit hours
4.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

**VCD 43051 - TYPE HIGH PRESS**

(Repeatable for a maximum of 12 credit hours) Students will explore aspects of letterpress printing. Course content will include typesetting, printing basics, and a brief history of movable type printing and typography. Students will work on a series of projects to acclimate themselves to the equipment and various printing techniques. Prerequisite: special approval; and VCD 13000, 13001, 20009, 22000, 23001.
3.000 Credit hours
5.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

**VCD 44001 - EXHIBITION DESIGN**
The study of content, narrative development, consideration of space, and the use of materials and media in environmental and exhibition design. Includes working in scale, 2D and 3D rendering, physical and digital modeling. Prerequisite: VCD 34005 and special approval.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Visual Communication Design Department

VCD 45000 - GRAPHIC DESIGN PERSPECTIVES

Comprehensive exploration of design through history. Topics include the early alphabet, print processes, illustration, photography, corporate design, modern design and digital processes. Prerequisites: ENG 21011; and junior standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Visual Communication Design Department

Course Attributes:
Writing Intensive Course

VCD 46000 - WEB DESIGN AND PROGRAMMING I

(Cross-listed with VCD 56000) Course focus is on Web concepts and high-quality Web design; CS and VCD principles, tools, architecture, presentation, design and creation of websites through teamwork. Course is jointly taught by Computer Science and Visual Communication Design. Prerequisites: CS 10051 and VCD 13001.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Visual Communication Design Department

VCD 46001 - WEB DESIGN AND PROGRAMMING II

(Cross-listed with VCD 56001) An elective course jointly taught by computer science and VCD on advanced web technologies and multimedia web design: web servers, security, advanced design, java servlets, applets, database connectivity, site maintenance, relation of actual websites by teamwork. Prerequisite: VCD 46000.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Visual Communication Design Department

VCD 46003 - ADVANCED TYPOGRAPHY

Applying typographic rules in advanced projects. Organizing large amounts of text in complex architectures and designing viewer controlled space. Exploration of dynamic information sound and motion sequences.
Prerequisites: special approval; and visual communication design (VCD) major; and VCD 13000, VCD 13001, VCD 20009, VCD 22000, VCD 22001, VCD 23001, VCD 32000, VCD 33000, VCD 33001, VCD 34005.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Visual Communication Design Department

**VCD 46053 - WEB DESIGN AND PROGRAMMING STUDIO**

(Cross-listed with VCD 56053) A joint CS and VCD project course exploring advanced aspects of web design and programming. Student may pursue individually defined projects or team projects for real clients. Limited enrollment. Prerequisite: VCD 46001.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Visual Communication Design Department

**VCD 48005 - COLOR PHOTOGRAPHY**

The discipline of color photography is explored through a range of lectures, assignments and critiques. Prerequisite: VCD 38003 and VCD 38004.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Visual Communication Design Department

**VCD 48007 - PHOTO ILLUSTRATION TECHNIQUES**

Creative photography for advertising and editorial uses. Art director/photographer relationship stressed in given assignments. Critique by professional in addition to academic evaluation. Prerequisites: VCD 38003 and VCD 38004 and VCD 48005; and photo illustration (PHOI) or visual communication design (VCD) major.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Studio

Visual Communication Design Department

**VCD 48009 - FASHION PHOTOGRAPHY**

(Cross-listed with JMC 42009) Instruction in studio lighting, filters special effects. Emphasis on editorial and advertising fashion photography. Studio and location assignments. Prerequisites: VCD 38003 and VCD 38004 and VCD 48005; and photo illustration (PHOI) or visual communication design (VCD) major.

3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
VCD 48092 - PRACTICUM IN PHOTOGRAPHY

(Repeatable for a total of 10 hours) Individual or group investigation into student selected areas of photographic field. Prerequisites: junior or senior standing; and photo illustration (PHOI) or visual communication design (VCD) major.
1.000 TO 3.000 Credit hours
7.000 TO 21.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

VCD 49198 - SENIOR RESEARCH PAPER: GRAPHIC DESIGN/ILLUSTRATION

Written documentation of a senior project in graphic design or illustration. If VCD 49199 Senior Project Graphic Design/Illustration is chosen, it must be taken concurrently with Senior Research paper and presented for final review by a faculty committee. Prerequisites: senior standing and VCD 49098.
2.000 Credit hours
2.000 Other hours

Levels: Undergraduate
Schedule Types: Research

VCD 49199 - SENIOR CAPSTONE

A final visual project in graphic design or illustration structured by a senior (with approval by faculty), completed independently and presented for review and evaluation by a faculty committee. Prerequisite: Senior standing; and photo illustration major (PHOI) or visual communication design (VCD) major; and special approval.
3.000 Credit hours
3.000 Other hours

Levels: Undergraduate
Schedule Types: Senior Project/Honors Thesis

VCD 50000 - BASIC COMPUTER GRAPHIC DESIGN/ILLUSTRATION

An introduction to the use of the computer as a tool in graphic design and illustration. Exploration of the relationship and integration of various hardware configurations and software solutions to meet the demands of
VCD 50003 - INTERMEDIATE COMPUTER DESIGN-GD & I VARIOUS SOFTWARE

Addresses the issues of page layout and design, digital manipulation and vector graphic illustration for graphic design professionals. Prerequisites: visual communication design (VCD) majors and graduate standing.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Visual Communication Design Department

VCD 50025 - PROFESSIONAL PORTFOLIO

(Repeatable for credit) Develop a professional portfolio through selection and refinement of previously completed classroom work, development of projects in areas of deficiency with emphasis on organization and presentation. Prerequisite: special approval and graduate standing.

2.000 Credit hours
2.000 Other hours

Levels: Graduate
Schedule Types: Studio

Visual Communication Design Department

VCD 50052 - GRAPHIC DESIGN-TRAVEL AND FIELD EXPERIENCE

(Repeatable for credit) Development of awareness and understanding in the practical application of graphic design and communication through directed field trip experience. Repeatable for a total of 16 credit hours. Prerequisite: graduate standing.

1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Studio

Visual Communication Design Department

VCD 50053 - GRAPHIC DESIGN STUDIO-GLYPHIX

(Repeatable for a maximum of 12 credit hours) Professional experience through an internal design studio. Involves responsibilities and procedures for the production of communication materials for off campus clients including non profit organizations, charities, arts groups, and selected on campus groups and departments. Prerequisite: Graduate standing.

1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours
Visual Communication Design Department

**VCD 50092 - INTERNSHIP-GRAPHIC DESIGN AND ILLUSTRATION**

(Repeatable for credit) Experience in design studio, agency or company involving design responsibilities and procedures to broaden a student's understanding of the profession through a real job situation. Prerequisite: Graduate standing.

1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Practicum or Internship

Visual Communication Design Department

**VCD 50095 - SPECIAL TOPICS GRAPHIC DESIGN/ILLUSTRATION**

(Repeatable for a maximum of 9 credit hours) To broaden the course offerings into specialized areas of study in graphic design and illustration taught by experts in the profession as a guest faculty. Primarily used to fulfill electives in graphic design or illustration. Prerequisite: special approval and graduate standing.

3.000 Credit hours
5.000 Other hours

Levels: Graduate
Schedule Types: Studio

Visual Communication Design Department

**VCD 50193 - VARIABLE TITLE WORKSHOP IN VCD**

(Repeatable for credit) Workshop setting dealing with intensive examination of special topics in VCD. Prerequisite: graduate standing.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Other hours

Levels: Graduate
Schedule Types: Workshop

Visual Communication Design Department

**VCD 50195 - SELECTED TOPICS GRAPHIC DESIGN AND ILLUSTRATION**

(Repeatable for credit) Variable topics related to graphic design and illustration. Prerequisite: Graduate standing.

1.000 TO 4.000 Credit hours
1.000 TO 4.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Visual Communication Design Department

**VCD 52000 - ADVANCED ILLUSTRATION/MEDIA**
Discussions and practice of media and grounds as they pertain to the illustration field. Discussion will also center around the problems in developing work of reproduction. Prerequisite: visual communication design (VCD) major and graduate standing.

3.000 Credit hours
5.000 Other hours

Levels: Graduate
Schedule Types: Studio

Visual Communication Design Department

**VCD 52002 - EDITORIAL ILLUSTRATION**

Exploration and discussion of various illustration techniques and their application in the publishing field. Emphasis is placed on client needs, concept and intended audience. Prerequisite: visual communication design (VCD) major and graduate standing.

3.000 Credit hours
5.000 Other hours

Levels: Graduate
Schedule Types: Studio

Visual Communication Design Department

**VCD 52003 - ADVERTISING ILLUSTRATION**

Exploration and discussion of various illustration techniques and their application in advertising. Emphasis is placed on client need, concept of solution and intended audience. Prerequisite: visual communication design (VCD) major and graduate standing.

3.000 Credit hours
5.000 Other hours

Levels: Graduate
Schedule Types: Studio

Visual Communication Design Department

**VCD 52005 - CHARACTER DEVELOPMENT AND DESIGN**

(Slashed with VCD 42005) Focuses on the application of the fundamental design principles and mechanics used when designing characters for film animation, television animation, computer animation, video games, comic strips, comic books, advertising, editorial illustration and book illustration. Students must demonstrate proficiency in drawing to register for this course. Prerequisite: Graduate standing.

3.000 Credit hours
6.000 Other hours

Levels: Graduate
Schedule Types: Studio

Visual Communication Design Department

**VCD 53000 - STUDIO PRODUCTION**

A technical lecture course designed to teach the fundamental techniques and processes of electronic prepress and printing production. This material is presented through a series of lectures, demos, written tests and field trips. Prerequisite: special approval and graduate standing.
### VCD 53001 - INTERACTION DESIGN: COMMUNITIES AND CULTURE

Interaction design for screen based media that explores communities and culture. Prerequisites: special approval and graduate standing.

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Levels: Graduate  
Schedule Types: Lecture

Visual Communication Design Department

### VCD 53002 - TYPOGRAPHIC/PHOTOGRAPHIC GRAPHIC DESIGN

The use of typography (rather than visual imagery) as the primary design form in solving graphic communication problems. Prerequisite: visual communication design and graduate standing.

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Levels: Graduate  
Schedule Types: Studio

Visual Communication Design Department

### VCD 53003 - CORPORATE IDENTITY/GRAPHIC DESIGN

Use of graphic design forms (typography, photography and illustration) in the development of corporate identification for total advertising programs. Prerequisite: visual communication design (VCD) major and graduate standing.

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Levels: Graduate  
Schedule Types: Studio

Visual Communication Design Department

### VCD 53004 - ISSUES FOR GRAPHIC DESIGN BUSINESSES

Designed to familiarize students with the basic business, marketing, legal and ethical standards in the graphic design industry. Prerequisite: special approval and graduate standing.

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Levels: Graduate  
Schedule Types: Lecture

Visual Communication Design Department
VCD 53005 - PACKAGING, PROMOTION AND RETAIL ENVIRONMENTS

Use of typography and visual images, photography and illustrations, in the structure of information for communication on three-dimensional surfaces: direct mail, packaging and point of purchase display. Prerequisite: special approval; visual communication design and graduate standing.

3.000 Credit hours
5.000 Other hours

Levels: Graduate
Schedule Types: Studio

Visual Communication Design Department

VCD 53006 - ENVIRONMENTAL GRAPHIC DESIGN

Aims at coordinating architectural planning, interior design systems analysis and graphic communications. Also includes an individually directed research component. Prerequisite: Graduate standing.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Studio

Visual Communication Design Department

VCD 53007 - INFORMATION GRAPHICS

Introduction to shapes, color, type and combinations of these for computer-designed news graphics; maps, charts, graphs and diagrams. Prerequisite: Graduate standing.

2.000 Credit hours
2.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Visual Communication Design Department

VCD 53051 - TYPE HIGH PRESS

(Repeatable for a maximum of 12 credit hours) Students will explore aspects of letterpress printing. Course content will include typesetting, printing basics, and a brief history of movable type printing and typography. Students will work on a series of projects to acclimate themselves to the equipment and various printing techniques. Prerequisite: special approval and graduate standing.

3.000 Credit hours
5.000 Other hours

Levels: Graduate
Schedule Types: Studio

Visual Communication Design Department

VCD 55000 - GRAPHIC DESIGN PERSPECTIVES

Comprehensive exploration of design through history. Topics include the early alphabet, print processes, illustration, photography, corporate design, modern design and digital processes. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Visual Communication Design Department

**VCD 56000 - WEB DESIGN AND PROGRAMMING I**

(Cross-listed with VCD 46000) Course focus is on web concepts and high quality web design; CS and VCD principles, tools, architecture, presentation, design and creation of websites through teamwork. Course is jointly taught by CS and VCD. Prerequisites: visual communication design (VCD) major and graduate standing.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Visual Communication Design Department

**VCD 56001 - WEB DESIGN AND PROGRAMMING II**

(Cross-listed with VCD 46001) Advanced course in web technologies and multimedia web design: web servers, security, advanced design, java servlets, applets, database connectivity, site maintenance, relation of actual websites by teamwork. Course is jointly taught by CS and VCD. Prerequisites: visual communication design (VCD) major and graduate standing.

3.000 Credit hours
2.000 Lecture hours
2.000 Lab hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Visual Communication Design Department

**VCD 56003 - ADVANCED TYPOGRAPHY**

Applying typographic rules in advanced projects. Organizing large amounts of text in complex architectures and designing viewer controlled space. Exploration of dynamic information sound and motion sequences. Prerequisite: special approval and graduate standing.

3.000 Credit hours
3.000 Other hours

Levels: Graduate
Schedule Types: Combined Lecture and Lab

Visual Communication Design Department

**VCD 56053 - WEB DESIGN AND PROGRAMMING STUDIO**

(Cross-listed with VCD 46053) A joint (CS) and (VCD) project course exploring advanced aspects of web design and programming. Student may pursue individually defined projects or team projects for real clients. Limited enrollment. Prerequisite: visual communication design and graduate standing.

3.000 Credit hours
1.000 Lecture hours
### VCD 6009 - CANDIDACY REVIEW/GRAPHIC DESIGN AND ILLUSTRATION

A formal review of the work completed in the first 12 semester credit hours of graphic design and/or illustration courses for both M.F.A. and M.A. Prerequisite: graduate standing.  
1.000 Credit hours  
1.000 Other hours

### VCD 60020 - GRADUATE STUDIO IN VISUAL COMMUNICATION DESIGN

(Repeatable for a maximum of 6 credit hours) Research based, hands-on studio course providing a context for collaborative and individual projects in design, illustration and/or photography. Prerequisite: visual communication design (VCD) major and graduate standing.  
3.000 Credit hours  
3.000 Other hours

### VCD 60091 - GRADUATE SEMINAR IN VISUAL COMMUNICATION DESIGN

(Repeatable for credit) Focuses on design theory and research methodologies pertaining to design. Content consists mostly of readings, discussions and student presentations. Prerequisite: visual communication design (VCD) major and graduate standing.  
3.000 Credit hours  
3.000 Other hours

### VCD 60094 - COLLEGE TEACHING IN VISUAL COMMUNICATION DESIGN

For VCD student teaching or who anticipate teaching in higher education. This experience also supports future careers in management, art direction and instructional roles in industry. Discussions include grading, critiques, classroom management and evaluation techniques. Prerequisite: graduate standing.  
3.000 Credit hours  
3.000 Lecture hours
VCD 60095 - SPECIAL TOPICS IN GRAPHIC DESIGN/ILLUSTRATION
(Repeatable for a maximum of 16 credit hours) To broaden course offerings into specialized areas of study in graphic design and illustration taught by experts in the profession as guest faculty. Used to fulfill primary studio requirements in graphic design and or illustration. Prerequisite: Graduate standing.
1.000 TO 4.000 Credit hours
1.000 TO 4.000 Other hours
Levels: Graduate
Schedule Types: Studio
Visual Communication Design Department

VCD 60096 - INDIVIDUAL INVESTIGATION IN GRAPHIC DESIGN AND ILLUSTRATION
(Repeatable for credit) Individual investigation related to topics of graphic design and illustration approved and under the direction of a faculty member. Prerequisite: Graduate standing.
1.000 TO 16.000 Credit hours
1.000 TO 16.000 Other hours
Levels: Graduate
Schedule Types: Individual Investigation
Visual Communication Design Department

VCD 60098 - RESEARCH
(Repeatable for credit) Independent research under the direction of a faculty member in the division of design/illustration. Prerequisite: graduate standing.
1.000 TO 15.000 Credit hours
1.000 TO 15.000 Other hours
Levels: Graduate
Schedule Types: Research
Visual Communication Design Department

VCD 60099 - M.A. PROJECT GD AND I
A research project for non-thesis option M.A. students approved in consultation with the faculty adviser which culminates in a visual project exhibition and formal presentations. Prerequisite: graduate standing.
4.000 Credit hours
4.000 Other hours
Levels: Graduate
Schedule Types: Research
Visual Communication Design Department

VCD 60120 - USER EXPERIENCE DESIGN PRINCIPLES AND CONCEPTS
(Cross-listed with IAKM 60120 and IAKM 80120) Students explore the context in which User Experience Design exists and the various methods employed by designers in various fields related to design research, the generation of ideas, and implementation of designs. Students are introduced to methods of design evaluation and to the conceptual framework of the related curricula. Prerequisite: graduate standing.
3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Visual Communication Design Department

**VCD 60121 - USER EXPERIENCE DESIGN IN PRACTICE**

Students learn and employ methods for engaging in creative problem solving. Introduce students to design research methods and current research on human behavior as it applies to user experience design. A core set of design deliverables are examined. Students begin to develop individual portfolio materials. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Visual Communication Design Department

**VCD 60200 - DESIGN THEORY I: CULTURE, COMMUNITIES AND CONTEXT**

(Cross-listed with VCD 80200) Introduces students to design theory through a lens of classic and contemporary readings taken from various disciplines. This survey of perspectives assists students in developing their individual voice as a designer. Delves into issues that affect the field of graphic design and will continue to shape culture and history. Students are asked to question ideas of community and to expand on their ideas with examples through media and technology. Students critically question notions of history, psychology and social behaviors. The writing and criticism of advertising, communication, design artifacts and culture are the primary communication tool of the class, which is completed through papers and personal reflections. Prerequisite: graduate standing.

3.000 Credit hours
3.000 Lecture hours

Levels: Graduate
Schedule Types: Lecture

Visual Communication Design Department

**VCD 68199 - M.A.THESIS I**

Thesis students must register for a minimum of 6 hours, 2-6 hours in a single semester or distributed over several semesters if desired. Prerequisite: Graduate standing.

2.000 TO 6.000 Credit hours
2.000 TO 6.000 Other hours

Levels: Graduate
Schedule Types: Masters Thesis

Visual Communication Design Department

**VCD 68299 - M.A.THESIS II**

Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: VCD 68199 and graduate standing.

2.000 Credit hours
<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Levels: Graduate</th>
<th>Schedule Types: Masters Thesis</th>
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| **VCD 69199 - M.F.A. THESIS I** | Thesis students must register for a minimum of 6 hours; 2-6 hours in a single semester or distributed over several semesters if desired. Prerequisite: Graduate standing. | 2.000 TO 6.000 Credit hours  
2.000 TO 6.000 Other hours                                                                                                                                 | Graduate         | Masters Thesis                |
| **VCD 69299 - M.F.A. THESIS II** | Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: VCD 69199 and graduate standing. | 2.000 Credit hours  
2.000 Other hours                                                                                                                                                                                   | Graduate         | Masters Thesis                |
| **VCD 80200 - DESIGN THEORY I: CULTURE, COMMUNITIES AND CONTEXT** | (Cross-listed with VCD 60200) Introduces students to design theory through a lens of classic and contemporary readings taken from various disciplines. This survey of perspectives assists students in developing their individual voice as a designer. The class delves into issues that affect the field of graphic design and will continue to shape culture and history. Students are asked to question ideas of community and to expand on their ideas with examples through media and technology. Students critically question notions of history, psychology and social behaviors. The writing and criticism of advertising, communication, design artifacts and culture are the primary communication tool of the class, which is completed through papers and personal reflections. Prerequisite: doctoral standing. | 3.000 Credit hours  
3.000 Lecture hours                                                                                                                                  | Graduate         | Lecture                        |
| **VIN 10500 - MOLECULAR PRINCIPLES IN GRAPE AND WINE** | Covers the basic chemistry involved in the wine and winemaking process. Includes basic understanding of the chemistry involved in the fermentation process, flavor, aroma and color of wine. Prerequisite: none. | 4.000 Credit hours  
4.000 Lecture hours                                                                                                                                  | Undergraduate    |                                |
VIN 11100 - INTRODUCTION TO VITICULTURE AND VINEYARD ESTABLISHMENT

Introduces students to current practices for establishing a commercial vineyard and maintaining its health and productivity once established. Topics covered include varietal selection, site preparation, equipment, site selection, first season establishment, vine growth development and training, trellis systems, vine propagation, weed control and vine disease control. Field work sessions consisting of 16 hours of hands-on experience is scheduled in area vineyards. Prerequisite: None.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

VIN 11200 - BOTANICAL VITICULTURE

Provides students with an overview of the plant kingdom and an examination of grapevine form and function from a botanical perspective. Prerequisite: None.

4.000 Credit hours
3.000 Lecture hours
2.000 Lab hours

Levels: Undergraduate
Schedule Types: Combined Lecture and Lab

Regional College Department

VIN 11392 - WINTER VITICULTURE FIELDWORK

(Repeatable for credit) Provides students initiated in the field of viticulture practical experience in winter vineyard operations. Students are required to partner with an approved vineyard to participate in the required fieldwork portion of the course, which serves as experience for those seeking employment in commercial viticulture. Prerequisite: VIN 11100.

2.000 Credit hours
1.500 Lecture hours
2.500 Other hours

Levels: Undergraduate
Schedule Types: Field Experience, Lecture

Regional College Department

Course Attributes:
Experiential Learning Requirem

VIN 11492 - SPRING VITICULTURE FIELDWORK

(Repeatable for credit) Designed to provide students initiated in the field of viticulture practical experience in spring vineyard operations. Students are required to partner with an approved vineyard to participate in the required fieldwork experience portion of the course, which serves as experience for those seeking employment in commercial viticulture. Prerequisite: VIN 11100.

2.000 Credit hours
VIN 11592 - SUMMER/FALL VITICULTURE FIELDWORK

(Repeatable for credit) Provides viticulture students practical experience in summer and fall vineyard operations. Students are required to partner with an approved vineyard to participate in the required fieldwork portion of the course, which serves as experience for those seeking employment in commercial viticulture. Prerequisite: VIN 11100.

2.000 Credit hours
1.500 Lecture hours
2.500 Other hours

Levels: Undergraduate
Schedule Types: Field Experience, Lecture

Regional College Department

Course Attributes:
Experiential Learning Requirem

VIN 20095 - SPECIAL TOPICS IN VITICULTURE AND ENOLOGY

(Repeatable for a maximum of 9 credit hours) Various special topics to be announced in the Schedule of Classes, offering current topics in viticulture and enology. Prerequisite: none.

1.000 TO 3.000 Credit hours
1.000 TO 3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

VIN 21100 - INTEGRATED PEST MANAGEMENT

Effective grape production depends on the grower developing a system of grape management that is appropriate for each vineyard. Decisions need to be made for how to manage all of the normal cultural practices such as planting, fertility, harvesting and pruning, as well as managing the insect, disease and weed problems that occur either regularly or sporadically. Course addresses management issues related to common, expected pest problems, as well as the occasional appearance of minor pest problems. Prerequisite: none.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

VIN 21300 - REGIONAL VINEYARD MANAGEMENT
A general study of vineyard management in the general wine growing regions in the Continental United States. Covers management of the mature vineyard from region to region and builds on the topics covered in prerequisite course. Prerequisite: VIN 11100.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**VIN 29300 - SOILS FOR VITICULTURE**

Explores soil properties and behavior and their influence on wines. Focuses not only on growth and production, but on the long-term effects of viticulture on soil quality and the wider environment. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**VTEC 10001 - INTRODUCTION TO VETERINARY TECHNOLOGY**

Introduction to veterinary technician's career: medical terminology, career choices, occupational safety, human-animal bond, pet loss, euthanasia, animal husbandry and basic nutrition, breed identification, basic animal behavior. Prerequisite: None.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**VTEC 10002 - VETERINARY NURSING I**

Introduction to animal nursing: record keeping, kennel sanitation, animal restraint, syringe and needle identification/handling, injection techniques, physical exams, grooming and administration of medications. Lecture two hours, laboratory 3 hours weekly. Prerequisite: Veterinary technology (VTEC) major; and admission to technical study.

3.000 Credit hours
2.000 Lecture hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture, Combined Lecture and Lab

Regional College Department

**VTEC 10204 - CLINICAL LABORATORY I**

Introduction to clinical laboratory: equipment and equipment maintenance; internal and external parasites; urinalysis. Lecture 2 hours, laboratory 3 hours weekly. Prerequisite: Veterinary technology (VTEC) major.

3.000 Credit hours
VTEC 10205 - VETERINARY NURSING II

Clinical application off-site. Emphasis on skills from VTEC 10002; physical exam, medications, blood vessels catheterization, venipuncture; fluid therapy, wound care, patient rehabilitation and physical therapy, first aid, bandaging and CPR. Lecture 2 hours, laboratory 3 hours weekly. Prerequisite: Minimum grade of C (2.000) in all prerequisites; BSCI 10100 and CHEM 10050 and HED 14020 and VTEC 10002 and VTEC 10204; and pre- or corequisite VTEC 10001.

3.000 Credit hours
2.000 Lecture hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture, Combined Lecture and Lab

Regional College Department

VTEC 10206 - PHARMACOLOGY

Regulations controlling the use of drugs and biologicals, classifications and mechanisms of action of pharmaceuticals, dosage calculations, labeling, packaging and dispensing of veterinary products. Lecture 2 hours weekly. Prerequisite: BSCI 10100 and BSCI 10110 and CHEM 10052 and CHEM 10053 and HED 14020 and VTEC 10001 and VTEC 10002 and VTEC 10204; pre- or corequisite: VTEC 10205.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

VTEC 20008 - CLINICAL LABORATORY II

Continuation and application of laboratory skills from Clinical Laboratory I; hematology, serology, cytology and other laboratory skills. Lecture 2 hours, laboratory 3 hours weekly. Prerequisite: minimum grade of C (2.000) in all prerequisites; BSCI 10100 and CHEM 10050 and VTEC 10002 and VTEC 10204; pre- or corequisites: VTEC 10001 and VTEC 10205.

3.000 Credit hours
2.000 Lecture hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture, Combined Lecture and Lab

Regional College Department

VTEC 20009 - VETERINARY NURSING III

Continuing nursing skills/techniques emphasizing large animal species: restraint, venipuncture, behavior, breeds, feedstuffs, food safety, meds, preventive care, surgical procedures, lameness. Lecture 2 hours,
laboratory 3 hours weekly. Prerequisite: BSCI 10110 and CHEM 10052 and CHEM 10053 and VTEC 10001 and VTEC 10002 and VTEC 10204 and VTEC 10205 and VTEC 20008; and pre- or corequisite: VTEC 10206.

3.000 Credit hours
2.000 Lecture hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture, Combined Lecture and Lab

Regional College Department

**VTEC 20010 - IMAGING TECHNIQUES**

Principles and application of the production of X-rays, processing, radiation safety, storage, patient positioning and other imaging techniques. Lecture 2 hours, laboratory 3 hours weekly. Prerequisite: BSCI 10100 and BSCI 10110 and CHEM 10052 and CHEM 10053 and VTEC 10001 and VTEC 10002 and VTEC 10204 and VTEC 10205 and VTEC 20008; and pre- or corequisite: VTEC 10206.

3.000 Credit hours
2.000 Lecture hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture, Combined Lecture and Lab

Regional College Department

**VTEC 20212 - SURGERY AND ANESTHESIA**

Principles and application of the use of anesthetics, patient monitoring, dental prophylaxis, presurgery preparation, post-surgical patient care, sterilization, surgical preparation and assisting and equipment maintenance. Lecture 2 hours, laboratory 3 hours weekly. Prerequisite: minimum grade of C (2.000) in all prerequisites; BSCI 10100 and BSCI 10110 and CHEM 10052 and CHEM 10053 and VTEC 10001 and VTEC 10002 and VTEC 10204 and VTEC 10205 and VTEC 20008; and pre- or corequisite: VTEC 10206.

3.000 Credit hours
2.000 Lecture hours
3.000 Lab hours

Levels: Undergraduate
Schedule Types: Laboratory, Lecture, Combined Lecture and Lab

Regional College Department

**VTEC 20213 - NUTRITION AND DISEASE**

Principles of the disease process, disease control and prevention of common diseases of domestic animals. Nutrition principles especially for clinical diseases will be covered. Lecture 2 hours weekly. Prerequisite: BSCI 20021 and VTEC 20009 and VTEC 20010 and VTEC 20212.

2.000 Credit hours
2.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Regional College Department

**VTEC 20214 - VETERINARY NURSING AND HOSPITAL PROCEDURES**
Nursing procedures for laboratory and animal exotic procedures; procedures by a veterinary technician in a hospital environment including office and computer application. Lecture 1 hour, laboratory 6 hours weekly including computer applications. Prerequisite: BSCI 20021 and VTEC 20009 and VTEC 20010 and VTEC 20212.

Levels: Undergraduate
Schedule Types: Laboratory, Lecture, Combined Lecture and Lab

Regional College Department

**VTEC 20392 - PRACTICUM IN VETERINARY HOSPITAL**

(Repeatable for credit) Students gain practical experience in veterinary clinic or approved clinical site to focus on mastery of all clinical skills needed for this career. Prerequisite: BSCI 20021 and VTEC 20009 and VTEC 20010 and VTEC 20212. Corequisites: VTEC 20213 and VTEC 20214.

5.000 Credit hours
5.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Regional College Department

Course Attributes:
Experiential Learning Requirem

**WMST 20095 - SPECIAL TOPICS IN WOMEN'S STUDIES**

(Repeatable for credit when topic varies) Study of particular contemporary figures, events and social practices or phenomenon as they relate to women's studies. This includes women and war, women and work, and women and interpersonal violence. Prerequisite: None.

1.000 TO 5.000 Credit hours
1.000 TO 5.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Center Compar/Integrative Prog Department

**WMST 20193 - VARIABLE TITLE WORKSHOP IN WOMEN'S STUDIES**

(Repeatable for credit) Workshop focused on a specific topic within women's studies. Prerequisite: None.

1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Undergraduate
Schedule Types: Workshop

Center Compar/Integrative Prog Department

**WMST 30000 - COLLOQUIUM IN WOMEN'S STUDIES**

A critical investigation of the position and category of women from a cross-cultural, historical and interdisciplinary perspective with special emphasis on major themes and issues in women's studies. Issues including race, ethnicity and sexuality will be addressed. Prerequisite: Junior standing.
WMST 30001 - FEMINIST THEORY

An examination of important historical and contemporary works of feminist theory, and their influence on the development of feminist thought and practice in the U.S. and worldwide. Issues including race, ethnicity and sexuality will be addressed. Prerequisite: junior standing; and ENG 21002 or ENG 33013 or ENG 33014 or COMM 35912 or WMST 20095 or WMST 30000 or WMST 30095 or WMST 30100 or PHIL 31040 or CRIM 37411 or PAS 33110 or PAS 37100 or PAS 37200 or HIST 31075 or GER 41332 or POL 40470 or SOC 42315.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Center Compar/Integrative Prog Department

Course Attributes:
Diversity Course-Domestic

WMST 30095 - SPECIAL TOPICS IN WOMEN'S STUDIES II

(Repeatable for credit when topic varies) Study of selected topics in women's studies organized around historical and theoretical issues and movements. This includes contemporary feminist theory, suffragist movement and third wave feminism. Prerequisite: None.

1.000 TO 5.000 Credit hours
1.000 TO 5.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Center Compar/Integrative Prog Department

WMST 30100 - HISTORY OF WOMEN IN THE UNITED STATES

(Cross-listed with HIST 31075) An exploration of the political, economic, social, intellectual, and cultural forces that have shaped women's lives, women's thought, perceptions of womanhood, and feminism for 1607 to the present in what is now the United States. Prerequisite: none.

3.000 Credit hours
3.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Center Compar/Integrative Prog Department

WMST 30196 - WOMEN STUDIES INDIVIDUAL INVESTIGATION

(Repeatable for credit) The design and completion of a scholarly research project related to women's studies, and the presentation of findings at the end of the term. Typically a capstone course for those completing the women's studies minor. Arrangements must be made in the semester prior to registration. Prerequisite: Special
approval of faculty member and department.
1.000 TO 3.000 Credit hours
3.000 TO 9.000 Other hours

Levels: Undergraduate
Schedule Types: Individual Investigation

Center Compar/Integrative Prog Department

**WMST 40095 - SPECIAL TOPICS IN WOMEN'S STUDIES III**

(Repeatable for credit when topic varies). Informed study of critical issues in women's studies from an international or global perspective. Prerequisite: WMST 30000 or WMST 30001.
1.000 TO 5.000 Credit hours
1.000 TO 5.000 Lecture hours

Levels: Undergraduate
Schedule Types: Lecture

Center Compar/Integrative Prog Department

**WMST 40193 - VARIABLE TITLE WORKSHOP IN WOMEN'S STUDIES**

(Repeatable for credit) Workshop focused on a specific topic within women's studies. Prerequisite: None.
1.000 TO 6.000 Credit hours
1.000 TO 6.000 Other hours

Levels: Undergraduate
Schedule Types: Workshop

Center Compar/Integrative Prog Department

**WMST 40992 - PRACTICUM IN WOMEN'S STUDIES**

(Repeatable for credit) An assignment at a private, public or nonprofit organization that centers on women's issues such as education, health and policy making. Arrangements must be made in the semester prior to registration. Prerequisite: Permission.
3.000 Credit hours
9.000 Other hours

Levels: Undergraduate
Schedule Types: Practicum or Internship

Center Compar/Integrative Prog Department

Course Attributes:
Experiential Learning Requirem