

Kent State University

# Course Descriptions

Spring 2013 Undergraduate and Graduate Courses

Office of Curriculum Services  
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## Accounting (ACCT)

### 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 Type(s): Lecture  
Department: Accounting  
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 Type(s): Lecture  
Department: Accounting  
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 11001; not open to accounting (ACCT) majors.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Accounting

### ACCT 33001 CORPORATE ACCOUNTING I

The review of the accounting cycle; financial statement preparation, accounting for sales, receivables, inventory, current liabilities and fixed assets. Written communication and professional accounting research skills are emphasized. Prerequisite: Cumulative 2.500 GPA; and ACCT 23021 or ACTT 11001; and accounting (ACCT) major or minor.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Accounting

### ACCT 33004 INTRODUCTION TO ACCOUNTING SYSTEMS

Provides an overview of accounting information systems with emphasis on systems design and internal controls. Interpersonal skills and computer applications are emphasized. Prerequisite: Cumulative 2.500 GPA; and ACCT 23021 or ACTT 11001; accounting (ACCT) major or minor.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Accounting

### 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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Accounting

### 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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Accounting

### 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 Type(s): Lecture  
Department: Accounting

### ACCT 33063 COST CONTROL AND ANALYSIS FOR MANAGEMENT

Cost accounting concepts and procedures; analysis of revenue cost and income variances. Open only to non accounting 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 Type(s): Lecture  
Department: Accounting

### 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.  
3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Accounting  
Course Attributes: Writing Intensive Course

### ACCT 43013 ADVANCED MANAGEMENT ACCOUNTING

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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Accounting

### ACCT 43014 ADVANCED ACCOUNTING SYSTEMS

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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Accounting

### ACCT 43020 CORPORATE ACCOUNTING III

Business combinations, consolidated financial statements specialized disclosures foreign currency impacts intercorporate investments. Professional accounting research and interpersonal 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 and ACCT 43031.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Accounting

### 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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Accounting



**ACCT 43033 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. 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 Type(s): Lecture  
Department: Accounting

**ACCT 43034 NONPROFIT ACCOUNTING AND 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 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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Accounting

**ACCT 43092 ACCOUNTING INTERNSHIP**

Study of activities related to concurrent on-the-job experience with cooperating industrial and public accounting firms. Professional accounting research and written communication skills are emphasized. Prerequisite: Junior standing and accounting (ACCT) major and special approval.  
3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Practicum  
Department: Accounting  
Course Attributes: Experiential Learning Requirement

**ACCT 43095 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: 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 Type(s): Lecture  
Department: Accounting

**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 Type(s): Individual Investigation  
Department: Accounting

**ACCT 53013 ADVANCED MANAGEMENT ACCOUNTING**

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 Type(s): Lecture  
Department: Accounting

**ACCT 53014 ADVANCED ACCOUNTING SYSTEMS**

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 Type(s): Lecture  
Department: Accounting

**ACCT 53020 CORPORATE ACCOUNTING III**

Business combinations, consolidated financial statement; specialized disclosures; foreign currency impacts; inter-corporate investments. Professional accounting research and interpersonal skills are emphasized. Prerequisite: ACCT 33012 and ACCT 43031; and graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Accounting

**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 Type(s): Lecture  
Department: Accounting

**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 Type(s): Lecture  
Department: Accounting

**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 Type(s): Lecture  
Department: Accounting

**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 Type(s): Lecture  
Department: Accounting

**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 Type(s): Lecture  
Department: Accounting

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

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 Type(s): Lecture  
Department: Accounting

**ACCT 63030 INTERNATIONAL ACCOUNTING**

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 Type(s): Lecture  
Department: Accounting

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

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 Type(s): Lecture  
Department: Accounting

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

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 Type(s): Lecture  
Department: Accounting

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

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 Type(s): Lecture  
Department: Accounting

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

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 Type(s): Lecture  
Department: Accounting

### **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 Type(s): Lecture  
Department: Accounting

### **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  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Accounting

### **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  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Accounting

### **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; ACCT 33010 and 33012; and graduate standing.  
3.000 Credit hours  
3.000 Other hours  
Levels: Graduate  
Schedule Type(s): Practicum  
Department: Accounting

### **ACCT 63098 RESEARCH IN ACCOUNTING**

(Repeatable for credit) 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 Type(s): Research  
Department: Accounting

### **ACCT 73022 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 communications emphasized. Prerequisite: special approval and doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Accounting

### **ACCT 73024 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: ACCT 43010; and ACCT 43014 or 53014; and doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Accounting

### **ACCT 73025 ANALYSIS AND VALUATION OF BUSINESS USING FINANCIAL STATEMENTS**

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 Type(s): Lecture  
Department: Accounting

### **ACCT 73030 INTERNATIONAL ACCOUNTING**

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 Type(s): Lecture  
Department: Accounting

### **ACCT 73031 ADVANCED AUDITING THEORY AND PRACTICE**

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 Type(s): Lecture  
Department: Accounting

### **ACCT 73032 ACCOUNTING THEORY**

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 Type(s): Lecture  
Department: Accounting

### **ACCT 73037 FINANCIAL ACCOUNTING FOR MANAGERIAL ACTION**

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 Type(s): Lecture  
Department: Accounting

### **ACCT 73038 ACCOUNTING FOR MANAGERIAL ACTION AND EVALUATION**

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 Type(s): Lecture  
Department: Accounting

### **ACCT 73098 RESEARCH IN ACCOUNTING**

(Repeatable for credit) 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 Type(s): Research  
Department: Accounting

### **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 Type(s): Lecture  
Department: Accounting

### **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 Type(s): Lecture  
Department: Accounting

### **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 Type(s): Lecture  
Department: Accounting

### **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 Type(s): Lecture  
Department: Accounting

### **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 Type(s): Seminar  
Department: Accounting

## ***Accounting Technology (ACTT)***

### **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 Type(s): Lecture  
Department: Regional

### **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 Type(s): Lecture  
Department: Regional

### **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 Type(s): Lecture  
Department: Regional

### **ACTT 20012 ACCOUNTING SOFTWARE APPLICATIONS**

A lecture/computer laboratory course using accounting, spreadsheet and word processing software. Prerequisite: ACTT 11001 and COMT 11000 or permission of full time ACTT faculty.

3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Regional

### **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 Type(s): Lecture  
Department: Regional

### **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 Type(s): Lecture  
Department: Regional

### **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  
Schedule Type(s): Lecture  
Department: Regional

**AC TT 21063 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: AC TT 11001.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Regional

**AC TT 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: AC TT 21000 and permission.

2.000 to 3.000 Credit hours

2.000 to 3.000 Other hours

Levels: Undergraduate

Schedule Type(s): Practicum

Department: Regional

Course Attributes: Experiential Learning Requirement

**AC TT 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 Type(s): Lecture

Department: Regional

**AC TT 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 AC TT courses and permission.

1.000 to 3.000 Credit hours

1.000 to 3.000 Other hours

Levels: Undergraduate

Schedule Type(s): Individual Investigation

Department: Regional

**AC TT 36110 PRINCIPLES OF FRAUD EXAMINATION**

Study of occupational fraud and abuse; its' detection and prevention within the realm of an enterprise. Prerequisite: AC TT 21000.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Regional

**AC TT 36120 ETHICAL ISSUES RELATING TO FRAUD EXAMINATION**

Understanding ethical dilemmas, issues and professionalism relating to fraud examination. Prerequisite: TECH 36110.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Regional

**AC TT 46170 CASE STUDIES IN FRAUD EXAMINATION**

Application of principles of fraud examination, detection and evaluation of recommended action plans to specific fraud cases. Prerequisite: AC TT 36110 and COM T 36318.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Regional

**AC TT 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: AC TT 46170 and special approval.

3.000 Credit hours

3.000 Other hours

Levels: Undergraduate

Schedule Type(s): Seminar

Department: Regional

## *Adolescent/Adult Education (ADED)*

**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 Type(s): Field Experience, Lecture

Department: Teaching, Learning and Curriculum Studies

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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**ADED 32275 SOCIAL STUDIES EDUCATION AND THE SOCIAL SCIENCES**

First of two special methods courses on teaching social studies at the secondary level. Focuses on achieving the purpose of social studies through attention to instruction, planning, curriculum and assessment. Prerequisite: ADED 32142 and admission to advanced study.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**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

Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**ADED 42275 TEACHING SOCIAL STUDIES IN SECONDARY SCHOOLS**

An advanced special methods course designed to prepare future social studies teachers for student teaching and their entry year into the profession.

Addresses a range of topics and issues in an in-depth manner through project-oriented learning activities. Prerequisite: ADED 32275 and

admission to advanced study.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**ADED 42292 FIELD WORK PRACTICUM**

(Repeatable for credit) 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 43315; and advanced study. Corequisite: ADED 42268 or 42275 or 42277 or 42278. 3.000 Credit hours  
21.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Practicum  
Department: Teaching, Learning and Curriculum Studies  
Course Attributes: Experiential Learning Requirement

**ADED 42357 SECONDARY STUDENT TEACHING**

Provides a 12-week student-teaching experience. See "student teaching" section of the undergraduate 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: Admission to advanced study. 9.000 Credit hours  
9.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Practicum  
Department: Teaching, Learning and Curriculum Studies  
Course Attributes: Experiential Learning Requirement

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

Explores the pedagogy of canonical literature, literary theory and approaches to teaching texts in the secondary classroom. Prerequisite: advanced standing. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**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 Type(s): Combined Lecture and Lab

Department: Teaching, Learning and Curriculum Studies

**ADED 43335 TEACHING LANGUAGE AND COMPOSITION**

Explores linguistic and rhetorical perspectives on the teaching of composition in secondary schools. Prerequisite: Advanced standing; and ADED 32142 and ADED 43315 and ADED 43325 and MCED 40007. Corequisite: ADED 42292. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**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 42358. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**ADED 53315 TEACHING LITERATURE IN THE SECONDARY SCHOOLS**

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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**ADED 53335 TEACHING LANGUAGE AND COMPOSITION**

Explores linguistic and rhetorical perspectives on the teaching of composition in secondary schools. Prerequisite: graduate standing. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**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. Pre- or corequisite: ADED 62145 and graduate standing. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**ADED 62191 SEMINAR IN SECONDARY EDUCATION**

(Repeatable for credit) 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 Type(s): Seminar  
Department: Teaching, Learning and Curriculum Studies

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

(Repeatable for 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. Prerequisites: graduate standing and special approval. 1.000 to 10.000 Credit hours  
1.000 to 10.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture, Practicum  
Department: Teaching, Learning and Curriculum Studies



**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 Type(s): Research

Department: Teaching, Learning and Curriculum Studies

**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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**ADED 67232 SECONDARY SCHOOL SOCIAL STUDIES**

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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**Architecture/Environment  
al Design (AED)****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 Type(s): Lecture

Department: Architecture

**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 Type(s): Lecture

Department: Architecture

**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 Type(s): Studio

Department: Architecture

**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 10101; and architecture (ARCH), interior design (ID) or architectural studies (ARCS) major.

3.000 Credit hours

6.000 Other hours

Levels: Undergraduate

Schedule Type(s): Studio

Department: Architecture

**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 Type(s): Lecture

Department: Architecture

**Aeronautics (AERN)****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 Type(s): Lecture

Department: Applied Engineering, Sustainability and Technology

**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 Type(s): Lecture

Department: Applied Engineering, Sustainability and Technology

**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 Type(s): Lecture

Department: Applied Engineering, Sustainability and Technology

**AERN 15741 PRIVATE PILOT FLIGHT**

Flight course designed to fulfill FAA

Requirements for private pilot certificate.

Prerequisite: AERN 15000 and 2.500 GPA.

Corequisite: AERN 15740.

3.000 Credit hours

9.000 Other hours

Levels: Undergraduate

Schedule Type(s): Private Lesson

Department: Applied Engineering, Sustainability and Technology

**AERN 15742 PRIVATE PILOT HELICOPTER FLIGHT**

Flight course designed to fulfill Federal Aviation Administration (FAA) Requirements for the private pilot helicopter certificate. Prerequisites: 2.000 cumulative GPA and TECH 15740.

Corequisite: TECH 35101.

3.000 Credit hours

5.500 Other hours

Levels: Undergraduate

Schedule Type(s): Combined Lecture and Lab

Department: Applied Engineering, Sustainability and Technology

**AERN 15743 PRIVATE PILOT HELICOPTER FLIGHT ADD-ON**

Flight course designed to fulfill Federal Aviation Administration (FAA) Requirements for the private pilot helicopter certificate. Prerequisites: 2.000 cumulative GPA and TECH 15740 and 15741. Corequisite: TECH 35101.

2.000 Credit hours

4.860 Other hours

Levels: Undergraduate

Schedule Type(s): Combined Lecture and Lab

Department: Applied Engineering, Sustainability and Technology

**AERN 25250 ELEMENTS OF AVIATION WEATHER**

Aviation weather provides an up-to-date and expanded course for professional pilots and others whose interest in weather is primarily in its application to flight. Prerequisite: AERN 15000.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Applied Engineering, Sustainability and Technology

**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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Applied Engineering, Sustainability and Technology

#### **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  
Levels: Undergraduate  
Schedule Type(s): Laboratory  
Department: Applied Engineering, Sustainability and Technology

#### **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. Prerequisites: AERN 15740 and 15741.  
2.000 Credit hours  
2.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Private Lesson  
Department: Applied Engineering, Sustainability and Technology

#### **AERN 35001 AIRCRAFT FABRICATION**

The study and laboratory practice of government approved procedures used in the fabrication, repair and testing of certificated aircraft. Prerequisites: AERN 15000 and PHY 13011.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Applied Engineering, Sustainability and Technology

#### **AERN 35020 AIRCRAFT PROPULSION SYSTEMS**

A study of basic reciprocating and gas turbine engine theory. Course investigates power plant construction, component function, including propeller and fuel systems, ancillary systems that support aircraft propulsive systems and performance characteristics. Prerequisite: AERN 15000 and PHY 13011.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Applied Engineering, Sustainability and Technology

#### **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: AERN 15000.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Applied Engineering, Sustainability and Technology

#### **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 23101; or PHY 13011 and 13012; and AERN 15000.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Applied Engineering, Sustainability and Technology

#### **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 Type(s): Lecture  
Department: Applied Engineering, Sustainability and Technology

#### **AERN 35101 HELICOPTER THEORY AND OPERATION**

Study of helicopter flight and operations that includes rotor system dynamics, control functions, major components, operation and performance. Prerequisites: AERN 15000 and 25250.  
3.000 Credit hours  
2.000 Lecture hours  
2.000 Lab hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Applied Engineering, Sustainability and Technology

#### **AERN 35150 AIRCRAFT STRUCTURES**

Aircraft structural design investigations dealing with theory and applications in aviation. Prerequisites: PHY 13011 and 13012; and AERN 15000.  
3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Applied Engineering, Sustainability and Technology

#### **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 operations. Prerequisite: AERN 15000 and 15740 and 25250.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate

Schedule Type(s): Lecture  
Department: Applied Engineering, Sustainability and Technology

#### **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: AERN 15000.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Applied Engineering, Sustainability and Technology

#### **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 and 15740 and 25350 and 25351.  
2.000 Credit hours  
2.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Applied Engineering, Sustainability and Technology

#### **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 25350 and 35342.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Applied Engineering, Sustainability and Technology

#### **AERN 35344 EN ROUTE I LABORATORY**

Application of en route operating principles explored in AERN 35343. Prerequisite: none.  
1.000 Credit hours  
2.000 Lab hours  
Levels: Undergraduate  
Schedule Type(s): Laboratory  
Department: Applied Engineering, Sustainability and Technology

#### **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 Type(s): Laboratory  
Department: Applied Engineering, Sustainability and Technology

#### **AERN 35644 INSTRUMENT FLIGHT THEORY**

Comprehensive instruction presenting theoretical and practical aspects of instrument and weather



flying. Prerequisites: AERN 15740 and TECH 25250. Corequisite: AERN 35645.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Applied Engineering, Sustainability and Technology

#### **AERN 35645 INSTRUMENT PILOT FLIGHT**

Comprehensive flight course for the professional pilot candidate to meet the Requirements of the FAA instrument rating. Prerequisites: AERN 25250 and 25743. Corequisite: AERN 35644.  
2.000 Credit hours  
2.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Applied Engineering, Sustainability and Technology

#### **AERN 35646 INSTRUMENT HELICOPTER FLIGHT**

Flight course designed to fulfill FAA Requirements for the Instrument Helicopter Rating. Prerequisite: AERN 15742 or 15743; special approval; and minimum cumulative 2.000 GPA. Corequisite: AERN 35644.  
2.000 Credit hours  
4.860 Other hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Applied Engineering, Sustainability and Technology

#### **AERN 35647 COMMERCIAL PILOT FLIGHT II**

Comprehensive flight course for the professional pilot candidate with emphasis on commercial flight maneuvers and instrument flight review. Prerequisites: AERN 35644 and 35645.  
2.000 Credit hours  
2.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Applied Engineering, Sustainability and Technology

#### **AERN 35648 INSTRUMENT HELICOPTER FLIGHT ADD-ON**

Flight course designed to fulfill FAA Requirements for the Instrument Helicopter Rating. Prerequisite: AERN 35645 and minimum cumulative 2.000 GPA. Corequisite: AERN 35101.  
1.000 Credit hours  
2.430 Other hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Applied Engineering, Sustainability and Technology

#### **AERN 35746 COMMERCIAL PILOT THEORY**

Comprehensive instruction covering all areas necessary to exercise the privileges of a commercial pilot. Prerequisites: AERN 35644 and 35645.  
2.000 Credit hours  
2.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture

Department: Applied Engineering, Sustainability and Technology

#### **AERN 35747 COMMERCIAL PILOT FLIGHT III**

Comprehensive flight course for the professional pilot candidate to meet the Requirements of the FAA commercial pilot certificate. Major emphasis on complex aircraft operations. Prerequisites: AERN 35644 and 35645. Pre/corequisite: AERN 35647. Corequisite: AERN 35746.  
2.000 Credit hours  
2.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Private Lesson  
Department: Applied Engineering, Sustainability and Technology

#### **AERN 35748 COMMERCIAL PILOT HELICOPTER FLIGHT ADD-ON**

Flight course designed to fulfill Federal Aviation Administration (FAA) Requirements for the commercial pilot helicopter certificate. Prerequisites: 2.000 cumulative GPA; and AERN 35747; and AERN 15742 or 15743. Corequisite: AERN 35101.  
2.000 Credit hours  
4.860 Other hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Applied Engineering, Sustainability and Technology

#### **AERN 35749 COMMERCIAL PILOT HELICOPTER FLIGHT**

Flight course designed to fulfill FAA Requirements for the Commercial Pilot Helicopter certificate. Prerequisite: AERN 15742 or 15743; and minimum cumulative 2.000 GPA. Corequisite: AERN 35746.  
3.000 Credit hours  
5.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Applied Engineering, Sustainability and Technology

#### **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 Type(s): Lecture  
Department: Applied Engineering, Sustainability and Technology  
Course Attributes: Writing Intensive Course

#### **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 2.000 Credit hours  
1.000 to 2.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Practicum

Department: Applied Engineering, Sustainability and Technology  
Course Attributes: Experiential Learning Requirement

#### **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 Type(s): Individual Investigation  
Department: Applied Engineering, Sustainability and Technology

#### **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 Type(s): Senior Project/Honors Thesis  
Department: Applied Engineering, Sustainability and Technology  
Course Attributes: Experiential Learning Requirement

#### **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 and airline with respect to financial and economic variables. Prerequisites: AERN 35340 and 35341; and FIN 36053.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Applied Engineering, Sustainability and Technology

#### **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 Type(s): Lecture  
Department: Applied Engineering, Sustainability and Technology

#### **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: AERN 15000.





3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Applied Engineering, Sustainability and Technology

#### **AERN 45135 AVIATION SAFETY THEORY**

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 Type(s): Lecture  
Department: Applied Engineering, Sustainability and Technology

#### **AERN 45150 APPLIED FLIGHT DYNAMICS I**

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: MATH 11012 or MATH 12002; and PHY 13011.  
3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Applied Engineering, Sustainability and Technology

#### **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 Other hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Applied Engineering, Sustainability and Technology

#### **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 35340 and AERN 35341 and AERN 45100; senior standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Applied Engineering, Sustainability and Technology

#### **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: AERN 15000.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Applied Engineering, Sustainability and Technology

#### **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 Type(s): Seminar  
Department: Applied Engineering, Sustainability and Technology

#### **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 "C" or higher must be achieved in order to graduate and receive a CIT endorsement. Prerequisites: AERN 45320 and 45321 AND 45343 AND 45344.  
3.000 Credit hours  
2.000 Lecture hours  
2.000 Lab hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Applied Engineering, Sustainability and Technology

#### **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 Type(s): Lecture  
Department: Applied Engineering, Sustainability and Technology

#### **AERN 45321 TERMINAL OPERATIONS II LABORATORY**

Application of terminal air traffic control operating principles explored in AERN 45320 Terminal Operations II. Prerequisite: AERN 35342 and AERN 35345. Corequisite: AERN 45320.

1.000 Credit hours  
2.000 Lab hours  
Levels: Undergraduate  
Schedule Type(s): Laboratory

Department: Applied Engineering, Sustainability and Technology

#### **AERN 45340 AIRCRAFT MAINTENANCE**

Fundamentals of aircraft maintenance and resolving maintenance problems on the flight line. Prerequisite: Aerospace (AERO) major and senior standing and special approval.  
3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Applied Engineering, Sustainability and Technology

#### **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 35343.  
2.000 Credit hours  
2.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Applied Engineering, Sustainability and Technology

#### **AERN 45344 EN ROUTE II LABORATORY**

Application of en route air traffic control operating principles explored in AERN 45343 En Route II. Prerequisite: AERN 35343. Corequisite: AERN 45343.  
1.000 Credit hours  
2.000 Lab hours  
Levels: Undergraduate  
Schedule Type(s): Laboratory  
Department: Applied Engineering, Sustainability and Technology

#### **AERN 45349 SYSTEMS MAINTENANCE AND RELIABILITY**

Combines theories of systems and operations with practical experience to meet FAA standards for an airframe and power plant license (300 hours shop experience). Prerequisite: TECH 45340.  
5.000 Credit hours  
5.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Applied Engineering, Sustainability and Technology

#### **AERN 45350 AVIONICS**

A study of aviation electronic systems in flight vehicles that pertain to communication, navigation and air traffic control systems. Prerequisites: PHY 13011 and 13012; and AERN 15000; and TECH 21021.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Applied Engineering, Sustainability and Technology

#### **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 Type(s): Lecture  
Department: Applied Engineering, Sustainability and Technology

**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. Prerequisites: AERN 35746 and 35747. Corequisite: AERN 45648.  
2.000 Credit hours  
9.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Private Lesson  
Department: Applied Engineering, Sustainability and Technology

**AERN 45650 CERTIFIED FLIGHT INSTRUCTOR HELICOPTER FLIGHT**

Flight course designed to fulfill FAA Requirements for the Flight Instructor Helicopter certificate. Prerequisites: 2.000 cumulative GPA; and AERN 35746 and 35749. Corequisite: AERN 45648.  
2.000 Credit hours  
2.220 Other hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Applied Engineering, Sustainability and Technology

**AERN 45651 FLIGHT INSTRUCTOR-INSTRUMENTS**

Flight course with emphasis on flight instructing techniques involved with instrument flight and ATC procedures. Student evaluations included. Prerequisites: AERN 45648 and 45649.  
2.000 Credit hours  
2.000 Lecture hours  
9.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Lecture, Private Lesson  
Department: Applied Engineering, Sustainability and Technology

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

Flight course designed to fulfill FAA Requirements for the Flight Instructor Instrument Helicopter certificate. Prerequisites: 2.000 cumulative GPA; and AERN 35646 or 35648; and AERN 45650 or 45659.  
1.000 Credit hours  
1.100 Other hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Applied Engineering, Sustainability and Technology

**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. Prerequisite: AERN 35747.  
1.000 Credit hours  
1.000 Lecture hours

9.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Lecture, Private Lesson  
Department: Applied Engineering, Sustainability and Technology

**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: 2.000 cumulative GPA; and AERN 45649.  
1.000 Credit hours  
1.100 Other hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Applied Engineering, Sustainability and Technology

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

Ground flight instruction for proficiency and required hours in preparation for multi-engine instruction. Prerequisite: AERN 45653.  
1.000 Credit hours  
9.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Private Lesson  
Department: Applied Engineering, Sustainability and Technology

**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: 2.000 cumulative GPA; and AERN 45651.  
1.000 Credit hours  
1.100 Other hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Applied Engineering, Sustainability and Technology

**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. Prerequisite: AERN 45649 and TECH 45655.  
1.000 Credit hours  
9.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Private Lesson  
Department: Applied Engineering, Sustainability and Technology

**AERN 45700 AIRCRAFT DESIGN**

Preliminary design of a fixed-wing aircraft for a specific mission: weight estimates; wing plan form, 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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Applied Engineering, Sustainability and Technology

**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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Applied Engineering, Sustainability and Technology

**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  
Levels: Undergraduate  
Schedule Type(s): Private Lesson  
Department: Applied Engineering, Sustainability and Technology

**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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Applied Engineering, Sustainability and Technology

**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  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Applied Engineering, Sustainability and Technology

**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 35040 and 45030.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Applied Engineering, Sustainability and Technology



### **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 35040 and 45030 and 45350. 3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Applied Engineering, Sustainability and Technology

### **AERN 45791 AVIATION SECURITY AND POLICY SEMINAR**

(Repeatable for credit) 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 35340 and 35341 and 35342 and 45250. 3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Seminar  
Department: Applied Engineering, Sustainability and Technology  
Course Attributes: Writing Intensive Course

### **AERN 55150 APPLIED FLIGHT DYNAMICS I**

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 Type(s): Combined Lecture and Lab  
Department: Applied Engineering, Sustainability and Technology

### **AERN 55350 AVIONICS**

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 Type(s): Combined Lecture and Lab  
Department: Applied Engineering, Sustainability and Technology

### **AERN 55700 AIRCRAFT DESIGN**

Preliminary design of a fixed-wing aircraft for a specific mission; weight estimates wing plan form 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 Type(s): Lecture

Department: Applied Engineering, Sustainability and Technology

### **AERN 55791 AVIATION SECURITY AND POLICY SEMINAR**

(Repeatable for credit) 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 Type(s): Seminar  
Department: Applied Engineering, Sustainability and Technology

### **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 Type(s): Seminar  
Department: Applied Engineering, Sustainability and Technology

### **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. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Applied Engineering, Sustainability and Technology

### **AERN 65496 AEROSPACE TECHNOLOGY**

(Repeatable for credit) Individual investigation of selected topic from the field of aerospace. Prerequisite: Special approval and graduate standing. 1.000 to 4.000 Credit hours  
1.000 to 4.000 Other hours  
Levels: Graduate  
Schedule Type(s): Individual Investigation  
Department: Applied Engineering, Sustainability and Technology

## ***Aviation Maintenance Technology (AMRT)***

### **AMRT 10010 FAA REGULATIONS AND DOCUMENTATION**

FAA history, inspections, documentation and aircraft drawings. Comprehensive course for the AMRT candidate to meet the Requirements for FAA certification. Corequisite: AMRT10040. 2.000 Credit hours  
2.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

### **AMRT 10020 AIRCRAFT TOOLS AND TECHNIQUES**

Welding for the aviation maintenance technician and understanding of fluid lines and fittings. Comprehensive course for the AMRT candidate to meet the Requirements for FAA certification. Corequisite: AMRT 10010. 2.000 Credit hours  
2.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Regional

## ***American Studies (AMST)***

### **AMST 10001 INTRODUCTION TO AMERICAN STUDIES**

Exposure to culture theory, analysis of major patterns and periodization in American culture. Required for American studies majors; also for elective credit. Prerequisite: None. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Arts and Sciences

### **AMST 40095 SPECIAL TOPICS**

(Repeatable for credit) Selected subjects and/or themes in American culture. Prerequisite: Junior standing and permission. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Arts and Sciences

### **AMST 40096 INDIVIDUAL INVESTIGATION**

(Repeatable for credit) Individual research project. Prerequisite: Senior standing and permission. 1.000 to 3.000 Credit hours  
1.000 to 3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Individual Investigation  
Department: Arts and Sciences

## ***Anthropology (ANTH)***

### **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 Type(s): Lecture  
Department: Anthropology  
Course Attributes: Diversity Course-Global, Kent Core-Social Sciences, IER-Social Sciences, TAG Social/Behavior Sciences, Transfer 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 Type(s): Lecture

Department: Anthropology

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

Schedule Type(s): Lecture

Department: Anthropology

Course Attributes: Kent Core-Basic Sciences, LER-Basic Sciences, TAG Social/Behavior Sciences, Transfer Module-Natural Sciences

### **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 or corequisite ANTH 18630.

1.000 Credit hours

1.000 Lab hours

Levels: Undergraduate

Schedule Type(s): Laboratory

Department: Anthropology

Course Attributes: Kent Core-Basic Sciences, Kent Core-Basic Sciences Lab, LER-Basic Sciences, Transfer Module-Natural Sciences

### **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 Type(s): Individual Investigation

Department: Anthropology

### **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 Type(s): Lecture

Department: Anthropology

Course Attributes: Diversity Course-Global

### **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

Schedule Type(s): Lecture

Department: Anthropology

### **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 Type(s): Field Experience, Lecture

Department: Anthropology

Course Attributes: Experiential Learning Requirement

### **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 Type(s): Lecture

Department: Anthropology

Course Attributes: Writing Intensive Course

### **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 Type(s): Lecture

Department: Anthropology

### **ANTH 38630 PRINCIPLES OF BIOLOGICAL ANTHROPOLOGY**

Review of fundamental subfields of modern biological anthropology, including human population, genetics, primate paleontology, human evolution and modern human taxonomy and variation. Prerequisite: None.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Anthropology

### **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 Type(s): Lecture

Department: Anthropology

### **ANTH 48093 VARIABLE TITLE WORKSHOP IN ANTHROPOLOGY**

(Repeatable for credit) 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 Type(s): Workshop

Department: Anthropology

### **ANTH 48095 SPECIAL TOPICS IN ANTHROPOLOGY**

(Repeatable for credit) 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 Type(s): Lecture

Department: Anthropology

### **ANTH 48212 KINSHIP AND SOCIAL ORGANIZATION**

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 Type(s): Lecture

Department: Anthropology

Course Attributes: Diversity Course-Global

### **ANTH 48214 POLITICS OF CULTURE**

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 Type(s): Lecture

Department: Anthropology

Course Attributes: Writing Intensive Course

### **ANTH 48220 CULTURAL ECOLOGY**

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 Type(s): Lecture

Department: Anthropology

### **ANTH 48225 ARCHAEOLOGY OF DEATH**

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 Type(s): Lecture

Department: Anthropology





### **ANTH 48230 SOCIO-CULTURAL CHANGE**

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 Type(s): Lecture

Department: Anthropology

### **ANTH 48250 CULTURE AND CURING**

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 Type(s): Lecture

Department: Anthropology

Course Attributes: Diversity Course-Global

### **ANTH 48260 CULTURE CONFLICT**

Analyzes structured conflict situations between widely different cultures, both simple and complex, including intertribal conflict, colonial conflict and problems arising from contact between dominant and subdominant social systems. Prerequisite: ANTH 18210.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Anthropology

Course Attributes: Diversity Course-Global

### **ANTH 48270 NATIVE PEOPLES OF NORTH AMERICA**

Comparative analysis of North American Indian peoples and cultures with special reference to linguistic groupings, cultural areas and contemporary issues. Prerequisite: ANTH 18210.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Anthropology

### **ANTH 48391 SEMINAR IN HISTORY OF ANTHROPOLOGY**

Seminar focusing on the development of anthropology within the intellectual and historical context from the height of the enlightenment to the close of World War II. Prerequisite: ANTH 18210.

3.000 Credit hours

3.000 Other hours

Levels: Undergraduate

Schedule Type(s): Seminar

Department: Anthropology

### **ANTH 48410 STONE AGE ARCHAEOLOGY**

Survey of Old World cultural history, using archaeological data. Stresses the period of three million years ago to 10,000 years ago.

Prerequisite: ANTH 18420.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Anthropology

### **ANTH 48425 ANCIENT MESOAMERICA**

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: ANTH 18420.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Anthropology

### **ANTH 48440 ARCHAEOLOGY OF ANCIENT OHIO**

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 Type(s): Lecture

Department: Anthropology

### **ANTH 48450 STATES AND EMPIRES**

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 Type(s): Lecture

Department: Anthropology

### **ANTH 48492 ARCHAEOLOGICAL FIELD METHODS**

(Repeatable for a maximum of 18 credit hours)

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 Type(s): Field Experience, Lecture

Department: Anthropology

Course Attributes: Experiential Learning

Requirement

### **ANTH 48623 HUMAN VARIATION**

A detailed anthropological examination of the causes and extent of modern human variability.

Prerequisite: none.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Anthropology

### **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.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Anthropology

Course Attributes: Diversity Course-Global

### **ANTH 48692 FIELD WORK IN BIOLOGICAL ANTHROPOLOGY**

(Repeatable for credit) Can be applied to any biological anthropology field of study and off-campus activity, ranging from museum work to U.S. and international research projects.

Prerequisite: special approval.

3.000 Credit hours

3.000 Other hours

Levels: Undergraduate

Schedule Type(s): Field Experience

Department: Anthropology

Course Attributes: Experiential Learning Requirement

### **ANTH 48810 HUMAN PALEONTOLOGY**

Study of primate fossils of the Miocene and Pliocene to include the origins of humans and their earliest ancestors. Prerequisite: ANTH 38630.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Anthropology

### **ANTH 48820 HUMAN MUSCULO-SKELETAL SYSTEM**

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: ANTH 38630.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Anthropology

### **ANTH 48830 HUMAN BEHAVIORAL ECOLOGY AND EVOLUTION**

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

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Anthropology

Course Attributes: Diversity Course-Global, Writing Intensive Course

### **ANTH 48835 PRIMATE ECOLOGY AND CONSERVATION**

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

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Anthropology

### **ANTH 48840 NATURAL SELECTION IN PERSPECTIVE**

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

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Anthropology

#### **ANTH 58093 VARIABLE TITLE WORKSHOP IN ANTHROPOLOGY**

(Repeatable for credit) 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

Levels: Graduate

Schedule Type(s): Workshop

Department: Anthropology

#### **ANTH 58095 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

Levels: Graduate

Schedule Type(s): Lecture

Department: Anthropology

#### **ANTH 58212 KINSHIP AND SOCIAL ORGANIZATION**

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

Levels: Graduate

Schedule Type(s): Lecture

Department: Anthropology

#### **ANTH 58214 POLITICS OF CULTURE**

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

Levels: Graduate

Schedule Type(s): Lecture

Department: Anthropology

#### **ANTH 58220 CULTURAL ECOLOGY**

Analysis of relationships between socio-cultural systems and physical-biological environment.

Prerequisite: Graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Anthropology

#### **ANTH 58225 ARCHAEOLOGY OF DEATH**

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 Type(s): Lecture

Department: Anthropology

#### **ANTH 58230 SOCIO-CULTURAL CHANGE**

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 Type(s): Lecture

Department: Anthropology

#### **ANTH 58250 CULTURE AND CURING**

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 Type(s): Lecture

Department: Anthropology

#### **ANTH 58260 CULTURE CONFLICT**

Analyzes structured conflict situations between widely different cultures, both simple and complex including intertribal conflict, colonial conflict and problems arising from contact between dominant and subdominant social systems. Prerequisite: Graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Anthropology

#### **ANTH 58270 NATIVE PEOPLES OF NORTH AMERICA**

Comparative analysis of North American Indian peoples and cultures with special reference to linguistic groupings, cultural areas and contemporary issues. Prerequisite: Graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Anthropology

#### **ANTH 58391 SEMINARY IN HISTORY OF ANTHROPOLOGY 1750-1950**

(Repeatable for credit) Seminar focusing on the development of anthropology within the intellectual and historical context from the height of the Enlightenment to the close of World War II. Prerequisite: Graduate standing.

3.000 Credit hours

3.000 Other hours

Levels: Graduate

Schedule Type(s): Seminar

Department: Anthropology

#### **ANTH 58410 STONE AGE ARCHAEOLOGY**

Survey of Old World cultural history, using archaeological data. Stresses the period from 3 million years ago to 10,000 years ago. Prerequisite: Graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Anthropology

#### **ANTH 58425 ANCIENT MESOAMERICA**

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 Type(s): Lecture

Department: Anthropology

#### **ANTH 58440 ARCHAEOLOGY OF ANCIENT OHIO**

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

Levels: Graduate

Schedule Type(s): Lecture

Department: Anthropology

#### **ANTH 58450 STATES AND EMPIRES**

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.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Anthropology

#### **ANTH 58492 ARCHAEOLOGICAL FIELD METHODS**

(Repeatable for a maximum of 18 credit hours) Field and laboratory techniques in archaeological research. Prerequisite: graduate standing.

3.000 Credit hours

1.660 Lecture hours

4.000 Other hours

Levels: Graduate

Schedule Type(s): Field Experience, Lecture

Department: Anthropology

#### **ANTH 58623 HUMAN VARIATION**

A detailed anthropological examination of the causes and extent of modern human variability. Prerequisite: Special approval and graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Anthropology

#### **ANTH 58810 HUMAN PALEONTOLOGY**

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 Type(s): Lecture  
Department: Anthropology

#### **ANTH 58820 HUMAN MUSCULO-SKELETAL SYSTEM**

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 Type(s): Lecture  
Department: Anthropology

#### **ANTH 58830 HUMAN BEHAVIORAL ECOLOGY AND EVOLUTION**

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 Type(s): Lecture  
Department: Anthropology

#### **ANTH 58835 PRIMATE ECOLOGY AND CONSERVATION**

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 Type(s): Lecture  
Department: Anthropology

#### **ANTH 58840 NATURAL SELECTION IN PERSPECTIVE**

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  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Anthropology

#### **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  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Anthropology

#### **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  
Levels: Graduate  
Schedule Type(s): Individual Investigation  
Department: Anthropology

#### **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 Type(s): Research  
Department: Anthropology

#### **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 Type(s): Master's Thesis  
Department: Anthropology

#### **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 sub discipline of anthropology. Prerequisite: Special approval and graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Anthropology

#### **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 Type(s): Lecture  
Department: Anthropology

#### **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 Type(s): Master's Thesis  
Department: Anthropology

#### **ANTH 68430 PROBLEMS IN WORLD PREHISTORY**

Basic graduate course in prehistoric archaeology required of all M.A. candidates. Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Type(s): Lecture  
Department: Anthropology

#### **ANTH 68613 MORPHOLOGICAL ANALYSIS**

Application of current taxonomic and genetic theory to the analysis of mammalian structure, with special emphasis on the primate fossil record. Prerequisite: Special approval and graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Anthropology

#### **ANTH 68624 PRIMATE ETHOLOGY**

Detailed examination of the principles of primate ethology, including evolutionary trends in ecology, dominance, locomotion and social behavior. Prerequisite: Special approval and graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Anthropology

#### **ANTH 68630 PRINCIPLES OF BIOLOGICAL ANTHROPOLOGY**

A graduate-level introduction to the field of biological anthropology. Topics include genetics, human variation, fossil and modern primates, early man. Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Anthropology

#### **ANTH 68637 BIOANTHROPOLOGICAL DATA ANALYSIS I**

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: Graduate standing.  
5.000 Credit hours  
5.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Anthropology

#### **ANTH 68638 BIOANTHROPOLOGICAL DATA ANALYSIS II**

This survey of multivariate analysis in anthropology includes one-sample data exploration, multiple sample problems and regression methods. It also includes computer application. Prerequisite: ANTH 68637 (same course as BMS 78638.). Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Anthropology





## Arabic (ARAB)

### ARAB 1101 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 Type(s): Lecture  
Department: Modern and Classical Language Studies

### ARAB 1102 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 1101.  
5.000 Credit hours  
5.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Modern and Classical Language Studies

### ARAB 2101 INTERMEDIATE ARABIC I

Continued development of speaking, listening, reading and writing skills in Arabic, using a variety of cultural materials. Prerequisite: ARAB 1102.  
5.000 Credit hours  
5.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Modern and Classical Language Studies

### ARAB 2102 INTERMEDIATE ARABIC II

Continuation of ARAB 2101. Prerequisite: ARAB 2101.  
5.000 Credit hours  
5.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Modern and Classical Language Studies

### 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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Modern and Classical Language Studies

### 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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Modern and Classical Language Studies

### ARAB 31302 ADVANCED INTERMEDIATE ARABIC II

Continuation of ARAB 31301. Prerequisite: ARAB 31301.  
4.000 Credit hours  
4.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Modern and Classical Language Studies

### 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  
Levels: Undergraduate  
Schedule Type(s): Individual Investigation  
Department: Modern and Classical Language Studies

### 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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Modern and Classical Language Studies

### 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 Type(s): Lecture  
Department: Modern and Classical Language Studies

### 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 Type(s): Lecture  
Department: Modern and Classical Language Studies

### 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 Type(s): Lecture  
Department: Modern and Classical Language Studies

## Architecture (ARCH)

### 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 Type(s): Lecture  
Department: Architecture  
Course Attributes: Kent Core-Fine Arts, LER-Fine Arts, Transfer Module-Fine Arts

### ARCH 10011 SURVEY OF ARCHITECTURAL HISTORY I

History of architecture from Neolithic times through the 14th century. Prerequisite: Not open to architecture majors.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Architecture  
Course Attributes: Kent Core-Fine Arts, LER-Fine Arts, Transfer Module-Fine Arts

### ARCH 10012 SURVEY OF ARCHITECTURAL HISTORY II

History of Western architecture from the Renaissance to the early 20th century. Prerequisite: ARCH 10011; not open to architecture majors.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Architecture  
Course Attributes: Kent Core-Fine Arts, LER-Fine Arts, Transfer Module-Fine Arts

### 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 orthographies, axonometric and perspectives. Prerequisite: architecture (ARCH) or interior design (ID) majors.  
3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Architecture

### 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  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Architecture



### **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

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Architecture

### **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

Levels: Undergraduate

Schedule Type(s): Studio

Department: Architecture

### **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 configurational shapes are again incorporated to develop building form solutions. Prerequisite: ARCH 20101.

3.000 Credit hours

3.000 Other hours

Levels: Undergraduate

Schedule Type(s): Studio

Department: Architecture

### **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 Type(s): Lecture

Department: Architecture

### **ARCH 20113 HISTORY OF ARCHITECTURE III**

A history of 20th century architecture.

Prerequisites: ARCH 20112 and architecture (ARCH) or architectural studies (ARCS) major or architectural studies (ARCS) minor.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Architecture

### **ARCH 20201 BEYOND WESTERN ARCHITECTURE**

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.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Architecture

### **ARCH 20301 INTRODUCTION TO BUILDING STRUCTURES**

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.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Architecture

### **ARCH 20601 COMPUTER APPLICATIONS IN ARCHITECTURE I**

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.

1.000 to 3.000 Credit hours

15.000 to 45.000 Other hours

Levels: Undergraduate

Schedule Type(s): Studio

Department: Architecture

### **ARCH 20602 COMPUTER APPLICATIONS IN ARCHITECTURE II**

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.

1.000 to 3.000 Credit hours

15.000 to 45.000 Other hours

Levels: Undergraduate

Schedule Type(s): Studio

Department: Architecture

### **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

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Architecture

Course Attributes: Writing Intensive Course

### **ARCH 30002 URBAN DESIGN**

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

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Architecture

### **ARCH 30012 URBAN DESIGN, FLORENCE, ITALY**

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

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Architecture

### **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

Levels: Undergraduate

Schedule Type(s): Studio

Department: Architecture

### **ARCH 30102 THIRD YEAR DESIGN STUDIO II**

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

Levels: Undergraduate

Schedule Type(s): Studio

Department: Architecture

Course Attributes: Experiential Learning Requirement

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

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

Levels: Undergraduate

Schedule Type(s): Studio

Department: Architecture

Course Attributes: Experiential Learning Requirement

### **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).

3.000 Credit hours

3.000 Other hours

Levels: Undergraduate

Schedule Type(s): Combined Lecture and Lab

Department: Architecture

**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 Type(s): Combined Lecture and Lab

Department: Architecture

**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 Type(s): Combined Lecture and Lab

Department: Architecture

**ARCH 40001 SUSTAINABLE DESIGN**

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 Type(s): Lecture

Department: Architecture

Course Attributes: Writing Intensive Course

**ARCH 40002 SYSTEMS DESIGN**

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

1.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Architecture

**ARCH 40101 FOURTH YEAR DESIGN STUDIO I**

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 Type(s): Studio

Department: Architecture

**ARCH 40102 FOURTH YEAR DESIGN STUDIO II**

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 Type(s): Studio

Department: Architecture

**ARCH 40302 STRUCTURAL SYSTEMS II**

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 Type(s): Combined Lecture and Lab

Department: Architecture

**ARCH 40402 METHODS AND MATERIALS II**

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 Type(s): Combined Lecture and Lab

Department: Architecture

**ARCH 40502 ENVIRONMENTAL TECHNOLOGY II**

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 Type(s): Combined Lecture and Lab

Department: Architecture

**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 Type(s): Lecture

Department: Architecture

**ARCH 45210 RENAISSANCE ARCHITECTURE**

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 Type(s): Lecture

Department: Architecture

**ARCH 45211 BAROQUE ARCHITECTURE**

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 Type(s): Lecture

Department: Architecture

**ARCH 45220 AMERICAN ARCHITECTURE: COLONIAL TO 1900**

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

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Architecture

**ARCH 45240 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: minimum C (2.000) grade in both ARCH 10111 and ARCH 20112.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Architecture

**ARCH 45291 SEMINAR: VARIABLE TOPICS IN ARCHITECTURAL HISTORY**

(repeatable for a total of 3 credit hours) content varies. Prerequisite: Permission.

1.000 to 3.000 Credit hours

1.000 to 3.000 Other hours

Levels: Undergraduate

Schedule Type(s): Seminar

Department: Architecture

**ARCH 45391 SEMINAR: STRUCTURES III**

(Repeatable for credit) 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 Type(s): Seminar

Department: Architecture

**ARCH 45491 SEMINAR: METHODS AND MATERIALS III**

(Repeatable for credit) 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 Type(s): Seminar  
Department: Architecture

**ARCH 45591 SEMINAR:  
ENVIRONMENTAL TECHNOLOGY III**  
(Repeatable for credit) 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 Type(s): Seminar  
Department: Architecture

**ARCH 45601 ADVANCED COMPUTER APPLICATIONS**  
This course discusses advanced visualization techniques such as retracing, 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 Type(s): Combined Lecture and Lab  
Department: Architecture

**ARCH 45620 INTRODUCTION TO PRESERVATION**  
(Repeatable for a maximum of 3 credit hours) 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 Type(s): Lecture  
Department: Architecture

**ARCH 45621 CURRENT ISSUES IN HISTORIC PRESERVATION**  
(Repeatable for a maximum of 3 credit hours) 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 Type(s): Lecture  
Department: Architecture

**ARCH 45625 EXPLORING HISTORIC STRUCTURES**  
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 Type(s): Laboratory, Lecture  
Department: Architecture

**ARCH 45627 PRESERVATION TECHNOLOGY**  
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 Type(s): Lecture  
Department: Architecture

**ARCH 45630 INTRODUCTION TO LANDSCAPE ARCHITECTURE**  
(Repeatable for a maximum of 3 credit hours) 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 Type(s): Lecture  
Department: Architecture

**ARCH 45631 SITE ANALYSIS AND DESIGN**  
(Repeatable for a maximum of 3 credit hours) 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 Type(s): Lecture  
Department: Architecture

**ARCH 45640 DEVELOPING ENVIRONMENTS FOR OLDER ADULTS**  
(Repeatable for a maximum of 3 credit hours) 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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Architecture

**ARCH 45701 URBAN DESIGN STUDIO I**  
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  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Architecture

**ARCH 46992 FIELD STUDY**  
(Repeatable for credit) 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 Type(s): Field Experience  
Department: Architecture  
Course Attributes: Experiential Learning Requirement

**ARCH 46993 WORKSHOP: VARIABLE TOPIC**  
(Repeatable for credit) 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 Type(s): Workshop  
Department: Architecture

**ARCH 46995 SPECIAL TOPICS IN ARCHITECTURE**  
(Repeatable for credit) 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 Type(s): Lecture  
Department: Architecture

**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  
Levels: Undergraduate  
Schedule Type(s): Individual Investigation  
Department: Architecture

**ARCH 50001 SUSTAINABLE DESIGN**  
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 Type(s): Lecture  
Department: Architecture

**ARCH 50002 SYSTEMS DESIGN**  
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 Type(s): Lecture  
Department: Architecture

**ARCH 50101 FOURTH YEAR DESIGN STUDIO I**  
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 Type(s): Studio  
Department: Architecture



**ARCH 50102 FOURTH YEAR DESIGN STUDIO II**

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 Type(s): Studio  
Department: Architecture

**ARCH 50302 STRUCTURAL SYSTEMS II**

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 Type(s): Combined Lecture and Lab  
Department: Architecture

**ARCH 50402 METHODS AND MATERIALS II**

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 Type(s): Combined Lecture and Lab  
Department: Architecture

**ARCH 50502 ENVIRONMENTAL TECHNOLOGY II**

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 Type(s): Combined Lecture and Lab  
Department: Architecture

**ARCH 55101 FIFTH-YEAR DESIGN STUDIO I**

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  
Levels: Graduate  
Schedule Type(s): Studio  
Department: Architecture

**ARCH 55102 FIFTH-YEAR DESIGN STUDIO II**

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  
Levels: Graduate  
Schedule Type(s): Studio  
Department: Architecture

**ARCH 55210 RENAISSANCE ARCHITECTURE**

History and theory of Renaissance architecture from 1400 until 1600. Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Architecture

**ARCH 55211 BAROQUE ARCHITECTURE**

History and theory of architecture in Europe from 1600 through 1750. Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Architecture

**ARCH 55220 AMERICAN ARCHITECTURE: COLONIAL TO 1900**

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  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Architecture

**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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Architecture

**ARCH 55291 SEMINAR: VARIABLE TOPICS IN ARCHITECTURAL HISTORY**

(Repeatable for a maximum of 3 credit hours)  
Content varies. Prerequisite: Permission and graduate standing.  
1.000 to 3.000 Credit hours  
1.000 to 3.000 Other hours  
Levels: Graduate  
Schedule Type(s): Seminar  
Department: Architecture

**ARCH 55391 SEMINAR: STRUCTURES III**

(Repeatable for credit) 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.  
1.000 to 3.000 Credit hours  
1.000 to 3.000 Other hours

Levels: Graduate  
Schedule Type(s): Seminar  
Department: Architecture

**ARCH 55491 SEMINAR: METHODS AND MATERIALS III**

(Repeatable for credit) Advanced topics in methods and complex materials systems. Computer modeling and field experience is required. Prerequisite: Graduate standing.  
1.000 to 3.000 Credit hours  
1.000 to 3.000 Other hours  
Levels: Graduate  
Schedule Type(s): Seminar  
Department: Architecture

**ARCH 55591 SEMINAR: ENVIRONMENTAL TECHNOLOGY III**

(Repeatable for a maximum of 3 credit hours) Variable topics in environmental technology, environmental design and energy conservation, advanced lighting techniques, etc. Prerequisite: Graduate standing.  
1.000 to 3.000 Credit hours  
1.000 to 3.000 Other hours  
Levels: Graduate  
Schedule Type(s): Seminar  
Department: Architecture

**ARCH 55601 ADVANCED COMPUTER APPLICATIONS**

(Repeatable for a maximum of 3 credit hours)  
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  
Levels: Graduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Architecture

**ARCH 55620 INTRODUCTION TO PRESERVATION**

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  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Architecture

**ARCH 55621 CURRENT ISSUES IN HISTORIC PRESERVATION**

(Repeatable for a maximum of 3 credit hours)  
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  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Architecture



### ARCH 55625 EXPLORING HISTORIC STRUCTURES

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  
Levels: Graduate  
Schedule Type(s): Laboratory, Lecture  
Department: Architecture

### ARCH 55627 PRESERVATION TECHNOLOGY

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 Type(s): Lecture  
Department: Architecture

### ARCH 55630 INTRODUCTION TO LANDSCAPE ARCHITECTURE

(Repeatable for a maximum of 3 credit hours) 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 Type(s): Lecture  
Department: Architecture

### ARCH 55631 SITE ANALYSIS AND DESIGN

(Repeatable for a maximum of 3 credit hours) 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 Type(s): Lecture  
Department: Architecture

### ARCH 55640 DEVELOPING ENVIRONMENTS FOR OLDER ADULTS

(Repeatable for a maximum of 3 credit hours) 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 Type(s): Lecture  
Department: Architecture

### ARCH 55707 REPRESENTATION IN DESIGN

(Repeatable for a maximum of 3 credit hours) 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 Type(s): Lecture  
Department: Architecture

### ARCH 56995 SPECIAL TOPICS IN ARCHITECTURE

(Repeatable for credit) 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 Type(s): Lecture  
Department: Architecture

### 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 Type(s): Studio  
Department: Architecture

### 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 Type(s): Studio  
Department: Architecture

### 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 Type(s): Studio  
Department: Architecture

### 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.

2.000 to 3.000 Credit hours  
2.000 to 3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Architecture

### 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.

1.000 to 3.000 Credit hours  
1.000 to 3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Architecture

### ARCH 60922 METHODS OF INQUIRY IN ARCHITECTURAL STUDIES

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.

2.000 Credit hours  
2.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Architecture

### 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 Type(s): Lecture  
Department: Architecture

### 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 Type(s): Lecture  
Department: Architecture

### ARCH 65001 PROFESSIONAL PRACTICE: REAL ESTATE AND DEVELOPMENT

Introduction to the economic, social, ethical and legal impact on/off 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 Type(s): Lecture  
Department: Architecture

### 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 Type(s): Lecture  
Department: Architecture

#### **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 Type(s): Lecture  
Department: Architecture

#### **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 Type(s): Master's Thesis  
Department: Architecture

#### **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 Type(s): Master's Thesis  
Department: Architecture

#### **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 Type(s): Field Experience  
Department: Architecture

#### **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 Type(s): Lecture  
Department: Architecture

#### **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 Type(s): Individual Investigation  
Department: Architecture

#### **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 Type(s): Research  
Department: Architecture

#### **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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Architecture

#### **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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Architecture

### ***Architectural Studies (ARCS)***

#### **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.  
3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Architecture

#### **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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Architecture

#### **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 ARCH 10102.  
4.000 Credit hours  
4.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Architecture

#### **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 Type(s): Studio  
Department: Architecture

#### **ARCS 30022 URBAN DESIGN DISCOURSE**

Starting in the 1960s, a series of theorists 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 45203.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Architecture  
Course Attributes: Experiential Learning Requirement, 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 10001 and 10002 and 10101 and 10102; and architectural studies (ARCS) major.

3.000 Credit hours

1.000 Lecture hours

4.000 Other hours

Levels: Undergraduate

Schedule Type(s): Lecture, Studio

Department: Architecture

### **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 10001 and 10002 and 10101 and 10102; and architectural studies (ARCS) major.

3.000 Credit hours

1.000 Lecture hours

4.000 Other hours

Levels: Undergraduate

Schedule Type(s): Lecture, Studio

Department: Architecture

### **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: ARCS 10121.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Architecture

### **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: ARCS 10121.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Architecture

### **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: architectural studies (ARCS) major; and junior or senior standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Architecture

Course Attributes: Writing Intensive Course

## **Art (ART)**

### **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 Type(s): Studio

Department: Art

Course Attributes: TAG Arts/Humanities

### **ART 10023 3D COMPOSITION**

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. As a foundation level course, Three-Dimensional Composition prepares students for subsequent study within all the visual arts. Prerequisite: none.

3.000 Credit hours

5.000 Other hours

Levels: Undergraduate

Schedule Type(s): Studio

Department: Art

### **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 Type(s): Studio

Department: Art

### **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 Type(s): Field Experience

Department: Art

Course Attributes: Experiential Learning Requirement

### **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 Type(s): Lecture

Department: Art

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 Type(s): Field Experience

Department: Art

Course Attributes: Experiential Learning Requirement

### **ART 50092 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.

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 Type(s): Field Experience

Department: Art

### **ART 51093 VARIABLE TITLE WORKSHOP IN ART**

(Repeatable for credit) Prerequisite: Graduate standing.

1.000 to 6.000 Credit hours

1.000 to 6.000 Other hours

Levels: Graduate

Schedule Type(s): Workshop

Department: Art

### **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 Type(s): Master's Thesis

Department: Art

### **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 Type(s): Master's Thesis  
Department: Art

### **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 Type(s): Master's Thesis  
Department: Art

### **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 Type(s): Master's Thesis  
Department: Art

## **Art Crafts (ARTC)**

### **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 14022.  
3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Art

### **ARTC 25400 CERAMICS I**

This course is an introduction to ceramics as an artistic medium with focus on the hand building of clay objects using the pinch, coil and slab methods of construction. Prerequisite: ARTF 14000 and 14022.  
3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Art

### **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 14022.  
3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Art

### **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 14022.

3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Art

### **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 Type(s): Studio  
Department: Art

### **ARTC 35095 CRAFTS: SELECTED TOPICS**

(Repeatable for credit) 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 Type(s): Studio  
Department: Art

### **ARTC 35300 TEXTILE ARTS: DIMENSIONAL**

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. Prerequisite: ARTF 14022.  
3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Art

### **ARTC 35301 TEXTILE ART: PRINT PATTERN**

Focus is on the unique aspects of printing repeat designs on cloth. Screen-printed 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 and ARTF 14060.  
3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Art

### **ARTC 35302 TEXTILE ARTS: FELTMAKING**

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 felt making are introduced and considered as an expressive vocabulary. Dyeing of wool fleece plays a major role in the course. Prerequisite: ARTF 14002 and 14060.  
3.000 Credit hours  
3.000 Other hours

Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Art

### **ARTC 35303 TEXTILE ARTS: TAPESTRY**

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: ARTF 14022 and 14060.  
3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Art

### **ARTC 35305 TEXTILE ACCESSORIES: DESIGN AND PRODUCTION**

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: ARTF 14022 and 14060.  
3.000 Credit hours  
5.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Art

### **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 and ART 10022.  
3.000 Credit hours  
5.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Art

### **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: ARTF 14022 and 14060.  
3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Art

### **ARTC 35400 CERAMICS II**

Continuation of ARTC 25400 emphasizing design, use of potter's wheel and chemistry of glazes. Prerequisite: ARTC 25400.  
3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate



Schedule Type(s): Studio  
Department: Art

#### **ARTC 35600 GLASS BLOWING**

Further exploration of glass blowing techniques. Design, form, color and execution will be emphasized. Prerequisite: ARTC 25600.  
3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Art

#### **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: ARTF 14055 and ARTC 25600.  
3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Art

#### **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.  
3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Art

#### **ARTC 35701 METALSMITHING CONCEPTS AND TECHNIQUES**

Course offers an in-depth exploration of hammer working 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.  
3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Art

#### **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  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Art

#### **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  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Art

#### **ARTC 45092 FIELD EXPERIENCE: TRAVEL STUDIES IN CRAFTS**

(Repeatable for credit) 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  
Levels: Undergraduate  
Schedule Type(s): Field Experience  
Department: Art  
Course Attributes: Experiential Learning Requirement

#### **ARTC 45095 CRAFTS: SELECTED TOPICS**

(Repeatable for credit) 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  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Art

#### **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  
Levels: Undergraduate  
Schedule Type(s): Individual Investigation  
Department: Art

#### **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 Type(s): Research  
Department: Art

#### **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 Type(s): Senior Project/Honors Thesis  
Department: Art  
Course Attributes: Experiential Learning Requirement

#### **ARTC 45300 TEXTILE ART: JACQUARD WEAVING**

(Repeatable for a maximum of 6 credit hours) Introduction to digital design and production of jacquard woven cloth on our state-of-the-art TC1 hand looms. The use of Pointcarre®, 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 Type(s): Studio  
Department: Art

#### **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.  
3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Art

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

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 double weave 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 and ARTF 14060.  
3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Art

#### **ARTC 45400 ADVANCED CERAMICS**

Individual problems in ceramics. Prerequisite: ARTC 35400.  
2.000 to 6.000 Credit hours  
2.000 to 6.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Art

**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 Type(s): Studio  
Department: Art

**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 Type(s): Studio  
Department: Art

**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 Type(s): Studio  
Department: Art

**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 Type(s): Studio  
Department: Art

**ARTC 45703 LARGE SCALE ENAMELING**

Course is an in-depth exploration of enameling on larger two-dimensional surfaces. Techniques include spraying, painting, screening and drawing with porcelain enamel on steel. Provides experience using unique large-scale flat bed-furnace. Prerequisite: ARTC 35702.  
3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Art

**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 Type(s): Studio  
Department: Art

**ARTC 55092 FIELD EXPERIENCE: TRAVEL STUDIES IN CRAFTS**

(Repeatable for credit) 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 Type(s): Field Experience  
Department: Art

**ARTC 55095 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  
Levels: Graduate  
Schedule Type(s): Studio  
Department: Art

**ARTC 55300 TEXTILE ART: JACQUARD WEAVING**

Introduction to digital design and production of jacquard woven cloth on our state-of-the-art TC1 hand looms. The use of Pointcarre®, 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  
Levels: Graduate  
Schedule Type(s): Studio  
Department: Art

**ARTC 55304 TEXTILE ART: PICTORIAL WEAVING**

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 double weave 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  
Levels: Graduate  
Schedule Type(s): Studio  
Department: Art

**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  
Levels: Graduate  
Schedule Type(s): Studio  
Department: Art

**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  
Levels: Graduate  
Schedule Type(s): Seminar  
Department: Art

**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  
Levels: Graduate  
Schedule Type(s): Individual Investigation  
Department: Art

## *Art Education (ARTE)*

**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  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Art

**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; ARTE 31001.  
3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Practicum  
Department: Art

**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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Art  
Course Attributes: Variable Title





### **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 Type(s): Individual Investigation  
Department: Art

### **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 Type(s): Field Experience, Lecture, Studio  
Department: Art  
Course Attributes: Experiential Learning Requirement

### **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. Prerequisite: 2.750 GPA and ARTE 31004.  
3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Field Experience, Lecture  
Department: Art  
Course Attributes: Writing Intensive Course

### **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.  
1.000 Credit hours  
1.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Art

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

(Repeatable for credit) 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.  
1.000 to 3.000 Credit hours  
1.000 to 3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Field Experience  
Department: Art  
Course Attributes: Experiential Learning Requirement

### **ARTE 41096 INDIVIDUAL STUDY-ART EDUCATION**

(Repeatable for credit) Additional study in areas of students' choice in consultation with adviser. Prerequisite: special approval.  
1.000 to 6.000 Credit hours  
1.000 to 6.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Individual Investigation  
Department: Art

### **ARTE 41525 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: 2.750 GPA and ARTE 41009 and special approval. Corequisite: ARTE 41557.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Art

### **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.  
9.000 Credit hours  
9.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Field Experience, Seminar  
Department: Art  
Course Attributes: Experiential Learning Requirement

### **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 Type(s): Field Experience, Lecture, Studio  
Department: Art

### **ARTE 51092 FIELD EXPERIENCE: TRAVEL STUDY IN ART EDUCATION**

(Repeatable for credit) 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  
Schedule Type(s): Field Experience  
Department: Art

### **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 Type(s): Lecture  
Department: Art

### **ARTE 61095 SPECIAL TOPICS: ART EDUCATION**

(Repeatable for credit) A course whose topic changes to reflect the interests and specialization's of faculty. Prerequisite: ARTE 61198 and instructor's special approval; graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Art

### **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 Type(s): Individual Investigation  
Department: Art

### **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  
Levels: Graduate  
Schedule Type(s): Seminar  
Department: Art

### **ARTE 61198 RESEARCH IN ART EDUCATION**

(Repeatable for credit) Specialized research leading to the thesis in art education. Prerequisite: ARTE 61001, 61003 and special approval. Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Art

### **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

Levels: Graduate

Schedule Type(s): Lecture

Department: Art

### **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

Levels: Graduate

Schedule Type(s): Seminar

Department: Art

### **ARTE 61298 MASTER'S PROJECT: ART EDUCATION**

(Repeatable for credit) A course for guiding the design, preparation of drafts and presentation of the terminal project in the non-thesis track of the MA program in art education. Prerequisite: ARTE 61209 and instructor's special approval; graduate standing.

2.000 Credit hours

2.000 Other hours

Levels: Graduate

Schedule Type(s): Research

Department: Art

## **Art Fine Arts (ARTF)**

### **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

Levels: Undergraduate

Schedule Type(s): Studio

Department: Art

Course Attributes: TAG Arts/Humanities

### **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.

3.000 Credit hours

3.000 Other hours

Levels: Undergraduate

Schedule Type(s): Studio

Department: Art

### **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: None.

3.000 Credit hours

3.000 Other hours

Levels: Undergraduate

Schedule Type(s): Studio

Department: Art

Course Attributes: TAG Arts/Humanities

### **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.

3.000 Credit hours

3.000 Other hours

Levels: Undergraduate

Schedule Type(s): Studio

Department: Art

Course Attributes: TAG Arts/Humanities

### **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 Type(s): Studio

Department: Art

### **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 Type(s): Studio

Department: Art

### **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 ARTF14022.

3.000 Credit hours

3.000 Other hours

Levels: Undergraduate

Schedule Type(s): Studio

Department: Art

### **ARTF 24040 PRINTMAKING I**

Basic traditional and contemporary techniques of relief (woodcut, lino-cut, etc.) And intaglio printing (etching, colography, etc.) Work produced in this class must be retained for later

portfolio presentation in ARTF 24005.

Prerequisite: ARTF 14000.

3.000 Credit hours

3.000 Other hours

Levels: Undergraduate

Schedule Type(s): Studio

Department: Art

### **ARTF 24055 SCULPTURE II**

Continuation of sculpture I with greater emphasis on materials and processes. Prerequisite: ARTF 14055.

3.000 Credit hours

3.000 Other hours

Levels: Undergraduate

Schedule Type(s): Studio

Department: Art

### **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.

3.000 Credit hours

3.000 Other hours

Levels: Undergraduate

Schedule Type(s): Studio

Department: Art

### **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

Levels: Undergraduate

Schedule Type(s): Studio

Department: Art

### **ARTF 34002 INTRODUCTION TO FIGURE DRAWING**

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, ARTF14001, ARTF 24001 and a grade of S in ARTF 24005.

3.000 Credit hours

3.000 Other hours

Levels: Undergraduate

Schedule Type(s): Studio

Department: Art

### **ARTF 34040 PRINTMAKING: INTERMEDIATE INTAGLIO**

Continuation of ARTF 24040 emphasizing individually assigned problems in intaglio with introduction to color intaglio techniques. Prerequisite: ARTF 24040 or a grade of S in ARTF 24005.

3.000 Credit hours

3.000 Other hours

Levels: Undergraduate

Schedule Type(s): Studio

Department: Art

### **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 and a grade of S in ARTF 24005.

3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Art

#### **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 and a grade of S in ARTF 24005.

3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Art

#### **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 Type(s): Studio  
Department: Art

#### **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  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Art

#### **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  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Art

#### **ARTF 44003 DRAWING V**

Continuation of ARTF 34001. Prerequisite: ARTF 34001 and a grade of S in ARTF 24005.

3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Art

#### **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  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Art

#### **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 Type(s): Studio  
Department: Art

#### **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 Type(s): Studio  
Department: Art

#### **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 Type(s): Studio  
Department: Art

#### **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 Type(s): Studio  
Department: Art

#### **ARTF 44060 PAINTING IV**

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 Type(s): Studio  
Department: Art

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

(Repeatable for credit) 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 Type(s): Field Experience  
Department: Art  
Course Attributes: Experiential Learning Requirement

#### **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 Type(s): Studio  
Department: Art

#### **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  
Levels: Undergraduate  
Schedule Type(s): Individual Investigation  
Department: Art

#### **ARTF 44099 SENIOR PROJECT: FINE ARTS**

(Repeatable for credit) Independently conceived project by senior fine art major, including written proposal and undergraduate thesis, culminating in an exhibition and 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 Type(s): Senior Project/Honors Thesis  
Department: Art  
Course Attributes: Experiential Learning Requirement, Writing Intensive Course

#### **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 Type(s): Seminar  
Department: Art

#### **ARTF 54092 FIELD EXPERIENCE: TRAVEL STUDY IN FINE ART**

(Repeatable for credit) 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 Type(s): Field Experience

Department: Art

#### **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 Type(s): Individual Investigation

Department: Art

#### **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 Type(s): Individual Investigation

Department: Art

#### **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 Type(s): Individual Investigation

Department: Art

#### **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

Levels: Graduate

Schedule Type(s): Individual Investigation, Studio

Department: Art

### **Art History (ARTH)**

#### **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. No credit for art majors. Prerequisite: None.

3.000 Credit hours

3.000 Other hours

Levels: Undergraduate

Schedule Type(s): Studio

Department: Art

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

#### **ARTH 22006 ART HISTORY I: 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.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Art

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

#### **ARTH 22007 ART HISTORY II: 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.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Art

Course Attributes: Kent Core-Fine Arts, LER-Fine Arts, TAG Arts/Humanities, Transfer 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 Type(s): Lecture

Department: Art

Course Attributes: Diversity Course-Global, Kent Core-Fine Arts, LER-Fine Arts, Transfer 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 Type(s): Lecture

Department: Art

#### **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 Type(s): Lecture

Department: Art

Course Attributes: Writing Intensive Course

#### **ARTH 42022 THE ARTS OF CHINA**

Examination of sources and styles of Chinese art from prehistoric to recent times. Prerequisite: Junior or senior standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Art

#### **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

Schedule Type(s): Lecture

Department: Art

#### **ARTH 42025 ART OF WEST AFRICA**

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 Type(s): Lecture

Department: Art

Course Attributes: Diversity Course-Global

#### **ARTH 42026 ART OF NIGERIA**

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 Type(s): Lecture

Department: Art

Course Attributes: Diversity Course-Global

#### **ARTH 42027 ART OF CENTRAL AFRICA**

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 Type(s): Lecture

Department: Art

Course Attributes: Diversity Course-Global

#### **ARTH 42031 GREEK ART AND ARCHAEOLOGY**

(Cross-listed with CLAS 41401, CLAS 51401 and ARTH 52031) Greek art and architecture from earliest times through Hellenistic period with special attention given to recent archaeological discoveries. Prerequisite: Junior or senior standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Art

#### **ARTH 42032 ROMAN ART AND ARCHAEOLOGY**

(Cross-listed with CLAS 41402, CLAS 51402 and ARTH 52032) Introduction to archaeology of Roman world. Emphasis on discoveries and impact on study of Italic, Etruscan and Roman art, architecture and sculpture through Imperial period. Prerequisite: Junior or senior standing.

3.000 Credit hours



3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Art

#### **ARTH 42036 MEDIEVAL ART**

Emphasis on major period of Medieval art (Byzantine, Carolingian, Ottoman, 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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Art

#### **ARTH 42039 GOTHIC ART, 12TH TO 15TH CENTURIES**

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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Art

#### **ARTH 42041 ITALIAN RENAISSANCE ART**

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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Art

#### **ARTH 42042 NORTHERN RENAISSANCE ART**

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 Type(s): Lecture  
Department: Art

#### **ARTH 42043 THE HIGH RENAISSANCE AND MANNERISM IN ITALY**

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 Type(s): Lecture  
Department: Art

#### **ARTH 42044 VENETIAN RENAISSANCE ART**

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 Type(s): Lecture  
Department: Art

#### **ARTH 42046 BAROQUE ART OF THE 17TH CENTURY**

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 Type(s): Lecture  
Department: Art

#### **ARTH 42051 EUROPEAN ART AND IDEAS: 1750-1900**

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 Type(s): Lecture  
Department: Art

#### **ARTH 42057 AMERICAN ART AND ARCHITECTURE: 1860-1940**

In-depth study of American painting, sculpture, graphic art, architecture and allied arts from the Civil War to 1940. Prerequisite: Junior or senior standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Art

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

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 Type(s): Lecture  
Department: Art

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

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 Type(s): Lecture  
Department: Art

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

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 Type(s): Lecture  
Department: Art

#### **ARTH 42070 HISTORY OF GRAPHIC DESIGN**

Traces the arts of visual communication from their origins to current trends and practices with an emphasis on theory and aesthetics. Prerequisite: Junior standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Art

#### **ARTH 42071 HISTORY OF PRINTS**

Chronological survey of printmaking (engraving, etching, lithography, etc.) From 1400 to the present emphasizing its technical and stylistic evolution. Prerequisite: Junior or senior standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Art

#### **ARTH 42078 HISTORY OF THE DECORATIVE AND APPLIED ARTS**

Historical and critical examination of decorative and applied arts and their relationship to the Western societies which produced them. Prerequisite: ARTH 22006, 22007.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Art

#### **ARTH 42091 ART HISTORY SEMINAR**

(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.  
3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Seminar  
Department: Art

#### **ARTH 42092 ART MUSEUM INTERNSHIP**

(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.  
3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Practicum  
Department: Art  
Course Attributes: Experiential Learning Requirement

**ARTH 42095 SPECIAL TOPICS: ART HISTORY**

(Repeatable for credit) Upper-division discussion and lecture course whose content changes in accordance with the interest and competence of faculty. Precise title to be inserted in 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 Type(s): Lecture  
Department: Art

**ARTH 42096 INDIVIDUAL INVESTIGATION: ART HISTORY**

(Repeatable for credit) Directed independent study with art history faculty. Prerequisite: Junior or senior standing.  
3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Individual Investigation  
Department: Art

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

(Repeatable for credit) 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.  
1.000 to 3.000 Credit hours  
1.000 to 3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Field Experience  
Department: Art  
Course Attributes: Experiential Learning Requirement

**ARTH 52025 ART OF WEST AFRICA**

Arts, crafts and architecture of the Western Sudanic and Guinea Coast areas of West Africa from prehistoric times to the present.  
Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Art

**ARTH 52026 ART OF NIGERIA**

Study of the arts, crafts and architecture of Nigeria from prehistoric times to present.  
Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Art

**ARTH 52027 ART OF CENTRAL AFRICA**

Study of the arts, crafts and architecture of Central Africa from prehistoric times to present.  
Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Art

**ARTH 52031 GREEK ART AND ARCHAEOLOGY**

(Cross-listed with CLAS 41401, CLAS 51401 and ARTH 42031) Greek art and architecture from earliest times through the Hellenistic period with special attention given to recent archaeological discoveries. Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Art

**ARTH 52032 ROMAN ART AND ARCHAEOLOGY**

(Cross-listed with CLAS 41402, CLAS 51402 and ARTH 42032) 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. Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Art

**ARTH 52036 MEDIEVAL ART**

Emphasis on major periods of Medieval art (Byzantine, Carolingian, Ottoman, Romanesque and Gothic), treating iconographic themes and styles in a variety of media. Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Art

**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 Type(s): Lecture  
Department: Art

**ARTH 52041 ITALIAN RENAISSANCE ART**

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 Type(s): Lecture  
Department: Art

**ARTH 52042 NORTHERN RENAISSANCE ART**

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 Type(s): Lecture  
Department: Art

**ARTH 52043 THE HIGH RENAISSANCE AND MANNERISM IN ITALY**

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 Type(s): Lecture  
Department: Art

**ARTH 52044 VENETIAN RENAISSANCE ART**

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 Type(s): Lecture  
Department: Art

**ARTH 52046 BAROQUE ART IN EUROPE**

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 Type(s): Lecture  
Department: Art

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

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 Type(s): Lecture  
Department: Art

**ARTH 52058 AMERICAN FILM, PHOTOGRAPHY, ART AND IDEAS**

Key examples of photography from the 19th century to present day. Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Art

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

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 Type(s): Lecture



Department: Art

**ARTH 52063 AMERICAN ART: EUROPEAN ROOTS**

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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Art

**ARTH 52066 LATE MODERN ART SINCE 1940**

A study of painting, sculpture and allied arts in the United States and Europe from 1940 to the present. Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Art

**ARTH 52067 ART OF THE 1960S**

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 Type(s): Lecture  
Department: Art

**ARTH 52070 HISTORY OF GRAPHIC DESIGN**

This course traces the arts of visual communication from their origins to current trends and practices with an emphasis on theory and aesthetics. Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Art

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

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 Type(s): Lecture  
Department: Art

**ARTH 52095 SPECIAL TOPICS: ART HISTORY**

(Repeatable for credit) 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 Type(s): Lecture  
Department: Art

**ARTH 52096 INDIVIDUAL INVESTIGATION: ART HISTORY**

(Repeatable for credit) Directed independent study with art history faculty. Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Other hours  
Levels: Graduate  
Schedule Type(s): Individual Investigation  
Department: Art

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

(Repeatable for credit) 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 Type(s): Field Experience  
Department: Art

**ARTH 62057 AMERICAN ART: 1860-1940**

In-depth study of American painting, sculpture, graphic and allied arts from 1860 to 1940. Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Art

**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 Type(s): Lecture  
Department: Art

**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 Type(s): Lecture  
Department: Art

**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 Lecture hours  
Levels: Graduate

Schedule Type(s): Lecture  
Department: Art

**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 Type(s): Research  
Department: Art

## Arts and Sciences (AS)

**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 Type(s): Lecture  
Department: Arts and Sciences

**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 Type(s): Lecture  
Department: Arts and Sciences

**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 Type(s): Lecture  
Department: Arts and Sciences

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

An introductory examination of lesbian, gay, bisexual and transgender issues from an interdisciplinary perspective. Prerequisite: None.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Arts and Sciences

**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 Type(s): Lecture  
Department: Arts and Sciences

### AS 30196 INDIVIDUAL INVESTIGATION

(Repeatable for credit) Registration requires prior approval from the college of arts and sciences office. Prerequisite: Permission.

1.000 to 3.000 Credit hours  
1.000 to 3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Individual Investigation  
Department: Arts and Sciences

### AS 30210 SOCIAL STRUCTURE AND PROCESSES IN EUROPE

Introduction to social life in today's Europe, contrasting the European situation with other parts of the world, predominantly, the United States. This course is only available for semester abroad. Prerequisite: none.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Arts and Sciences

### AS 40095 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  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Arts and Sciences

### AS 43001 LEGAL INFORMATION SOURCES AND SERVICES

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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Arts and Sciences

### AS 50095 SPECIAL TOPICS

(Repeatable for credit) 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  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Arts and Sciences

### 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  
Levels: Graduate  
Schedule Type(s): Individual Investigation  
Department: Arts and Sciences

### AS 53001 LEGAL INFORMATION SOURCES AND SERVICES

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  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Arts and Sciences

### AS 61000 INTRODUCTION TO LIBERAL STUDIES

Introduction to graduate-level interdisciplinary studies. The specific subjects covered are chosen by the instructor, and so may vary. Prerequisite: graduate standing.

2.000 Credit hours  
2.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Arts and Sciences

### AS 61001 LIBERAL STUDIES RESEARCH PAPER

Learning to write a graduate-level research paper. Prerequisites: graduate standing and special approval.

1.000 Credit hours  
1.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Seminar  
Department: Arts and Sciences

### AS 61095 LIBERAL STUDIES SEMINAR

(Repeatable for credit) An interdisciplinary seminar designed for candidates in the liberal studies program. Topics will vary. Prerequisite: None.

3.000 Credit hours  
3.000 Other hours  
Levels: Graduate  
Schedule Type(s): Seminar  
Department: Arts and Sciences

### AS 61098 LIBERAL STUDIES ESSAY

(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.

3.000 Credit hours  
3.000 Other hours  
Levels: Graduate  
Schedule Type(s): Research  
Department: Arts and Sciences

### AS 70095 SPECIAL TOPICS

(Repeatable for credit) Topic to be announced in the schedule of classes booklet. Prerequisite: Doctoral standing; special approval.

1.000 to 5.000 Credit hours

1.000 to 5.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Arts and Sciences

### 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.

1.000 to 6.000 Credit hours  
1.000 to 6.000 Other hours  
Levels: Graduate  
Schedule Type(s): Individual Investigation  
Department: Arts and Sciences

### AS 73001 LEGAL INFORMATION SOURCES AND SERVICES

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 Type(s): Lecture  
Department: Arts and Sciences

## American Sign Language (ASL)

### 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.

4.000 Credit hours  
4.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Modern and Classical Language Studies

### 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. Cross listed with SPED 19202. Prerequisite: ASL 19201 or SPED 19201.

4.000 Credit hours  
4.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Modern and Classical Language Studies

### ASL 29201 INTERMEDIATE AMERICAN SIGN LANGUAGE I

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. Cross listed with SPED 29201. Prerequisite: ASL 19202 or SPED 19202.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture





Department: Modern and Classical Language Studies

### **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. Cross listed with SPED 29202. Prerequisite: ASL 29201 or SPED 29201.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Modern and Classical Language Studies

### **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 or SPED 29202.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Modern and Classical Language Studies

### **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 or SPED 39201.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Modern and Classical Language Studies

### **ASL 49092 DEAF RESIDENTIAL SCHOOL PRACTICUM**

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 Type(s): Practicum

Department: Modern and Classical Language Studies

Course Attributes: Experiential Learning Requirement

### **ASL 49096 INDIVIDUAL INVESTIGATION**

(Repeatable for credit) 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 Type(s): Individual Investigation

Department: Modern and Classical Language Studies

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

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 Type(s): Lecture

Department: Modern and Classical Language Studies

### **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 Type(s): Lecture

Department: Modern and Classical Language Studies

### **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 Signing Competency Proficiency Interview.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Modern and Classical Language Studies

### **ASL 49309 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: None.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Modern and Classical Language Studies

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.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Modern and Classical Language Studies

### **ASL 49401 DEAF CULTURE AND COMMUNITY**

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.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Modern and Classical Language Studies

### **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 Type(s): Lecture

Department: Modern and Classical Language Studies

## ***Aerospace Studies (ASTU)***

### **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 Type(s): Lecture

Department: Aerospace Studies

**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 Type(s): Lecture

Department: Aerospace Studies

**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 Type(s): Laboratory

Department: Aerospace Studies

**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

Levels: Undergraduate

Schedule Type(s): Laboratory

Department: Aerospace Studies

**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

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Aerospace Studies

**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

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Aerospace Studies

**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

Levels: Undergraduate

Schedule Type(s): Laboratory

Department: Aerospace Studies

**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

Levels: Undergraduate

Schedule Type(s): Laboratory

Department: Aerospace Studies

**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 Type(s): Lecture

Department: Aerospace Studies

**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 Type(s): Lecture

Department: Aerospace Studies

**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 Type(s): Laboratory

Department: Aerospace Studies

**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 Type(s): Laboratory  
Department: Aerospace Studies

**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: Permission.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Aerospace Studies

**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 Type(s): Lecture

Department: Aerospace Studies

**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 Type(s): Laboratory

Department: Aerospace Studies

**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 Type(s): Laboratory

Department: Aerospace Studies

## *Athletic Training (ATTR)*

**ATTR 15001 INTRODUCTION TO THE PROFESSION OF ATHLETIC TRAINING**

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. Prerequisite: Athletic training (ATTR) major.

1.000 Credit hours

1.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Health Sciences



### **ATTR 15011 INTRODUCTION TO CLINICAL ATHLETIC TRAINING**

Basic concepts and skills related to the professional domains of the athletic training profession. Arc certification in first aid and cpr and overview of career opportunities are included. Prerequisite: Athletic training (ATTR) major. 2.000 Credit hours  
2.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Health Sciences

### **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, psychomotor and affective components. Clinical hours and completion of specific competencies are required. Prerequisite: ATTR 15011 and special approval. 3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Practicum  
Department: Health Sciences  
Course Attributes: Experiential Learning Requirement

### **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; athletic taping, wrapping and bracing; and equipment fitting. Prerequisite: None. 3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Health Sciences

### **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. 3.000 Credit hours  
2.000 Lecture hours  
2.000 Lab hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Health Sciences

### **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. 3.000 Credit hours  
2.000 Lecture hours  
2.000 Lab hours  
Levels: Undergraduate

Schedule Type(s): Combined Lecture and Lab  
Department: Health Sciences

### **ATTR 25057 HUMAN ANATOMY AND PHYSIOLOGY I**

(Equivalent to 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. 3.000 Credit hours  
2.000 Lecture hours  
2.000 Lab hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Health Sciences

### **ATTR 25058 HUMAN ANATOMY AND PHYSIOLOGY II**

(Equivalent to 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. 3.000 Credit hours  
2.000 Lecture hours  
2.000 Lab hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Health Sciences

### **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, psychomotor and affective components. Clinical hours and completion of specific competencies are required. Prerequisite: ATTR 15092. 3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Practicum  
Department: Health Sciences  
Course Attributes: Experiential Learning Requirement

### **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 Type(s): Laboratory  
Department: Health Sciences

### **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. 3.000 Credit hours  
2.000 Lecture hours  
2.000 Lab hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Health Sciences

### **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 Type(s): Combined Lecture and Lab  
Department: Health Sciences

### **ATTR 35040 STRENGTH AND CONDITIONING I**

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; and athletic training (ATTR) or physical education-professional (PEP) major. 1.000 Credit hours  
2.000 Lab hours  
Levels: Undergraduate  
Schedule Type(s): Laboratory  
Department: Health Sciences

### **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: ATTR 25036. 5.000 Credit hours  
2.000 Lecture hours  
6.000 Lab hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Health Sciences

### **ATTR 35054 BIOMECHANICS**

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; and ATTR 25058 or EXSC 25058. 3.000 Credit hours  
2.000 Lecture hours  
2.000 Lab hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Health Sciences

**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, psychomotor and affective components. Clinical hours and completion of specific competencies are required.

Prerequisite: ATTR 25092.

3.000 Credit hours

3.000 Other hours

Levels: Undergraduate

Schedule Type(s): Practicum

Department: Health Sciences

Course Attributes: Experiential Learning Requirement

**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

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Health Sciences

**ATTR 45038 ORGANIZATION AND ADMINISTRATION OF ATHLETIC TRAINING**

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

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Health Sciences

**ATTR 45039 THERAPEUTIC REHABILITATION**

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.

4.000 Credit hours

4.000 Other hours

Levels: Undergraduate

Schedule Type(s): Combined Lecture and Lab

Department: Health Sciences

**ATTR 45040 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 treatment and physiologic effects for various afflictions. Prerequisite: ATTR 25058 or EXSC 25058.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Health Sciences

**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.

1.000 Credit hours

1.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Seminar

Department: Health Sciences

**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 Type(s): Individual Investigation

Department: Health Sciences

**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, psychomotor and affective components. Clinical hours and completion of specific competencies are required. Prerequisite: ATTR 35092.

3.000 Credit hours

3.000 Other hours

Levels: Undergraduate

Schedule Type(s): Practicum

Department: Health Sciences

Course Attributes: Experiential Learning Requirement

**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 Type(s): Lecture, Practicum

Department: Health Sciences

Course Attributes: Experiential Learning Requirement

**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 Type(s): Lecture, Practicum

Department: Health Sciences

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 Type(s): Lecture

Department: Health Sciences

**ATTR 55038 ORGANIZATION AND ADMINISTRATION OF ATHLETIC TRAINING**

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 Type(s): Lecture

Department: Health Sciences

**ATTR 55039 THERAPEUTIC REHABILITATION**

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.

4.000 Credit hours

3.000 Lecture hours

2.000 Lab hours

Levels: Graduate

Schedule Type(s): Combined Lecture and Lab

Department: Health Sciences

**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 Type(s): Lecture

Department: Health Sciences

**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 Type(s): Lecture

Department: Health Sciences





### **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 Type(s): Lecture  
Department: Health Sciences

### **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 Type(s): Lecture  
Department: Health Sciences

### **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 Type(s): Lecture  
Department: Health Sciences

### **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 Type(s): Lecture  
Department: Health Sciences

### **ATTR 63095 RESEARCH SEMINAR**

(Repeatable for credit) 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 Type(s): Seminar  
Department: Health Sciences

### **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. Repeatable to 6 credit hours. Prerequisites: graduate standing and special approval.  
1.000 to 3.000 Credit hours  
3.000 to 9.000 Other hours  
Levels: Graduate  
Schedule Type(s): Individual Investigation  
Department: Health Sciences

### **ATTR 63098 RESEARCH**

(Repeatable for credit) Research or individual investigation. Prerequisite: Graduate standing.  
1.000 to 15.000 Credit hours  
1.000 to 15.000 Other hours  
Levels: Graduate  
Schedule Type(s): Research  
Department: Health Sciences

### **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 Type(s): Workshop  
Department: Health Sciences

### **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 Type(s): Lecture  
Department: Health Sciences

### **ATTR 63199 THESIS I**

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 Type(s): Master's Thesis  
Department: Health Sciences

### **ATTR 63299 THESIS II**

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  
Levels: Graduate  
Schedule Type(s): Master's Thesis  
Department: Health Sciences

### **ATTR 65004 BIOMECHANICS**

Survey of biomechanics, with particular emphasis on skeletal muscle mechanics. Prerequisites: graduate standing  
3.000 Credit hours

3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Health Sciences

### **ATTR 73095 RESEARCH SEMINAR**

(Repeatable for credit) 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 Type(s): Seminar  
Department: Health Sciences

## ***Business Administration (BAD)***

### **BAD 60092 MBA INTERNSHIP**

(Repeatable for credit) 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  
Levels: Graduate  
Schedule Type(s): Practicum  
Department: Business Administration

### **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.  
1.000 to 3.000 Credit hours  
1.000 to 3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Business Administration

### **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.  
2.000 or 3.000 Credit hours  
2.000 or 3.000 Other hours  
Levels: Graduate  
Schedule Type(s): Individual Investigation  
Department: Business Administration

### **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.  
1.000 to 15.000 Credit hours  
1.000 to 15.000 Other hours  
Levels: Graduate  
Schedule Type(s): Research  
Department: Business Administration

**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.

2.000 to 6.000 Credit hours

2.000 to 6.000 Other hours

Levels: Graduate

Schedule Type(s): Master's Thesis

Department: Business Administration

**BAD 68051 BUSINESS PROFESSIONAL DEVELOPMENT**

Development of professional business skills for the full-time MBA student to use in career development during and after graduation.

Students must continue registration each semester until all content Requirements are met.

Prerequisite: admission to MBA program.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture, Seminar

Department: Management Information Systems

**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 Type(s): Research

Department: Business Administration

**BAD 71094 COLLEGE TEACHING**

(Repeatable for credit) 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 Type(s): Lecture

Department: Business Administration

**BAD 72021 BUSINESS CONDITIONS ANALYSIS AND PUBLIC POLICY**

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 Type(s): Lecture

Department: Business Administration

**BAD 72022 MANAGERIAL ECONOMICS**

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 Type(s): Lecture

Department: Business Administration

**BAD 72050 MICROECONOMIC THEORY I**

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

Levels: Graduate

Schedule Type(s): Lecture

Department: Business Administration

**BAD 72051 MACROECONOMIC THEORY I**

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

Levels: Graduate

Schedule Type(s): Lecture

Department: Business Administration

**BAD 72054 ECONOMETRICS I**

Introduction to problems and methods of the empirical estimation of economic relationships. Prerequisite: Doctoral standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Business Administration

**BAD 72055 ECONOMETRICS II**

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

Levels: Graduate

Schedule Type(s): Lecture

Department: Business Administration

**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

Levels: Graduate

Schedule Type(s): Lecture

Department: Business Administration

**BAD 72061 MONETARY THEORY AND POLICY**

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 Type(s): Lecture

Department: Business Administration

**BAD 72075 INTERNATIONAL TRADE**

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 Type(s): Lecture

Department: Business Administration

**BAD 72076 INTERNATIONAL FINANCE**

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 Type(s): Lecture

Department: Business Administration

**BAD 72077 ECONOMIC PROBLEMS OF DEVELOPING AREAS**

In-depth analysis of selected topics and issues in development economics. Prerequisite: ECON 52076. Doctoral standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Business Administration

**BAD 74004 QUANTITATIVE METHODS IN BUSINESS ADMINISTRATION I**

Introduction to fundamentals of matrix algebra, differential calculus and linear programming. Both algebraic and transcendental functions are included in discussion. Prerequisite: Doctoral standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Business Administration

**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 Type(s): Seminar

Department: Business Administration

**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 Type(s): Research  
Department: Business Administration

### **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 Type(s): Dissertation  
Department: Business Administration

### **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 Type(s): Dissertation  
Department: Business Administration

### **BAD 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  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Business Administration

### **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 Type(s): Lecture  
Department: Business Administration

## ***Business Management and Related Technology (BMRT)***

### **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 nay 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 Type(s): Lecture  
Department: Regional

### **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 Type(s): Lecture  
Department: Regional

### **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 Type(s): Lecture  
Department: Regional

### **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 10006 or Compass Reading score of 86; and ENG 11001 or Compass Writing score of 67.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

### **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 10023 or MATH 10024 or MATH 10009 or MATH 11010.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

### **BMRT 21005 PURCHASING AND SUPPLY MANAGEMENT**

Practical approach to the material acquisition, management and supply chain function in the American business system. Prerequisite: BMRT 11000 or special approval of full-time BMRT faculty.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

### **BMRT 21006 HUMAN RESOURCES MANAGEMENT**

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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

### **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: Special approval of full-time BMRT faculty only.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

### **BMRT 21009 SEMINAR IN MANAGEMENT TECHNOLOGY**

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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

### **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 Type(s): Lecture  
Department: Regional

### **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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

### **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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

### **BMRT 21050 FUNDAMENTALS OF MARKETING TECHNOLOGY**

(Equivalent to MKTG 25010) Study of the basic concepts and principles involved in marketing a product/service with an emphasis on the marketing mix variables: product, price, place and promotion. Prerequisite: BMRT 11000 and ECON 22060.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

### **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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

### **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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

### **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 Type(s): Lecture  
Department: Regional

### **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 Type(s): Practicum  
Department: Regional  
Course Attributes: Experiential Learning Requirement

### **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 Type(s): Lecture  
Department: Regional

### **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 Type(s): Individual Investigation  
Department: Regional

### **BMRT 36401 APPLICATIONS OF TECHNOLOGY MANAGEMENT SOFTWARE**

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.

3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Regional

### **BMRT 36410 SECURITY FOR BUSINESS STUDENTS**

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.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

### **BMRT 36415 CUSTOMER SERVICE TECHNOLOGY**

Analysis and definition of customer satisfaction with an emphasis on quality customer service that includes technique for assessing company service efforts and developing customer satisfaction programs. Prerequisite: Junior standing.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

### **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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

### **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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

### **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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

### **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.

1.000 to 4.000 Credit hours  
7.000 to 28.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Field Experience, Practicum  
Department: Regional  
Course Attributes: Experiential Learning Requirement

### **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.

1.000 to 4.000 Credit hours  
7.000 to 28.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Individual Investigation  
Department: Regional

### **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 11009 or MIS 24163; and sophomore standing.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional




**BMR 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 Type(s): Lecture Department: Regional

**BMR 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 Type(s): Lecture Department: Regional

**BMR 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 Type(s): Lecture Department: Regional

## **Biomedical Sciences (BMS)**

**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 Type(s): Research Department: Biomedical Sciences Course Attributes: Joint Program/Consortial Agreement

**BMS 60196 INDIVIDUAL INVESTIGATION**

(Repeatable for a maximum of 6 credit hours) 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 Type(s): Individual Investigation Department: Biomedical Sciences Course Attributes: Joint Program/Consortial Agreement

**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 Type(s): Research

Department: Biomedical Sciences

Course Attributes: Joint Program/Consortial Agreement

**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 Type(s): Master's Thesis

Department: Biomedical Sciences

Course Attributes: Joint Program/Consortial Agreement

**BMS 60220 HUMAN MICROSCOPIC ANATOMY**

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 Type(s): Lecture Department: Biomedical Sciences Course Attributes: Joint Program/Consortial Agreement

**BMS 60251 THEORY AND PRACTICE OF CLONING AND GENETIC ENGINEERING**

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 Type(s): Lecture Department: Biomedical Sciences Course Attributes: Joint Program/Consortial Agreement

**BMS 60257 RESEARCH PROPOSAL**

Preparation and defense of a formal research proposal modeled after the format of the National Institutes of Health. Prerequisite: Special approval and graduate standing. 2.000 Credit hours 2.000 Other hours Levels: Graduate Schedule Type(s): Research Department: Biomedical Sciences Course Attributes: Joint Program/Consortial Agreement

**BMS 60291 SEMINAR IN CELLULAR AND MOLECULAR BIOLOGY**

(Repeatable for credit) 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 Type(s): Seminar

Department: Biomedical Sciences

Course Attributes: Joint Program/Consortial Agreement

**BMS 60295 SPECIAL TOPICS IN CELLULAR AND MOLECULAR BIOLOGY**

(Repeatable for credit) Study of subject or problem of current importance. Content dependent upon student Requirements and on recent developments in field. Prerequisite: Special approval and graduate standing.

2.000 to 5.000 Credit hours

2.000 to 5.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Biomedical Sciences

Course Attributes: Joint Program/Consortial Agreement

**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 Type(s): Master's Thesis

Department: Biomedical Sciences

Course Attributes: Joint Program/Consortial Agreement

**BMS 60440 CELLULAR AND MOLECULAR SIGNALING**

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 Type(s): Lecture

Department: Biomedical Sciences

**BMS 60449 MEDICAL PHYSIOLOGY I**

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 Type(s): Lecture

Department: Biomedical Sciences

Course Attributes: Joint Program/Consortial Agreement

**BMS 60450 MEDICAL PHYSIOLOGY II**

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 Type(s): Lecture  
Department: Biomedical Sciences  
Course Attributes: Joint Program/Consortial Agreement

**BMS 60452 PULMONARY PHYSIOLOGY**

Relationship between structure and function of the lung with focus on mechanics, circulation, gas exchange, gas transport, acid/base regulation, regulation, host-defense and ventilation perfusion. Prerequisite: BSCI 5/70433 and 5/70434 or BMS 6/70449 and 6/70450. Graduate standing.  
2.000 Credit hours  
2.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Biomedical Sciences  
Course Attributes: Joint Program/Consortial Agreement

**BMS 60491 SEMINAR IN MEDICAL PHYSIOLOGY**

(Repeatable for credit) 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 Type(s): Seminar  
Department: Biomedical Sciences  
Course Attributes: Joint Program/Consortial Agreement

**BMS 60495 SPECIAL TOPICS IN MEDICAL PHYSIOLOGY**

(Repeatable for credit) Study of subject or problem of current importance. Content dependent upon student Requirements and on recent developments in field. Prerequisite: Special approval and graduate standing.  
2.000 to 5.000 Credit hours  
2.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Biomedical Sciences  
Course Attributes: Joint Program/Consortial Agreement

**BMS 60550 MEDICAL PHARMACOLOGY I**

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 Type(s): Lecture  
Department: Biomedical Sciences  
Course Attributes: Joint Program/Consortial Agreement

**BMS 60551 MEDICAL PHARMACOLOGY II**

Continuation of BMS 60550/70550. Prerequisite: BMS 6/70550. Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate

Schedule Type(s): Lecture  
Department: Biomedical Sciences  
Course Attributes: Joint Program/Consortial Agreement

**BMS 60591 SEMINAR IN PHARMACOLOGY**

(Repeatable for credit) 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 Type(s): Seminar  
Department: Biomedical Sciences  
Course Attributes: Joint Program/Consortial Agreement

**BMS 60595 SPECIAL TOPICS IN PHARMACOLOGY**

(Repeatable for credit) Study of subject or problem of current importance. Content dependent upon student Requirements and on recent developments in field. Prerequisite: Special approval and graduate standing.  
2.000 to 5.000 Credit hours  
2.000 to 5.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Biomedical Sciences  
Course Attributes: Joint Program/Consortial Agreement

**BMS 60596 INDIVIDUAL INVESTIGATION IN PHARMACOLOGY**

(Repeatable for credit) 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 Type(s): Individual Investigation  
Department: Biomedical Sciences  
Course Attributes: Joint Program/Consortial Agreement

**BMS 60729 CELLULAR AND MOLECULAR NEUROSCIENCE**

The relation of aspects of the neurosciences to the fundamental properties of nervous tissue, establishing a firm base in experimental neurobiology. Lecture, discussion and laboratory. Prerequisites: graduate standing and special approval of instructor.  
4.000 Credit hours  
4.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Biomedical Sciences  
Course Attributes: Joint Program/Consortial Agreement

**BMS 60791 SEMINAR IN NEUROBIOLOGY**

(Repeatable for credit) 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 Type(s): Seminar  
Department: Biomedical Sciences

**BMS 60795 SPECIAL TOPICS IN NEUROBIOLOGY**

(Repeatable for credit) Study of problems of current importance. Content dependent on student Requirements and on developments in field. Prerequisite: Special approval and graduate standing.  
2.000 or 3.000 Credit hours  
2.000 or 3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Biomedical Sciences  
Course Attributes: Joint Program/Consortial Agreement

**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 Type(s): Lecture  
Department: Biomedical Sciences

**BMS 61001 INTRODUCTION TO BIOMEDICAL SCIENCES**

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 Type(s): Seminar  
Department: Biomedical Sciences

**BMS 68610 HUMAN GROSS ANATOMY I**

An intensive survey of human micromorphology. 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 Type(s): Lecture  
Department: Biomedical Sciences  
Course Attributes: Joint Program/Consortial Agreement

**BMS 68611 HUMAN GROSS ANATOMY II**

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 Type(s): Lecture  
Department: Biomedical Sciences  
Course Attributes: Joint Program/Consortial Agreement


**BMS 70120 LABORATORY TECHNIQUES IN BIOMEDICAL SCIENCES**

(Repeatable once for credit) 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

Levels: Graduate

Schedule Type(s): Research

Department: Biomedical Sciences

Course Attributes: Joint Program/Consortial Agreement

**BMS 70196 INDIVIDUAL INVESTIGATION**

(Repeatable for credit) 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

Levels: Graduate

Schedule Type(s): Individual Investigation

Department: Biomedical Sciences

Course Attributes: Joint Program/Consortial Agreement

**BMS 70220 HUMAN MICROSCOPIC ANATOMY**

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

Levels: Graduate

Schedule Type(s): Lecture

Department: Biomedical Sciences

Course Attributes: Joint Program/Consortial Agreement

**BMS 70251 THEORY AND PRACTICE OF CLONING AND GENETIC ENGINEERING**

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

Levels: Graduate

Schedule Type(s): Lecture

Department: Biomedical Sciences

Course Attributes: Joint Program/Consortial Agreement

**BMS 70257 RESEARCH PROPOSAL**

Preparation and defense of a formal research proposal modeled after the format of the national institutes of health. Prerequisite: Doctoral standing.

2.000 Credit hours

2.000 Other hours

Levels: Graduate

Schedule Type(s): Research

Department: Biomedical Sciences

Course Attributes: Joint Program/Consortial Agreement

**BMS 70291 SEMINAR IN CELLULAR AND MOLECULAR BIOLOGY**

(Repeatable for credit) 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 Type(s): Seminar

Department: Biomedical Sciences

Course Attributes: Joint Program/Consortial Agreement

**BMS 70295 SPECIAL TOPICS IN CELLULAR AND MOLECULAR BIOLOGY**

(Repeatable for credit) Study of subject or problem of current importance. Content dependent upon student Requirements and on recent developments in field. Prerequisite: Special approval. Doctoral standing.

2.000 to 5.000 Credit hours

2.000 to 5.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Biomedical Sciences

Course Attributes: Joint Program/Consortial Agreement

**BMS 70440 CELLULAR AND MOLECULAR SIGNALING**

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.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Biomedical Sciences

**BMS 70449 MEDICAL PHYSIOLOGY I**

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. Doctoral standing.

4.000 Credit hours

4.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Biomedical Sciences

Course Attributes: Joint Program/Consortial Agreement

**BMS 70452 PULMONARY PHYSIOLOGY**

Relationship between structure and function of the lung with focus on mechanics, circulation, gas exchange, gas transport, acid/base regulation, regulation, host-defense and ventilation perfusion. Prerequisite: BSCI 5/70433 and 5/70434 or BMS 6/70449 and 6/70450. Doctoral standing.

2.000 Credit hours

2.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Biomedical Sciences

Course Attributes: Joint Program/Consortial Agreement

**BMS 70491 SEMINAR IN MEDICAL PHYSIOLOGY**

(Repeatable for credit) 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 Type(s): Seminar

Department: Biomedical Sciences

Course Attributes: Joint Program/Consortial Agreement

**BMS 70495 SPECIAL TOPICS IN MEDICAL PHYSIOLOGY**

(Repeatable for credit) Study of subject or problem of current importance. Content dependent upon student Requirements and on recent developments in field. Prerequisite: Special approval. Doctoral standing.

2.000 to 5.000 Credit hours

2.000 to 5.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Biomedical Sciences

Course Attributes: Joint Program/Consortial Agreement

**BMS 70550 MEDICAL PHARMACOLOGY I**

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 Type(s): Lecture

Department: Biomedical Sciences

Course Attributes: Joint Program/Consortial Agreement

**BMS 70591 SEMINAR IN PHARMACOLOGY**

(Repeatable for credit) 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 Type(s): Seminar

Department: Biomedical Sciences

Course Attributes: Joint Program/Consortial Agreement

**BMS 70595 SPECIAL TOPICS IN PHARMACOLOGY**

(Repeatable for credit) Study of subject or problem of current importance. Content dependent upon student Requirements and on recent developments in field. Prerequisite: Special approval. Doctoral standing.

2.000 to 5.000 Credit hours

2.000 to 5.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Biomedical Sciences

Course Attributes: Joint Program/Consortial Agreement

**BMS 70596 INDIVIDUAL INVESTIGATION IN PHARMACOLOGY**

(Repeatable for credit) 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 Type(s): Individual Investigation

Department: Biomedical Sciences

Course Attributes: Joint Program/Consortial Agreement

**BMS 70729 CELLULAR AND MOLECULAR NEUROSCIENCE**

The relation of aspects of the neurosciences to the fundamental properties of nervous tissue, establishing a firm base in experimental neurobiology. Lecture, discussion and laboratory. Prerequisites: BMS 6/70710, doctoral standing and special approval of instructor.

4.000 Credit hours

4.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Biomedical Sciences

**BMS 70791 SEMINAR IN NEUROBIOLOGY**

(Repeatable for credit) 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 Type(s): Seminar

Department: Biomedical Sciences

Course Attributes: Joint Program/Consortial Agreement

**BMS 70795 SPECIAL TOPICS IN NEUROBIOLOGY**

(Repeatable for credit) Study of problems of current importance. Content dependent on student Requirements and on developments in field. Prerequisite: Special approval. Doctoral standing.

2.000 or 3.000 Credit hours

2.000 or 3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Biomedical Sciences

Course Attributes: Joint Program/Consortial Agreement

**BMS 78610 HUMAN GROSS ANATOMY I**

An intensive survey of human micromorphology. Lecture two hours per week. Laboratory six hours per week. Prerequisite: Special approval. Doctoral standing.

4.000 Credit hours

4.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Biomedical Sciences

Course Attributes: Joint Program/Consortial Agreement

**BMS 78611 HUMAN GROSS ANATOMY II**

An intensive survey of human micromorphology; 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

Levels: Graduate

Schedule Type(s): Lecture

Department: Biomedical Sciences

Course Attributes: Joint Program/Consortial Agreement

**BMS 78613 PLEISTOCENE HOMINID MORPHOLOGY**

An intensive examination of fossil hominids of the plio-pleistocene. Prerequisite: Special approval. Doctoral standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Biomedical Sciences

Course Attributes: Joint Program/Consortial Agreement

**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

Levels: Graduate

Schedule Type(s): Lecture

Department: Biomedical Sciences

Course Attributes: Joint Program/Consortial Agreement

**BMS 78630 PRINCIPLES OF BIOLOGICAL ANTHROPOLOGY**

Graduate-level introduction to the field of biological anthropology. Topics include genetics, human variation, fossil and modern primates and early man. Prerequisite: Special approval. Doctoral standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Biomedical Sciences

Course Attributes: Joint Program/Consortial Agreement

**BMS 78637 BIOANTHROPOLOGICAL DATA ANALYSIS I**

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

Levels: Graduate

Schedule Type(s): Lecture

Department: Biomedical Sciences

Course Attributes: Joint Program/Consortial Agreement

**BMS 78638 BIOANTHROPOLOGICAL DATA ANALYSIS II**

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.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Biomedical Sciences

Course Attributes: Joint Program/Consortial Agreement

**BMS 78691 SEMINAR IN BIOLOGICAL ANTHROPOLOGY**

(Repeatable for credit) 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 Type(s): Seminar

Department: Biomedical Sciences

Course Attributes: Joint Program/Consortial Agreement

**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.

1.000 to 5.000 Credit hours

1.000 to 5.000 Other hours

Levels: Graduate

Schedule Type(s): Field Experience

Department: Biomedical Sciences

**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. Prerequisite: Special approval. Doctoral standing.

2.000 to 5.000 Credit hours

2.000 to 5.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Biomedical Sciences

Course Attributes: Joint Program/Consortial Agreement

**BMS 80198 RESEARCH**

(Repeatable for credit) Research for doctoral students who have not yet passed candidacy examination. Prerequisite: Special approval of adviser. Doctoral standing.

1.000 to 15.000 Credit hours

1.000 to 15.000 Other hours

Levels: Graduate

Schedule Type(s): Research

Department: Biomedical Sciences

Course Attributes: Joint Program/Consortial Agreement

**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

Levels: Graduate

Schedule Type(s): Dissertation





Department: Biomedical Sciences  
Course Attributes: Joint Program/Consortial Agreement

### **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  
Levels: Graduate  
Schedule Type(s): Dissertation  
Department: Biomedical Sciences  
Course Attributes: Joint Program/Consortial Agreement

## **Basic Sciences (BSC)**

### **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 prosecutions, 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  
Levels: Professional  
Schedule Type(s): Combined Lecture and Lab  
Department: Podiatric Medicine

### **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  
2.000 Lab hours  
Levels: Professional  
Schedule Type(s): Laboratory, Lecture  
Department: Podiatric Medicine

### **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 and introduction to the inborn errors of metabolism, nutrition and biochemistry of specialized tissue and fluids. Prerequisite: student must be enrolled in the Podiatric Medicine program.

6.000 Credit hours  
6.000 Lecture hours  
Levels: Professional  
Schedule Type(s): Lecture  
Department: Podiatric Medicine

### **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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Professional  
Schedule Type(s): Lecture  
Department: Podiatric Medicine

### **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 Type(s): Laboratory, Lecture  
Department: Podiatric Medicine

### **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 Type(s): Lecture  
Department: Podiatric Medicine

### **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 Type(s): Lecture  
Department: Podiatric Medicine

### **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 microbic groups: viruses, bacteria, fungi, and protozoa. The structure, metabolism, genetics, control and laboratory techniques of each microbic group will be described. 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  
4.000 Lecture hours  
2.000 Lab hours  
Levels: Professional  
Schedule Type(s): Combined Lecture and Lab  
Department: Podiatric Medicine

### **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  
6.000 Lecture hours  
2.000 Lab hours  
Levels: Professional  
Schedule Type(s): Combined Lecture and Lab  
Department: Podiatric Medicine

### **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 Type(s): Lecture  
Department: Podiatric Medicine

**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

6.000 Lecture hours

2.000 Lab hours

Levels: Professional

Schedule Type(s): Combined Lecture and Lab

Department: Podiatric Medicine

**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 Type(s): Lecture

Department: Podiatric Medicine

***Biological Sciences (BSCI)*****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 Type(s): Lecture

Department: Biological Sciences

Course Attributes: Kent Core-Basic Sciences, LER-Basic Sciences, Transfer 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 Type(s): Lecture

Department: Biological Sciences

Course Attributes: Kent Core-Basic Sciences, LER-Basic Sciences, Transfer 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 Type(s): Laboratory

Department: Biological Sciences

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 Type(s): Combined Lecture and Lab

Department: Biological Sciences

**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.

4.000 Credit hours

3.000 Lecture hours

2.000 Lab hours

Levels: Undergraduate

Schedule Type(s): Combined Lecture and Lab

Department: Biological Sciences

Course Attributes: Kent Core-Basic Sciences, LER-Basic Sciences

**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.

4.000 Credit hours

3.000 Lecture hours

3.000 Lab hours

Levels: Undergraduate

Schedule Type(s): Laboratory, Lecture

Department: Biological Sciences

Course Attributes: Kent Core-Basic Sciences, LER-Basic Sciences, TAG Science

**BSCI 10195 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 Type(s): Lecture

Department: Biological Sciences

**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.

5.000 Credit hours

5.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Biological Sciences

**BSCI 11010 ANATOMY AND PHYSIOLOGY I FOR ALLIED HEALTH**

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. Prerequisite: special approval.

3.000 Credit hours

2.000 Lecture hours

3.000 Lab hours

Levels: Undergraduate

Schedule Type(s): Combined Lecture and Lab

Department: Biological Sciences

Course Attributes: Kent Core-Basic Sciences

**BSCI 11020 ANATOMY AND PHYSIOLOGY II FOR ALLIED HEALTH**

Anatomy and physiology of the circulatory, digestive, urinary, nervous, endocrine and reproductive systems. Prerequisite: BSCI 11010 and special approval.

3.000 Credit hours

2.000 Lecture hours

3.000 Lab hours

Levels: Undergraduate

Schedule Type(s): Combined Lecture and Lab

Department: Biological Sciences

Course Attributes: Kent Core-Basic Sciences

**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 Type(s): Laboratory, Lecture

All Sections for this Course

Department: Biological Sciences

**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

1.000 Lab hours

Levels: Undergraduate

Schedule Type(s): Laboratory, Lecture

Department: Biological Sciences

Course Attributes: Kent Core-Basic Sciences, Kent Core-Basic Sciences Lab, LER-Basic Sciences, Transfer Module-Natural Sciences

**BSCI 20021 BASIC MICROBIOLOGY**

Principles of microorganisms having a direct relationship on the health and well-being of man. Prerequisite: BSCI 20020; or BSCI 10100 and 10110.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Biological Sciences

**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 Type(s): Laboratory

Department: Biological Sciences

**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 Type(s): Lecture

Department: Biological Sciences

**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 Type(s): Individual Investigation

Department: Biological Sciences

**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 Type(s): Lecture

Department: Biological Sciences

**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

2.000 Lecture hours

3.000 Lab hours

Levels: Undergraduate

Schedule Type(s): Laboratory, Lecture

Department: Biological Sciences

**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

2.000 Lecture hours

3.000 Lab hours

Levels: Undergraduate

Schedule Type(s): Laboratory, Lecture

Department: Biological Sciences

**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 Type(s): Lecture

Department: Biological Sciences

**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 Type(s): Lecture

Department: Biological Sciences

**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 Type(s): Lecture

Department: Biological Sciences

**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 10110 and 10120 and CHEM 10060 and 10061 and 10062 and 10063.

4.000 Credit hours

3.000 Lecture hours

3.000 Lab hours

Levels: Undergraduate

Schedule Type(s): Laboratory, Lecture

Department: Biological Sciences

**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. Prerequisite: BSCI 10110 and 10120.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Biological Sciences

**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. Prerequisite: BSCI 30140; CHEM 10060, 10061, 10062 and 10063.

4.000 Credit hours

3.000 Lecture hours

1.000 Lab hours

Levels: Undergraduate

Schedule Type(s): Laboratory, Lecture

Department: Biological Sciences

**BSCI 30267 PLANT PHYSIOLOGY**

Survey of physiological and biochemical processes, their interactions and effect on plant growth and behavior. Lecture three hours, lab three hours weekly. Prerequisite: BSCI 30140; CHEM 10060, 10061, 10062 and 10063.

4.000 Credit hours

3.000 Lecture hours

3.000 Lab hours

Levels: Undergraduate

Schedule Type(s): Laboratory, Lecture

Department: Biological Sciences

**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 Type(s): Lecture

Department: Biological Sciences

**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 Type(s): Laboratory

Department: Biological Sciences

**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.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Biological Sciences

**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.

4.000 Credit hours

2.000 Lecture hours

6.000 Lab hours

Levels: Undergraduate

Schedule Type(s): Laboratory, Lecture

Department: Biological Sciences

**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.

2.000 Credit hours

2.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Biological Sciences

**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.

4.000 Credit hours

3.000 Lecture hours

1.000 Lab hours

Levels: Undergraduate

Schedule Type(s): Laboratory, Lecture

Department: Biological Sciences

**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.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Biological Sciences

**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 Type(s): Lecture

Department: Biological Sciences

**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 Type(s): Laboratory, Lecture

Department: Biological Sciences

**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 Type(s): Laboratory, Lecture

Department: Biological Sciences

**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 Type(s): Lecture

Department: Biological Sciences

**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 Type(s): Laboratory, Lecture

Department: Biological Sciences

**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 Type(s): Laboratory, Lecture

Department: Biological Sciences

**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 Type(s): Laboratory, Lecture

Department: Biological Sciences

**BSCI 40020 BIOLOGY OF AGING**

Aging in cells, plants and animals, including man; maintaining human health during aging; current theories of aging. Lecture three hours weekly. Prerequisites: BSCI 20020 and CHEM 10050 and CHEM 10052.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Biological Sciences

**BSCI 40099 SENIOR HONORS THESIS**

(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 Type(s): Senior Project/Honors Thesis

Department: Biological Sciences

Course Attributes: Experiential Learning Requirement

**BSCI 40142 BIOENERGETICS**

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 Type(s): Lecture

Department: Biological Sciences

**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 Type(s): Lecture

Department: Biological Sciences

**BSCI 40146 DEVELOPMENTAL MECHANISMS**

Fundamental concepts and paradigms of development as exemplified by major model organisms, with main focus on modern molecular and genetic understanding of developmental mechanisms. Prerequisite: senior standing, B or better in BSCI 30156 and BSCI 30410.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Biological Sciences

**BSCI 40150 MOLECULAR MECHANISMS OF DISEASE: CANCER**

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 Type(s): Lecture

Department: Biological Sciences

**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 Type(s): Lecture

Department: Biological Sciences



**BSCI 40159 MOLECULAR BIOLOGY LAB**

Experience in research methods for studying cellular and molecular processes in plant and animal systems. Lab meets 6 hours weekly. Prerequisite: BSCI 30140; BSCI 40143 or 40158; CHEM 20481 or 30481; CHEM 30475.

2.000 Credit hours

2.000 Other hours

Levels: Undergraduate

Schedule Type(s): Combined Lecture and Lab

Department: Biological Sciences

**BSCI 40160 MARINE BIOLOGY**

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 Type(s): Lecture

Department: Biological Sciences

**BSCI 40162 SOIL BIOLOGY**

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 Type(s): Lecture

Department: Biological Sciences

**BSCI 40163 ORGANIC EVOLUTION**

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 Type(s): Lecture

Department: Biological Sciences

**BSCI 40164 MOLECULAR SYSTEMATICS AND PHYLOGENETICS**

Modern methods used in systematics, DNA sequencing, DNA fingerprinting, phylogenetic analysis and interpretation of character evolution. Three hours lecture and 3 hours lab weekly. Prerequisite: BSCI 40163.

4.000 Credit hours

4.000 Other hours

Levels: Undergraduate

Schedule Type(s): Combined Lecture and Lab

Department: Biological Sciences

**BSCI 40170 STREAM BIOLOGY**

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

Levels: Undergraduate

Schedule Type(s): Laboratory, Lecture

Department: Biological Sciences

**BSCI 40174 IMMUNOLOGY**

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

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Biological Sciences

**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

Levels: Undergraduate

Schedule Type(s): Seminar

Department: Biological Sciences

**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

Levels: Undergraduate

Schedule Type(s): Practicum

Department: Biological Sciences

Course Attributes: Experiential Learning Requirement

**BSCI 40195 SPECIAL TOPICS IN BIOLOGY**

(Repeatable for credit) 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 Type(s): Laboratory, Lecture

Department: Biological Sciences

**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 Type(s): Individual Investigation

Department: Biological Sciences

**BSCI 40272 PLANT ANATOMY**

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 Type(s): Laboratory, Lecture

Department: Biological Sciences

**BSCI 40275 SYSTEMATIC BOTANY**

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 Type(s): Laboratory, Lecture

Department: Biological Sciences

**BSCI 40277 MORPHOLOGY OF LOWER PLANTS**

Nonvascular plants, emphasizing structure, reproduction, evolution, fossil history, economic, ecological and medical importance. Lecture three hours, lab three hours weekly. Prerequisite: BSCI 10110 and 10120.

4.000 Credit hours

3.000 Lecture hours

3.000 Lab hours

Levels: Undergraduate

Schedule Type(s): Laboratory, Lecture

Department: Biological Sciences

**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 Type(s): Combined Lecture and Lab

Department: Biological Sciences

**BSCI 40363 MICROBIAL ECOLOGY**

Microbial interactions with their biotic and abiotic environment; control of distribution and physiological activities; biochemical cycles; current techniques; emphasis on bacteria in aquatic systems. Pre- or corequisite BSCI 30171, 30360.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Biological Sciences

**BSCI 40364 LIMNOLOGY**

Field and laboratory study of the principles of aquatic ecology. Recitation one hour, lecture two hours, lab three hours weekly. Prerequisite: BSCI 30360.

4.000 Credit hours

3.000 Lecture hours

0.500 Lab hours



0.500 Other hours

Levels: Undergraduate

Schedule Type(s): Laboratory, Lecture, Recitation

Department: Biological Sciences

### **BSCI 40368 WETLAND ECOLOGY AND MANAGEMENT**

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 Type(s): Laboratory, Lecture

Department: Biological Sciences

### **BSCI 40372 POPULATIONS, COMMUNITIES AND ECOSYSTEMS**

Integrated investigation of population, community and ecosystem ecology from historical and current perspectives. Community and ecosystem views of nutrient dynamics and biodiversity provide a framework for consideration of food web patterns, energy flow and, ecosystem stability and function. Prerequisite: BSCI 30360 and 40163.

4.000 Credit hours

4.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Biological Sciences

### **BSCI 40374 CONSERVATION BIOLOGY**

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 Type(s): Lecture

Department: Biological Sciences

### **BSCI 40375 ENVIRONMENTAL BIOLOGY AND MANAGEMENT**

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

Schedule Type(s): Lecture

Department: Biological Sciences

### **BSCI 40376 TROPICAL FIELD BIOLOGY AND CONSERVATION**

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 Type(s): Combined Lecture and Lab

Department: Biological Sciences

### **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 Type(s): Lecture

Department: Biological Sciences

### **BSCI 40432 ENDOCRINOLOGY**

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 Type(s): Lecture

Department: Biological Sciences

### **BSCI 40433 MAMMALIAN PHYSIOLOGY I**

The internal environment, metabolism and energy balance, temperature regulation, nervous system and special senses. Lecture three hours. Prerequisite: BSCI 40430; 9 hours mathematics (MATH) coursework; 20 hours chemistry (CHEM) coursework. Corequisite: BSCI 40444.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Biological Sciences

### **BSCI 40434 MAMMALIAN PHYSIOLOGY II**

Physiology of cardiovascular, renal, respiratory and digestive systems. Lecture three hours. Prerequisite: BSCI 40430; 9 hours mathematics (MATH) coursework or 20 hours chemistry (CHEM) coursework. Corequisite: BSCI 40445.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Biological Sciences

### **BSCI 40435 REPRODUCTIVE PHYSIOLOGY OF MAMMALS**

Current concepts of reproductive processes based on studies with laboratory and domestic animals and man. Lecture three hours. Prerequisite: BSCI 40430 and 40432.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Biological Sciences

### **BSCI 40439 ENVIRONMENTAL PHYSIOLOGY**

Effects of heat, cold, oxygen, carbon dioxide, pressure, radiant energy, salt and water variations

and other environmental factors on organisms.

Prerequisite: BSCI 10110 and 10120 and CHEM 10060, 10061, 10062 and 10063.

4.000 Credit hours

4.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Biological Sciences

### **BSCI 40450 BIOLOGICAL CLOCKS**

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 Type(s): Lecture

Department: Biological Sciences

### **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 Type(s): Lecture

Department: Biological Sciences

### **BSCI 40517 HISTOLOGY**

Study of the microscopic and submicroscopic structure of the mammalian body in relation to function. Lecture two hours, lab three hours weekly. Prerequisite: BSCI 10110, 10120, 30140 and 4 hours of biology (BSCI) coursework.

3.000 Credit hours

2.000 Lecture hours

3.000 Lab hours

Levels: Undergraduate

Schedule Type(s): Laboratory, Lecture

Department: Biological Sciences

### **BSCI 40519 HORMONES AND BEHAVIOR**

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 Type(s): Lecture

Department: Biological Sciences

### **BSCI 40520 BEHAVIORAL EVOLUTION**

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 Type(s): Lecture

Department: Biological Sciences

### **BSCI 40525 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: BSCI 10110 and 10120 plus 4 hours of biology (BSCI) coursework. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Biological Sciences

#### **BSCI 40556 VERTEBRATE ZOOLOGY**

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 Type(s): Laboratory, Lecture  
Department: Biological Sciences

#### **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 Type(s): Laboratory, Lecture  
Department: Biological Sciences

#### **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 Type(s): Lecture  
Department: Biological Sciences  
Course Attributes: Writing Intensive Course

#### **BSCI 41010 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. Prerequisite: special approval. 3.000 Credit hours  
1.000 Lecture hours  
6.000 Lab hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Biological Sciences

#### **BSCI 50020 BIOLOGY OF AGING**

Aging in cells, plants and animals, including humans; maintaining human health during aging; current theories of aging. Lecture three hours

weekly. Prerequisites: BSCI 20020 and CHEM 10050 and CHEM 10052 and graduate standing. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Biological Sciences

#### **BSCI 50142 BIOENERGETICS**

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 Type(s): Lecture  
Department: Biological Sciences

#### **BSCI 50143 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 40430. Graduate standing. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Biological Sciences

#### **BSCI 50146 DEVELOPMENTAL MECHANISMS**

Fundamental concepts and paradigms of development as exemplified by major model organisms, with main focus on modern molecular and genetic understanding of developmental mechanisms. Prerequisite: graduate standing. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Biological Sciences

#### **BSCI 50150 MOLECULAR MECHANISMS OF DISEASE: CANCER**

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. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Biological Sciences

#### **BSCI 50158 MOLECULAR BIOLOGY**

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 Type(s): Lecture  
Department: Biological Sciences

#### **BSCI 50159 MOLECULAR BIOLOGY LABORATORY**

Experience in research methods for studying cellular and molecular processes in plant and animal systems. Lab meets 6 hours weekly. Prerequisite: BSCI 20140; BSCI 40143 or 40158; CHEM 20481 or 30481; CHEM 30475. Graduate standing. 2.000 Credit hours  
2.000 Other hours  
Levels: Graduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Biological Sciences

#### **BSCI 50160 MARINE BIOLOGY**

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  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Biological Sciences

#### **BSCI 50162 SOIL BIOLOGY**

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  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Biological Sciences

#### **BSCI 50163 ORGANIC 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. Graduate standing. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Biological Sciences

#### **BSCI 50164 MOLECULAR SYSTEMATICS AND PHYLOGENETICS**

Modern methods used in systematics, DNA sequencing, DNA fingerprinting, phylogenetic analysis and interpretation of character evolution. Three hours lecture and 3 hours lab weekly. Prerequisite: BSCI 40163; graduate standing. 4.000 Credit hours  
4.000 Other hours  
Levels: Graduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Biological Sciences

#### **BSCI 50170 STREAM BIOLOGY**

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  
Levels: Graduate  
Schedule Type(s): Laboratory, Lecture  
Department: Biological Sciences

**BSCI 50174 IMMUNOLOGY**

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

Levels: Graduate

Schedule Type(s): Lecture

Department: Biological Sciences

**BSCI 50195 SPECIAL TOPICS IN BIOLOGY**

(Repeatable for credit) 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 Type(s): Laboratory, Lecture

Department: Biological Sciences

**BSCI 50196 INDIVIDUAL INVESTIGATION**

(Repeatable for credit) 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 Type(s): Individual Investigation

Department: Biological Sciences

**BSCI 50272 PLANT ANATOMY**

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: BSCI 10181, 10182.

Graduate standing.

4.000 Credit hours

3.000 Lecture hours

1.000 Lab hours

Levels: Graduate

Schedule Type(s): Laboratory, Lecture

Department: Biological Sciences

**BSCI 50275 SYSTEMATIC BOTANY**

Biosystematics, angiosperm phylogeny survey of some major families of dicotyledons. Lecture three hours laboratory three hours weekly. Prerequisite: BSCI 10181 10182 or equivalent.

Graduate standing.

4.000 Credit hours

3.000 Lecture hours

1.000 Lab hours

Levels: Graduate

Schedule Type(s): Laboratory, Lecture

Department: Biological Sciences

**BSCI 50277 MORPHOLOGY OF LOWER PLANTS**

Nonvascular plants, emphasizing structure reproduction evolution fossil history economic ecological and medical importance. Lecture three hours laboratory three hours weekly. Prerequisite: BSCI 10181 10182 or equivalent. Graduate standing.

4.000 Credit hours

3.000 Lecture hours

3.000 Lab hours

Levels: Graduate

Schedule Type(s): Laboratory, Lecture

Department: Biological Sciences

**BSCI 50360 ICHTHYOLOGY**

Basic biology, natural history, behavior and ecology of the fishes. Three hour lecture and three hour lab weekly. Prerequisite: graduate standing.

4.000 Credit hours

3.000 Lecture hours

3.000 Lab hours

Levels: Graduate

Schedule Type(s): Combined Lecture and Lab

Department: Biological Sciences

**BSCI 50363 MICROBIAL ECOLOGY**

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.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Biological Sciences

**BSCI 50364 LIMNOLOGY**

Field and laboratory study of the principles of aquatic ecology. Recitation one hour, lecture two hours, laboratory three hours weekly. Prerequisite: BSCI 30360t. Graduate standing.

4.000 Credit hours

3.000 Lecture hours

0.500 Lab hours

0.500 Other hours

Levels: Graduate

Schedule Type(s): Laboratory, Lecture, Recitation

Department: Biological Sciences

**BSCI 50368 WETLAND ECOLOGY AND MANAGEMENT**

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.

4.000 Credit hours

3.000 Lecture hours

1.000 Lab hours

Levels: Graduate

Schedule Type(s): Laboratory, Lecture

Department: Biological Sciences

**BSCI 50372 POPULATIONS, COMMUNITIES AND ECOSYSTEMS**

Integrated investigation of population, community and ecosystem ecology from historical and current perspectives. Community and ecosystem views of nutrient dynamics and biodiversity provide a framework for consideration of food web patterns energy flow and, ecosystem stability and function. Prerequisite: BSCI 30360 and 40163; graduate standing.

4.000 Credit hours

4.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Biological Sciences

**BSCI 50374 CONSERVATION BIOLOGY**

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 Type(s): Lecture

Department: Biological Sciences

**BSCI 50375 ENVIRONMENTAL BIOLOGY AND MANAGEMENT**

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 Type(s): Lecture

Department: Biological Sciences

**BSCI 50376 TROPICAL FIELD BIOLOGY AND CONSERVATION**

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 Type(s): Combined Lecture and Lab

Department: Biological Sciences

**BSCI 50432 ENDOCRINOLOGY**

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 Type(s): Lecture

Department: Biological Sciences

**BSCI 50433 MAMMALIAN PHYSIOLOGY I**

The internal environment, metabolism and energy balance, temperature regulation, nervous system and special senses. Lecture three hours.

Prerequisite: BSCI 40430; 9 hours mathematics; 20 hours chemistry; graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Biological Sciences




**BSCI 50434 MAMMALIAN  
PHYSIOLOGY II**

Physiology of cardiovascular, renal, respiratory and digestive systems. Lecture three hours. Prerequisite: BSCI 40430; 9 hours mathematics; 20 hours chemistry; graduate standing. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Biological Sciences

**BSCI 50435 REPRODUCTIVE  
PHYSIOLOGY OF MAMMALS**

Current concepts of reproductive processes based on studies with laboratory and domestic animals and man. Lecture three hours. Prerequisite: BSCI 40430 and 40432; graduate standing. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Biological Sciences

**BSCI 50439 ENVIRONMENTAL  
PHYSIOLOGY**

Effects of heat, cold, oxygen, carbon dioxide, pressure, radiant energy salt, and water variations and other environmental factors on organisms. Lecture four hours weekly. Prerequisite: BSCI 10181, 10182; CHEM 10060, 10061 and 10062. Graduate standing. 4.000 Credit hours  
4.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Biological Sciences

**BSCI 50445 MAMMALIAN PHYSIOLOGY  
LAB II**

Laboratory experimentation emphasizing physiological principles covered in BSCI 5/70434. Corequisite: BSCI 5/70434. Graduate standing. 1.000 Credit hours  
3.000 Lab hours  
Levels: Graduate  
Schedule Type(s): Laboratory  
Department: Biological Sciences

**BSCI 50450 BIOLOGICAL CLOCKS**

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. 2.000 Credit hours  
2.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Biological Sciences

**BSCI 50451 CURRENT TOPICS IN  
BIOLOGICAL CLOCKS RESEARCH**

Discussion of current research literature in the area of research on biological clocks. Prerequisite: graduate standing. Corequisite: BSCI 50450. 1.000 Credit hours  
1.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Seminar  
Department: Biological Sciences

**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. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Biological Sciences

**BSCI 50517 HISTOLOGY**

Study of the microscopic and submicroscopic structure of the mammalian body in relation to function. Lecture two hours, laboratory three hours weekly. Prerequisite: BSCI 10181, 10182, plus 4 hours of biology. Graduate standing. 3.000 Credit hours  
2.000 Lecture hours  
3.000 Lab hours  
Levels: Graduate  
Schedule Type(s): Laboratory, Lecture  
Department: Biological Sciences

**BSCI 50519 HORMONES AND BEHAVIOR**

Current concepts of hormone and behavior interactions across species. Prerequisite: graduate standing. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Biological Sciences

**BSCI 50520 BEHAVIORAL EVOLUTION**

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 Type(s): Lecture  
Department: Biological Sciences

**BSCI 50522 READINGS IN BEHAVIORAL  
EVOLUTION**

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 Type(s): Seminar  
Department: Biological Sciences

**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: BSCI 10181 and 10182 plus 4 hours. Graduate standing. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate

Schedule Type(s): Lecture  
Department: Biological Sciences

**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: BSCI 10181, 10182 plus 4 hours of biology. Graduate standing. 4.000 Credit hours  
3.000 Lecture hours  
3.000 Lab hours  
Levels: Graduate  
Schedule Type(s): Laboratory, Lecture  
Department: Biological Sciences

**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. 3.000 Credit hours  
1.000 Lecture hours  
6.000 Lab hours  
Levels: Graduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Biological Sciences

**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. 2.000 Credit hours  
2.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Biological Sciences

**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 Type(s): Lecture  
Department: Biological Sciences

**BSCI 60144 SELECTED READINGS IN  
EUKARYOTIC CELL BIOLOGY**

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 Type(s): Lecture  
Department: Biological Sciences

**BSCI 60194 COLLEGE TEACHING IN BIOLOGY**

(Repeatable for credit) 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 Type(s): Lecture

Department: Biological Sciences

**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 Type(s): Research

Department: Biological Sciences

**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 Type(s): Master's Thesis

Department: Biological Sciences

**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 Type(s): Master's Thesis

Department: Biological Sciences

**BSCI 60370 ECOLOGICAL GENETICS**

Dynamics of genes in diploid populations and consequent interactions with and effects on components of the ecosystem, with examples. Prerequisite: BSCI 30156 30360, 40162. Graduate standing.

2.000 Credit hours

2.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Biological Sciences

**BSCI 60371 EVOLUTIONARY ECOLOGY**

An application of the theory of natural selection to the evolution of population and community phenomena. Prerequisite: BSCI 30360. Graduate standing.

2.000 Credit hours

2.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Biological Sciences

**BSCI 60391 SEMINAR IN ECOLOGY**

(Repeatable for credit) 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 Type(s): Seminar

Department: Biological Sciences

**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 Type(s): Lecture

Department: Biological Sciences

**BSCI 60440 CELLULAR AND MOLECULAR SIGNALING**

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 4/5/70143; and graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Biological Sciences

**BSCI 60446 ADVANCED HUMAN PHYSIOLOGY**

Physiological mechanisms of human health and disease with an emphasis on integrative physiology. Lecture 3 hours weekly. Prerequisite: Special approval from department and graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Biological Sciences

**BSCI 60461 NEUROCHEMISTRY**

Basic biochemistry of the mammalian nervous system, including myelin structure and metabolism, stimulus-secretion coupling, neurotransmitter and eicosanoid metabolism, energy utilization and the biochemistry of nervous disorders. Prerequisite: CHEM 5/70247.

Graduate standing.

2.000 Credit hours

2.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Biological Sciences

**BSCI 60462 NEUROBIOLOGY: SYSTEMS AND BEHAVIOR**

Provides broad coverage of the parts of the central nervous systems and how they integrate sensory information, drive motor function and regulate behavior. Prerequisite: graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Biological Sciences

**BSCI 60491 SEMINAR IN PHYSIOLOGY**

(Repeatable for credit) 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 Type(s): Seminar

Department: Biological Sciences

**BSCI 70103 BIOLOGICAL STATISTICS**

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 Type(s): Lecture

Department: Biological Sciences

**BSCI 70142 BIOENERGETICS**

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.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Biological Sciences

**BSCI 70143 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 40430. Doctoral standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Biological Sciences

**BSCI 70144 SELECTED READINGS IN EUKARYOTIC CELL BIOLOGY**

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.

1.000 Credit hours

1.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Biological Sciences

**BSCI 70146 DEVELOPMENTAL MECHANISMS**

Fundamental concepts and paradigms of development as exemplified by major model organisms, with main focus on modern molecular and genetic understanding of developmental mechanisms. Prerequisite: doctoral standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Biological Sciences


**BSCI 70150 MOLECULAR MECHANISMS OF DISEASE: CANCER**

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. 3.000 Credit hours 3.000 Lecture hours Levels: Graduate Schedule Type(s): Lecture Department: Biological Sciences

**BSCI 70158 MOLECULAR BIOLOGY**

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. 3.000 Credit hours 3.000 Lecture hours Levels: Graduate Schedule Type(s): Lecture Department: Biological Sciences

**BSCI 70160 MARINE BIOLOGY**

Natural history and ecology of marine organisms, with emphasis on life in coastal habitats. Lecture three hours weekly. Prerequisite: Doctoral standing. 3.000 Credit hours 3.000 Lecture hours Levels: Graduate Schedule Type(s): Lecture Department: Biological Sciences

**BSCI 70162 SOIL BIOLOGY**

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. 3.000 Credit hours 3.000 Lecture hours Levels: Graduate Schedule Type(s): Lecture Department: Biological Sciences

**BSCI 70163 ORGANIC 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 Type(s): Lecture Department: Biological Sciences

**BSCI 70164 MOLECULAR SYSTEMATICS AND PHYLOGENETICS**

Modern methods used in systematics, DNA sequencing, DNA fingerprinting, phylogenetic analysis and interpretation of character evolution. Three hours lecture and 3 hours lab weekly. Prerequisite: BSCI 40163; doctoral standing. 4.000 Credit hours 4.000 Other hours Levels: Graduate Schedule Type(s): Combined Lecture and Lab Department: Biological Sciences

**BSCI 70170 STREAM BIOLOGY**

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 Type(s): Laboratory, Lecture Department: Biological Sciences

**BSCI 70174 IMMUNOLOGY**

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 Type(s): Lecture Department: Biological Sciences

**BSCI 70194 COLLEGE TEACHING IN BIOLOGY**

(Repeatable for credit) 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 Levels: Graduate Schedule Type(s): Lecture Department: Biological Sciences

**BSCI 70195 SPECIAL TOPICS IN BIOLOGY**

(Repeatable for credit) 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 Levels: Graduate Schedule Type(s): Laboratory, Lecture Department: Biological Sciences

**BSCI 70196 INDIVIDUAL INVESTIGATION**

(Repeatable for credit) Prerequisite: Special approval of instructor and doctoral standing. 1.000 to 3.000 Credit hours 1.000 to 3.000 Other hours Levels: Graduate Schedule Type(s): Individual Investigation Department: Biological Sciences

**BSCI 70272 PLANT ANATOMY**

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: BSCI 10181, 10182. Doctoral standing. 4.000 Credit hours 3.000 Lecture hours 0.000 Lab hours Levels: Graduate Schedule Type(s): Laboratory, Lecture

Department: Biological Sciences

**BSCI 70275 SYSTEMATIC BOTANY**

Biosystematics, angiosperm phylogeny, survey of some major families of dicotyledons. Lecture three hours, laboratory three hours weekly. Prerequisite: BSCI 10181, 10182. Doctoral standing. 4.000 Credit hours 3.000 Lecture hours 1.000 Lab hours Levels: Graduate Schedule Type(s): Laboratory, Lecture Department: Biological Sciences

**BSCI 70277 MORPHOLOGY OF LOWER PLANTS**

Nonvascular plants, emphasizing structure, reproduction, evolution, fossil history, economic, ecological and medical importance. Lecture three hours, laboratory three hours weekly. Prerequisite: BSCI 10181, 10182. Doctoral standing. 4.000 Credit hours 3.000 Lecture hours 3.000 Lab hours Levels: Graduate Schedule Type(s): Laboratory, Lecture Department: Biological Sciences

**BSCI 70360 ICHTHYOLOGY**

Basic biology, natural history, behavior and ecology of the fishes. Three hour lecture and three hour lab weekly. Prerequisite: doctoral standing. 4.000 Credit hours 3.000 Lecture hours 3.000 Lab hours Levels: Graduate Schedule Type(s): Combined Lecture and Lab Department: Biological Sciences

**BSCI 70363 MICROBIAL ECOLOGY**

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. 3.000 Credit hours 3.000 Lecture hours Levels: Graduate Schedule Type(s): Lecture Department: Biological Sciences

**BSCI 70364 LIMNOLOGY**

Field and laboratory study of the principles of aquatic ecology. Recitation one hour, lecture two hours, laboratory three hours weekly. Prerequisite: BSCI 30360. Doctoral standing. 4.000 Credit hours 3.000 Lecture hours 0.500 Lab hours 0.500 Other hours Levels: Graduate Schedule Type(s): Laboratory, Lecture, Recitation Department: Biological Sciences

**BSCI 70368 WETLAND ECOLOGY AND MANAGEMENT**

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.

4.000 Credit hours

3.000 Lecture hours

1.000 Lab hours

Levels: Graduate

Schedule Type(s): Laboratory, Lecture

Department: Biological Sciences

### **BSCI 70370 ECOLOGICAL GENETICS**

Dynamics of genes in diploid populations and consequent interactions with and effects on components of the ecosystem, with examples.

Prerequisite: BSCI 30156, 30360, 40162. Doctoral standing.

2.000 Credit hours

2.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Biological Sciences

### **BSCI 70371 EVOLUTIONARY ECOLOGY**

An application of the theory of natural selection to the evolution of population and community phenomena. Prerequisite: BSCI 30360. Doctoral standing.

2.000 Credit hours

2.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Biological Sciences

### **BSCI 70372 POPULATIONS, COMMUNITIES AND ECOSYSTEMS**

Integrated investigation of population, community, and ecosystem ecology from historical and current perspectives. Community and ecosystem views of nutrient dynamics and biodiversity provide a framework for consideration of food web patterns, energy flow, and ecosystem stability and function. Prerequisite: BSCI 30360 and 40163; doctoral standing.

4.000 Credit hours

4.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Biological Sciences

### **BSCI 70374 CONSERVATION BIOLOGY**

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 Type(s): Lecture

Department: Biological Sciences

### **BSCI 70375 ENVIRONMENTAL BIOLOGY AND MANAGEMENT**

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 Type(s): Lecture

Department: Biological Sciences

### **BSCI 70376 TROPICAL FIELD BIOLOGY AND CONSERVATION**

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 Type(s): Combined Lecture and Lab

Department: Biological Sciences

### **BSCI 70391 SEMINAR IN ECOLOGY**

(Repeatable for credit) 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 Type(s): Seminar

Department: Biological Sciences

### **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 Type(s): Lecture

Department: Biological Sciences

### **BSCI 70432 ENDOCRINOLOGY**

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 Type(s): Lecture

Department: Biological Sciences

### **BSCI 70433 MAMMALIAN PHYSIOLOGY I**

The internal environment, metabolism and energy balance, temperature regulation, nervous system and special senses. Lecture three hours.

Prerequisite: BSCI 40430; 9 hours mathematics; 20 hours chemistry; doctoral standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Biological Sciences

### **BSCI 70434 MAMMALIAN PHYSIOLOGY II**

Physiology of cardiovascular, renal, respiratory and digestive systems. Lecture three hours.

Prerequisite: BSCI 40430; 9 hours mathematics; 20 hours chemistry; doctoral standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Biological Sciences

### **BSCI 70435 REPRODUCTIVE PHYSIOLOGY OF MAMMALS**

Current concepts of reproductive processes based on studies with laboratory and domestic animals and man. Lecture three hours. Prerequisite: BSCI 40430 and 40432. Doctoral standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Biological Sciences

### **BSCI 70439 ENVIRONMENTAL PHYSIOLOGY**

Effects of heat, cold, oxygen, carbon dioxide, pressure, radiant energy, salt, and water variations and other environmental factors on organisms. Lecture four hours weekly. Prerequisite: BSCI 10181, 10182; CHEM 10060, 10061 and 10062. Doctoral standing.

4.000 Credit hours

4.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Biological Sciences

### **BSCI 70440 CELLULAR AND MOLECULAR SIGNALING**

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 4/5/70143 and doctoral standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Biological Sciences

### **BSCI 70445 MAMMALIAN PHYSIOLOGY LAB II**

Laboratory experimentation emphasizing physiological principles covered in BSCI 5/70434. Prerequisite: doctoral standing. Corequisite: BSCI 50434 or 70434.

1.000 Credit hours

3.000 Lab hours

Levels: Graduate

Schedule Type(s): Laboratory

Department: Biological Sciences

### **BSCI 70450 BIOLOGICAL CLOCKS**

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 Type(s): Lecture  
Department: Biological Sciences

#### **BSCI 70451 CURRENT TOPICS IN BIOLOGICAL CLOCKS RESEARCH**

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 Type(s): Seminar  
Department: Biological Sciences

#### **BSCI 70461 NEUROCHEMISTRY**

Basic biochemistry of the mammalian nervous system, including myelin structure and metabolism, stimulus-secretion coupling, neurotransmitter and eicosanoid metabolism, energy utilization and the biochemistry of nervous disorders. Prerequisite: CHEM 5/70247. Doctoral standing.  
2.000 Credit hours  
2.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Biological Sciences

#### **BSCI 70491 SEMINAR IN PHYSIOLOGY**

(Repeatable for credit) 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 Type(s): Seminar  
Department: Biological Sciences

#### **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 Type(s): Lecture  
Department: Biological Sciences

#### **BSCI 70517 HISTOLOGY**

Study of the microscopic and submicroscopic structure of the mammalian body in relation to function. Lecture two hours laboratory three hours weekly. Prerequisite: BSCI 10181, 10182 plus 4 hours of biology. Doctoral standing.  
3.000 Credit hours  
2.000 Lecture hours  
3.000 Lab hours  
Levels: Graduate  
Schedule Type(s): Laboratory, Lecture  
Department: Biological Sciences

#### **BSCI 70519 HORMONES AND BEHAVIOR**

Current concepts of hormone and behavior interactions across species. Prerequisite: doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture

Department: Biological Sciences

#### **BSCI 70520 BEHAVIORAL EVOLUTION**

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 Type(s): Lecture  
Department: Biological Sciences

#### **BSCI 70522 READINGS IN BEHAVIORAL EVOLUTION**

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 Type(s): Seminar  
Department: Biological Sciences

#### **BSCI 70525 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: BSCI 10181, 10182 plus 4 hours. Doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Biological Sciences

#### **BSCI 70556 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: BSCI 10181, 10182 plus 4 hours of biology. Doctoral standing.  
4.000 Credit hours  
3.000 Lecture hours  
3.000 Lab hours  
Levels: Graduate  
Schedule Type(s): Laboratory, Lecture  
Department: Biological Sciences

#### **BSCI 80198 RESEARCH**

(Repeatable for credit) Research or individual investigation for doctoral students who have not yet passed candidacy examination. Prerequisite: Doctoral standing.  
1.000 to 15.000 Credit hours  
1.000 to 15.000 Other hours  
Levels: Graduate  
Schedule Type(s): Research  
Department: Biological Sciences

#### **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.  
15.000 Credit hours  
15.000 Other hours  
Levels: Graduate  
Schedule Type(s): Dissertation  
Department: Biological Sciences

#### **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.  
15.000 Credit hours  
15.000 Other hours  
Levels: Graduate  
Schedule Type(s): Dissertation  
Department: Biological Sciences

#### **BSCI 80462 NEUROBIOLOGY: SYSTEMS AND BEHAVIOR**

Provides broad coverage of the parts of the central nervous systems and how they integrate sensory information, drive motor function and regulate behavior. Prerequisite: doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Biological Sciences

#### **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 Type(s): Individual Investigation  
Department: Epidemiology and Biostatistics

### ***Biostatistics (BST)***

#### **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 Type(s): Laboratory, Lecture  
Department: Epidemiology and Biostatistics

**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 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture, Seminar

Department: Epidemiology and Biostatistics

**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 Type(s): Lecture

Department: Epidemiology and Biostatistics

**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 Type(s): Lecture

Department: Epidemiology and Biostatistics

**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 Type(s): Lecture

Department: Epidemiology and Biostatistics

**BST 63014 APPLIED REGRESSION ANALYSIS OF PUBLIC HEALTH DATA**

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 Type(s): Lecture

Department: Epidemiology and Biostatistics

**BST 63015 CATEGORICAL DATA ANALYSIS OF PUBLIC HEALTH DATA**

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 Type(s): Lecture

Department: Epidemiology and Biostatistics

**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 Type(s): Lecture

Department: Epidemiology and Biostatistics

**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 Type(s): Lecture

Department: Epidemiology and Biostatistics

**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 Type(s): Lecture

Department: Epidemiology and Biostatistics

**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 Type(s): Lecture

Department: Epidemiology and Biostatistics

**BST 83014 APPLIED REGRESSION ANALYSIS OF PUBLIC HEALTH DATA**

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 Type(s): Lecture

Department: Epidemiology and Biostatistics

**BST 83015 CATEGORICAL DATA ANALYSIS OF PUBLIC HEALTH DATA**

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

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Epidemiology and Biostatistics

## *Biotechnology (BTEC)*

**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.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Arts and Sciences

Course Attributes: Joint Program/Consortial Agreement



#### **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.

1.000 Credit hours

1.000 Other hours

Levels: Undergraduate

Schedule Type(s): Seminar

Department: Arts and Sciences

Course Attributes: Joint Program/Consortial Agreement

#### **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.

2.000 to 9.000 Credit hours

2.000 to 9.000 Other hours

Levels: Undergraduate

Schedule Type(s): Practicum

Department: Arts and Sciences

Course Attributes: Experiential Learning Requirement, Joint Program/Consortial Agreement

#### **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.

2.000 to 9.000 Credit hours

2.000 to 9.000 Other hours

Levels: Undergraduate

Schedule Type(s): Individual Investigation

Department: Arts and Sciences

Course Attributes: Joint Program/Consortial Agreement

#### **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 Type(s): Lecture

Department: Arts and Sciences

Course Attributes: Joint Program/Consortial Agreement

#### **BTEC 40220 BIOINFORMATICS**

Analysis of biological databases including nucleic acid and protein sequence searching, multiple sequence alignments, protein classification, phylogenetic analysis, comparative genomics, proteomics, protein structure analysis. Prerequisite: BSCI 30140, 30171, 30156, 40158; CHEM 30284, 40248.

2.000 Credit hours

2.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Arts and Sciences

Course Attributes: Joint Program/Consortial Agreement

### ***Business Administration (BUS)***

#### **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 Type(s): Lecture

Department: Business Administration

#### **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 Type(s): Lecture

Department: Business Administration

#### **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 Type(s): Practicum

Department: Business Administration

Course Attributes: Experiential Learning Requirement

#### **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 Type(s): Lecture

Division Undeclared Division

Business Administration Department

#### **BUS 30195 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 Type(s): Lecture

Department: Business Administration

#### **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: ACCT 23020, ECON 22060, ECON 22061, FIN 36053 and MKTG 25010.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Business Administration

#### **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

Levels: Undergraduate

Schedule Type(s): Practicum

Department: Business Administration

Course Attributes: Experiential Learning Requirement

#### **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

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Business Administration

### ***College of the Arts (CA)***

#### **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.

1.000 to 5.000 Credit hours

1.000 to 5.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: College of the Arts

#### **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 Type(s): Lecture

Department: College of the Arts

**CA 20001 PERFORMING ARTS II**

Continuation of Performing Arts I. Prerequisite: none.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: College of the Arts

**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 Type(s): Lecture

Department: College of the Arts

**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

Schedule Type(s): Lecture

Department: College of the Arts

**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 Type(s): Workshop

Department: College of the Arts

**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 Type(s): Lecture

Department: College of the Arts

**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 Type(s): Lecture

Department: College of the Arts

***Center for Applied Conflict Management (CACM)*****CACM 11001 INTRODUCTION TO CONFLICT MANAGEMENT**

Introduces key elements of conflict management theory and practice such as communication, collaborative problem solving, negotiation, mediation and nonviolent conflict intervention. Includes conflict communication skills development. Prerequisite: None.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Center for Applied Conflict Management

Course Attributes: Diversity Course-Domestic, Kent Core-Social Sciences, LER-Social Sciences, Transfer Module-Social Sciences

**CACM 21002 GENDER, POWER AND CONFLICT**

Course examines power imbalances in interpersonal relationships and the violence that often results, and considers some of the ways these power imbalances are developed focusing particularly on gender. Prerequisite: CACM 11001.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Center for Applied Conflict Management

**CACM 21010 CROSS-CULTURAL CONFLICT MANAGEMENT**

This course examines cultural and gender-based components of conflict in diverse settings with special emphasis on conflict escalation and de-escalation, power disparity and conflict resolution techniques. Prerequisite: None.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Center for Applied Conflict Management

Course Attributes: Diversity Course-Global

**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 are familiarized with how and why international conflicts appear and progress and learn recent developments on early warning methods, negotiation techniques and peacekeeping and peace building 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 Type(s): Lecture

Department: Center for Applied Conflict Management

Course Attributes: Diversity Course-Global

**CACM 31003 NONVIOLENCE: THEORY AND PRACTICE**

Examines the nature of violence and nonviolence on various structural levels and in different contexts. Prerequisite: None.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Center for Applied Conflict Management

**CACM 31010 CONFLICT THEORY**

Explores theoretical models of conflict and addresses cultural dimensions of conflict, gender and conflict and the functions of power in conflict. Prerequisite: CACM 11001.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Center for Applied Conflict Management

**CACM 32020 STRATEGIC PLANNING**

Course provides training in strategic planning, including assessing the current environment, developing goals and objectives and establishing a time line for action. Prerequisite: Junior standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Center for Applied Conflict Management

**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 environments and workplace violence. Prerequisite: CACM 11001.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Center for Applied Conflict Management



**CACM 34040 NEGOTIATION**

Explores the dynamics of negotiation occurring in different contexts from both a theoretical and practical perspective. Prerequisite: CACM 11001.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Center for Applied Conflict Management

**CACM 35050 ENVIRONMENTAL CONFLICT RESOLUTION**

Examines alternative dispute resolution principles applicable to public sector disputes, especially environmental and land use disputes. Prerequisite: None.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Center for Applied Conflict Management

**CACM 35092 INTERNSHIP IN CONFLICT MANAGEMENT**

(Repeatable for credit) Students work as interns with an organization, group or business utilizing and enhancing their skills in conflict management. Prerequisites: junior standing and two upper-division CACM courses.  
3.000 to 12.000 Credit hours  
3.000 to 12.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Practicum  
Department: Center for Applied Conflict Management  
Course Attributes: Experiential Learning Requirement

**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 Type(s): Lecture  
Department: Center for Applied Conflict Management

**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 and two upper-division CACM courses.  
3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Individual Investigation  
Department: Center for Applied Conflict Management

**CACM 38080 MEDIATION: THEORY AND TRAINING**

Examines the historical development of mediation. Teaches mediation skills necessary to

become a practicing mediator. Prerequisite: CACM 11001.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Center for Applied Conflict Management

**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 Type(s): Lecture  
Department: Center for Applied Conflict Management  
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 writing a major research paper. Prerequisites: CACM 11001 and 2 upper-division CACM courses; and junior standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Center for Applied Conflict Management  
Course Attributes: Writing Intensive Course

**CACM 49091 VARIABLE TITLE SEMINAR IN CONFLICT MANAGEMENT**

(Repeatable for credit) 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: senior standing.  
1.000 to 3.000 Credit hours  
1.000 to 3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Seminar  
Department: Center for Applied Conflict Management

## *Computer Design and Animation Engineering Technology (CADT)*

**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.  
2.000 Credit hours  
2.000 Lecture hours

Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

**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.  
2.000 Credit hours  
2.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

**CADT 22002 CAD: CIVIL APPLICATIONS**

A course on the use of computer-aided drafting and design for civil engineering applications. Prerequisite: None.  
2.000 Credit hours  
2.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

**CADT 22003 SOLID MODELING**

A course in solid modeling using computers. Modeling techniques using regional and solid modular for two dimensional regions and three dimensional solids. Prerequisite: CADT 22000.  
2.000 Credit hours  
2.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

**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 22005.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

**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.  
2.000 Credit hours  
2.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

**CADT 22007 3-D MODELING PROJECT**

A guided project course in 3-D modeling for computer animation and game design. Prerequisite: CADT 22005.  
1.000 Credit hours  
1.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

**CADT 22008 PROJ TEXTURE MATERIAL CREATION**

A guided project course in Texture and Material Creation for computer animation and game design. Prerequisites: CADT 22007  
1.000 Credit hours  
1.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

**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 Type(s): Lecture  
Department: Regional

## *College of Communication and Information (CCI)*

**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 Type(s): Lecture  
Department: College of Communication and Information

**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 Type(s): Lecture  
Department: College of Communication and Information

**CCI 40095 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 Type(s): Lecture  
Department: College of Communication and Information

**CCI 50095 SPECIAL TOPICS IN COMMUNICATION AND INFORMATION**

(Repeatable for credit) 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 Type(s): Lecture

Department: College of Communication and Information

**CCI 60001 INTRODUCTION TO RESEARCH IN COMMUNICATION AND INFORMATION**

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 Type(s): Lecture  
Department: College of Communication and Information

**CCI 60095 SPECIAL TOPICS IN COMMUNICATION AND INFORMATION**

(Repeatable for credit) 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 Type(s): Lecture  
Department: College of Communication and Information

**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 Type(s): Lecture  
Department: College of Communication and Information

**CCI 80001 INTRODUCTION TO RESEARCH IN COMMUNICATION AND INFORMATION**

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 Type(s): Lecture  
Department: College of Communication and Information

**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 Type(s): Seminar

Department: College of Communication and Information

**CCI 80095 SPECIAL TOPICS IN COMMUNICATION AND INFORMATION**

(Repeatable for credit) 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 Type(s): Lecture  
Department: College of Communication and Information

**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 Type(s): Individual Investigation  
Department: College of Communication and Information

**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  
Schedule Type(s): Dissertation  
Department: College of Communication and Information

**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 and doctoral standing.  
15.000 Credit hours  
15.000 Other hours  
Levels: Graduate  
Schedule Type(s): Dissertation  
Department: College of Communication and Information

**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 Type(s): Research  
Department: College of Communication and Information

## ***Computer Design, Animation and Game Design (CDAG)***

### **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  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

### **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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

### **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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

### **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.  
2.000 Credit hours  
2.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

### **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.  
2.000 Credit hours  
2.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

### **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 Type(s): Lecture  
Department: Regional

### **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 Type(s): Lecture  
Department: Regional

### **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 Type(s): Lecture  
Department: Regional

### **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 Type(s): Lecture  
Department: Regional

## ***Counseling and Human Development Services (CHDS)***

### **CHDS 10001 INTRODUCTION TO A CAREER IN TEACHING**

Students considering teaching as a career will explore all aspects of an educator's role, will evaluate career and personal development as

related to the education profession, and will participate in observation experience. This course is a pre professional experience coordinated by ACHVE department. Prerequisite: None.  
2.000 Credit hours  
2.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Lifespan Development and Educational Sciences

### **CHDS 10002 INTRODUCTION TO CAREERS IN EDUCATION, HEALTH AND HUMAN SERVICES**

Explores roles of educators, health and human service providers in community and school settings. Introduction to work of professionals in such areas as youth organizations; recreation, mental health and child and family services; museums and parks; and health and allied health agencies. Assessment of career interests is conducted. Prerequisite: None.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Lifespan Development and Educational Sciences

### **CHDS 20092 FIELD EXPERIENCE I: MIDDLE CHILDHOOD**

(Repeatable for credit) Course augments from an experiential perspective knowledge of early adolescence period of development. Placement in school settings (30 hrs.). Corequisite: HDFS 24013.  
1.000 Credit hours  
1.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Field Experience  
Department: Lifespan Development and Educational Sciences  
Course Attributes: Experiential Learning Requirement

### **CHDS 37700 HUMAN RELATIONS IN A WORLD OF DIVERSITY**

Emphasizes the study/practice of facilitative human relations in personal and work/career spheres. Topics include, not limited to gender, sexual orientation/multiculturalism/conflict resolution/value clarification/family influence. Prerequisite: None.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Lifespan Development and Educational Sciences

### **CHDS 37800 SMALL GROUP PROCESS**

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.  
2.000 Credit hours  
2.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Lifespan Development and Educational Sciences

**CHDS 40093 VARIABLE TITLE  
WORKSHOP IN COUNSELING AND  
HUMAN DEVELOPMENT SERVICES**

(Repeatable for credit) 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. Prerequisite: None.  
1.000 to 4.000 Credit hours  
1.000 to 4.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Workshop  
Department: Lifespan Development and Educational Sciences

**CHDS 41892 INTERNSHIP IN  
EDUCATIONAL STUDIES AND  
HELPING PROFESSIONS**

(Repeatable for credit) Placement in a worksite congruent with student's career aspirations. Ten hrs. week for 15 weeks for two semesters or 20 hrs. week for 15 weeks one semester for a total of 300 hours. Prerequisite: Senior standing. Corequisite: CHDS 41791.  
10.000 Credit hours  
10.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Practicum  
Department: Lifespan Development and Educational Sciences  
Course Attributes: Experiential Learning Requirement

**CHDS 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: Permission.  
1.000 to 3.000 Credit hours  
1.000 to 3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Lifespan Development and Educational Sciences

**CHDS 50093 VARIABLE TITLE  
WORKSHOP IN COUNSELING AND  
HUMAN DEVELOPMENT SERVICES**

(Repeatable for credit) 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. Prerequisite: Graduate standing.  
1.000 to 4.000 Credit hours  
1.000 to 4.000 Other hours  
Levels: Graduate  
Schedule Type(s): Workshop  
Department: Lifespan Development and Educational Sciences

**CHDS 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  
3.000 Other hours  
Levels: Graduate  
Schedule Type(s): Master's Thesis  
Department: Lifespan Development and Educational Sciences

**CHDS 60299 THESIS II**

Thesis students must continue registration each semester until all degree Requirements are met. Prerequisite: CHDS 60199 and graduate standing.  
2.000 Credit hours  
2.000 Other hours  
Levels: Graduate  
Schedule Type(s): Master's Thesis  
Department: Lifespan Development and Educational Sciences

**CHDS 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 Type(s): Lecture  
Department: Lifespan Development and Educational Sciences

**CHDS 67530 INTRODUCTION TO  
COUNSELING**

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  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Lifespan Development and Educational Sciences

**CHDS 67531 INDIVIDUAL COUNSELING  
PROCEDURES**

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  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Lifespan Development and Educational Sciences

**CHDS 67571 ADVANCED INDIVIDUAL  
COUNSELING PRACTICUM**

Supervised experience in counseling. Students meet for individual supervision and in seminar groups to assess their effectiveness in helping relationships. Prerequisite: Minimum grade of B- (2.700) in CHDS 68166 and grade of S in CHDS 67636 and 67637 and graduate standing.  
3.000 Credit hours  
3.000 Other hours  
Levels: Graduate  
Schedule Type(s): Practicum  
Department: Lifespan Development and Educational Sciences

**CHDS 67580 MULTICULTURAL  
COUNSELING**

Seminar focused on information and sensitivities needed to work effectively with the culturally different. Consideration given to such issues as racism and cultural institutional and political oppression. Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Lifespan Development and Educational Sciences

**CHDS 67595 SPECIAL TOPICS IN  
COUNSELING AND HUMAN  
DEVELOPMENT SERVICES**

(Repeatable for credit) Presentation of topics of special interest to students in counseling and human development services. 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 Type(s): Lecture  
Department: Lifespan Development and Educational Sciences

**CHDS 67596 INDIVIDUAL  
INVESTIGATION IN COUNSELING AND  
HUMAN DEVELOPMENT SERVICES**

(Repeatable for credit) 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. Prerequisite: Graduate standing and special approval.  
1.000 to 3.000 Credit hours  
1.000 to 3.000 Other hours  
Levels: Graduate  
Schedule Type(s): Individual Investigation  
Department: Lifespan Development and Educational Sciences

**CHDS 67628 DIAGNOSIS IN  
COUNSELING**

To develop diagnostic skills in interviewing and use of appropriate nosology in counseling diagnosis. Prerequisite: Graduate standing and special approval.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Lifespan Development and Educational Sciences

**CHDS 67636 PRACTICUM I: CLINICAL  
MENTAL HEALTH COUNSELING**

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. Prerequisites: minimum B- (2.700) grade in CHDS 67530 and 67531 and 67663 and 67820 and 68126 and 68182; and clinical mental health counseling major (CMHC); and graduate standing.  
3.000 Credit hours  
3.000 Other hours  
Levels: Graduate





Schedule Type(s): Practicum  
Department: Lifespan Development and Educational Sciences

### **CHDS 67637 PRACTICUM II: CLINICAL MENTAL HEALTH COUNSELING**

Involves individual counseling and group work with appropriate populations. Caseload geared toward preparation for internship. Prerequisite: CHDS 67636 with a grade of satisfactory; CHDS 67628 or 77628 with a grade of B- (2.700) or better; graduate standing.  
1.000 to 3.000 Credit hours  
1.000 to 3.000 Other hours  
Levels: Graduate  
Schedule Type(s): Practicum  
Department: Lifespan Development and Educational Sciences

### **CHDS 67663 ORIENTATION TO CLINICAL MENTAL HEALTH COUNSELING**

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 Type(s): Lecture  
Department: Lifespan Development and Educational Sciences

### **CHDS 67664 THEORY AND PRACTICES IN ADDICTIONS COUNSELING**

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 Type(s): Lecture  
Department: Lifespan Development and Educational Sciences

### **CHDS 67665 TREATMENT PLANNING IN ADDICTION COUNSELING**

Assessment and diagnosis of substance use disorders, and determining appropriate care levels, treatment goals and interventions. Prerequisites: CHDS 67664 or CHDS 77664; graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Lifespan Development and Educational Sciences

### **CHDS 67695 SPECIAL TOPICS IN CLINICAL MENTAL HEALTH 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.  
1.000 to 3.000 Credit hours  
1.000 to 3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture

Department: Lifespan Development and Educational Sciences

### **CHDS 67698 INDIVIDUAL RESEARCH IN CLINICAL MENTAL HEALTH COUNSELING**

(Repeatable for credit) Student pursues research project on selected aspect of community counseling under supervision of instructor. Arrangements with instructor must be made prior to registration. Credit hours to be fixed at registration time. Prerequisite: Graduate standing and special approval.  
1.000 to 9.000 Credit hours  
1.000 to 9.000 Other hours  
Levels: Graduate  
Schedule Type(s): Research  
Department: Lifespan Development and Educational Sciences

### **CHDS 67820 GROUP WORK: THEORY AND TECHNIQUES**

Didactic and experiential training in how to facilitate personal and interpersonal development in small groups, including group guidance, structured theme counseling and growth groups. Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Lifespan Development and Educational Sciences

### **CHDS 67858 SEMINAR: GROUP COUNSELING**

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 Type(s): Seminar  
Department: Lifespan Development and Educational Sciences

### **CHDS 68011 FOUNDATIONS OF SCHOOL COUNSELING**

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 Type(s): Lecture  
Department: Lifespan Development and Educational Sciences

### **CHDS 68036 SCHOOL COUNSELING PRACTICUM**

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. Prerequisite: CHDS 67530, 77530, 67531, 77531, 68069, 78069, 67820, 77820. Graduate standing and special approval.  
4.000 Credit hours  
4.000 Other hours  
Levels: Graduate  
Schedule Type(s): Practicum  
Department: Lifespan Development and Educational Sciences

### **CHDS 68066 COUNSELING ADOLESCENTS**

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 CHDS 67530 and 67531 and graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Lifespan Development and Educational Sciences

### **CHDS 68067 COUNSELING CHILDREN**

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: CHDS 6/77530, 6/77531. Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Lifespan Development and Educational Sciences

### **CHDS 68068 SCHOOL COUNSELING PROGRAM MANAGEMENT AND LEADERSHIP**

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 CHDS 68011 and graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Lifespan Development and Educational Sciences

### **CHDS 68069 ORIENTATION TO SCHOOL COUNSELING**

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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Lifespan Development and Educational Sciences

**CHDS 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.

1.000 to 3.000 Credit hours

1.000 to 3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Lifespan Development and Educational Sciences

**CHDS 68126 PRINCIPLES OF MEASUREMENT AND APPRAISAL**

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.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Lifespan Development and Educational Sciences

**CHDS 68128 INDIVIDUAL APPRAISAL IN COUNSELING**

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 CHDS 68126 and 67628 and graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Lifespan Development and Educational Sciences

**CHDS 68130 PSYCHOPATHOLOGY FOR COUNSELORS**

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 CHDS 67628 and graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Lifespan Development and Educational Sciences

**CHDS 68167 ADVANCED COUNSELING PROCEDURES**

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 CHDS 67628 and grade of S in CHDS 67636 and graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Lifespan Development and Educational Sciences

**CHDS 68168 ADVANCED COUNSELING THEORIES**

Consideration in depth of major counseling theories, with special emphasis on comparative analysis. original readings used. Prerequisite: Grade of S in CHDS 67636 and graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Lifespan Development and Educational Sciences

**CHDS 68182 CAREER DEVELOPMENT AND GUIDANCE**

The world of work, theories of career choice, techniques in career guidance. An introductory course in the careers area for practitioners in education, helping services, human resources and personnel. Prerequisite: Graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Lifespan Development and Educational Sciences

**CHDS 68284 SUPERVISION OF COUNSELING**

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 CHDS 67637 or 77637; and 77692 and graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Lifespan Development and Educational Sciences

**CHDS 68529 COUPLES THERAPY: THEORY AND TECHNIQUES**

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 Type(s): Lecture

Department: Lifespan Development and Educational Sciences

**CHDS 68533 FAMILY THERAPY: THEORY AND TECHNIQUES**

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 Type(s): Lecture

Department: Lifespan Development and Educational Sciences

**CHDS 68536 PRACTICUM IN COUPLES AND FAMILY THERAPY**

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.

Prerequisites: Graduate standing in clinical mental health counseling (CMHC) or school counseling (SCON).

3.000 Credit hours

3.000 Other hours

Levels: Graduate

Schedule Type(s): Practicum

Department: Lifespan Development and Educational Sciences

**CHDS 68538 ADVANCED MULTICULTURAL COUNSELING**

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; CHDS 6/77580, 6/77531.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Lifespan Development and Educational Sciences

**CHDS 70093 VARIABLE TITLE WORKSHOP IN COUNSELING AND HUMAN DEVELOPMENT SERVICES**

(Repeatable for credit) 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.

Prerequisite: Doctoral standing.

1.000 to 4.000 Credit hours

1.000 to 4.000 Other hours

Levels: Graduate

Schedule Type(s): Workshop

Department: Lifespan Development and Educational Sciences

**CHDS 77530 INTRODUCTION TO COUNSELING**

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 Type(s): Lecture

Department: Lifespan Development and Educational Sciences

**CHDS 77531 INDIVIDUAL COUNSELING PROCEDURES**

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



3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Lifespan Development and Educational Sciences

#### **CHDS 77580 MULTICULTURAL COUNSELING**

Seminar focused on information and sensitivities needed to work effectively with the culturally different. Consideration given to such issues as racism and cultural institutional and political oppression. Prerequisite: Doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Lifespan Development and Educational Sciences

#### **CHDS 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 Type(s): Lecture  
Department: Lifespan Development and Educational Sciences

#### **CHDS 77628 DIAGNOSIS IN COUNSELING**

To develop diagnostic skills in interviewing and use of appropriate nosology in counseling diagnosis. Prerequisite: Doctoral standing and special approval.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Lifespan Development and Educational Sciences

#### **CHDS 77663 ORIENTATION TO CLINICAL MENTAL HEALTH COUNSELING**

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 Type(s): Lecture  
Department: Lifespan Development and Educational Sciences

#### **CHDS 77664 THEORY AND PRACTICES IN ADDICTIONS COUNSELING**

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 Type(s): Lecture

Department: Lifespan Development and Educational Sciences

#### **CHDS 77665 TREATMENT PLANNING IN ADDICTIONS COUNSELING**

Assessment and diagnosis of substance use disorders, and determining appropriate care levels, treatment goals and interventions. Prerequisites: CHDS 67664 or CHDS 77664; and doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Lifespan Development and Educational Sciences

#### **CHDS 77695 SPECIAL TOPICS IN CLINICAL MENTAL HEALTH COUNSELING**

(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  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Lifespan Development and Educational Sciences

#### **CHDS 77792 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 doctoral standing; and special approval.  
3.000 Credit hours  
2.000 Lecture hours  
20.000 Other hours  
Levels: Graduate  
Schedule Type(s): Lecture, Practicum  
Department: Lifespan Development and Educational Sciences

#### **CHDS 77820 GROUP WORK: THEORY AND TECHNIQUES**

Didactic and experiential training in how to facilitate personal and interpersonal development in small groups, including group guidance, structured theme counseling and growth groups.  
Prerequisite: Doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Lifespan Development and Educational Sciences

#### **CHDS 77858 SEMINAR: GROUP COUNSELING**

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 Type(s): Seminar  
Department: Lifespan Development and Educational Sciences

#### **CHDS 77892 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. Prerequisite: clinical mental health counseling major; and doctoral standing; and special approval.  
3.000 Credit hours  
2.000 Lecture hours  
20.000 Other hours  
Levels: Graduate  
Schedule Type(s): Lecture, Practicum  
Department: Lifespan Development and Educational Sciences

#### **CHDS 78011 FOUNDATIONS OF SCHOOL COUNSELING**

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 Type(s): Lecture  
Department: Lifespan Development and Educational Sciences

#### **CHDS 78066 COUNSELING ADOLESCENTS**

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 CHDS 67530 or 77530; and 67531 and 77531 and doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Lifespan Development and Educational Sciences

#### **CHDS 78067 COUNSELING CHILDREN**

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: CHDS 6/77530, 6/77531. Doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Lifespan Development and Educational Sciences

#### **CHDS 78068 SCHOOL COUNSELING PROGRAM MANAGEMENT AND LEADERSHIP**

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 CHDS 68011 or 78011 and doctoral standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Lifespan Development and Educational Sciences

### **CHDS 78069 ORIENTATION TO SCHOOL COUNSELING**

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 Type(s): Lecture

Department: Lifespan Development and Educational Sciences

### **CHDS 78126 PRINCIPLES OF MEASUREMENT AND APPRAISAL**

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 Type(s): Lecture

Department: Lifespan Development and Educational Sciences

### **CHDS 78128 INDIVIDUAL APPRAISAL IN COUNSELING**

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 CHDS 68126 or 78126; and 67628 or 77628 and doctoral standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Lifespan Development and Educational Sciences

### **CHDS 78130 PSYCHOPATHOLOGY FOR COUNSELORS**

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 CHDS 67628 or 77628 and doctoral standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Lifespan Development and Educational Sciences

### **CHDS 78181 GESTALT THERAPY**

Introductory course on theory and techniques of Gestalt therapy. Prerequisite: Doctoral standing and special approval.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Lifespan Development and Educational Sciences

### **CHDS 78182 CAREER DEVELOPMENT AND GUIDANCE**

The world of work, theories of career choice, techniques in career guidance. An introductory course in the careers 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 Type(s): Lecture

Department: Lifespan Development and Educational Sciences

### **CHDS 78192 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: doctoral standing and special approval.

3.000 Credit hours

2.000 Lecture hours

20.000 Other hours

Levels: Graduate

Schedule Type(s): Lecture, Practicum

Department: Lifespan Development and Educational Sciences

### **CHDS 78292 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. Prerequisite: doctoral standing and special approval.

3.000 Credit hours

2.000 Lecture hours

20.000 Other hours

Levels: Graduate

Schedule Type(s): Lecture, Practicum

Department: Lifespan Development and Educational Sciences

### **CHDS 78529 COUPLES THERAPY: THEORY AND TECHNIQUES**

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 Type(s): Lecture

Department: Lifespan Development and Educational Sciences

### **CHDS 78533 FAMILY THERAPY: THEORY AND TECHNIQUES**

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 Type(s): Lecture

Department: Lifespan Development and Educational Sciences

### **CHDS 78536 PRACTICUM IN COUPLES AND FAMILY THERAPY**

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. Prerequisite: doctoral standing in clinical mental health counseling (CMHC) or school counseling (SCON).

3.000 Credit hours

3.000 Other hours

Levels: Graduate

Schedule Type(s): Practicum

Department: Lifespan Development and Educational Sciences

### **CHDS 78538 ADVANCED MULTICULTURAL COUNSELING**

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: Doctoral standing; CHDS 6/77580, 6/77531.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Lifespan Development and Educational Sciences

### **CHDS 80090 DOCTORAL RESIDENCY SEMINAR IN COUNSELING AND HUMAN DEVELOPMENT SERVICES**

Focus on professional identity, current issues and trends and involvement in professional activities. Restricted to students admitted to doctoral program in CHDS. Prerequisite: Doctoral standing.

3.000 Credit hours

3.000 Other hours

Levels: Graduate

Schedule Type(s): Seminar

Department: Lifespan Development and Educational Sciences

### **CHDS 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 Type(s): Dissertation

Department: Lifespan Development and Educational Sciences



**CHDS 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; CHDS 80199.

15.000 Credit hours

15.000 Other hours

Levels: Graduate

Schedule Type(s): Dissertation

Department: Lifespan Development and Educational Sciences

**CHDS 87571 ADVANCED INDIVIDUAL COUNSELING PRACTICUM**

Supervised experience in counseling. Students meet for individual supervision and in seminar groups to assess their effectiveness in helping relationships. Prerequisite: Grade of S in CHDS 67636 or 77636; and 67637 or 77637; and minimum grade of B- (2.700) in CHDS 88166 and doctoral standing.

3.000 Credit hours

3.000 Other hours

Levels: Graduate

Schedule Type(s): Practicum

Department: Lifespan Development and Educational Sciences

**CHDS 87595 SPECIAL TOPICS IN COUNSELING AND HUMAN DEVELOPMENT SERVICES**

(Repeatable for credit) Presentation of topics of special interest to students in counseling and human development services. 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 Type(s): Lecture

Department: Lifespan Development and Educational Sciences

**CHDS 87596 INDIVIDUAL INVESTIGATION IN COUNSELING AND HUMAN DEVELOPMENT SERVICES**

(Repeatable for credit) 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. Prerequisite: Doctoral standing and special approval.

1.000 to 3.000 Credit hours

1.000 to 3.000 Other hours

Levels: Graduate

Schedule Type(s): Individual Investigation

Department: Lifespan Development and Educational Sciences

**CHDS 88167 ADVANCED COUNSELING PROCEDURES**

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: Grade of S in CHDS 67636 or 77636; and minimum grade of B- (2.700) in CHDS 67628 or 77628; and doctoral standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Lifespan Development and Educational Sciences

**CHDS 88168 ADVANCED COUNSELING THEORIES**

consideration in depth of major counseling theories, with special emphasis on comparative analysis. Original readings used. Prerequisite: Grade of S in CHDS 77636 and doctoral standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Lifespan Development and Educational Sciences

**CHDS 88281 RESEARCH SEMINAR IN COUNSELING AND HUMAN DEVELOPMENT SERVICES**

Topics or problems of current concern in counseling and human development services. Review of significant studies, design strategies, instrumentation, data analysis and research issues. Topic to be announced in schedule of classes booklet. Prerequisite: EVAL 65510, 65511, 78716 and 78898. Doctoral standing.

3.000 Credit hours

3.000 Other hours

Levels: Graduate

Schedule Type(s): Seminar

Department: Lifespan Development and Educational Sciences

**CHDS 88284 SUPERVISION OF COUNSELING**

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: Doctoral standing and special approval.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Lifespan Development and Educational Sciences

**CHDS 88292 INTERNSHIP IN COUNSELING AND HUMAN DEVELOPMENT SERVICES**

(Repeatable for credit) 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. Prerequisite: Doctoral standing and special approval.

3.000 to 6.000 Credit hours

3.000 to 6.000 Other hours

Levels: Graduate

Schedule Type(s): Practicum, Seminar

Department: Lifespan Development and Educational Sciences

**CHDS 88294 COLLEGE TEACHING IN COUNSELING AND HUMAN DEVELOPMENT SERVICES**

(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: CHDS 88286. Doctoral standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Lifespan Development and Educational Sciences

**CHDS 88298 INDIVIDUAL RESEARCH IN COUNSELING AND HUMAN DEVELOPMENT SERVICES**

(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. Prerequisite: Doctoral standing and special approval.

1.000 to 3.000 Credit hours

1.000 to 3.000 Other hours

Levels: Graduate

Schedule Type(s): Research

Department: Lifespan Development and Educational Sciences

**Chemistry (CHEM)****CHEM 10020 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. This course may not count toward any major Requirements. Prerequisite: Math ACT score of 18; or ALEKS math upper level score of 30; or ALEKS math single assessment score of 45; or minimum C (2.000) grade in MATH 10023 or higher.

2.000 Credit hours

2.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Chemistry and Biochemistry

**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 Type(s): Lecture

Department: Chemistry and Biochemistry

Course Attributes: Kent Core-Basic Sciences, LER-Basic Sciences, Transfer Module-Natural Sciences

**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- or corequisite: CHEM 10030.

1.000 Credit hours

1.000 Lab hours

Levels: Undergraduate

Schedule Type(s): Laboratory

Department: Chemistry and Biochemistry

Course Attributes: Kent Core-Basic Sciences, Kent Core-Basic Sciences Lab, LER-Basic Sciences, Transfer Module-Natural Sciences

**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 10007 or MATH 10023 or MATH 10024 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 Type(s): Lecture

Department: Chemistry and Biochemistry

Course Attributes: Kent Core-Basic Sciences, LER-Basic Sciences, Transfer Module-Natural Sciences

**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 Type(s): Lecture

Department: Chemistry and Biochemistry

Course Attributes: Kent Core-Basic Sciences, LER-Basic Sciences, Transfer 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 Type(s): Laboratory

Department: Chemistry and Biochemistry

Course Attributes: Kent Core-Basic Sciences, Kent Core-Basic Sciences Lab, LER-Basic Sciences, Transfer 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 10007 or MATH 10023 or MATH 10024 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 Type(s): Lecture

Department: Chemistry and Biochemistry

Course Attributes: Kent Core-Basic Sciences, LER-Basic Sciences, Transfer Module-Natural 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 may only receive credit toward graduation for one of the following courses: CHEM 10050 or CHEM 10054 or CHEM 10060 or CHEM 10960. Prerequisite: ACT math score of 18 or MATH 11009 or MATH 11010 or MATH 11012 or MATH 12002 or MATH 12011 or MATH 12021.

4.000 Credit hours

4.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Chemistry and Biochemistry

Course Attributes: Kent Core-Basic Sciences, LER-Basic Sciences, TAG Science

**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 Type(s): Lecture

Department: Chemistry and Biochemistry

Course Attributes: Kent Core-Basic Sciences, LER-Basic Sciences, TAG Science

**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 Type(s): Laboratory

Department: Chemistry and Biochemistry

Course Attributes: Kent Core-Basic Sciences, LER-Basic Sciences, TAG Science

**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 Type(s): Laboratory

Department: Chemistry and Biochemistry

Course Attributes: Kent Core-Basic Sciences, 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 Type(s): Laboratory, Lecture

Department: Chemistry and Biochemistry

Course Attributes: Honors Course, Kent Core-Basic Sciences, 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 Type(s): Laboratory, Lecture

Department: Chemistry and Biochemistry

Course Attributes: Honors Course, Kent Core-Basic Sciences, LER-Basic Sciences

**CHEM 20095 SPECIAL TOPICS**

(Repeatable for credit) Selected topics in chemistry. Prerequisite: special approval.

1.000 to 3.000 Credit hours

1.000 to 3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Chemistry and Biochemistry

Course Attributes: Kent Core-Basic Sciences, LER-Basic Sciences

**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.  
1.000 to 3.000 Credit hours  
1.000 to 3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Research  
Department: Chemistry and Biochemistry  
Course Attributes: Experiential Learning Requirement

**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.  
4.000 Credit hours  
4.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Chemistry and Biochemistry

**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.  
4.000 Credit hours  
4.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Chemistry and Biochemistry  
Course Attributes: TAG Science

**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 or 30481.  
2.000 Credit hours  
2.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Chemistry and Biochemistry  
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 Type(s): Lecture

Department: Chemistry and Biochemistry

**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 Type(s): Lecture  
Department: Chemistry and Biochemistry

**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 Type(s): Lecture  
Department: Chemistry and Biochemistry

**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 Type(s): Laboratory  
Department: Chemistry and Biochemistry  
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 Type(s): Laboratory  
Department: Chemistry and Biochemistry  
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 Type(s): Lecture  
Department: Chemistry and Biochemistry

**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 Type(s): Lecture  
Department: Chemistry and Biochemistry

**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 Type(s): Laboratory  
Department: Chemistry and Biochemistry  
Course Attributes: 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 Type(s): Laboratory  
Department: Chemistry and Biochemistry  
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 Type(s): Lecture  
Department: Chemistry and Biochemistry

**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 Type(s): Lecture  
Department: Chemistry and Biochemistry

#### **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 Type(s): Laboratory  
Department: Chemistry and Biochemistry

#### **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 Type(s): Senior Project/Honors Thesis  
Department: Chemistry and Biochemistry  
Course Attributes: Experiential Learning Requirement, Honors Course

#### **CHEM 40109 BIOANALYTICAL CHEMISTRY**

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 Type(s): Lecture  
Department: Chemistry and Biochemistry

#### **CHEM 40113 CHEMICAL SEPARATIONS**

Theory, instrumentation and applications of chemical separations for chemical analysis with an emphasis on gas and liquid chromatography.  
Prerequisite: CHEM 30106.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Chemistry and Biochemistry

#### **CHEM 40114 ELECTROANALYTICAL CHEMISTRY**

The physical basis of electrochemistry; instrumentation and applications in chemical analysis. Polarography, coulometry, voltametry and ion selective electrodes. Three hours lecture weekly. Prerequisite: CHEM 40555.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Chemistry and Biochemistry

#### **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 Type(s): Lecture  
Department: Chemistry and Biochemistry

#### **CHEM 40245 BIOCHEMICAL FOUNDATIONS OF MEDICINE**

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 Type(s): Lecture  
Department: Chemistry and Biochemistry

#### **CHEM 40248 ADVANCED BIOLOGICAL CHEMISTRY**

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 Type(s): Lecture  
Department: Chemistry and Biochemistry

#### **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 Type(s): Lecture  
Department: Chemistry and Biochemistry  
Course Attributes: Writing Intensive Course

#### **CHEM 40261 PRINCIPLES OF BIOCHEMISTRY I**

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 Type(s): Lecture  
Department: Chemistry and Biochemistry

#### **CHEM 40262 PRINCIPLES OF BIOCHEMISTRY II**

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 Type(s): Lecture  
Department: Chemistry and Biochemistry

#### **CHEM 40263 PHYSICAL BIOCHEMISTRY I**

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 Type(s): Lecture  
Department: Chemistry and Biochemistry

#### **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 Type(s): Lecture  
Department: Chemistry and Biochemistry

#### **CHEM 40302 INORGANIC CHEMISTRY II**

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 Type(s): Lecture  
Department: Chemistry and Biochemistry

#### **CHEM 40303 INORGANIC CHEMISTRY III**

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 Type(s): Lecture  
Department: Chemistry and Biochemistry

#### **CHEM 40352 INORGANIC MATERIALS CHEMISTRY**

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 Type(s): Lecture  
Department: Chemistry and Biochemistry



**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 Type(s): Laboratory

Department: Chemistry and Biochemistry

**CHEM 40365 BIOLOGICAL INORGANIC CHEMISTRY**

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 30360.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Chemistry and Biochemistry

**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 Type(s): Lecture

Department: Chemistry and Biochemistry

**CHEM 40451 ORGANIC MATERIALS CHEMISTRY**

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 Type(s): Lecture

Department: Chemistry and Biochemistry

**CHEM 40476 SPECTROSCOPIC IDENTIFICATION OF ORGANIC COMPOUNDS**

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 Type(s): Lecture

Department: Chemistry and Biochemistry

**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 Type(s): Laboratory

Department: Chemistry and Biochemistry

**CHEM 40478 SYNTHESIS OF ORGANIC LIQUID CRYSTALS**

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 Type(s): Lecture

Department: Chemistry and Biochemistry

**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 Type(s): Lecture

Department: Chemistry and Biochemistry

**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 Type(s): Lecture

Department: Chemistry and Biochemistry

**CHEM 40555 ELEMENTARY PHYSICAL CHEMISTRY**

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 Type(s): Lecture

Department: Chemistry and Biochemistry

**CHEM 40556 ELEMENTARY PHYSICAL CHEMISTRY**

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

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Chemistry and Biochemistry

**CHEM 40557 PHYSICAL CHEMISTRY LAB**

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 Type(s): Laboratory

Department: Chemistry and Biochemistry

**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 Type(s): Lecture

Department: Chemistry and Biochemistry

**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 Type(s): Laboratory

Department: Chemistry and Biochemistry

**CHEM 40571 SURFACE CHEMISTRY**

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 Type(s): Lecture

Department: Chemistry and Biochemistry

**CHEM 40575 MOLECULAR SPECTROSCOPY**

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 Type(s): Lecture

Department: Chemistry and Biochemistry

**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 Type(s): Lecture

Department: Chemistry and Biochemistry

**CHEM 40795 CURRENT TOPICS IN CHEMICAL EDUCATION**

(Repeatable for credit) 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 Type(s): Lecture  
Department: Chemistry and Biochemistry

#### **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  
Levels: Undergraduate  
Schedule Type(s): Individual Investigation  
Department: Chemistry and Biochemistry

#### **CHEM 41010 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. Prerequisite: special approval.  
3.000 Credit hours  
1.000 Lecture hours  
6.000 Lab hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Chemistry and Biochemistry

#### **CHEM 50109 BIOANALYTICAL CHEMISTRY**

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 Type(s): Lecture  
Department: Chemistry and Biochemistry

#### **CHEM 50113 CHEMICAL SEPARATIONS**

Theory, instrumentation and applications of chemical separations for chemical analysis. Emphasis on gas and liquid chromatography. Prerequisite: CHEM 30106 and graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Chemistry and Biochemistry

#### **CHEM 50114 ELECTROANALYTICAL CHEMISTRY**

The physical basis of electrochemistry; instrumentation and applications in chemical analysis. Polarography, coulometry, voltammetry and ion selective electrodes. Three hours lecture weekly. Prerequisite: CHEM 40555 and graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Chemistry and Biochemistry

#### **CHEM 50245 BIOCHEMICAL FOUNDATIONS OF MEDICINE**

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.  
4.000 Credit hours  
4.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Chemistry and Biochemistry

#### **CHEM 50248 ADVANCED BIOLOGICAL CHEMISTRY**

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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Chemistry and Biochemistry

#### **CHEM 50261 PRINCIPLES OF BIOCHEMISTRY I**

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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Chemistry and Biochemistry

#### **CHEM 50262 PRINCIPLES OF BIOCHEMISTRY II**

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 graduate standing.  
3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Type(s): Lecture  
Department: Chemistry and Biochemistry

#### **CHEM 50263 PHYSICAL BIOCHEMISTRY I**

Principles and techniques of physical chemistry used in studying biomacromolecules 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 Type(s): Lecture  
Department: Chemistry and Biochemistry

#### **CHEM 50302 INORGANIC CHEMISTRY II**

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 Type(s): Lecture  
Department: Chemistry and Biochemistry

#### **CHEM 50303 INORGANIC CHEMISTRY III**

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 Type(s): Lecture  
Department: Chemistry and Biochemistry

#### **CHEM 50352 INORGANIC MATERIALS CHEMISTRY**

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 Type(s): Lecture  
Department: Chemistry and Biochemistry

#### **CHEM 50365 BIOLOGICAL INORGANIC CHEMISTRY**

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 Type(s): Lecture  
Department: Chemistry and Biochemistry

**CHEM 50451 ORGANIC MATERIALS CHEMISTRY**

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 Type(s): Lecture

Department: Chemistry and Biochemistry

**CHEM 50476 SPECTROSCOPIC IDENTIFICATION OF ORGANIC COMPOUNDS**

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 Type(s): Lecture

Department: Chemistry and Biochemistry

**CHEM 50478 SYNTHESIS OF ORGANIC LIQUID CRYSTALS**

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 Type(s): Lecture

Department: Chemistry and Biochemistry

**CHEM 50555 ELEMENTARY PHYSICAL CHEMISTRY**

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 Type(s): Lecture

Department: Chemistry and Biochemistry

**CHEM 50556 ELEMENTARY PHYSICAL CHEMISTRY**

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 Type(s): Lecture

Department: Chemistry and Biochemistry

**CHEM 50557 PHYSICAL CHEMISTRY LABORATORY**

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 Type(s): Laboratory

Department: Chemistry and Biochemistry

**CHEM 50571 SURFACE CHEMISTRY**

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

Levels: Graduate

Schedule Type(s): Lecture

Department: Chemistry and Biochemistry

**CHEM 50575 MOLECULAR SPECTROSCOPY**

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 Type(s): Lecture

Department: Chemistry and Biochemistry

**CHEM 50795 CURRENT TOPICS IN CHEMICAL EDUCATION**

(Repeatable for credit) 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 Type(s): Lecture

Department: Chemistry and Biochemistry

**CHEM 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.

3.000 Credit hours

1.000 Lecture hours

6.000 Lab hours

Levels: Graduate

Schedule Type(s): Combined Lecture and Lab

Department: Chemistry and Biochemistry

**CHEM 60050 CHEMISTRY RESEARCH PROPOSAL**

The student will prepare an independent and original research proposal that is completely distinct from the thesis project. Prerequisite: Graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Chemistry and Biochemistry

**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

Schedule Type(s): Master's Thesis

Department: Chemistry and Biochemistry

**CHEM 60253 BIOMACROMOLECULAR STRUCTURES**

Structure/function of motile processes in bacteria and eukaryotic cells; supermolecular structure and self-organization of proteins and nucleic acids in chromatin, spliceosomes, viruses and ribosomes. Prerequisite: graduate standing.

1.000 Credit hours

1.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Chemistry and Biochemistry

**CHEM 60254 BIOMEMBRANES**

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 Type(s): Lecture

Department: Chemistry and Biochemistry

**CHEM 60291 SEMINAR: RECENT DEVELOPMENTS IN BIOCHEMISTRY**

(Repeatable for credit) 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 Type(s): Seminar

Department: Chemistry and Biochemistry

**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 Type(s): Master's Thesis

Department: Chemistry and Biochemistry

**CHEM 60327 MODERN INORGANIC CHEMISTRY**

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 Type(s): Lecture

Department: Chemistry and Biochemistry

**CHEM 60347 CHEMICAL CRYSTALLOGRAPHY**

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 Type(s): Lecture

Department: Chemistry and Biochemistry

**CHEM 60391 SEMINAR: RECENT DEVELOPMENTS IN INORGANIC CHEMISTRY**

(Repeatable for credit) 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 Type(s): Seminar

Department: Chemistry and Biochemistry

**CHEM 60471 ADVANCED ORGANIC CHEMISTRY-MECHANISTIC ASPECTS**

Discussion of organic reaction mechanisms.

Chemistry of reactive intermediates, aromaticity, addition/elimination, nucleophilic/electrophilic substitution, bonding theories and other fundamental topics governing organic reactions.

Prerequisite: CHEM 30482. Graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Chemistry and Biochemistry

**CHEM 60472 ADVANCED ORGANIC CHEMISTRY-SYNTHETIC ASPECTS**

Disconnection approach to organic synthesis.

Modern methods for carbon-carbon bond formation and functional group interconversion, and their application to natural product synthesis.

Prerequisite: CHEM 30482. Graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Chemistry and Biochemistry

**CHEM 60473 STEREOSELECTIVE ORGANIC SYNTHESIS**

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 Type(s): Lecture

Department: Chemistry and Biochemistry

**CHEM 60541 ADVANCED PHYSICAL CHEMISTRY**

Covers basic materials of modern physical chemistry in two broad areas: thermodynamics and introductory quantum mechanics.

Prerequisite: CHEM 50556. Graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Chemistry and Biochemistry

**CHEM 60591 SEMINAR: RECENT DEVELOPMENTS IN PHYSICAL CHEMISTRY**

(Repeatable for credit) Presentation and discussion of original papers from current literature.

Prerequisite: Graduate standing.

1.000 Credit hours

1.000 Other hours

Levels: Graduate

Schedule Type(s): Seminar

Department: Chemistry and Biochemistry

**CHEM 60894 COLLEGE TEACHING OF CHEMISTRY**

(Repeatable for credit) Experience in teaching of chemistry at college level. Prerequisite: Graduate standing.

1.000 Credit hours

1.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Chemistry and Biochemistry

**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 Type(s): Research

Department: Chemistry and Biochemistry

**CHEM 61191 SEMINAR: PROBLEM SOLVING IN ANALYTICAL CHEMISTRY**

(Repeatable for credit) 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 Type(s): Seminar

Department: Chemistry and Biochemistry

**CHEM 61491 SEMINAR: PROBLEM SOLVING IN ORGANIC CHEMISTRY**

(Repeatable for credit) 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 Type(s): Seminar

Department: Chemistry and Biochemistry

**CHEM 62191 SEMINAR: ANALYTICAL CHEMISTRY**

(Repeatable for credit) 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 Type(s): Seminar

Department: Chemistry and Biochemistry

**CHEM 62291 SEMINAR: BIOCHEMISTRY**

(Repeatable for credit) 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 Type(s): Seminar

Department: Chemistry and Biochemistry

**CHEM 62391 SEMINAR: INORGANIC CHEMISTRY**

(Repeatable for credit) 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 Type(s): Seminar

Department: Chemistry and Biochemistry

**CHEM 62491 SEMINAR: ORGANIC CHEMISTRY**

(Repeatable for credit) 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 Type(s): Seminar

Department: Chemistry and Biochemistry

**CHEM 62591 SEMINAR: PHYSICAL CHEMISTRY**

(Repeatable for credit) 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 Type(s): Seminar

Department: Chemistry and Biochemistry

**CHEM 70050 CHEMISTRY RESEARCH PROPOSAL**

The student will prepare an independent and original research proposal that is completely distinct from the dissertation project. Prerequisite: Doctoral standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Chemistry and Biochemistry

**CHEM 70109 BIOANALYTICAL CHEMISTRY**

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.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Chemistry and Biochemistry

#### **CHEM 70113 CHEMICAL SEPARATIONS**

Theory, instrumentation and applications of chemical separations for chemical analysis.

Emphasis on gas and liquid chromatography.

Prerequisite: CHEM 30106 and doctoral standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Chemistry and Biochemistry

#### **CHEM 70114 ELECTROANALYTICAL CHEMISTRY**

The physical basis of electrochemistry;

instrumentation and applications in chemical

analysis. Polarography, coulometry, voltametry

and ion selective electrodes. Three hours lecture

weekly. Prerequisite: CHEM 40555 and doctoral standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Chemistry and Biochemistry

#### **CHEM 70195 ADVANCED TOPICS, ANALYTICAL**

(Repeatable for credit)Advanced topics in

analytical chemistry. Prerequisite: Special approval

and doctoral standing.

1.000 to 3.000 Credit hours

1.000 to 3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Chemistry and Biochemistry

#### **CHEM 70248 ADVANCED BIOLOGICAL CHEMISTRY**

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 Type(s): Lecture

Department: Chemistry and Biochemistry

#### **CHEM 70253 BIOMACROMOLECULAR STRUCTURES**

Structure/function of motile processes in bacteria

and eukaryotic cells; supermolecular structure and

self-organization of proteins and nucleic acids in

chromatin, spliceosomes, viruses and ribosomes.

Prerequisite: doctoral standing.

1.000 Credit hours

1.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Chemistry and Biochemistry

#### **CHEM 70254 BIOMEMBRANES**

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 Type(s): Lecture

Department: Chemistry and Biochemistry

#### **CHEM 70261 PRINCIPLES OF BIOCHEMISTRY I**

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 Type(s): Lecture

Department: Chemistry and Biochemistry

#### **CHEM 70262 PRINCIPLES OF BIOCHEMISTRY II**

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 Type(s): Lecture

Department: Chemistry and Biochemistry

#### **CHEM 70263 PHYSICAL BIOCHEMISTRY I**

Principles and techniques of physical chemistry

used in studying biomacromolecules 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

Levels: Graduate

Schedule Type(s): Lecture

Department: Chemistry and Biochemistry

#### **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 Type(s): Seminar

Department: Chemistry and Biochemistry

#### **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 Type(s): Lecture

Department: Chemistry and Biochemistry

#### **CHEM 70327 MODERN INORGANIC CHEMISTRY**

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 Type(s): Lecture

Department: Chemistry and Biochemistry

#### **CHEM 70347 CHEMICAL CRYSTALLOGRAPHY**

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 Type(s): Lecture

Department: Chemistry and Biochemistry

#### **CHEM 70352 INORGANIC MATERIALS CHEMISTRY**

Broad survey of the synthesis, properties,

characterization and applications of inorganic

materials. Prerequisite: Doctoral standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Chemistry and Biochemistry

#### **CHEM 70365 BIOLOGICAL INORGANIC CHEMISTRY**

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 Type(s): Lecture

Department: Chemistry and Biochemistry

#### **CHEM 70391 SEMINAR: RECENT DEVELOPMENTS IN INORGANIC CHEMISTRY**

(Repeatable for credit)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 Type(s): Seminar

Department: Chemistry and Biochemistry

#### **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 Type(s): Lecture  
Department: Chemistry and Biochemistry

#### **CHEM 70451 ORGANIC MATERIALS CHEMISTRY**

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 Type(s): Lecture  
Department: Chemistry and Biochemistry

#### **CHEM 70471 ADVANCED ORGANIC CHEMISTRY-MECHANISTIC ASPECTS**

Discussion of organic reaction mechanisms. Chemistry of reactive intermediates, aromaticity, addition/elimination, nucleophilic/electrophilic substitution, bonding theories and other fundamental topics governing organic reactions. Prerequisite: CHEM 30482. Doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Chemistry and Biochemistry

#### **CHEM 70472 ADVANCED ORGANIC CHEMISTRY-SYNTHETIC ASPECTS**

Disconnection approach to organic synthesis. Modern methods for carbon-carbon bond formation and functional group interconversion, and their application to natural product synthesis. Prerequisite: CHEM 30482. Doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Chemistry and Biochemistry

#### **CHEM 70473 STEREOSELECTIVE ORGANIC SYNTHESIS**

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 Type(s): Lecture  
Department: Chemistry and Biochemistry

#### **CHEM 70476 SPECTROSCOPIC IDENTIFICATION OF ORGANIC COMPOUNDS**

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 Type(s): Lecture  
Department: Chemistry and Biochemistry

#### **CHEM 70478 SYNTHESIS OF ORGANIC LIQUID CRYSTALS**

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 Type(s): Lecture  
Department: Chemistry and Biochemistry

#### **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 Type(s): Lecture  
Department: Chemistry and Biochemistry

#### **CHEM 70541 ADVANCED PHYSICAL CHEMISTRY**

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 Type(s): Lecture  
Department: Chemistry and Biochemistry

#### **CHEM 70555 ELEMENTARY PHYSICAL CHEMISTRY**

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 Type(s): Lecture  
Department: Chemistry and Biochemistry

#### **CHEM 70556 ELEMENTARY PHYSICAL CHEMISTRY**

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 Type(s): Lecture  
Department: Chemistry and Biochemistry

#### **CHEM 70557 PHYSICAL CHEMISTRY LABORATORY**

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 Type(s): Laboratory  
Department: Chemistry and Biochemistry

#### **CHEM 70571 SURFACE CHEMISTRY**

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 Type(s): Lecture  
Department: Chemistry and Biochemistry

#### **CHEM 70575 MOLECULAR SPECTROSCOPY**

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 Type(s): Lecture  
Department: Chemistry and Biochemistry

#### **CHEM 70591 SEMINAR: RECENT DEVELOPMENTS IN PHYSICAL CHEMISTRY**

(Repeatable for credit) Presentation and discussion of original papers from current literature. Prerequisite: Doctoral standing.  
1.000 Credit hours  
1.000 Other hours  
Levels: Graduate  
Schedule Type(s): Seminar  
Department: Chemistry and Biochemistry

#### **CHEM 70595 ADVANCED TOPICS, PHYSICAL**

(Repeatable for credit) 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 Type(s): Lecture  
Department: Chemistry and Biochemistry

#### **CHEM 70894 COLLEGE TEACHING OF CHEMISTRY**

(Repeatable for credit) Experience in teaching of chemistry at college level. Prerequisite: Doctoral standing.  
1.000 Credit hours  
1.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Chemistry and Biochemistry

#### **CHEM 71191 SEMINAR: PROBLEM SOLVING IN ANALYTICAL CHEMISTRY**

(Repeatable for credit) 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 Type(s): Seminar  
Department: Chemistry and Biochemistry

**CHEM 71491 SEMINAR: PROBLEM SOLVING IN ORGANIC CHEMISTRY**

(Repeatable for credit) 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 Type(s): Seminar  
Department: Chemistry and Biochemistry

**CHEM 72191 SEMINAR: ANALYTICAL CHEMISTRY**

(Repeatable for credit) 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 Type(s): Seminar  
Department: Chemistry and Biochemistry

**CHEM 72291 SEMINAR: BIOCHEMISTRY**

(Repeatable for credit) 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 Type(s): Seminar  
Department: Chemistry and Biochemistry

**CHEM 72391 SEMINAR: INORGANIC CHEMISTRY**

(Repeatable for credit) 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 Type(s): Seminar  
Department: Chemistry and Biochemistry

**CHEM 72491 SEMINAR: ORGANIC CHEMISTRY**

(Repeatable for credit) 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 Type(s): Seminar  
Department: Chemistry and Biochemistry

**CHEM 72591 SEMINAR: PHYSICAL CHEMISTRY**

(Repeatable for credit) 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 Type(s): Seminar  
Department: Chemistry and Biochemistry

**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 Type(s): Dissertation  
Department: Chemistry and Biochemistry

**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 Type(s): Dissertation  
Department: Chemistry and Biochemistry

**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 Type(s): Research  
Department: Chemistry and Biochemistry

## Chinese (CHIN)

**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 Type(s): Lecture  
Department: Modern and Classical Language Studies

**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 Type(s): Lecture  
Department: Modern and Classical Language Studies

**CHIN 25201 INTERMEDIATE CHINESE I**

Continued development of speaking, listening, reading and writing skills using a variety of cultural materials. Prerequisite: CHIN 15102.

5.000 Credit hours  
5.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Modern and Classical Language Studies

**CHIN 25202 INTERMEDIATE CHINESE II**

Continuation of CHIN 25201. Prerequisite: CHIN 25201.

5.000 Credit hours  
5.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Modern and Classical Language Studies

**CHIN 30095 SPECIAL TOPICS**

(Repeatable for credit) Topic to be announced in schedule of classes. Prerequisite: Permission.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Modern and Classical Language Studies

**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.

5.000 Credit hours  
5.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Modern and Classical Language Studies

**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.

5.000 Credit hours  
5.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Modern and Classical Language Studies

**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 Type(s): Individual Investigation  
Department: Modern and Classical Language Studies

**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 Type(s): Lecture  
Department: Modern and Classical Language Studies

**CHIN 45202 ADVANCED CHINESE II**

Continuation of Advanced Chinese I.  
Prerequisite: CHIN 45201.  
5.000 Credit hours  
5.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Modern and Classical Language Studies

**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 Type(s): Lecture  
Department: Modern and Classical Language Studies

**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 Type(s): Lecture  
Department: Modern and Classical Language Studies

## *Curriculum and Instruction (CI)*

**CI 40093 VARIABLE TITLE WORKSHOP IN CURRICULUM AND INSTRUCTION**

(Repeatable for credit) 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 Type(s): Workshop  
Department: Teaching, Learning and Curriculum Studies

**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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**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 Type(s): Individual Investigation  
Department: Teaching, Learning and Curriculum Studies

**CI 47195 SPECIAL TOPICS IN CURRICULUM AND INSTRUCTION**

Student teaching. Prerequisite: special approval.  
1.000 to 5.000 Credit hours  
1.000 to 5.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Practicum  
Department: Teaching, Learning and Curriculum Studies

**CI 47330 READING AND WRITING IN ADOLESCENCE/ADULTHOOD**

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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**CI 47502 SCIENCE TEACHING IN EARLY AND MIDDLE GRADES**

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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**CI 47503 TEACHING SOCIAL STUDIES IN EARLY AND MIDDLE GRADES**

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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**CI 47504 TEACHING READING AND WRITING IN MIDDLE GRADES**

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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**CI 50093 VARIABLE TITLE WORKSHOP IN CURRICULUM AND INSTRUCTION**

(Repeatable for credit) 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 Type(s): Workshop  
Department: Teaching, Learning and Curriculum Studies

**CI 50095 SPECIAL TOPICS: SEMINAR/WORKSHOP IN CURRICULUM AND INSTRUCTION**

Special topic: seminar workshop for international baccalaureate program. Prerequisite: Graduate standing.  
1.000 Credit hours  
1.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**CI 53093 VARIABLE TITLE WORKSHOP IN EXERCISE, LEISURE AND SPORT**

(Repeatable for credit) 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 Type(s): Workshop  
Department: Teaching, Learning and Curriculum Studies

**CI 55015 PSYCHOLOGY OF COACHING**

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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**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 Type(s): Lecture





Department: Teaching, Learning and Curriculum Studies

**CI 55051 ELEMENTARY SCHOOL PHYSICAL EDUCATION METHODS**

Approaches to teaching in elementary school physical education. Focusing on sequential curriculum development and on learning outcomes 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 the semester in which student teaching/ internship will take place. Prerequisite: Special approval and graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**CI 55053 ELEMENTARY SCHOOL PHYSICAL EDUCATION CONTENT**

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 the semester in which student teaching/ internship will take place. Prerequisite: Special approval and graduate standing.  
3.000 Credit hours  
3.000 Other hours  
Levels: Graduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Teaching, Learning and Curriculum Studies

**CI 55058 SECONDARY SCHOOL PHYSICAL EDUCATION METHODS**

Approaches to teaching in secondary school physical education. Focus on sequential curriculum development and on learning outcomes 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 the semester in which student teaching/ internship will take place. Prerequisite: Special approval and graduate standing.  
3.000 Credit hours  
3.000 Other hours  
Levels: Graduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Teaching, Learning and Curriculum Studies

**CI 55059 SECONDARY SCHOOL PHYSICAL EDUCATION CONTENT**

Introduction and development of content, 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 the semester in which student teaching/ internship will take place. Prerequisite: Special approval and graduate standing.  
3.000 Credit hours  
3.000 Other hours  
Levels: Graduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Teaching, Learning and Curriculum Studies

**CI 57330 READING AND WRITING IN ADOLESCENCE/ADULTHOOD**

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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**CI 57501 TEACHING MATHEMATICS IN EARLY AND MIDDLE GRADES**

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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**CI 57502 SCIENCE TEACHING IN EARLY AND MIDDLE GRADES**

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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**CI 57503 TEACHING SOCIAL STUDIES IN EARLY AND MIDDLE GRADES**

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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**CI 57504 TEACHING READING AND WRITING IN MIDDLE GRADES**

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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**CI 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 Type(s): Master's Thesis  
Department: Teaching, Learning and Curriculum Studies

**CI 60299 THESIS II**

Thesis students must continue registration each semester until all degree Requirements are met. Prerequisite: CI 60199 and graduate standing.  
2.000 Credit hours  
2.000 Other hours  
Levels: Graduate  
Schedule Type(s): Master's Thesis  
Department: Teaching, Learning and Curriculum Studies

**CI 61125 ISSUES AND TRENDS IN SOCIAL STUDIES EDUCATION**

This course will provide an overview of historical trends and contemporary issues in social studies education. Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**CI 61126 RESEARCH IN SOCIAL STUDIES TEACHING AND LEARNING**

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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**CI 61127 TECHNOLOGY AND SOCIAL STUDIES**

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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**CI 61130 MULTICULTURAL EDUCATION: STRATEGIES**

Teachers will be provided with knowledge and strategies for teaching children to function effectively in a pluralistic society. Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**CI 61133 ISSUES AND TRENDS IN ELEMENTARY SCIENCE**

New discoveries in science, including issues in society with direct science content. Emphasis is on practical and simple classroom applications. Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**CI 61134 RESEARCH TRENDS IN SCIENCE EDUCATION**

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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**CI 61140 CULTURE AND MULTICULTURALISM IN SCIENCE EDUCATION**

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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**CI 61141 NATURE OF SCIENCE IN SCIENCE EDUCATION**

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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**CI 61142 HISTORY AND INQUIRY IN SCIENCE EDUCATION**

This course will investigate the continuing debate for what counts as science and how that vision has been represented throughout history. The

impacts of the political, economic and societal factors on the nature of scientific inquiry will also be discussed within a historical context.

Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**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.  
10.000 Credit hours  
10.000 Other hours  
Levels: Graduate  
Schedule Type(s): Practicum  
Department: Teaching, Learning and Curriculum Studies

**CI 65592 INTERNSHIP IN MOTOR DEVELOPMENT**

(Repeatable for credit) Supervised and supervisory experiences in motor development for all ages and abilities, including conceptual bases for assessment individualizations task analysis. Maximum of 6 hours applies to degree. Prerequisite: Special approval and graduate standing.  
1.000 to 12.000 Credit hours  
1.000 to 12.000 Lecture hours  
Levels: Graduate

Schedule Type(s): Lecture, Practicum  
Department: Teaching, Learning and Curriculum Studies

**CI 65692 INTERNSHIP IN ATHLETIC COACHING**

(Repeatable for credit) Supervised experience in organized sport focused upon the duties of a coach; can be at one or more levels (youth school college professional) and sports. A focus on the philosophy skills strategies and tactics of coaching within contemporary society. 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  
2.000 to 4.000 Other hours  
Levels: Graduate  
Schedule Type(s): Practicum  
Department: Teaching, Learning and Curriculum Studies

**CI 67001 FUNDAMENTALS OF CURRICULUM**

Orientation to the curriculum field. Theoretical examination of foundations, elements, design and development of school, college and non-school curricula. Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**CI 67002 CURRICULUM LEADERSHIP**

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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**CI 67003 TEACHER EDUCATION**

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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**CI 67004 PROFESSIONAL DEVELOPMENT IN TEACHING**

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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

### **CI 67005 INTERCULTURAL DIMENSIONS OF TEACHING AND LEARNING**

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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

### **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

Levels: Graduate

Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

### **CI 67010 CURRICULUM EVALUATION**

Students will focus on designing program evaluation related to assessment, development and implementation of curricula, critique national and local curricular programs, apply elements of evaluation models. Prerequisite: CI 677001.

Graduate Standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

### **CI 67091 SEMINAR IN CURRICULUM AND INSTRUCTION**

(Repeatable for credit) 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

Levels: Graduate

Schedule Type(s): Seminar

Department: Teaching, Learning and Curriculum Studies

### **CI 67092 ADVANCED PRACTICUM AND INTERNSHIP IN CURRICULUM AND INSTRUCTION**

(Repeatable for credit) Advanced practicum in curriculum and instruction. 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

1.000 to 10.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture, Practicum

Department: Teaching, Learning and Curriculum Studies

### **CI 67095 SPECIAL TOPICS IN CURRICULUM AND INSTRUCTION**

(Repeatable for credit) 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

Levels: Graduate

Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

### **CI 67096 INDIVIDUAL INVESTIGATION IN CURRICULUM AND INSTRUCTION**

(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 Type(s): Individual Investigation

Department: Teaching, Learning and Curriculum Studies

### **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

Levels: Graduate

Schedule Type(s): Research

Department: Teaching, Learning and Curriculum Studies

### **CI 67105 IMPROVING CLASSROOM INSTRUCTION**

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

Levels: Graduate

Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

### **CI 67107 CURRICULUM AND ORGANIZATION IN THE MIDDLE GRADES**

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

Levels: Graduate

Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

### **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.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

### **CI 67224 TEACHING MATHEMATICS USING COMPUTERS AND CALCULATORS**

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.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

### **CI 67225 RESEARCH IN MATHEMATICS EDUCATION**

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.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

### **CI 67226 IMPROVING MATHEMATICS INSTRUCTION IN MIDDLE CHILDHOOD**

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.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture



Department: Teaching, Learning and Curriculum Studies

### **CI 67227 ASSESSMENT IN MATHEMATICS EDUCATION**

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.  
2.000 Credit hours  
2.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

### **CI 67228 INTERVENTION IN MATHEMATICS INSTRUCTION**

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  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

### **CI 67240 INTRODUCTION TO ENVIRONMENTAL EDUCATION**

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  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

### **CI 67292 CLINICAL PRACTICUM IN MATHEMATICAL ASSESSMENT**

(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  
2.000 Other hours  
Levels: Graduate  
Schedule Type(s): Practicum  
Department: Teaching, Learning and Curriculum Studies

### **CI 67310 THEORY AND PRACTICE IN THE TEACHING OF READING**

Nature and development of reading, approaches to instruction, relation to learning and development. Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

### **CI 67312 TEACHING WRITING AS A PROCESS**

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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

### **CI 67314 SURVEY OF YOUNG ADULT LITERATURE**

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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

### **CI 67315 SURVEY OF CHILDREN'S LITERATURE**

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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

### **CI 67318 TEACHING DRAMA IN THE CLASSROOM**

Presents an in-depth survey of selected types of drama appropriate for elementary and middle school children. Theory and practice are emphasized. Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

### **CI 67319 DIAGNOSIS AND REMEDIATION IN READING**

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 677310. Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

### **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  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

### **CI 67323 CLINICAL PRACTICUM IN CORRECTIVE READING**

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  
4.000 Other hours  
Levels: Graduate  
Schedule Type(s): Practicum  
Department: Teaching, Learning and Curriculum Studies

### **CI 67330 READING IN CONTENT AREAS**

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  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

### **CI 67331 LITERACY LEARNING IN EARLY YEARS**

Emphasizes developmental nature of literacy learning in preschool and primary grades; provides techniques for establishing effective reading and writing programs for young children. Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

### **CI 67333 BLACK WOMEN AND LITERACY**

This graduate level course is designed to support inquiry into literacy and its implications for women from the African diaspora. Several aspects of literacy will be considered i.e. verbal, visual and graphic. Questions will be raised about the implications of these forms of literacy for black women in different geographical locations. Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies





### CI 67337 THEORY AND PRACTICE OF TEACHING LITERATURE-SECONDARY AND COLLEGE

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

Levels: Graduate

Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

### CI 67339 WRITING ASSESSMENT AND RESPONSE

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

Levels: Graduate

Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

### CI 67350 COLLEGE/ADULT READING INSTRUCTION

Reading strategies for teachers of adult learners with emphasis on the role of the teacher and the development of programs. Prerequisite: Graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

### CI 67351 PERSPECTIVES ON LITERACY RESEARCH

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

Levels: Graduate

Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

### CI 67352 LITERACY COACHING

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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

### CI 67353 MULTICULTURAL VOICES IN TEACHING CHILDREN'S AND YOUNG ADULT LITERATURE

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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

### CI 67392 ADVANCED PRACTICUM AND INTERNSHIP IN READING

(Repeatable for credit) 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

1.000 to 10.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture, Practicum

Department: Teaching, Learning and Curriculum Studies

### CI 67395 SPECIAL TOPICS IN READING

(Repeatable for credit) 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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

### CI 67396 INDIVIDUAL INVESTIGATION IN READING AND LANGUAGE ARTS

(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 Type(s): Individual Investigation

Department: Teaching, Learning and Curriculum Studies

### CI 67517 NEW LITERACIES IN PRACTICE

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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

### CI 67592 PRACTICUM MATH INTERVENTION

(Repeatable for credit) Practicum in Math Intervention. Prerequisites: Choose 2 of 4: ADED 52267, CI 67224 and 67226, ECED 50147. Graduate standing.

3.000 Credit hours

3.000 Other hours

Levels: Graduate

Schedule Type(s): Practicum

Department: Teaching, Learning and Curriculum Studies

### 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 Type(s): Seminar

Department: Teaching, Learning and Curriculum Studies

### CI 70093 VARIABLE TITLE WORKSHOP IN CURRICULUM AND INSTRUCTION

(Repeatable for credit) 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 Type(s): Workshop

Department: Teaching, Learning and Curriculum Studies

### CI 71125 ISSUES AND TRENDS IN SOCIAL STUDIES EDUCATION

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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

### CI 71126 RESEARCH IN SOCIAL STUDIES TEACHING AND LEARNING

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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

### **CI 71127 TECHNOLOGY AND SOCIAL STUDIES**

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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

### **CI 71130 MULTICULTURAL EDUCATION: STRATEGIES**

Teachers will be provided with knowledge and strategies for teaching children to function effectively in a pluralistic society. Prerequisite: Doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

### **CI 71133 ISSUES AND TRENDS IN ELEMENTARY SCIENCE**

New discoveries in science, including issues in society with direct science content. Emphasis is on practical and simple classroom applications. Prerequisite: Doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

### **CI 71134 RESEARCH TRENDS IN SCIENCE EDUCATION**

Course in issues relating to research methods pertinent to science education. Prerequisite: Doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

### **CI 71140 CULTURE AND MULTICULTURALISM IN SCIENCE EDUCATION**

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.  
3.000 Credit hours  
3.000 Lecture hours

Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

### **CI 71141 NATURE OF SCIENCE IN SCIENCE EDUCATION**

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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

### **CI 71142 HISTORY OF INQUIRY IN SCIENCE EDUCATION**

This course will investigate the continuing debate for what counts as science and how that vision has been represented throughout history. The impacts of the political economic and societal factors on the nature of scientific inquiry will also be discussed within a historical context. Prerequisite: Doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

### **CI 75592 INTERNSHIP IN MOTOR DEVELOPMENT**

(Repeatable for credit) Supervised and supervisory experiences in motor development for all ages and abilities, including conceptual bases for assessment individualizations task analysis. Maximum of 6 hours applies to degree. Prerequisite: Special approval and doctoral standing.  
1.000 to 12.000 Credit hours  
7.000 to 84.000 Other hours  
Levels: Graduate  
Schedule Type(s): Practicum  
Department: Teaching, Learning and Curriculum Studies

### **CI 77001 FUNDAMENTALS OF CURRICULUM**

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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

### **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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

### **CI 77003 TEACHER EDUCATION**

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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

### **CI 77004 PROFESSIONAL DEVELOPMENT IN TEACHING**

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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

### **CI 77005 INTERCULTURAL DIMENSIONS OF TEACHING AND LEARNING**

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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

### **CI 77010 CURRICULUM EVALUATION**

Students will focus on designing program evaluation related to assessment, development and implementation of curricula, critique national and local curricular programs, apply elements of evaluation models. Prerequisite: CI 6/77001. Doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

### **CI 77092 ADVANCED PRACTICUM IN CURRICULUM AND INSTRUCTION**

(Repeatable for credit) Supervised program in curriculum design, development and/or implementation. 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. Special approval.

1.000 to 10.000 Credit hours  
1.000 to 10.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture, Practicum

Department: Teaching, Learning and Curriculum Studies

#### **CI 77095 SPECIAL TOPICS IN CURRICULUM AND INSTRUCTION**

(Repeatable for credit) 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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

#### **CI 77096 INDIVIDUAL INVESTIGATION IN CURRICULUM AND INSTRUCTION**

(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 Type(s): Individual Investigation

Department: Teaching, Learning and Curriculum Studies

#### **CI 77105 IMPROVING CLASSROOM INSTRUCTION**

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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

#### **CI 77107 CURRICULUM AND ORGANIZATION IN THE MIDDLE GRADES**

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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

#### **CI 77108 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: Doctoral standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

#### **CI 77224 TEACHING MATHEMATICS USING COMPUTERS AND CALCULATORS**

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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

#### **CI 77225 RESEARCH IN MATHEMATICS EDUCATION**

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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

#### **CI 77226 IMPROVING MATHEMATICS INSTRUCTION IN MIDDLE CHILDHOOD**

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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

#### **CI 77227 ASSESSMENT IN MATHEMATICS EDUCATION**

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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

#### **CI 77228 INTERVENTION IN MATHEMATICS INSTRUCTION**

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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

#### **CI 77240 INTRODUCTION TO ENVIRONMENTAL EDUCATION**

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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

#### **CI 77292 CLINICAL PRACTICUM IN MATHEMATICAL ASSESSMENT**

(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. Doctoral standing.

2.000 Credit hours

2.000 Other hours

Levels: Graduate

Schedule Type(s): Practicum

Department: Teaching, Learning and Curriculum Studies

#### **CI 77310 THEORY AND PRACTICE IN THE TEACHING OF READING**

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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

#### **CI 77312 TEACHING WRITING AS A PROCESS**

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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

#### **CI 77314 SURVEY OF YOUNG ADULT LITERATURE**

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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

#### **CI 77315 SURVEY OF CHILDREN'S LITERATURE**

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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

#### **CI 77318 TEACHING DRAMA IN THE CLASSROOM**

Presents an in-depth survey of selected types of drama appropriate for elementary and middle school children. Theory and practice are emphasized. Prerequisite: Doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

#### **CI 77319 DIAGNOSIS AND REMEDIATION IN READING**

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 677310. Doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

#### **CI 77323 CLINICAL PRACTICUM IN CORRECTIVE READING**

Application of previous courses includes supervised diagnostic/prescriptive reading work with school-age pupils and diagnostic/remedial reporting. Prerequisite: CI 67319. Doctoral standing.  
4.000 Credit hours  
4.000 Other hours  
Levels: Graduate  
Schedule Type(s): Practicum  
Department: Teaching, Learning and Curriculum Studies

#### **CI 77330 READING IN CONTENT AREAS**

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  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

#### **CI 77331 LITERACY LEARNING IN EARLY YEARS**

Emphasizes developmental nature of literacy learning in preschool and primary grades; provides techniques for establishing effective reading and writing programs for young children. Prerequisite: Doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

#### **CI 77333 BLACK WOMEN AND LITERACY**

This graduate level course is designed to support inquiry into literacy and its implications for women from the African diaspora. Several aspects of literacy will be considered i.e. verbal, visual, and graphic. Questions will be raised about the implications of these forms of literacy for black women in different geographical locations. Prerequisite: Doctoral standing and special approval from instructor.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

#### **CI 77337 THEORY AND PRACTICE IN TEACHING LITERATURE-SECONDARY AND COLLEGE**

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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

#### **CI 77339 WRITING ASSESSMENT AND RESPONSE**

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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

#### **CI 77350 COLLEGE/ADULT READING INSTRUCTION**

Reading strategies for teachers of adult learners with emphasis on the role of the teacher and the development of programs. Prerequisite: Doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

#### **CI 77351 PERSPECTIVES ON LITERACY RESEARCH**

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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

#### **CI 77352 LITERACY COACHING**

Focus on principles and strategies related to literacy coaching, p--adult, within classrooms, schools and districts. CI 67310 or 77310; and 67319 or 77319; and 67323 or 77323; and 67330 or 77330; and MCED 50005 and doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

#### **CI 77353 MULTICULTURAL VOICES IN TEACHING CHILDREN'S AND YOUNG ADULT LITERATURE**

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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

#### **CI 77392 ADVANCED PRACTICUM AND INTERNSHIP IN READING**

(Repeatable for credit) 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  
1.000 to 10.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture, Practicum  
Department: Teaching, Learning and Curriculum Studies

#### **CI 77395 SPECIAL TOPICS IN READING**

(Repeatable for credit) 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 Type(s): Lecture





Department: Teaching, Learning and Curriculum Studies

### **CI 77396 INDIVIDUAL INVESTIGATION IN READING AND LANGUAGE ARTS**

(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 Type(s): Individual Investigation  
Department: Teaching, Learning and Curriculum Studies

### **CI 77592 PRACTICUM MATH INTERVENTION**

(Repeatable for credit) Practicum in Math Intervention. Prerequisites: ADED 52267, CI 67224 and 67226, ECED 50147. Doctoral standing.  
3.000 Credit hours  
3.000 Other hours  
Levels: Graduate  
Schedule Type(s): Practicum  
Department: Teaching, Learning and Curriculum Studies

### **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 Type(s): Seminar  
Department: Teaching, Learning and Curriculum Studies

### **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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

### **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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

### **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 Type(s): Dissertation  
Department: Teaching, Learning and Curriculum Studies

### **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 Type(s): Dissertation  
Department: Teaching, Learning and Curriculum Studies

### **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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

### **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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

### **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.  
3.000 Credit hours  
3.000 Other hours  
Levels: Graduate  
Schedule Type(s): Research

Department: Teaching, Learning and Curriculum Studies

### **CI 87091 SEMINAR IN CURRICULUM AND INSTRUCTION**

(Repeatable for credit) 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.  
1.000 to 4.000 Credit hours  
1.000 to 4.000 Other hours  
Levels: Graduate  
Schedule Type(s): Seminar  
Department: Teaching, Learning and Curriculum Studies

### **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.  
1.000 to 15.000 Credit hours  
1.000 to 15.000 Other hours  
Levels: Graduate  
Schedule Type(s): Research  
Department: Teaching, Learning and Curriculum Studies

### **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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

### **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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

### **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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**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 Type(s): Seminar

Department: Teaching, Learning and Curriculum Studies

**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 Type(s): Research

Department: Teaching, Learning and Curriculum Studies

**CI 87517 NEW LITERACIES IN PRACTICE**

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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**CI 87791 DOCTORAL SEMINAR IN MATHEMATICS EDUCATION**

(Repeatable for credit) Doctoral Seminar in Math Education. Prerequisites: Doctoral standing and CI major and special approval from instructor.

3.000 Credit hours

3.000 Other hours

Levels: Graduate

Schedule Type(s): Seminar

Department: Teaching, Learning and Curriculum Studies

***Classics (CLAS)*****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 Type(s): Lecture

Department: Modern and Classical Language Studies

**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 Type(s): Lecture

Department: Modern and Classical Language Studies

Course Attributes: Diversity Course-Global, Kent Core-Humanities, IER-Humanities, Transfer 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 Type(s): Lecture

Department: Modern and Classical Language Studies

Course Attributes: Diversity Course-Global, Kent Core-Humanities, IER-Humanities, Transfer Module-Humanities

**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 Type(s): Lecture

Department: Modern and Classical Language Studies

**CLAS 41005 HISTORY OF ANCIENT GREECE**

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 Type(s): Lecture

Department: Modern and Classical Language Studies

**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 Type(s): Lecture

Department: Modern and Classical Language Studies

**CLAS 41092 FIELD EXPERIENCE IN CLASSICS**

(Repeatable for a maximum of 7 credit hours if the destination differs) 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 cities 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 Type(s): Field Experience

Department: Modern and Classical Language Studies

Course Attributes: Experiential Learning Requirement

**CLAS 41095 SPECIAL TOPICS IN CLASSICS**

(Repeatable for a maximum of 6 credit hours) Topic announced in the schedule of classes.

Prerequisite: none.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Modern and Classical Language Studies

**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 Type(s): Individual Investigation

Department: Modern and Classical Language Studies

**CLAS 41097 COLLOQUIUM IN CLASSICS**

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 Type(s): Colloquium

Department: Modern and Classical Language Studies

**CLAS 41301 CLASSICAL MYTHOLOGY**

Assessment of major streams of ancient mythology stressing broad humanistic concepts of religion, philosophy and literature. Prerequisite: Sophomore standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Modern and Classical Language Studies



#### **CLAS 41304 LATIN LITERATURE IN TRANSLATION**

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 Type(s): Lecture  
Department: Modern and Classical Language Studies  
Course Attributes: Writing Intensive Course

#### **CLAS 41305 CLASSICAL LITERARY STUDIES**

(Repeatable for a maximum of 12 credit hours)  
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 Type(s): Lecture  
Department: Modern and Classical Language Studies

#### **CLAS 41401 GREEK ARCHAEOLOGY AND ART**

(Cross-listed with CLAS 51401, 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: None.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Modern and Classical Language Studies

#### **CLAS 41402 ROMAN ARCHAEOLOGY AND ART**

(Cross-listed with CLAS 51402, 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: None.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Modern and Classical Language Studies

#### **CLAS 41404 ANCIENT CHRISTIANITIES**

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 Type(s): Lecture

Department: Modern and Classical Language Studies

#### **CLAS 41503 GREEK LITERATURE IN TRANSLATION**

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 Type(s): Lecture  
Department: Modern and Classical Language Studies  
Course Attributes: Writing Intensive Course

#### **CLAS 51005 HISTORY OF ANCIENT GREECE**

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 Type(s): Lecture  
Department: Modern and Classical Language Studies

#### **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 Type(s): Lecture  
Department: Modern and Classical Language Studies

#### **CLAS 51092 FIELD EXPERIENCE IN CLASSICS**

(Repeatable for a maximum of 7 credit hours if destination differs) 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 cities 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 Type(s): Field Experience  
Department: Modern and Classical Language Studies

#### **CLAS 51095 SPECIAL TOPICS IN CLASSICS**

(Repeatable for a maximum of 6 credit hours) Topic announced in the schedule of classes. Prerequisite: graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Modern and Classical Language Studies

#### **CLAS 51097 COLLOQUIUM IN CLASSICS**

(Repeatable for credit) 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 Type(s): Colloquium  
Department: Modern and Classical Language Studies

#### **CLAS 51301 CLASSICAL MYTHOLOGY**

Assessment of major streams of ancient mythology stressing broad humanistic concepts of religion, philosophy and literature. Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Modern and Classical Language Studies

#### **LAS 51304 LATIN LITERATURE IN TRANSLATION**

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 Type(s): Lecture  
Department: Modern and Classical Language Studies

#### **CLAS 51305 CLASSICAL LITERARY STUDIES**

(Repeatable for a maximum of 12 credit hours)  
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 Type(s): Lecture  
Department: Modern and Classical Language Studies

#### **CLAS 51401 GREEK ARCHAEOLOGY AND ART**

(Cross-listed with CLAS 41401, 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 Type(s): Lecture  
Department: Modern and Classical Language Studies

#### **CLAS 51402 ROMAN ARCHAEOLOGY AND ART**

(Cross-listed with CLAS 41402, 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 Type(s): Lecture  
Department: Modern and Classical Language Studies

**CLAS 51404 ANCIENT CHRISTIANITIES**

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 Type(s): Lecture  
Department: Modern and Classical Language Studies

**CLAS 51503 GREEK LITERATURE IN TRANSLATION**

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 Type(s): Lecture  
Department: Modern and Classical Language Studies

## *Clinical Education (CLI)*

**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 Type(s): Clinic  
Department: Podiatric Medicine

**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 Type(s): Clinic  
Department: Podiatric Medicine

**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 Institute and assist in the performance of history-taking and physical examinations. During the course of patient care at the Cleveland Foot and Ankle Institute, 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 Type(s): Clinic  
Department: Podiatric Medicine

**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 Type(s): Clinic  
Department: Podiatric Medicine

**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  
Levels: Professional  
Schedule Type(s): Clinic  
Department: Podiatric Medicine

**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 Type(s): Clinic  
Department: Podiatric Medicine

**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 Type(s): Clinic  
Department: Podiatric Medicine





### **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 Type(s): Clinic  
Department: Podiatric Medicine

### **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 Type(s): Clinic  
Department: Podiatric Medicine

### **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 Type(s): Clinic  
Department: Podiatric Medicine

### **CLI 80390 SIMULATED PATIENTS ROTATION**

The simulated patient lab offers third-year students experiences and feedback not available in other rotations. The use of simulated patients to train students in medical education began about 10-15 years ago and has gained acceptance at many medical schools in the United States and abroad. Simulated patients are actors who are coached to simulate an actual patient so accurately that a skilled clinician could not detect the simulation. In performing the simulation, the simulated patient presents the "gestalt" of the patient being simulated—not just the history, but the body language and personality characteristics as well. Properly trained simulated patients will not vary in the picture they present from student to student. This provides standardization to teaching and evaluation, not offered elsewhere in the clinical curriculum. In addition, computerized patient scenarios are used to assist in development of clinical reasoning skills. Prerequisite: student must be enrolled in the Podiatric Medicine program.

4.000 Credit hours  
16.000 Other hours  
Levels: Professional  
Schedule Type(s): Clinic  
Department: Podiatric Medicine

### **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 Type(s): Clinic  
Department: Podiatric Medicine

### **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 Type(s): Clinic  
Department: Podiatric Medicine

### **CLI 80455 COMMUNITY MEDICINE**

In addition to the rotations on campus, the college operates several community medicine

clinics in various sites throughout the city of Cleveland to full 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 imagining 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 Type(s): Clinic  
Department: Podiatric Medicine

### **CLI 80491 SENIOR MEDICAL 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 Type(s): Clinic  
Department: Podiatric Medicine

### **CLI 80496 CLERKSHIP ROTATION**

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  
16.000 Other hours  
Levels: Professional  
Schedule Type(s): Clinic  
Department: Podiatric Medicine

### **CLI 80498 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. Prerequisite: student must be enrolled in the Podiatric Medicine program.

1.000 Credit hours  
4.000 Other hours  
Levels: Professional  
Schedule Type(s): Clinic  
Department: Podiatric Medicine



## ***Clinical Laboratory Sciences (CLS)***

### **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  
4.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Biological Sciences

### **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  
4.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Biological Sciences

### **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) major.

1.000 Credit hours  
1.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Biological Sciences

### **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  
1.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Biological Sciences

### **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  
1.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Biological Sciences

### **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  
1.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Biological Sciences

### **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  
4.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Biological Sciences

### **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.

4.000 Credit hours  
4.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Biological Sciences

### **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  
1.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Biological Sciences

### **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  
1.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Biological Sciences

### **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  
2.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Biological Sciences

### **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  
2.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Biological Sciences

### **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  
1.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Biological Sciences

### **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  
2.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Biological Sciences

### **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  
2.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Biological Sciences

### **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  
1.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Biological Sciences

### **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  
1.000 to 4.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Biological Sciences



## Community Medicine (CMD)

### CMD 424 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 Type(s): Lecture  
Department: Podiatric Medicine

### 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 Type(s): Lecture  
Department: Podiatric Medicine

### 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 Type(s): Lecture  
Department: Podiatric Medicine

## Communication Studies (COMM)

### 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 Type(s): Lecture  
Department: Communication Studies  
Course Attributes: Kent Core-Additional, LER-Additional Course, TAG Communication, Transfer 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: cumulative 2.000 GPA or better.  
3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Communication Studies

### COMM 20001 INTERPERSONAL COMMUNICATION

Introduction to human interpersonal communication. Components and structures situations and contexts are described non-evaluative focus with emphasis on informal experience. Prerequisite: None.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Communication Studies  
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 (2.000) or better in this course to fulfill the grammar Requirement. If they fail to earn a C (2.000) or better in COMM 21000 after three attempts, they are not permitted to continue in the communication studies (COMM) program. Does not count toward communication studies (COMM) course requirements. Prerequisite: none.  
1.000 Credit hours  
1.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Communication Studies

### COMM 21008 SOCIAL MEDIA STRATEGIES

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 Type(s): Lecture  
Department: Communication Studies

### COMM 25454 INTERCOLLEGIATE FORENSICS I

(Repeatable for a maximum of 8 credit hours) practicum in intercollegiate forensics for freshmen, sophomores and beginning forensic students. Maximum 4 credit hours may apply to the communication major Requirements. Prerequisite: special approval.  
1.000 or 2.000 Credit hours  
1.000 to 2.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Communication Studies

### 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 Type(s): Lecture  
Department: Communication Studies

### COMM 25851 COMMUNICATION FOR TEACHERS

Principles, skills and responsibilities of oral communication as central to the process of teaching all grades and subjects. Focuses upon speaking and listening with pupils peers and parents. Prerequisite: Integrated Language Arts (INLA) major.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Communication Studies

### 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 Type(s): Lecture  
Department: Communication Studies

### 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 Type(s): Lecture  
Department: Communication Studies  
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 Type(s): Lecture  
Department: Communication Studies  
Course Attributes: Diversity Course-Domestic,  
Kent Core-Humanities, LER-Humanities,  
Transfer 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 Type(s): Lecture  
Department: Communication Studies

### **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 Type(s): Lecture  
Department: Communication Studies

### **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 Type(s): Lecture  
Department: Communication Studies

### **COMM 35454 INTERCOLLEGIATE FORENSICS II**

(Repeatable for a maximum of 8 credit hours) advanced practicum in intercollegiate forensics for juniors and seniors with forensics experience. Maximum of 4 hours may apply to the communication major. Prerequisite: Permission.  
1.000 or 2.000 Credit hours  
1.000 to 2.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Communication Studies

### **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 Type(s): Lecture  
Department: Communication Studies

Course Attributes: TAG Communication

### **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: cumulative GPA of 2.000 or better.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Communication Studies

### **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 Type(s): Lecture  
Department: Communication Studies  
Course Attributes: Diversity Course-Global

### **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 Type(s): Lecture  
Department: Communication Studies

### **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 Type(s): Lecture  
Department: Communication Studies  
Course Attributes: Writing Intensive Course

### **COMM 35912 GENDER AND COMMUNICATION**

Examines influence of gender in interpersonal and organizational communication including communication processes in interpersonal violence, STDs and other contemporary social problems. Prerequisite: None.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Communication Studies  
Course Attributes: Diversity Course-Domestic

### **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 Type(s): Lecture  
Department: Communication Studies

### **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 Type(s): Lecture  
Department: Communication Studies

### **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 Type(s): Lecture  
Department: Communication Studies  
Course Attributes: Writing Intensive Course

### **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 Type(s): Lecture  
Department: Communication Studies

### **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 Type(s): Lecture  
Department: Communication Studies

### **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 Type(s): Lecture  
Department: Communication Studies

#### **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 Type(s): Lecture  
Department: Communication Studies

#### **COMM 45007 FREEDOM OF SPEECH**

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 Type(s): Lecture  
Department: Communication Studies

#### **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 Type(s): Seminar  
Department: Communication Studies

#### **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. S/u grades and IP.

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 Type(s): Practicum  
Department: Communication Studies  
Course Attributes: Experiential Learning Requirement

#### **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 Type(s): Workshop  
Department: Communication Studies

#### **COMM 45095 SPECIAL TOPICS IN COMMUNICATION STUDIES**

(Repeatable for credit) 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 Type(s): Lecture  
Department: Communication Studies

#### **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 Type(s): Individual Investigation  
Department: Communication Studies

#### **COMM 45459 COMMUNICATION AND CONFLICT**

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: cumulative GPA of 2.000 or better.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Communication Studies

#### **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 Type(s): Lecture  
Department: Communication Studies

#### **COMM 45865 ORGANIZATIONAL COMMUNICATION TRAINING AND DEVELOPMENT**

Theory and application of diagnosing communication problems in an organization and the intervention process. Prerequisite: COMM 35864 and a cumulative GPA of 2.000 or better.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Communication Studies

#### **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 Type(s): Lecture  
Department: Communication Studies  
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 (adaptive ability, gender differences); powerful vs. powerless speech; and intercultural considerations. Prerequisite: none.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Communication Studies

#### **COMM 45959 NONVERBAL COMMUNICATION**

Survey of theory and research in nonverbal codes of communication through readings, field study and classroom interaction. Prerequisite: cumulative GPA of 2.000 or better. Pre/corequisite: COMM 30000.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Communication Studies

#### **COMM 45960 HEALTH COMMUNICATION**

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 Type(s): Lecture  
Department: Communication Studies

#### **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 (2.000) in COMM 20000; and a cumulative GPA of 2.000 or better; and senior standing.

3.000 Credit hours  
3.000 Other hours



Levels: Undergraduate  
Schedule Type(s): Seminar  
Department: Communication Studies  
Course Attributes: Experiential Learning Requirement

### **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 2.000 or better; and COMM 20000 with a minimum grade of C (2.000) or better; and COMM 35864; and JMC 20005; and VCD 37000; and senior standing; and special approval.  
3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Practicum  
Department: Communication Studies  
Course Attributes: Experiential Learning Requirement

### **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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Communication Studies

### **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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Communication Studies

### **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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Communication Studies

### **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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Communication Studies

### **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 Type(s): Lecture  
Department: Communication Studies

### **COMM 55007 FREEDOM OF SPEECH**

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 Type(s): Lecture  
Department: Communication Studies

### **COMM 55095 SPECIAL TOPICS**

(Repeatable for credit) 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 Type(s): Lecture  
Department: Communication Studies

### **COMM 55459 COMMUNICATION AND CONFLICT**

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 Type(s): Lecture  
Department: Communication Studies

### **COMM 55960 HEALTH COMMUNICATION**

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 Type(s): Lecture  
Department: Communication Studies

### **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 Type(s): Master's Thesis  
Department: Communication Studies

### **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  
Levels: Graduate  
Schedule Type(s): Master's Thesis  
Department: Communication Studies

### **COMM 61198 MASTERS PROJECT IN COMMUNICATION STUDIES**

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.  
3.000 Credit hours  
3.000 Other hours  
Levels: Graduate  
Schedule Type(s): Research  
Department: Communication Studies

### **COMM 64092 MASTERS INTERNSHIP IN COMMUNICATION STUDIES**

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 120 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.  
3.000 Credit hours  
3.000 Other hours  
Levels: Graduate  
Schedule Type(s): Practicum  
Department: Communication Studies

### **COMM 65000 FOUNDATIONS OF COMMUNICATION INQUIRY**

Philosophy of science, epistemological and theory construction principles which are the foundation of inquiry into the process of communication. Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Communication Studies



**COMM 65020 QUANTITATIVE RESEARCH METHODS IN COMMUNICATION**

An examination of basic quantitative social scientific research methods and procedures for the study of communication. Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Communication Studies

**COMM 65040 QUALITATIVE RESEARCH METHODS IN COMMUNICATION**

Exploration of qualitative methods in human communication research. Focus on the nature of qualitative data participant observation, and archival strategies of data collection and interpretive and interactionist approaches to data analysis. Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Communication Studies

**COMM 65060 COMMUNICATION MEASUREMENT AND ANALYSIS**

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 Type(s): Lecture  
Department: Communication Studies

**COMM 65091 SEMINAR IN PERSUASION**

(Repeatable for credit) 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 Type(s): Seminar  
Department: Communication Studies

**COMM 65096 INDIVIDUAL INVESTIGATION**

(Repeatable for a maximum of 6 credit hours) 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 Type(s): Individual Investigation  
Department: Communication Studies

**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  
1.000 to 15.000 Other hours  
Levels: Graduate  
Schedule Type(s): Research

Department: Communication Studies

**COMM 65591 SEMINAR IN SMALL GROUP COMMUNICATION**

(Repeatable for credit) 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 Type(s): Seminar  
Department: Communication Studies

**COMM 65652 THEORIES OF COMMUNICATION**

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 Type(s): Lecture  
Department: Communication Studies

**COMM 65660 POLITICAL COMMUNICATION**

An examination of political communication theory and research. Content includes approaches to political communication, role of the media in politics and analysis of political messages. Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Communication Studies

**COMM 65661 COMMUNICATION IN AN INFORMATION SOCIETY**

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 Type(s): Lecture  
Department: Communication Studies

**COMM 65662 MASS MEDIA EFFECTS**

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 Type(s): Lecture  
Department: Communication Studies

**COMM 65665 PERSONAL AND MEDIATED COMMUNICATION**

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 Type(s): Lecture  
Department: Communication Studies

**COMM 65670 INTERPERSONAL COMMUNICATION**

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 Type(s): Lecture  
Department: Communication Studies

**COMM 65673 FAMILY COMMUNICATION**

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 Type(s): Lecture  
Department: Communication Studies

**COMM 65675 COMMUNICATION, UNCERTAINTY AND PRIVACY MANAGEMENT**

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 Type(s): Lecture  
Department: Communication Studies

**COMM 65677 RELATIONAL COMMUNICATION**

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 Type(s): Lecture  
Department: Communication Studies

### **COMM 65679 COMMUNICATION ACROSS THE LIFESPAN**

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 Type(s): Lecture  
Department: Communication Studies

### **COMM 65683 INTERGROUP COMMUNICATION**

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 Type(s): Lecture  
Department: Communication Studies

### **COMM 65685 COMMUNICATION AND COGNITION**

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 Type(s): Lecture  
Department: Communication Studies

### **COMM 65690 SEMINAR IN COMMUNICATION THEORY**

Examination of selected conceptual orientations to the study of human communication and pertinent research. Emphasis on behavioral science research results. Prerequisite: Graduate standing.  
3.000 or 4.000 Credit hours  
3.000 or 4.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Communication Studies

### **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 Type(s): Lecture  
Department: Communication Studies

### **COMM 65794 TEACHING OF COLLEGE COMMUNICATION**

(Repeatable for credit) 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 Type(s): Lecture  
Department: Communication Studies

### **COMM 65851 ORGANIZATIONAL COMMUNICATION**

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 Type(s): Lecture  
Department: Communication Studies

### **COMM 66501 HEALTH COMMUNICATION**

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 Type(s): Lecture  
Department: Communication Studies

### **COMM 66503 HEALTH COMMUNICATION AND MEDIA EFFECTS**

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 Type(s): Lecture  
Department: Communication Studies

### **COMM 66506 HEALTH COMMUNICATION AND NEW MEDIA**

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 Type(s): Lecture  
Department: Communication Studies

### **COMM 66507 INTERPERSONAL COMMUNICATION AND HEALTH**

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 Type(s): Lecture  
Department: Communication Studies

### **COMM 66508 HEALTH COMMUNICATION LITERACY**

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 Type(s): Lecture  
Department: Communication Studies

### **COMM 66509 PUBLIC COMMUNICATION CAMPAIGNS**

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 Type(s): Lecture  
Department: Communication Studies

### **COMM 75000 FOUNDATIONS OF COMMUNICATION INQUIRY**

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 Type(s): Lecture  
Department: Communication Studies

### **COMM 75020 QUANTITATIVE RESEARCH METHODS IN COMMUNICATION**

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 Type(s): Lecture  
Department: Communication Studies

### **COMM 75040 QUALITATIVE RESEARCH METHODS IN COMMUNICATION**

Exploration of qualitative methods in human communication research. Focus on the nature of qualitative data, participant observation, and archival strategies of data collection and interpretive and interactionist approaches to data analysis. Prerequisite: Doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate





Schedule Type(s): Lecture  
Department: Communication Studies

#### **COMM 75060 COMMUNICATION MEASUREMENT AND ANALYSIS**

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  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Communication Studies

#### **COMM 75091 SEMINAR IN PERSUASION**

(Repeatable for credit) 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.  
3.000 or 4.000 Credit hours  
3.000 or 4.000 Other hours  
Levels: Graduate  
Schedule Type(s): Seminar  
Department: Communication Studies

#### **COMM 75095 SPECIAL TOPICS**

(Repeatable for credit) Offered when resources permit a topic different from existing courses. Topic will be announced when scheduled. Prerequisite: Doctoral standing.  
1.000 to 4.000 Credit hours  
1.000 to 4.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Communication Studies

#### **COMM 75096 INDIVIDUAL INVESTIGATION**

(Repeatable for credit) Independent study of area or problem to be selected in consultation with graduate staff. Prerequisite: Doctoral standing.  
1.000 to 6.000 Credit hours  
1.000 to 6.000 Other hours  
Levels: Graduate  
Schedule Type(s): Individual Investigation  
Department: Communication Studies

#### **COMM 75591 SEMINAR IN SMALL GROUP COMMUNICATION**

(Repeatable for credit) Research theories and findings in small group communication. Prerequisite: COMM 35550. Doctoral standing.  
3.000 or 4.000 Credit hours  
3.000 or 4.000 Other hours  
Levels: Graduate  
Schedule Type(s): Seminar  
Department: Communication Studies

#### **COMM 75652 THEORIES OF COMMUNICATION**

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 Type(s): Lecture  
Department: Communication Studies

#### **COMM 75660 POLITICAL COMMUNICATION**

An examination of political communication theory and research. Content includes approaches to political communication, role of the media in politics and analysis of political messages. Prerequisite: Doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Communication Studies

#### **COMM 75661 COMMUNICATION IN AN INFORMATION SOCIETY**

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 Type(s): Lecture  
Department: Communication Studies

#### **COMM 75662 MASS MEDIA EFFECTS**

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 Type(s): Lecture  
Department: Communication Studies

#### **COMM 75665 PERSONAL AND MEDIATED COMMUNICATION**

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  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Communication Studies

#### **COMM 75670 INTERPERSONAL COMMUNICATION**

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  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Communication Studies

#### **COMM 75690 SEMINAR IN COMMUNICATION THEORY**

Examination of selected conceptual orientations to the study of human communication and pertinent research. Emphasis on behavioral science research results. Prerequisite: Doctoral standing.  
3.000 or 4.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Communication Studies

#### **COMM 75794 TEACHING OF COLLEGE COMMUNICATION**

(Repeatable for credit) 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  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Communication Studies

#### **COMM 75851 ORGANIZATIONAL COMMUNICATION**

Structure, methodology and application of communication theory in industrial and organizational settings. Prerequisite: Doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Communication Studies  
**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 Type(s): Dissertation  
Department: Communication Studies

#### **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 Type(s): Dissertation  
Department: Communication Studies

#### **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 Type(s): Research  
Department: Communication Studies

**COMM 85673 FAMILY COMMUNICATION**

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 Type(s): Lecture  
Department: Communication Studies

**COMM 85675 COMMUNICATION, UNCERTAINTY AND PRIVACY MANAGEMENT**

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 Type(s): Lecture  
Department: Communication Studies

**COMM 85677 RELATIONAL COMMUNICATION**

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 Type(s): Lecture  
Department: Communication Studies

**COMM 85679 COMMUNICATION ACROSS THE LIFESPAN**

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 Type(s): Lecture  
Department: Communication Studies

**COMM 85683 INTERGROUP COMMUNICATION**

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  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Communication Studies

**COMM 85685 COMMUNICATION AND COGNITION**

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 Type(s): Lecture  
Department: Communication Studies

**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 Type(s): Lecture  
Department: Communication Studies

**COMM 86501 HEALTH COMMUNICATION**

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 Type(s): Seminar  
Department: Communication Studies

**COMM 86503 HEALTH COMMUNICATION AND MEDIA EFFECTS**

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 Type(s): Lecture  
Department: Communication Studies

**COMM 86506 HEALTH COMMUNICATION AND NEW MEDIA**

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 Type(s): Lecture  
Department: Communication Studies

**COMM 86507 INTERPERSONAL COMMUNICATION AND HEALTH**

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 Type(s): Lecture  
Department: Communication Studies

**COMM 86508 HEALTH COMMUNICATION LITERACY**

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 Type(s): Lecture  
Department: Communication Studies

**COMM 86509 PUBLIC COMMUNICATION CAMPAIGNS**

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 Type(s): Lecture  
Department: Communication Studies

## *Computer Technology (COMT)*

**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 Type(s): Lecture  
Department: Regional  
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 Type(s): Lecture

Department: Regional

### 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 Type(s): Lecture

Department: Regional

### COMT 11005 INTRODUCTION TO OPERATING SYSTEMS AND NETWORKING TECHNOLOGY

Lab-oriented survey of desktop/network OS essentials, including file/disk management, system tools utilization, resource sharing and introductory network concepts. Prerequisite: None.

3.000 Credit hours

3.000 Other hours

Levels: Undergraduate

Schedule Type(s): Combined Lecture and Lab

Department: Regional

### 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

Schedule Type(s): Lecture

Department: Regional

### 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 COMT faculty special approval.

4.000 Credit hours

4.000 Other hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Regional

### COMT 12000 PERSONAL PRODUCTIVITY SOFTWARE

Covers the 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 Type(s): Lecture

Department: Regional

### 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 Type(s): Lecture

Department: Regional

### 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 Type(s): Lecture

Department: Regional

### COMT 21002 NETWORK SETUP AND CONFIGURATION

Laboratory course introducing networking in LAN and WAN environments. Topics include network protocol, configuration, operation, setup, installation, administration, management and security. Pre- or corequisite: COMT 11009 or COMT faculty special approval.

4.000 Credit hours

4.000 Other hours

Levels: Undergraduate

Schedule Type(s): Combined Lecture and Lab

Department: Regional

### COMT 21005 VISUAL BASIC DATABASE PROGRAMMING

Advanced laboratory course in the visual basic language focusing on database systems development. Prerequisite: COMT 11002.

4.000 Credit hours

4.000 Other hours

Levels: Undergraduate

Schedule Type(s): Combined Lecture and Lab

Department: Regional

### 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 Type(s): Lecture

Department: Regional

### 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 Type(s): Lecture

Department: Regional

### 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 Type(s): Seminar

Department: Regional

### 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 Other hours

Levels: Undergraduate

Schedule Type(s): Combined Lecture and Lab

Department: Regional

### COMT 21011 TECHNIQUES OF MULTIMEDIA WEB DESIGN

This lab-oriented course will focus 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 Other hours

Levels: Undergraduate

Schedule Type(s): Combined Lecture and Lab

Department: Regional

### 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.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Regional

### COMT 21092 COMPUTER PRACTICUM

(Repeatable for credit) Supervised work experience in information technology environment; 50 hours supervised work experience per credit hour. Prerequisite: sophomore standing.

1.000 to 3.000 Credit hours

1.000 to 3.000 Other hours

Levels: Undergraduate

Schedule Type(s): Practicum

Department: Regional

Course Attributes: Experiential Learning Requirement

### COMT 21095 SPECIAL TOPICS IN COMPUTER TECHNOLOGY

(Repeatable for credit) Topics announced when scheduled. Prerequisite: Permission.

1.000 to 4.000 Credit hours



1.000 to 4.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Regional

### **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

1.000 to 4.000 Other hours

Levels: Undergraduate

Schedule Type(s): Individual Investigation

Department: Regional

### **COMT 21100 LOCAL AREA NETWORK TROUBLESHOOTING**

Laboratory course covering local area network troubleshooting techniques. Topics will include identifying the scope of the problem, systematic troubleshooting approaches, problem resolution and ongoing maintenance. Prerequisite: COMT 21002.

3.000 Credit hours

3.000 Other hours

Levels: Undergraduate

Schedule Type(s): Combined Lecture and Lab

Department: Regional

### **COMT 21110 INTERNETWORKING**

Laboratory course introducing internetworking concepts. Topics will include networking standards, cabling, TCP/IP, router configuration, LAN and WAN segments and other related topics. Prerequisite: COMT 21002 or full-time COMT faculty special approval.

3.000 Credit hours

3.000 Other hours

Levels: Undergraduate

Schedule Type(s): Combined Lecture and Lab

Department: Regional

### **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.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Regional

### **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 Type(s): Lecture

Department: Regional

### **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 Other hours

Levels: Undergraduate

Schedule Type(s): Combined Lecture and Lab

Department: Regional

### **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 Type(s): Lecture

Department: Regional

### **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 Type(s): Lecture

Department: Regional

### **COMT 36308 ERGONOMICS IN COMPUTER SYSTEMS**

Introduction to ergonomics, usability design, and assessment methods for the development of computer hardware, software, and systems.

Prerequisite: COMT 11002.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Regional

### **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 21005

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Regional

### **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.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Regional

### **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.

4.000 Credit hours

4.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Regional

### **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 Type(s): Lecture

Department: Regional

### **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 Type(s): Lecture

Department: Regional

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 TECH 23010 and TECH 26301

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Regional

### **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.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Regional

### **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.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Regional



**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 Type(s): Lecture  
Department: Regional

**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 Type(s): Lecture  
Department: Regional

**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. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

**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 Type(s): Lecture  
Department: Regional

**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. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

**COMT 36392 INTERNSHIP FOR COMPUTER TECHNOLOGY STUDENTS**

(Repeatable for credit) An arranged work experience for students in the IT field. Students will complete 150 hours of unpaid internship or 225 hours of paid internship. Prerequisite: junior standing. 3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Practicum  
Department: Regional

Course Attributes: Experiential Learning Requirement

**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 Type(s): Lecture  
Department: Regional

**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 Type(s): Lecture  
Department: Regional

**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. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

**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. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

**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. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

**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. 3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Regional

**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 Type(s): Lecture  
Department: Regional

**COMT 46313 VIRTUAL MACHINE CONFIGURATION AND ADMINISTRATION**

Focus on configuring and administering virtual machine software. Prerequisite: COMT 21002 and junior standing. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

**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. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

**COMT 46315 SQL WITH ORACLE**

Focus is on SQL and relational databases using Oracle. Prerequisite: COMT 21005. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

**COMT 46321 WEB DATABASE INTEGRATION**

Focus is 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. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

**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 Type(s): Lecture  
Department: Regional

#### **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 Type(s): Lecture  
Department: Regional

### ***Chemical Physics (CPHY)***

#### **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 Type(s): Master's Thesis  
Department: Arts and Sciences

#### **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 Type(s): Master's Thesis  
Department: Arts and Sciences

#### **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 orientation and partial translational order. Dynamics of phase transitions.  
Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Arts and Sciences

#### **CPHY 62242 CHARACTERIZATION OF SOFT MATERIALS**

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 Type(s): Combined Lecture and Lab  
Department: Arts and Sciences

#### **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 Type(s): Lecture  
Department: Arts and Sciences

#### **CPHY 62248 LIQUID CRYSTAL OPTICS AND PHOTONICS**

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 Type(s): Lecture  
Department: Chemical Physics

#### **CPHY 62335 ADVANCED LIQUID CRYSTALLINE AND POLYMERIC MATERIALS**

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  
Levels: Graduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Chemical Physics

#### **CPHY 64491 SEMINAR: LIQUID CRYSTALS**

(Repeatable for credit) 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 Type(s): Seminar  
Department: Arts and Sciences

#### **CPHY 64495 SPECIAL TOPICS IN CHEMICAL PHYSICS**

(Repeatable for credit) 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 Type(s): Lecture  
Department: Arts and Sciences

#### **CPHY 72241 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: Doctoral standing.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Arts and Sciences

#### **CPHY 72242 CHARACTERIZATION OF SOFT MATERIALS**

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  
Levels: Graduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Arts and Sciences

#### **CPHY 72243 LYOTROPIC LIQUID CRYSTALS AND MICELLAR SYSTEMS**

Properties of lyotropic liquid crystals, polymer solutions and aqueous solutions of amphiphilic compounds. Self-assembly of amphiphilic compounds, formation and properties of micelles, cylinders, bilayers, vesicles and tubules.  
Prerequisite: Doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Arts and Sciences

#### **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  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Arts and Sciences

#### **CPHY 72248 LIQUID CRYSTAL OPTICS AND PHOTONICS**

Optics of cholesterols, 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  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Arts and Sciences

#### **CPHY 72249 LABVIEW FOR DATA ACQUISITION AND INSTRUMENT CONTROL**

Introduction to laboratory data acquisition and instrument control using Labview software.  
Prerequisite: Special approval and doctoral standing.



1.000 Credit hours  
1.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Arts and Sciences

### **CPHY 72335 ADVANCED LIQUID CRYSTALLINE AND POLYMERIC MATERIALS**

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  
Levels: Graduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Arts and Sciences

### **CPHY 72418 DEFECTS IN LIQUID CRYSTAL MATERIALS**

Defects in solids and liquid crystals: observation and characterization of defects, elastic properties, defect interactions and movement and phases with periodic defect structures. Prerequisite: Special approval and doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Arts and Sciences

### **CPHY 72640 LIQUID CRYSTAL, POLYMER AND COLLOID COMPOSITES**

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  
Levels: Graduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Arts and Sciences

### **CPHY 72643 LIQUID CRYSTAL APPLICATIONS**

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

Levels: Graduate  
Schedule Type(s): Lecture  
Department: Arts and Sciences

### **CPHY 72647 STRUCTURED FLUIDS**

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. Prerequisite: Special approval and doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Arts and Sciences

### **CPHY 72650 COMPUTATIONAL MATERIALS SCIENCE**

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 and special approval.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Arts and Sciences

### **CPHY 72651 NANOBIO TECHNOLOGY**

Nanobiotechnology is the manipulation and analysis of biological molecules, cellular components with nanometer sizes. 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  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Arts and Sciences

### **CPHY 74491 SEMINAR: LIQUID CRYSTALS**

(Repeatable for credit) 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  
Levels: Graduate  
Schedule Type(s): Seminar  
Department: Arts and Sciences

### **CPHY 74495 SPECIAL TOPICS IN CHEMICAL PHYSICS**

(Repeatable for credit) 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  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Arts and Sciences

### **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 Type(s): Dissertation  
Department: Arts and Sciences

### **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 Type(s): Dissertation  
Department: Arts and Sciences

### **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 Type(s): Research  
Department: Arts and Sciences

## **Computer Science (CS)**

### **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 Type(s): Combined Lecture and Lab  
Department: Computer Science

### **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 Type(s): Combined Lecture and Lab  
Department: Computer Science  
Course Attributes: Kent Core-Math and Crit Reason, LER-Math and Critical 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 Type(s): Lecture

Department: Computer Science

### **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. Course is three hours lecture and one hour lab. Prerequisite: C (2.000) or better in MATH 11009 or 11010.

4.000 Credit hours

3.000 Lecture hours

3.000 Lab hours

Levels: Undergraduate

Schedule Type(s): Combined Lecture and Lab

Department: Computer Science

### **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.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Computer Science

### **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 Type(s): Lecture

Department: Computer Science

### **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: Minimum grade of C (2.000) in CS 13001. Corequisite: CS 23022.

4.000 Credit hours

3.000 Lecture hours

3.000 Lab hours

Levels: Undergraduate

Schedule Type(s): Combined Lecture and Lab

Department: Computer Science

### **CS 23022 DISCRETE STRUCTURES FOR COMPUTER SCIENCE**

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: and minimum grade of C (2.000) in MATH 11009 or 11010.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Computer Science

### **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

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Computer Science

### **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

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Computer Science

### **CS 31045 FORMAL LOGIC**

Study of first order predicate calculus with identity and function symbols. Prerequisite: None.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Computer Science

### **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 23021.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Computer Science

Course Attributes: Writing Intensive Course

### **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

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Computer Science

### **CS 33011 SPEED PROGRAMMING TECHNIQUES**

Discussion and practice of pertinent aspects related to programming under time constraints. Prerequisite: CS 33001.

3.000 Credit hours

3.000 Other hours

Levels: Undergraduate

Schedule Type(s): Combined Lecture and Lab

Department: Computer Science

### **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, no determinism and internet languages. Prerequisite: C (2.000) or better in CS 33001.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Computer Science

### **CS 33192 INTERNSHIP IN COMPUTER SCIENCE**

(Repeatable for credit) 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. Prerequisite: CS 33006 and special approval.

1.000 to 3.000 Credit hours

1.000 to 3.000 Other hours

Levels: Undergraduate

Schedule Type(s): Practicum

Department: Computer Science

Course Attributes: Experiential Learning Requirement

### **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 35101 and C (2.000) or better in CS 33001.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Computer Science

### **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 23021.

3.000 Credit hours

3.000 Lecture hours





Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Computer Science

### 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 Type(s): Lecture  
Department: Computer Science

### 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 23021.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Computer Science

### 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 Type(s): Lecture  
Department: Computer Science

### 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 33001.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Computer Science

### 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 Type(s): Lecture  
Department: Computer Science

### CS 41012 FINITE MATHEMATICS

A continuation of discrete math: emphasizing combinatorial techniques, graph applications in

algorithms, finite algebra, number theory and probability. Covers useful math for CS majors. Prerequisite: CS 23022.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Computer Science

### CS 41045 METALOGIC

Consideration of various metatheorems including soundness and completeness of propositional and predicate calculus, decidability of predicate calculus and incompleteness of the theory of arithmetic. Prerequisite: PHIL 31045.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Computer Science

### 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 23021.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Computer Science

### CS 42202 INTRODUCTION TO NUMERICAL COMPUTING II

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 Type(s): Lecture  
Department: Computer Science

### CS 43006 THEORY OF OBJECT-ORIENTED PROGRAMMING

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 33001.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Computer Science

### CS 43111 STRUCTURE OF COMPILERS

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 Type(s): Lecture  
Department: Computer Science

### CS 43202 SYSTEMS ADMINISTRATION

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 Type(s): Lecture  
Department: Computer Science

### 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 33211.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Computer Science

### 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 33001 and junior standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Computer Science

### CS 44201 ARTIFICIAL INTELLIGENCE

Examines goals, problems, concepts and methods of artificial intelligence, heuristic versus algorithmic methods, natural language comprehension, theorem proving. Prerequisite: CS 33001.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Computer Science

### CS 45111 PRINCIPLES OF VLSI DESIGN

Introduction to the design of VLSI chips, with emphasis on FPLD based design. Students will design various chips using standard industry logic synthesis tools. Prerequisite: CS 35101.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Computer Science

### CS 45203 COMPUTER NETWORK SECURITY

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 Type(s): Lecture

Department: Computer Science

### **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 33001, 33211 and 45201.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Computer Science

### **CS 46101 DESIGN AND ANALYSIS OF ALGORITHMS**

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 33001.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Computer Science

### **CS 46201 INTRODUCTION TO THEORY OF AUTOMATA, FORMAL LANGUAGES, COMPUTATION**

A study of alphabets, strings, languages; regular languages and expressions, deterministic and nondeterministic finite automata, context-free grammars and languages, pushdown automata, Turing machines and complexity theory. Prerequisite: CS 23022 and MATH 12003.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Computer Science

### **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 33001.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Computer Science

### **CS 47105 INTRODUCTION TO WEB DESIGN AND PROGRAMMING**

A joint computer science (CS) and visual communication design (VCD) course on web concepts and high quality web design: CS, VCD, principles, tools, architecture, presentation, design and creation of web sites by teamwork. Web-based instruction is used. Prerequisite: CS 33001 and VCD 37000.

3.000 Credit hours

3.000 Other hours

Levels: Undergraduate

Schedule Type(s): Combined Lecture and Lab  
Department: Computer Science

### **CS 47106 WEB DESIGN AND PROGRAMMING II**

A joint computer science and visual communication design course on advanced web techniques and multimedia Web design: Web servers, security, advanced design, JAVA servlets, applets database connectivity, site maintenance, creation of actual web sites by teamwork.

Prerequisite: CS 47105.

3.000 Credit hours

3.000 Other hours

Levels: Undergraduate

Schedule Type(s): Combined Lecture and Lab

Department: Computer Science

### **CS 47107 WEB DESIGN AND PROGRAMMING STUDIO**

A joint computer science (CS) and visual communication design (VCD) project course. Comprehensive experience on aspects of website creation, hosting, maintenance and management. Creative combination and integration of art and programming are emphasized. Prerequisite: CS 47106 and VCD 46003.

3.000 to 6.000 Credit hours

3.000 to 6.000 Other hours

Levels: Undergraduate

Schedule Type(s): Studio

Department: Computer Science

### **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 33001.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Computer Science

### **CS 47205 INFORMATION SECURITY**

An introduction to concepts and methodology useful for information security, as specified by the NSTISSI NO. 4011 standard from the NSA.

Prerequisite: CS 33006.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Computer Science

### **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 33001 and junior standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Computer Science

### **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 33001.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Computer Science

### **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 Type(s): Combined Lecture and Lab

Department: Computer Science

Course Attributes: Experiential Learning

Requirement, 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

Levels: Undergraduate

Schedule Type(s): Combined Lecture and Lab

Department: Computer Science

Course Attributes: Experiential Learning

Requirement, Writing Intensive Course

### **CS 49995 SPECIAL TOPICS IN COMPUTER SCIENCE**

(Repeatable for credit) Special topics from all areas of computer science. Prerequisite: special approval.

1.000 to 4.000 Credit hours

4.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Computer Science

### **CS 49996 INDIVIDUAL STUDY**

(Repeatable for credit)

1.000 to 4.000 Credit hours

1.000 to 4.000 Other hours

Levels: Undergraduate

Schedule Type(s): Individual Investigation

Department: Computer Science

### **CS 49998 RESEARCH**

(Repeatable for credit)

1.000 to 15.000 Credit hours

1.000 to 15.000 Other hours

Levels: Undergraduate

Schedule Type(s): Research

Department: Computer Science

Course Attributes: Experiential Learning  
Requirement

**CS 51012 FINITE MATHEMATICS**

A continuation of discrete mathematics; emphasizing combinatorial techniques, graph applications in algorithms, finite algebra, number theory and probability. Covers useful mathematics for CS majors. Prerequisite: CS 23022; graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Computer Science

**CS 51045 METALOGIC**

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 Type(s): Lecture

Department: Computer Science

**CS 52201 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, 21001 and CS 23021. Graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Computer Science

**CS 52202 INTRODUCTION TO NUMERICAL COMPUTING II**

Cross-listed with MATH 52202. A continuation of CS 52201. Topics include interpolation numerical differentiation and integration and numerical solution of ordinary differential equations. Prerequisite: MATH 32044 and CS 4 52201. Graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Computer Science

**CS 53005 INTRODUCTION TO DATABASE SYSTEMS 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: graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Computer Science

**CS 53006 THEORY OF OBJECT-ORIENTED PROGRAMMING**

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 33001 and graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Computer Science

**CS 53111 STRUCTURE OF COMPILERS**

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; graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Computer Science

**CS 53202 SYSTEMS ADMINISTRATION**

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; graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Computer Science

**CS 53203 SYSTEMS PROGRAMMING**

Design, implementation and maintenance of system programs, system utilities; command interpreters, editors, file maintenance programs, text processors, interrupt handling, device drivers. Prerequisite: CS 33211; graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Computer Science

**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. Prerequisites: C (2.000) or better in CS 33001 and graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Computer Science

**CS 53901 SOFTWARE ENGINEERING**

An introduction to software engineering concepts: life cycle models; modeling languages; Requirements analysis; specification; design; testing; validation; project management and maintenance. Prerequisite: graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Computer Science

**CS 54201 ARTIFICIAL INTELLIGENCE**

Examines goals, problems, concepts and methods of artificial intelligence heuristic versus algorithmic methods, natural language comprehension, theorem proving. Prerequisite: CS 33001; graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Computer Science

**CS 55111 PRINCIPLES OF VLSI DESIGN**

Introduction to the design of VLSI chips, with emphasis on FPLD-based design. Students will design various chips using standard industry logic synthesis tools. Prerequisite: CS 35101; graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Computer Science

**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 Type(s): Lecture

Department: Computer Science

**CS 55203 COMPUTER NETWORK SECURITY**

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 Type(s): Lecture

Department: Computer Science

**CS 55231 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 33001, 53201 and 55201; graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Computer Science

**CS 56101 DESIGN AND ANALYSIS OF ALGORITHMS**

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: CS 33001 and MATH 12003.

Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Computer Science

**CS 56201 INTRODUCTION TO THE THEORY OF AUTOMATA, FORMAL LANGUAGES AND COMPUTATION**

A study of alphabets, strings, languages; regular languages and expressions, deterministic and nondeterministic finite automata, context free grammars and languages, pushdown automata, turing machines and complexity theory.

Prerequisite: CS 23022 and MATH 12003; graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Computer Science

**CS 57101 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 33001.

Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Computer Science

**CS 57105 WEB DESIGN AND PROGRAMMING I**

A joint computer science (CS) and visual communication design (VCD) course on web concepts and high quality web design: CS, VCD, principles, tools, architecture, presentation design and creation of web sites by teamwork. Web based instruction is used. Prerequisite: Graduate standing.

3.000 Credit hours  
3.000 Other hours  
Levels: Graduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Computer Science

**CS 57106 WEB DESIGN AND PROGRAMMING II**

A joint computer science and visual communication design course on advanced web techniques and multimedia Web design: Web servers, security, advanced design, JAVA servlets, applets, database connectivity, site maintenance, creation of actual web sites by teamwork.

Prerequisite: CS 4/57105 or VCD 4/56000 and graduate standing.  
3.000 Credit hours  
3.000 Other hours  
Levels: Graduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Computer Science

**CS 57107 WEB DESIGN AND PROGRAMMING STUDIO**

A joint computer science (CS) and visual communication design (VCD) project course. Comprehensive experience on aspects of website creation, hosting, maintenance and management. Creative combination and integration of art and programming are emphasized. Prerequisite: VCD 4/56001 or CS 4/57106; graduate standing.

3.000 to 6.000 Credit hours  
3.000 to 6.000 Other hours  
Levels: Graduate  
Schedule Type(s): Studio  
Department: Computer Science

**CS 57201 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 33001; graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Computer Science

**CS 57205 INFORMATION SECURITY**

An introduction to concepts and methodology useful for information security, as specified by the NSTISSI NO. 4011 standard from the NSA.

Prerequisite: CS 33006; graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Computer Science

**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: C (2.000) or better in CS 33001 and graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Computer Science

**CS 59995 SPECIAL TOPICS IN COMPUTER SCIENCE**

(Repeatable for credit) 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 Type(s): Lecture  
Department: Computer Science

**CS 60094 COLLEGE TEACHING OF COMPUTER SCIENCE**

(Repeatable for credit) 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 Type(s): Lecture  
Department: Computer Science

**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: CS 61001; graduate standing.  
4.000 Credit hours  
4.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Computer Science

**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 Type(s): Lecture  
Department: Computer Science

**CS 62201 NUMERICAL COMPUTING I**

Numerical methods for scientific computing emphasizing modern mathematical software and environments. Computer arithmetic and errors, linear systems of equations, least squares data fitting, eigenvalues and singular values, nonlinear systems optimization. Prerequisite: MATH 21001 and MATH; and graduate standing.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Computer Science

**CS 62202 NUMERICAL COMPUTING II**

A continuation of CS 6/72201. Interpolation, numerical integration and differentiation, ordinary differential equations initial and boundary value problems, partial differential equations, fast Fourier transforms and applications. Prerequisite: MATH 52045 and CS 6/72201; graduate standing.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Computer Science

**CS 63005 ADVANCED DATABASE SYSTEMS DESIGN**

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: CS 4/53005 and graduate standing.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Computer Science



**CS 63015 DATA MINING TECHNIQUES**

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: CS 53005 and MATH 50011; graduate standing. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Computer Science

**CS 63201 ADVANCED OPERATING SYSTEMS**

Introduction to distributed systems, interprocess communication, distributed mutual exclusion, synchronization and deadlock, distributed process management and distributed file systems. Prerequisite: CS 4/53201 and graduate standing. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Computer Science

**CS 63301 PARALLEL AND DISTRIBUTED COMPUTING**

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 Type(s): Lecture  
Department: Computer Science

**CS 63304 CLUSTER COMPUTING**

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: CS 55201; graduate standing. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Computer Science

**CS 63901 SOFTWARE ENGINEERING METHODOLOGIES**

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 Type(s): Lecture  
Department: Computer Science

**CS 63902 SOFTWARE EVOLUTION**

Methods and techniques supporting later lifecycle activities, including software testing and maintenance, reuse and reverse engineering. Prerequisite: CS 63901; graduate standing. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture

Department: Computer Science

**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: CS 4/54201 and graduate standing. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Computer Science

**CS 64301 PATTERN RECOGNITION PRINCIPLES**

Introduction to mathematical pattern recognition, feature selection, distribution-free classification, statistical classification, nonsupervised learning, sequential learning and application. Prerequisite: CS 4/57101 and graduate standing. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Computer Science

**CS 64401 IMAGE PROCESSING**

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: CS 4/56101 and graduate standing. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Computer Science

**CS 65101 ADVANCED COMPUTER ARCHITECTURE**

System performance measures, processor implementation, pipelining, system interconnection, memory hierarchy interrupts, stack architecture, vector and multiprocessors. Prerequisite: CS 4/ 55101 and graduate standing. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Computer Science

**CS 65201 INTERCONNECTION NETWORKS**

This course provides a comprehensive coverage of interconnection as networks in switching principles for high-performance computing and blocking communications. It covers the theory, architecture, implementation, and performance analysis of switching systems for multiprocessors, broadband networks and optical communications. Prerequisite: CS 4/55201 or 6/75101; graduate standing. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Computer Science

**CS 65202 ADVANCED COMMUNICATION NETWORKS**

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: CS 4/55201 and graduate standing. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Computer Science

**CS 65203 WIRELESS AND MOBILE COMMUNICATION NETWORKS**

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: CS 55201; graduate standing. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Computer Science

**CS 65208 DISTRIBUTED MULTIMEDIA LANGUAGES AND SYSTEMS**

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: CS 33001 and graduate standing. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Computer Science

**CS 65301 SYSTEM MODELING AND PERFORMANCE EVALUATION**

Provides a detailed study of queuing, network models and their application to operating systems, computer time sharing and multi access systems. Prerequisite: MATH 4/50012 and CS 4/53201. Graduate standing. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Computer Science

**CS 66101 ADVANCED TOPICS IN ALGORITHMS**

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: CS 4/56101 and graduate standing. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Computer Science

**CS 66105 PARALLEL AND DISTRIBUTED ALGORITHMS**

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: CS 4/56101 or 63301; graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Computer Science

### CS 66110 COMPUTATIONAL GEOMETRY

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 Type(s): Lecture

Department: Computer Science

### CS 66120 EVOLUTIONARY COMPUTATION

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: CS 56101; graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Computer Science

### CS 67101 ADVANCED COMPUTER GRAPHICS

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: CS 4/ 57101 and graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Computer Science

### CS 67301 SCIENTIFIC VISUALIZATION

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: CS 23021 and graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Computer Science

### CS 69098 RESEARCH

(Repeatable for credit) Research or individual investigation. Credits are applied toward degree Requirements with approval if letter grade or "S" is given. Prerequisite: Graduate standing.

1.000 to 5.000 Credit hours

1.000 to 5.000 Other hours

Levels: Graduate

Schedule Type(s): Research

Department: Computer Science

### CS 69191 MASTER'S SEMINAR

(Repeatable for credit) 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 master's degree.

Prerequisite: Admission to master's program.

1.000 to 2.000 Credit hours

1.000 to 2.000 Other hours

Levels: Graduate

Schedule Type(s): Seminar

Department: Computer Science

### 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

Schedule Type(s): Master's Thesis

Department: Computer Science

### 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 Type(s): Master's Thesis

Department: Computer Science

### CS 69995 SPECIAL TOPICS IN COMPUTER SCIENCE

(Repeatable for credit) 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 Type(s): Lecture

Department: Computer Science

### CS 70094 COLLEGE TEACHING OF COMPUTER SCIENCE

(Repeatable for credit) 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 Type(s): Lecture

Department: Computer Science

### CS 72201 NUMERICAL COMPUTING I

Numerical methods for scientific computing emphasizing modern mathematical software and environments. Computer arithmetic and errors, linear systems of equations, least squares data fitting, eigenvalues and singular values, nonlinear systems, optimization. Prerequisite: MATH 21001 and MATH 22005; and doctoral standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Computer Science

### CS 72202 NUMERICAL COMPUTING II

A continuation of CS 6/72201. Interpolation, numerical integration and differentiation, ordinary differential equations initial and boundary value problems, partial differential equations, fast Fourier transforms and applications. Prerequisite: MATH 52045 and CS 6/72201; doctoral standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Computer Science

### CS 73005 ADVANCED DATABASE SYSTEMS DESIGN

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: CS 4/53005 and doctoral standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Computer Science

### CS 73015 DATA MINING TECHNIQUES

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: CS 53005 and MATH 50011 or equivalent doctoral standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Computer Science

### CS 73201 ADVANCED OPERATING SYSTEMS

Introduction to distributed systems, interprocess communication, distributed mutual exclusion, synchronization and deadlock, distributed process management and distributed file systems.

Prerequisite: CS 4/53201 and doctoral standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Computer Science

### CS 73301 PARALLEL AND DISTRIBUTED COMPUTING

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 Type(s): Lecture

Department: Computer Science

### CS 73304 CLUSTER COMPUTING

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: CS 55201; doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Computer Science

#### **CS 73901 SOFTWARE ENGINEERING METHODOLOGIES**

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  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Computer Science

#### **CS 73902 SOFTWARE EVOLUTION**

Methods and techniques supporting later lifecycle activities, including software testing and maintenance reuse and reverse engineering. Prerequisite: CS 73901; doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Computer Science

#### **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: CS 4/54201 and doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Computer Science

#### **CS 74301 PATTERN RECOGNITION PRINCIPLES**

Introduction to mathematical pattern recognition, feature selection, distribution-free classification, statistical classification, non-supervised learning, sequential learning and application. Prerequisite: CS 4/57101 and doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Computer Science

#### **CS 74401 IMAGE PROCESSING**

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: CS 4/56101 and doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Computer Science

#### **CS 75101 ADVANCED COMPUTER ARCHITECTURE**

System performance measures, processor implementation, pipelining, system interconnection, memory hierarchy interrupts, stack architecture, vector and multiprocessors. Prerequisite: CS 4/ 55101 and doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Computer Science

#### **CS 75201 INTERCONNECTION NETWORKS**

This course provides a comprehensive coverage of interconnection as networks in switching principles for high-performance computing and blocking communications. It covers the theory, architecture, implementation, and performance analysis of switching systems for multiprocessors, broadband networks and optical communications. Prerequisite: CS 4/55201 or 6/75101; doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Computer Science

#### **CS 75202 ADVANCED COMMUNICATION NETWORKS**

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: CS 4/55201 and doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Computer Science

#### **CS 75203 WIRELESS AND MOBILE COMMUNICATION NETWORKS**

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: CS 55201; doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Computer Science

#### **CS 75208 DISTRIBUTED MULTIMEDIA LANGUAGES AND SYSTEMS**

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: CS 33001 and doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Computer Science

#### **CS 75301 SYSTEM MODELING AND PERFORMANCE EVALUATION**

Provides a detailed study of queuing, network models and their application to operating systems, computer time sharing and multi-access systems. Prerequisite: MATH 4/50012 and CS 4/53201. Doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Computer Science

#### **CS 76101 ADVANCED TOPICS IN ALGORITHMS**

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: CS 4/56101 and doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Computer Science

#### **CS 76105 PARALLEL AND DISTRIBUTED ALGORITHMS**

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: CS 4/56101 or 6/73301; doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Computer Science

#### **CS 76110 COMPUTATIONAL GEOMETRY**

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 Type(s): Lecture  
Department: Computer Science

#### **CS 76120 EVOLUTIONARY COMPUTATION**

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: CS 56101; doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Computer Science

**CS 77101 ADVANCED COMPUTER GRAPHICS**

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: CS 4/ 57101 and doctoral standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Computer Science

**CS 77301 SCIENTIFIC VISUALIZATION**

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: CS 23021 and doctoral standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Computer Science

**CS 79995 SPECIAL TOPICS IN COMPUTER SCIENCE**

(Repeatable for credit) 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 Type(s): Lecture

Department: Computer Science

**CS 89098 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 Type(s): Research

Department: Computer Science

**CS 89191 DOCTORAL SEMINAR**

(Repeatable for credit) 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: Admission to doctoral program.

1.000 to 2.000 Credit hours

1.000 to 2.000 Other hours

Levels: Graduate

Schedule Type(s): Seminar

Department: Computer Science

**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 Type(s): Dissertation

Department: Computer Science

**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 Type(s): Dissertation

Department: Computer Science

## *Career Technical Teacher Education (CTTE)*

**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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**CTTE 40093 VARIABLE TOPIC WORKSHOP IN CAREER TECHNICAL EDUCATION**

(Repeatable for credit) 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 Type(s): Workshop

Department: Teaching, Learning and Curriculum Studies

**CTTE 45372 ISSUES IN CAREER TECHNICAL EDUCATION SUBJECTS**

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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**CTTE 46001 ORGANIZATION OF CAREER AND TECHNICAL EDUCATION**

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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

Course Attributes: Writing Intensive Course

**CTTE 46002 IN-SERVICE TEACHING**

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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

Course Attributes: Experiential Learning Requirement

**CTTE 46015 METHODS OF CAREER AND TECHNICAL EDUCATION**

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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies




**CTTE 46018 DISADVANTAGED YOUTH IN CAREER TECHNICAL EDUCATION**

Developing an understanding of disadvantaged youth stressing their characteristics as they pertain to career technical education programs.

Prerequisite: None.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**CTTE 46019 COORDINATION OF CAREER TECHNICAL COOPERATIVE EDUCATION PROGRAMS**

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

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**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

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**CTTE 46031 STUDENT TEACHING IN CAREER TECHNICAL EDUCATION**

Provides a 12 week student teaching experience in a career-technical program setting. See "student teaching" section in the undergraduate 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: Eligible for admission to student teaching; and advanced study; and major in career and technical teacher education (CTTE) or integrated business education (IBED) or family and consumer sciences education (FCSE) or marketing education (MKT) or trade and industrial education (TIED). Corequisite: CTTE 49525.

9.000 Credit hours

24.000 Other hours

Levels: Undergraduate

Schedule Type(s): Practicum

Department: Teaching, Learning and Curriculum Studies

Course Attributes: Experiential Learning Requirement

**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.

1.000 to 3.000 Credit hours

1.000 to 3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**CTTE 46096 INDIVIDUAL INVESTIGATION IN CAREER TECHNICAL EDUCATION**

(Repeatable for credit) 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.

1.000 to 3.000 Credit hours

1.000 to 3.000 Other hours

Levels: Undergraduate

Schedule Type(s): Individual Investigation

Department: Teaching, Learning and Curriculum Studies

**CTTE 46192 PRACTICUM: OCCUPATIONAL**

(Repeatable for credit) Supervised work experience in occupation to obtain initial experience or to update 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. Prerequisite: Permission.

1.000 to 6.000 Credit hours

1.000 to 6.000 Other hours

Levels: Undergraduate

Schedule Type(s): Practicum

Department: Teaching, Learning and Curriculum Studies

Course Attributes: Experiential Learning Requirement

**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.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**CTTE 50093 VARIABLE TOPIC WORKSHOP IN CAREER TECHNICAL EDUCATION**

(Repeatable for credit) 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.

1.000 to 5.000 Credit hours

1.000 to 5.000 Other hours

Levels: Graduate

Schedule Type(s): Workshop

Department: Teaching, Learning and Curriculum Studies

**CTTE 55372 ISSUES IN CAREER TECHNICAL EDUCATION SUBJECTS**

Exploration of issues and trends unique to specific career-technical education subjects.

Prerequisite: Graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**CTTE 55377 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.

Prerequisite: Graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**CTTE 56001 ORGANIZATION OF CAREER AND TECHNICAL EDUCATION**

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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**CTTE 56002 IN-SERVICE TEACHING**

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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**CTTE 56015 METHODS OF CAREER AND TECHNICAL EDUCATION**

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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**CTTE 56018 DISADVANTAGED YOUTH IN CAREER TECHNICAL EDUCATION**

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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**CTTE 56019 COORDINATION OF CAREER TECHNICAL COOPERATIVE EDUCATION PROGRAMS**

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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**CTTE 56020 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. Prerequisite: Graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**CTTE 56031 STUDENT TEACHING IN CAREER TECHNICAL EDUCATION**

Provides a 12 week student teaching experience in a career-technical program setting. See "student teaching" section in the graduate 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: Eligible for admission to student teaching; graduate standing; and major in career and technical teacher education (CTTE) or trade and industrial education (TIED). Corequisite: CTTE 59525.

9.000 Credit hours

24.000 Other hours

Levels: Graduate

Schedule Type(s): Practicum

Department: Teaching, Learning and Curriculum Studies

**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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**CTTE 56096 INDIVIDUAL INVESTIGATION IN CAREER TECHNICAL EDUCATION**

(Repeatable for credit) 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 Type(s): Individual Investigation

Department: Teaching, Learning and Curriculum Studies

**CTTE 59525 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: Graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**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 demographic influences. Includes the application of the contemporary workforce to engage in lifelong learning to keep career and technical skills updated. Prerequisite: Graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**CTTE 66096 INDIVIDUAL INVESTIGATION IN CAREER-TECHNICAL EDUCATION**

(Repeatable for credit) 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 Type(s): Individual Investigation

Department: Teaching, Learning and Curriculum Studies



## **Cultural Foundations (CULT)**

### **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

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Foundations, Leadership and Administration

Course Attributes: CTAG Education, TAG Education

### **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 Type(s): Lecture

Department: Foundations, Leadership and Administration

### **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 Type(s): Lecture

Department: Foundations, Leadership and Administration

### **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 Type(s): Individual Investigation

Department: Foundations, Leadership and Administration

### **CULT 40093 VARIABLE TITLE WORKSHOP IN CULTURAL FOUNDATIONS**

(Repeatable for credit) 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 Type(s): Workshop

Department: Foundations, Leadership and Administration

### **CULT 50093 VARIABLE TITLE WORKSHOP IN CULTURAL FOUNDATIONS**

(Repeatable for a maximum of 6 credit hours) 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 Type(s): Workshop

Department: Foundations, Leadership and Administration

### **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 Type(s): Master's Thesis

Department: Foundations, Leadership and Administration

### **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 Type(s): Master's Thesis

Department: Foundations, Leadership and Administration

### **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 Type(s): Lecture

Department: Foundations, Leadership and Administration

### **CULT 66531 PROFESSIONAL PRACTICE IN A MULTICULTURAL SOCIETY**

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.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Foundations, Leadership and Administration

### **CULT 69521 PROFESSIONAL PRACTICE IN A MULTICULTURAL SOCIETY**

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.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Foundations, Leadership and Administration

### **CULT 69522 ETHICS IN PROFESSIONAL PRACTICE**

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.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Foundations, Leadership and Administration

### **CULT 69530 MULTICULTURAL THEORIES AND SCHOLARSHIP IN EDUCATION**

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.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Foundations, Leadership and Administration

### **CULT 69560 CONTEMPORARY PHILOSOPHY OF EDUCATION**

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.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Foundations, Leadership and Administration

### **CULT 69564 HISTORY OF AMERICAN EDUCATION**

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 Type(s): Lecture  
Department: Foundations, Leadership and Administration

### **CULT 69568 GREAT IDEAS IN EDUCATION**

An examination of major influential ideas in education through original sources from Plato to Skinner. Prerequisite: Special approval of instructor and graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Foundations, Leadership and Administration

### **CULT 69569 INTERNATIONAL EDUCATION: FOUNDATIONAL ISSUES**

An introductory seminar to explore current foundational issues and challenges in education worldwide (non-formal, 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 Type(s): Lecture

Department: Foundations, Leadership and Administration

### **CULT 69570 MULTICULTURAL EDUCATION: THEORY AND POLICY**

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 Type(s): Lecture

Department: Foundations, Leadership and Administration

### **CULT 69571 GLOBALIZATION AND EDUCATION**

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 Type(s): Lecture

Department: Foundations, Leadership and Administration

### **CULT 69575 ANTHROPOLOGY AND EDUCATION**

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 Type(s): Lecture

Department: Foundations, Leadership and Administration

### **CULT 69591 SEMINAR IN CULTURAL FOUNDATIONS**

(Repeatable for credit) 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 and special approval.

1.000 to 5.000 Credit hours

1.000 to 5.000 Other hours

Levels: Graduate

Schedule Type(s): Seminar

Department: Foundations, Leadership and Administration

### **CULT 69592 ADVANCED PRACTICUM AND INTERNSHIP IN CULTURAL FOUNDATIONS**

(Repeatable for credit) 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.

2.000 to 6.000 Credit hours

2.000 to 6.000 Other hours

Levels: Graduate

Schedule Type(s): Practicum

Department: Foundations, Leadership and Administration

### **CULT 69595 SPECIAL TOPICS IN CULTURAL FOUNDATIONS**

(Repeatable for credit) 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 Type(s): Lecture

Department: Foundations, Leadership and Administration

### **CULT 69596 INDIVIDUAL INVESTIGATION IN CULTURAL FOUNDATIONS**

(Repeatable for credit) 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 Type(s): Individual Investigation

Department: Foundations, Leadership and Administration

### **CULT 69598 RESEARCH IN CULTURAL FOUNDATIONS**

(Repeatable for credit) 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 Type(s): Research

Department: Foundations, Leadership and Administration

### **CULT 79510 PHILOSOPHY OF EDUCATION**

Analysis of selected philosophies of education through examination of philosophical problems of education. Prerequisite: CULT 6/79560 or 6/79568. Doctoral standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Foundations, Leadership and Administration

### **CULT 79530 MULTICULTURAL THEORIES AND SCHOLARSHIP IN EDUCATION**

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 Type(s): Lecture

Department: Foundations, Leadership and Administration

### **CULT 79560 CONTEMPORARY PHILOSOPHY OF EDUCATION**

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 Type(s): Lecture

Department: Foundations, Leadership and Administration

### **CULT 79564 HISTORY OF AMERICAN EDUCATION**

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 Type(s): Lecture  
Department: Foundations, Leadership and Administration

#### **CULT 79568 GREAT IDEAS IN EDUCATION**

An examination of major influential ideas in education through original sources from Plato to Skinner. Prerequisite: Special approval of instructor and doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Foundations, Leadership and Administration

#### **CULT 79569 INTERNATIONAL EDUCATION: FOUNDATIONAL ISSUES**

An introductory seminar to explore current foundational issues and challenges in education worldwide (non-formal, 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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Foundations, Leadership and Administration

#### **CULT 79570 MULTICULTURAL EDUCATION: THEORY AND POLICY**

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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Foundations, Leadership and Administration

#### **CULT 79571 GLOBALIZATION AND EDUCATION**

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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Foundations, Leadership and Administration

#### **CULT 79575 ANTHROPOLOGY AND EDUCATION**

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 Type(s): Lecture  
Department: Foundations, Leadership and Administration

#### **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 Type(s): Seminar  
Department: Foundations, Leadership and Administration

#### **CULT 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 Type(s): Dissertation  
Department: Foundations, Leadership and Administration

#### **CULT 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; CULT 80199.  
15.000 Credit hours  
15.000 Other hours  
Levels: Graduate  
Schedule Type(s): Dissertation  
Department: Foundations, Leadership and Administration

#### **CULT 85535 INTERPROFESSIONAL STUDIES**

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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Foundations, Leadership and Administration

#### **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 Type(s): Lecture  
Department: Foundations, Leadership and Administration

#### **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 Type(s): Lecture  
Department: Foundations, Leadership and Administration

#### **CULT 89582 SOCIAL PERSPECTIVES OF EDUCATION**

Examines selected social factors that influence the development of educational policies and patterns of research relating to school and non-school educational settings. Prerequisite: Doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Foundations, Leadership and Administration

#### **CULT 89591 SEMINAR IN CULTURAL FOUNDATIONS**

(Repeatable for credit) 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 Type(s): Seminar  
Department: Foundations, Leadership and Administration

**CULT 89592 ADVANCED PRACTICUM AND INTERNSHIP IN CULTURAL FOUNDATIONS**

(Repeatable for credit) 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  
2.000 to 6.000 Other hours  
Levels: Graduate  
Schedule Type(s): Practicum  
Department: Foundations, Leadership and Administration

**CULT 89595 SPECIAL TOPICS IN CULTURAL FOUNDATIONS**

(Repeatable for credit) 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 Type(s): Lecture  
Department: Foundations, Leadership and Administration

**CULT 89596 INDIVIDUAL INVESTIGATION IN CULTURAL FOUNDATIONS**

(Repeatable for credit) 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 Type(s): Individual Investigation  
Department: Foundations, Leadership and Administration

**CULT 89598 RESEARCH IN CULTURAL FOUNDATIONS**

(Repeatable for credit) 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 Type(s): Research  
Department: Foundations, Leadership and Administration

## *Dance (DAN)*

**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 Type(s): Studio  
Department: Theatre and Dance

**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 Type(s): Studio  
Department: Theatre and Dance

**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 Type(s): Studio  
Department: Theatre and Dance

**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 Type(s): Studio  
Department: Theatre and Dance

**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 Type(s): Studio  
Department: Theatre and Dance

**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 Type(s): Studio  
Department: Theatre and Dance

**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 Type(s): Studio  
Department: Theatre and Dance

**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 Type(s): Studio  
Department: Theatre and Dance

**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 Type(s): Studio  
Department: Theatre and Dance

**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  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Theatre and Dance

**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  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Theatre and Dance

**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 Type(s): Studio  
Department: Theatre and Dance

**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 Type(s): Lecture  
Department: Theatre and Dance

**DAN 17051 MODERN DANCE TECHNIQUE I-A**

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 Type(s): Studio  
Department: Theatre and Dance

**DAN 17052 BALLET I-A**

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 Type(s): Studio  
Department: Theatre and Dance

### **DAN 17053 PRINCIPLES OF DANCE MECHANICS I**

The study and application of alignment and basic movement principles to dance techniques.  
Corequisite: DAN 17051 or 17052. Prerequisite: Dance major and special approval.  
2.000 Credit hours  
2.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Theatre and Dance  
Course Attributes: TAG Arts/Humanities

### **DAN 17151 MODERN DANCE TECHNIQUE I-B**

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 Type(s): Studio  
Department: Theatre and Dance

### **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 Type(s): Studio  
Department: Theatre and Dance

### **DAN 27057 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 Type(s): Lecture  
Department: Theatre and Dance

### **DAN 27070 INTRODUCTION TO JAZZ STYLES A**

Development of basic jazz dance skills. Students must be at 20000-level technique in modern or ballet. Prerequisite: DAN 27071 or 27072 and special approval.  
2.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Theatre and Dance

### **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 Type(s): Studio  
Department: Theatre and Dance

### **DAN 27072 BALLET II-A**

(Repeatable for a maximum of 8 credit hours)  
Intermediate ballet technique. Prerequisite: Dance major; DAN 17152 and special approval.  
2.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Theatre and Dance

### **DAN 27074 DANCE COMPOSITION I**

(Repeatable for a maximum of 12 credit hours)  
Movement exploration and improvisation, including developing the body as an instrument of expression. Prerequisite: DAN 17151 and special approval. Corequisite: DAN 27071.  
3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Theatre and Dance

### **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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Theatre and Dance  
Course Attributes: Diversity Course-Global, Kent Core-Fine Arts, LER-Fine Arts, Transfer Module-Fine Arts

### **DAN 27170 INTRODUCTION TO JAZZ STYLES B**

Continued development of basic jazz dance skills.  
Prerequisite: DAN 27070 and special approval.  
2.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Theatre and Dance

### **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.  
3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Theatre and Dance

### **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 Type(s): Studio  
Department: Theatre and Dance

### **DAN 27174 DANCE COMPOSITION II: ELEMENTS OF STRUCTURE**

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 Other hours  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Theatre and Dance  
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 Type(s): Lecture  
Department: Theatre and Dance

### **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 Type(s): Lecture  
Department: Theatre and Dance

### **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 Type(s): Studio  
Department: Theatre and Dance

### **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 Type(s): Studio  
Department: Theatre and Dance

### **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  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Theatre and Dance

**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

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Theatre and Dance

**DAN 37167 BALLET III-B**

Continuation of advanced ballet technique.

Prerequisite: DAN 37067 and special approval.

2.000 Credit hours

3.000 Other hours

Levels: Undergraduate

Schedule Type(s): Studio

Department: Theatre and Dance

**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

Levels: Undergraduate

Schedule Type(s): Studio

Department: Theatre and Dance

**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 Type(s): Studio

Department: Theatre and Dance

**DAN 37192 DANCE PRACTICUM**

(Repeatable for a total of 4 hours) Practical experience in curriculum dance activities under faculty supervision. Prerequisite: special approval.

1.000 Credit hours

3.000 Other hours

Levels: Undergraduate

Schedule Type(s): Practicum, Studio

Department: Theatre and Dance

Course Attributes: Experiential Learning Requirement

**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 Type(s): Studio

Department: Theatre and Dance

**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

Levels: Undergraduate

Schedule Type(s): Studio

Department: Theatre and Dance

**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

Levels: Undergraduate

Schedule Type(s): Studio

Department: Theatre and Dance

**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

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Theatre and Dance

**DAN 47070 JAZZ STYLE-A**

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 Type(s): Studio

Department: Theatre and Dance

**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 Type(s): Lecture

Department: Theatre and Dance

**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 Type(s): Lecture

Department: Theatre and Dance

**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 Type(s): Lecture

Department: Theatre and Dance

Course Attributes: Writing Intensive Course

**DAN 47170 JAZZ STYLE-B**

Continuation of DAN 47070. Prerequisite: DAN 47070 and special approval.

2.000 Credit hours

3.000 Other hours

Levels: Undergraduate

Schedule Type(s): Studio

Department: Theatre and Dance

**DAN 47174 SENIOR CHOREOGRAPHY  
PROJECT**

Creation of a modern dance work to be performed with full production values in an approved setting. Prerequisite: DAN 37170 and special approval.

1.000 Credit hours

1.000 Other hours

Levels: Undergraduate

Schedule Type(s): Studio

Department: Theatre and Dance

Course Attributes: Experiential Learning Requirement

**DAN 47192 INTERNSHIP IN DANCE**

(Repeatable for credit) Supervised dance apprenticeship in an approved educational setting. Prerequisite: Dance major and special approval.

1.000 Credit hours

3.000 Other hours

Levels: Undergraduate

Schedule Type(s): Practicum

Department: Theatre and Dance

Course Attributes: Experiential Learning Requirement

**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 Type(s): Individual Investigation

Department: Theatre and Dance

**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.

9.000 Credit hours

9.000 Other hours

Levels: Undergraduate

Schedule Type(s): Practicum

Department: Theatre and Dance

Course Attributes: Experiential Learning Requirement

## Digital Sciences (DSCI)

**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 Type(s): Lecture

Department: Digital Sciences



**DSCI 10310 MY STORY ON THE WEB**

A first course in understanding the Web's impact on our private and public lives. Investigates web site design, storytelling, multimedia, intellectual property, ethical considerations and social media. Students develop practical website design skills for presenting and navigating both textual and multimedia content. Students build their own website that presents their story. The website is in effect an online multimedia resume in which the student presents their accomplishments, skills, interests and objectives. Prerequisite: none.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Digital Sciences

**DSCI 10410 INFORMATION ETHICS AND SOCIAL RESPONSIBILITY**

Investigates ethical and societal responsibility issues related to information technology including tensions between legal and ethical values; access and control of intellectual property; the US Patriot Act as it relates to private and public records; ethical vendor management; the digital divide, outsourcing, and green computing; and network security and protections (e.g., viruses, protecting minors, cyber bullying). In addition, bias in information retrieval and indexing, information seeking behaviors and professional codes of ethics are explored. Prerequisite: none.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Digital Sciences

**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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Digital Sciences

**DSCI 13410 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 Type(s): Lecture  
Department: Digital Sciences

**DSCI 15310 COMPUTATIONAL THINKING AND PROGRAMMING**

Introductory, broad, and hands-on coverage of basic aspects of computational thinking with

emphasis on problem solving using a high-level programming language. Prerequisite: none.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Digital Sciences

**DSCI 16010 TELECOMMUNICATIONS INFRASTRUCTURE**

Provides a broad overview of communication infrastructures for the public switch telephone network, wireless networks and data networks. Other topics covered include security, network management and monitoring. Prerequisite: none.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Digital Sciences

**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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Digital Sciences

**DSCI 21010 ENTERPRISE ARCHITECTURE**

Enterprise architectures 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 Type(s): Lecture  
Department: Digital Sciences

**DSCI 23310 HUMAN-COMPUTER INTERACTION**

A survey course intended to provide a broad foundation of HCI principles and perspectives relevant across multiple digital science concentrations. Focuses on both understanding HCI, through the presentation of major concepts, issues and principles in HCI across the full-spectrum of the user-centered design process (research, sketching, prototyping, evaluation, etc.), and doing HCI, with a focus on the user, needs and task analysis, and sketching, prototyping, and evaluation. Prerequisite: sophomore standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture

Department: Digital Sciences

**DSCI 24410 DIGITAL INFORMATION MANAGEMENT AND PROCESSING**

Presents a holistic view of information management including the external and internal information environment. Covers the history of information management, information industry and markets, internal information politics, behaviors, and cultures, information management policies, processes and technologies. Prerequisites: DSCI 10010 and 10410.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Digital Sciences

**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 Type(s): Lecture  
Department: Digital Sciences

**DSCI 31510 GLOBAL PROJECT MANAGEMENT AND TEAM DYNAMICS**

Explains to technical and non-technical students alike what it takes to lead teams and projects from start to finish. Students will learn the critical and common challenges of leading projects and managing teams, studying diagrams and war stories of successes and failures using practical tools and methods. Prerequisite: 2.500 cumulative GPA; and MIS 24065; and MIS 24053 with a minimum grade of C.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Digital Sciences  
Course Attributes: Writing Intensive Course

**DSCI 31610 DIGITAL SYSTEMS SECURITY**

The real threat to information system security comes from people, not computers. Students will understand human, behavioral and managerial factors to deal with personal computer security, social engineering, cyberthreats and risk management. Prerequisites: DSCI 24410 and MIS 44045.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Digital Sciences

**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 Type(s): Lecture



Department: Digital Sciences

### **DSCI 40910 CAPSTONE IN DIGITAL SCIENCES**

Provides an integrative experience, bringing together aspects of the student's required coursework in the major and concentration. Students work in project teams, whenever possible together with senior project courses in digital science affiliated programs or capstone project teams from other digital sciences concentrations. Prerequisites: DSCI 31510; and TECH 36411; and senior standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Digital Sciences

### **DSCI 49910 EMERGING TECHNOLOGIES IN DIGITAL SCIENCES**

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 Type(s): Lecture

Department: Digital Sciences

### **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

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Digital Sciences

### **DSCI 59910 EMERGING TECHNOLOGIES IN DIGITAL SCIENCES**

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.

1.000 to 3.000 Credit hours

1.000 to 3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Digital Sciences

### **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.

1.000 to 4.000 Credit hours

1.000 to 4.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Digital Sciences

### **DSCI 60910 CAPSTONE IN DIGITAL SCIENCES**

Provides an integrative experience, bringing together aspects of the student's required coursework in the major and concentration via a research paper, individual project, or practicum.

Prerequisites: graduate standing and special approval by the Digital Sciences Graduate Coordinator.

3.000 Credit hours

3.000 Other hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Digital Sciences

### **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 standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Digital Sciences

### **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 Type(s): Lecture

Department: Digital Sciences

### **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 Type(s): Lecture

Department: Digital Sciences

### **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 Type(s): Lecture

Department: Digital Sciences

### **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 Type(s): Master's Thesis

Department: Digital Sciences

### **DSCI 69299 THESIS II**

Thesis students must continue registration each semester until all degree Requirements are met.

Prerequisites: DSCI 69199 and graduate standing.

2.000 Credit hours

2.000 Other hours

Levels: Graduate

Schedule Type(s): Master's Thesis

Department: Digital Sciences

### **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.

1.000 to 4.000 Credit hours

1.000 to 4.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Digital Sciences

## ***Early Childhood Education (ECED)***

### **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 Type(s): Lecture



Department: Teaching, Learning and Curriculum Studies

**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. Corequisites: ECED 30134 and 30164 and 40145 and SPED 23000; and admission to advanced study.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**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 40114 and 40126 and 40127 and 40128 and 40147 (Block IV).

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**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 EDUC 30134 and EDUC 40145 (ECED Block I).

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**ECED 40093 VARIABLE TITLE WORKSHOP IN EARLY CHILDHOOD EDUCATION**

(Repeatable for credit) 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 Type(s): Workshop

Department: Teaching, Learning and Curriculum Studies

**ECED 40105 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: admission to advanced study.

Corequisites: ECED 40107 and 40123 and 40142 (Block III).

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**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 40105 and 40123 and 40142.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**ECED 40114 TEACHING SCIENCE IN THE EARLY YEARS**

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 30144 and 40126 and 40127 and 40128 and 40147 (Block IV).

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**ECED 40123 CRITICAL INQUIRY INTO INTEGRATED CURRICULUM IN THE PRIMARY YEARS**

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 40105 and 40107 and 40142.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**ECED 40126 DEVELOPMENTAL READING AND WRITING: EARLY YEARS**

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. Pre-service teachers will also learn how to implement a process approach to writing instruction. Prerequisite: ECED 40105 and admission to advanced study. Corequisites ECED 40127 and 30144 and 40114 and 40147.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

Course Attributes: Writing Intensive Course

**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 30144 and 40114 and 40126 and 40128 and 40147.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**ECED 40128 INTEGRATED FIELD EXPERIENCES**

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 school/agency before the first day of the semester in which student teaching/ internship will take place. Prerequisite: admission to advanced study. Corequisites: ECED 30144 and 40114 and 40126 and 40127 and 40147.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**ECED 40142 HOME-SCHOOL-COMMUNITY-PARTNERSHIPS IN DIVERSE CONTEXTS**

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 knowledge 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 40105 and 40107 and 40123.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

Course Attributes: Experiential Learning Requirement

**ECED 40145 MUSIC AND RHYTHMS IN PRE-PRIMARY EDUCATION**

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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**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 30144 and 40114 and 40126 and 40127 and 40128 (Block IV).

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**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

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**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

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**ECED 40192 INTERNSHIP IN PRESCHOOL**

(Equivalent to ECET 22150) (Repeatable for credit) Internship in preschool settings, full day for fifteen weeks. Prerequisite: ECED 30164 and admission to advanced study. Corequisites:

ECED 30123 and ECED 30142 and ECED 30147 and ECED 40165

6.000 to 12.000 Credit hours

42.000 to 84.000 Other hours

Levels: Undergraduate

Schedule Type(s): Practicum

Department: Teaching, Learning and Curriculum Studies

Course Attributes: Experiential Learning Requirement

**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.

1.000 to 5.000 Credit hours

1.000 to 5.000 Other hours

Levels: Undergraduate

Schedule Type(s): Individual Investigation

Department: Teaching, Learning and Curriculum Studies

**ECED 40292 INTERNSHIP IN KINDERGARTEN/PRIMARY**

(Repeatable for credit) Internship in grades K-3, full day for 16 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. Corequisite: ECED 40125.

6.000 to 12.000 Credit hours

6.000 to 12.000 Other hours

Levels: Undergraduate

Schedule Type(s): Field Experience

Department: Teaching, Learning and Curriculum Studies

Course Attributes: Experiential Learning Requirement





**ECED 50093 VARIABLE TITLE  
WORKSHOP IN EARLY CHILDHOOD  
EDUCATION**

(Repeatable for credit) 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 Type(s): Workshop  
Department: Teaching, Learning and Curriculum Studies

**ECED 50114 TEACHING SCIENCE IN  
THE EARLY YEARS**

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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**ECED 50123 CRITICAL INQUIRY INTO  
INTEGRATED CURRICULUM IN THE  
PRIMARY YEARS**

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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**ECED 50142 HOME, SCHOOL AND  
COMMUNITY RELATIONS**

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  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**ECED 50145 MUSIC AND RHYTHMS IN  
PREPRIMARY EDUCATION**

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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

**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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**ECED 60112 HUMANITIES FOR  
CHILDREN**

Relevance of humanities as applied to education of young children. Prerequisite: Graduate standing.  
2.000 Credit hours  
2.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**ECED 60113 PRESCHOOL EDUCATION**

In-depth study of curriculum development in preschool programs. Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**ECED 60151 SOCIOMORAL  
ENVIRONMENT IN EARLY  
CHILDHOOD EDUCATION**

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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**ECED 60152 APPLICATION OF  
SELECTED THEORETICAL  
PRINCIPLES TO THE DEVELOPMENT  
OF YOUNG CHILDREN**

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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**ECED 60153 PLAY IN CHILDHOOD**

Examination of the play of children from various theoretical perspectives, the role of the play in development, strategies for facilitation of children's play in various settings. Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

**ECED 60158 RECONCEPTUALIZING  
EARLY CHILDHOOD CURRICULUM**

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 Type(s): Lecture



Department: Teaching, Learning and Curriculum Studies

### **ECED 60160 TYPICAL AND ATYPICAL DEVELOPMENT IN YOUNG CHILDREN**

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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

### **ECED 60167 LANGUAGE AND LITERACY: UNDERSTANDING DEVELOPMENT**

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

Levels: Graduate

Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

### **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

Levels: Graduate

Schedule Type(s): Master's Thesis

Department: Teaching, Learning and Curriculum Studies

### **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

Levels: Graduate

Schedule Type(s): Master's Thesis

Department: Teaching, Learning and Curriculum Studies

### **ECED 67291 SEMINAR IN EARLY CHILDHOOD EDUCATION**

(Repeatable for credit) 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 Type(s): Seminar

Department: Teaching, Learning and Curriculum Studies

### **ECED 67292 PRACTICUM AND INTERNSHIP IN EARLY CHILDHOOD EDUCATION**

(Repeatable for credit) 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.

1.000 to 10.000 Credit hours

1.000 to 10.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture, Practicum

Department: Teaching, Learning and Curriculum Studies

### **ECED 67295 SPECIAL TOPICS IN EARLY CHILDHOOD EDUCATION**

(Repeatable for credit) 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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

### **ECED 67296 INDIVIDUAL INVESTIGATION IN EARLY CHILDHOOD EDUCATION**

(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 Type(s): Individual Investigation

Department: Teaching, Learning and Curriculum Studies

### **ECED 67298 RESEARCH IN EARLY CHILDHOOD EDUCATION**

(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 Type(s): Research

Department: Teaching, Learning and Curriculum Studies

### **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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

### **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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

### **ECED 70113 PRESCHOOL EDUCATION**

In-depth study of curriculum development in preschool programs. Prerequisite: Doctoral standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

### **ECED 70151 SOCIOMORAL ENVIRONMENT IN EARLY CHILDHOOD EDUCATION**

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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

### **ECED 70152 APPLICATION OF SELECTED THEORETICAL PRINCIPLES TO THE DEVELOPMENT OF YOUNG CHILDREN**

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 Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies

### **ECED 70153 PLAY IN CHILDHOOD**

Examination of the play of children from various theoretical perspectives, the role of the play in development, strategies for facilitation of children's play in various settings. Prerequisite: Doctoral standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Teaching, Learning and Curriculum Studies



### **ECED 70158 RECONCEPTUALIZING EARLY CHILDHOOD CURRICULUM**

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 Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

### **ECED 77291 SEMINAR IN EARLY CHILDHOOD EDUCATION**

(Repeatable for credit) Seminar in ECED. Prerequisite: Doctoral standing and special approval.  
1.000 to 4.000 Credit hours  
1.000 to 4.000 Other hours  
Levels: Graduate  
Schedule Type(s): Seminar  
Department: Teaching, Learning and Curriculum Studies

### **ECED 77292 PRACTICUM AND INTERNSHIP IN EARLY CHILDHOOD EDUCATION**

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  
1.000 to 10.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture, Practicum  
Department: Teaching, Learning and Curriculum Studies

### **ECED 77295 SPECIAL TOPICS IN EARLY CHILDHOOD EDUCATION**

(Repeatable for credit) Special topics in ECED. Prerequisite: Doctoral standing and special approval.  
1.000 to 5.000 Credit hours  
1.000 to 5.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Teaching, Learning and Curriculum Studies

### **ECED 80292 ADVANCED PRACTICUM AND INTERNSHIP IN EARLY CHILDHOOD EDUCATION**

(Repeatable for credit) Advanced Practicum and 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  
1.000 to 10.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture, Practicum  
Department: Teaching, Learning and Curriculum Studies

### **ECED 80296 INDIVIDUAL INVESTIGATION IN EARLY CHILDHOOD EDUCATION**

(Repeatable for credit) Individual investigation in ECED. Prerequisite: Doctoral standing and special approval.  
1.000 to 5.000 Credit hours  
1.000 to 5.000 Other hours  
Levels: Graduate  
Schedule Type(s): Individual Investigation  
Department: Teaching, Learning and Curriculum Studies

### **ECED 80298 RESEARCH IN EARLY CHILDHOOD EDUCATION**

(Repeatable for credit) Research in ECED. Prerequisite: Doctoral standing.  
1.000 to 15.000 Credit hours  
1.000 to 15.000 Other hours  
Levels: Graduate  
Schedule Type(s): Research  
Department: Teaching, Learning and Curriculum Studies

## ***Early Childhood Education Technology (ECET)***

### **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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

### **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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

### **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  
Levels: Undergraduate  
Schedule Type(s): Individual Investigation  
Department: Regional

### **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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

### **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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

### **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.  
3.000 Credit hours



3.000 Lecture hours  
 Levels: Undergraduate  
 Schedule Type(s): Lecture  
 Department: Regional  
 Course Attributes: Experiential Learning Requirement

### **ECET 22150 STUDENT TEACHING**

(Equivalent to ECED 40192) Student will spend 300 hours at an approved preschool program under the supervision of an ECET/ECED 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: departmental special approval. Corequisite: ECET 22140.  
 6.000 Credit hours  
 6.000 Other hours  
 Levels: Undergraduate  
 Schedule Type(s): Practicum  
 Department: Regional  
 Course Attributes: Experiential Learning Requirement

## ***Economics (ECON)***

### **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 Type(s): Lecture  
 Department: Economics

### **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 10007 or one course from MATH 10023-49999; or ALEKS math upper-level minimum score of 30; or ALEKS math single assessment score of 45.  
 3.000 Credit hours  
 3.000 Lecture hours  
 Levels: Undergraduate  
 Schedule Type(s): Lecture  
 Department: Economics  
 Course Attributes: Kent Core-Social Sciences, LER-Social Sciences, TAG Social/Behavior Sciences, Transfer 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 Type(s): Lecture  
 Department: Economics  
 Course Attributes: Kent Core-Social Sciences, LER-Social Sciences, TAG Social/Behavior Sciences, Transfer 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  
 Levels: Undergraduate  
 Schedule Type(s): Lecture  
 Department: Economics

### **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  
 Levels: Undergraduate  
 Schedule Type(s): Lecture  
 Department: Economics

### **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  
 Levels: Undergraduate  
 Schedule Type(s): Lecture  
 Department: Economics

### **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  
 Levels: Undergraduate  
 Schedule Type(s): Lecture  
 Department: Economics  
 Course Attributes: Experiential Learning Requirement

### **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  
 Levels: Undergraduate  
 Schedule Type(s): Lecture  
 Department: Economics

### **ECON 32075 INTRODUCTION TO INTERNATIONAL TRADE**

Introduction to fundamental principles and problems of international trade. Covers comparative advantage, government policies affecting trade, free trade vs. protection, international institutions and exchange rates. Offered only in the Geneva program.  
 Prerequisite: ECON 22061.  
 3.000 Credit hours  
 3.000 Lecture hours  
 Levels: Undergraduate  
 Schedule Type(s): Lecture  
 Department: Economics

### **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 Type(s): Lecture  
 Department: Economics

### **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 Type(s): Lecture  
 Department: Economics  
 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 Type(s): Lecture  
Department: Economics

#### **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  
Schedule Type(s): Lecture  
Department: Economics

#### **ECON 42068 INDUSTRIAL ORGANIZATION AND PUBLIC POLICY**

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 Type(s): Lecture  
Department: Economics

#### **ECON 42072 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 growing wage inequality. Prerequisite: ECON 32040.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Economics

#### **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 Type(s): Lecture  
Department: Economics

#### **ECON 42076 ECONOMIC DEVELOPMENT**

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 Type(s): Lecture  
Department: Economics

#### **ECON 42080 REGIONAL ECONOMICS**

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 Type(s): Lecture  
Department: Economics

#### **ECON 42081 URBAN ECONOMICS**

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 Type(s): Lecture  
Department: Economics

#### **ECON 42085 PUBLIC FINANCE**

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 Type(s): Lecture  
Department: Economics

#### **ECON 42086 ECONOMICS OF HEALTH CARE**

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 Type(s): Lecture  
Department: Economics

#### **ECON 42087 LAW AND ECONOMICS**

A study of the economic foundations of the legal system and the impact of legal systems on market behavior. Prerequisite: ECON 22060 and 22061 or special approval of instructor.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Economics

#### **ECON 42191 SENIOR SEMINAR IN ECONOMICS**

(Repeatable for credit) 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 Type(s): Seminar  
Department: Economics  
Course Attributes: Writing Intensive Course

#### **ECON 42291 VARIABLE CONTENT SEMINAR IN ECONOMICS**

(repeated registration permitted when topic varies; repeatable for a total of 12 hours) 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 Type(s): Seminar  
Department: Economics

#### **ECON 42292 INTERNSHIP IN ECONOMICS**

(Repeatable for credit) Supervised practical experience in economics. Eligibility Requirements available from the internship coordinator. Does not count toward economics major. May count as business elective. Prerequisite: Economics major; junior standing; special approval.

3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Practicum  
Department: Economics  
Course Attributes: Experiential Learning Requirement

#### **ECON 42295 SPECIAL TOPICS IN ECONOMICS**

(Repeated registration permitted when topic varies; repeatable for a total of 9 hours) Various special topics will be announced in the schedule of classes under this course number. Prerequisite: special approval.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Economics

#### **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  
Levels: Undergraduate  
Schedule Type(s): Individual Investigation  
Department: Economics

#### **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  
Schedule Type(s): Lecture  
Department: Economics

**ECON 52068 INDUSTRIAL ORGANIZATION AND PUBLIC POLICY**

Theoretical, empirical and critical examination of structure, operation and performance of industrial markets in American economy. Prerequisite:

Graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Economics

**ECON 52072 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 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.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Economics

**ECON 52076 ECONOMIC DEVELOPMENT**

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.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Economics

**ECON 52080 REGIONAL ECONOMICS**

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.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Economics

**ECON 52081 URBAN ECONOMICS**

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 Type(s): Lecture

Department: Economics

**ECON 52085 PUBLIC FINANCE**

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 Type(s): Lecture

Department: Economics

**ECON 52086 ECONOMICS OF HEALTH CARE**

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 Type(s): Lecture

Department: Economics

**ECON 52087 LAW AND ECONOMICS**

A study of the economic foundations of the legal system and the impact of legal systems on market behavior. Prerequisite: Graduate standing or special approval.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Economics

**ECON 52291 VARIABLE CONTENT SEMINAR IN ECONOMICS**

(Repeatable for a maximum of 12 credit hours)

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 Type(s): Seminar

Department: Economics

**ECON 52295 SPECIAL TOPICS IN ECONOMICS**

(Repeatable for a maximum of 9 credit hours)

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 Type(s): Lecture

Department: Economics

**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 Type(s): Lecture

Department: Economics

**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 Type(s): Lecture

Department: Economics

**ECON 62021 BUSINESS CONDITIONS ANALYSIS AND PUBLIC POLICY**

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). Graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Economics

**ECON 62022 MANAGERIAL ECONOMICS**

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 graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Economics

**ECON 62050 MICROECONOMIC THEORY I**

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 Type(s): Lecture

Department: Economics

**ECON 62051 MACROECONOMIC THEORY I**

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 Type(s): Lecture

Department: Economics

**ECON 62054 ECONOMETRICS I**

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 Type(s): Lecture  
Department: Economics

**ECON 62055 ECONOMETRICS II**

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. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Economics

**ECON 62056 TIME SERIES ANALYSIS**

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. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Economics

**ECON 62061 MONETARY THEORY AND POLICY**

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. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Economics

**ECON 62075 INTERNATIONAL TRADE**

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 Type(s): Lecture  
Department: Economics

**ECON 62076 INTERNATIONAL FINANCE**

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 Type(s): Lecture  
Department: Economics

**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 Type(s): Lecture  
Department: Economics

**ECON 62092 INTERNSHIP IN ECONOMICS**

(Repeatable for credit) Supervised practical experience in economics. Eligibility Requirements available from the internship coordinator. Prerequisite: Admitted to M.A. in economics program; special approval. 3.000 Credit hours  
3.000 Other hours  
Levels: Graduate  
Schedule Type(s): Practicum  
Department: Economics

**ECON 62095 SPECIAL TOPICS IN ECONOMICS**

(Repeatable 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  
Schedule Type(s): Lecture  
Department: Economics

**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 Type(s): Individual Investigation  
Department: Economics

**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 Type(s): Research  
Department: Economics

**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 Type(s): Master's Thesis  
Department: Economics

**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 Type(s): Master's Thesis  
Department: Economics

**ECON 64004 QUANTITATIVE METHODS IN BUSINESS ADMINISTRATION I**

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 Type(s): Lecture  
Department: Economics

**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 Type(s): Seminar  
Department: Economics

## Educational Administration (EDAD)

**EDAD 40093 VARIABLE TITLE WORKSHOP IN EDAD**

(Repeatable for credit) Prerequisite: None. 1.000 to 5.000 Credit hours  
1.000 to 5.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Workshop  
Department: Foundations, Leadership and Administration

**EDAD 50093 VARIABLE TITLE WORKSHOP IN EDUCATIONAL ADMINISTRATION**

(Repeatable for credit) Variable title workshop in educational administration. Prerequisite: Graduate standing. 1.000 to 5.000 Credit hours  
1.000 to 5.000 Other hours  
Levels: Graduate  
Schedule Type(s): Workshop  
Department: Foundations, Leadership and Administration

**EDAD 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 Type(s): Master's Thesis  
Department: Foundations, Leadership and Administration

**EDAD 60299 THESIS II**

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  
Levels: Graduate  
Schedule Type(s): Master's Thesis  
Department: Foundations, Leadership and Administration

**EDAD 66492 INTERNSHIP IN EDUCATIONAL ADMINISTRATION**

(Repeatable for credit) A field-based internship requiring a separate project 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  
3.000 to 6.000 Other hours  
Levels: Graduate  
Schedule Type(s): Practicum  
Department: Foundations, Leadership and Administration

**EDAD 66515 FACILITIES PLANNING AND ADMINISTRATION**

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 Type(s): Lecture  
Department: Foundations, Leadership and Administration

**EDAD 66517 ADMINISTRATION AND SUPERVISION OF SPECIAL EDUCATION**

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 Type(s): Lecture  
Department: Foundations, Leadership and Administration

**EDAD 66518 LAW AND SPECIAL EDUCATION**

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 Type(s): Lecture  
Department: Foundations, Leadership and Administration

**EDAD 66520 SCHOOL LAW FOR TEACHERS AND PRINCIPALS**

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 Type(s): Lecture  
Department: Foundations, Leadership and Administration

**EDAD 66522 PUBLIC SCHOOL FINANCE AND ECONOMICS**

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  
Schedule Type(s): Lecture  
Department: Foundations, Leadership and Administration

**EDAD 66525 THE EDUCATIONAL PRINCIPALSHIP**

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 Type(s): Lecture  
Department: Foundations, Leadership and Administration

**EDAD 66526 FUNDAMENTALS OF EDUCATIONAL ADMINISTRATION**

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 Type(s): Lecture  
Department: Foundations, Leadership and Administration

**EDAD 66527 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 and an elective course in EDAD. Prerequisite: Major in Educational Administration K-12 Leadership (EAKI), 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 Type(s): Lecture  
Department: Foundations, Leadership and Administration

**EDAD 66528 THE SCHOOL BUSINESS MANAGER AND SCHOOL TREASURER**

Identification and description of the roles, responsibilities and activities of the school Business Manager and the school Treasurer overview of the interface in school district operations. Prerequisite: Graduate standing. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Foundations, Leadership and Administration

**EDAD 66529 LEADING FOR SOCIAL JUSTICE**

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  
Levels: Graduate  
Schedule Type(s): Field Experience, Lecture  
Department: Foundations, Leadership and Administration

**EDAD 66531 INSTRUCTIONAL LEADERSHIP**

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  
Levels: Graduate  
Schedule Type(s): Field Experience, Lecture  
Department: Foundations, Leadership and Administration

**EDAD 66533 CENTRAL OFFICE ADMINISTRATION: CURRICULUM AND PUPIL SERVICES**

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

Levels: Graduate

Schedule Type(s): Field Experience, Lecture

Department: Foundations, Leadership and Administration

#### **EDAD 66534 THE SUPERINTENDENCY**

Focuses on major responsibilities of board of education and superintendent. Prerequisite:

EDAD 6/ 76526. Graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Foundations, Leadership and Administration

#### **EDAD 66536 THE ADMINISTRATOR'S ROLE IN CURRICULUM DEVELOPMENT**

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

Levels: Graduate

Schedule Type(s): Lecture

Department: Foundations, Leadership and Administration

#### **EDAD 66537 THE PRINCIPAL AS EDUCATIONAL LEADER**

Focus on the role of the principal as a leader for understanding the societal and cultural context of education; teaching and learning processes; ethical and moral issues for administrators; and stakeholder empowerment for school improvement. Prerequisite: EDAD6/76526.

Graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Foundations, Leadership and Administration

#### **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

Levels: Graduate

Schedule Type(s): Field Experience, Lecture

Department: Foundations, Leadership and Administration

#### **EDAD 66540 WOMEN IN LEADERSHIP**

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

Levels: Graduate

Schedule Type(s): Lecture

Department: Foundations, Leadership and Administration

#### **EDAD 66542 PRINCIPLES AND TECHNIQUES OF SUPERVISION**

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

Levels: Graduate

Schedule Type(s): Lecture

Department: Foundations, Leadership and Administration

#### **EDAD 66543 SCHOOL ADMINISTRATION IN URBAN SETTINGS**

This course is designed to provide students with opportunities to discuss and investigate the unique challenges of leading inner-city schools. Issues of focus include transportation, staffing, extracurricular support for students and more. Prerequisite: Graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Foundations, Leadership and Administration

#### **EDAD 66544 COMMUNITY RELATIONS AND COMMUNICATION SKILLS**

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

1.750 Lecture hours

1.250 Other hours

Levels: Graduate

Schedule Type(s): Field Experience, Lecture

Department: Foundations, Leadership and Administration

#### **EDAD 66591 SEMINAR IN EDUCATIONAL ADMINISTRATION**

(Repeatable for credit)Seminar in educational administration. Prerequisite: Graduate standing.

1.000 to 4.000 Credit hours

1.000 to 4.000 Other hours

Levels: Graduate

Schedule Type(s): Seminar

Department: Foundations, Leadership and Administration

#### **EDAD 66595 SPECIAL TOPICS IN EDUCATIONAL ADMINISTRATION**

(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 Type(s): Lecture

Department: Foundations, Leadership and Administration

#### **EDAD 66596 INDIVIDUAL INVESTIGATION IN EDUCATIONAL ADMINISTRATION**

(Repeatable for credit) Projects as assigned. Prerequisite: Grading standing and special approval.

2.000 to 4.000 Credit hours

2.000 to 4.000 Other hours

Levels: Graduate

Schedule Type(s): Individual Investigation

Department: Foundations, Leadership and Administration

#### **EDAD 66598 RESEARCH IN EDUCATIONAL 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 Type(s): Research

Department: Foundations, Leadership and Administration

#### **EDAD 66602 TECHNOLOGY LEADERSHIP IN EDUCATION**

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 Type(s): Field Experience, Lecture

Department: Foundations, Leadership and Administration

#### **EDAD 66747 PERSONNEL**

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 Type(s): Lecture

Department: Foundations, Leadership and Administration

**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 per assistance will be examined and practiced. Prerequisite: graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Foundations, Leadership and Administration

**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. Perquisite: graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Foundations, Leadership and Administration

**EDAD 70093 VARIABLE TITLE WORKSHOP IN EDUCATIONAL ADMINISTRATION**

(Repeatable for credit) Variable title workshop in EDAD. Prerequisite: Doctoral standing.  
1.000 to 5.000 Credit hours  
1.000 to 5.000 Other hours  
Levels: Graduate  
Schedule Type(s): Workshop  
Department: Foundations, Leadership and Administration

**EDAD 76492 INTERNSHIP IN EDUCATIONAL ADMINISTRATION**

(Repeatable for credit) A field-based internship requiring a separate project 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  
3.000 to 6.000 Other hours  
Levels: Graduate  
Schedule Type(s): Practicum  
Department: Foundations, Leadership and Administration

**EDAD 76515 FACILITIES PLANNING AND ADMINISTRATION**

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 Type(s): Lecture  
Department: Foundations, Leadership and Administration

**EDAD 76517 ADMINISTRATION AND SUPERVISION OF SPECIAL EDUCATION**

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 Type(s): Lecture  
Department: Foundations, Leadership and Administration

**EDAD 76518 LAW AND SPECIAL EDUCATION**

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  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Foundations, Leadership and Administration

**EDAD 76520 SCHOOL LAW FOR TEACHERS AND PRINCIPALS**

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  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Foundations, Leadership and Administration

**EDAD 76522 PUBLIC SCHOOL FINANCE AND ECONOMICS**

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  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Foundations, Leadership and Administration

**EDAD 76525 THE EDUCATIONAL PRINCIPALSHIP**

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  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Foundations, Leadership and Administration

**EDAD 76526 FUNDAMENTALS OF EDUCATIONAL ADMINISTRATION**

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  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Foundations, Leadership and Administration

**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 prinpal 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 Type(s): Lecture  
Department: Foundations, Leadership and Administration

**EDAD 76528 THE SCHOOL BUSINESS MANAGER AND SCHOOL TREASURER**

Identification and description of the roles, responsibilities and activities of the school business manager and the school treasurer overview of the interface in school district operations. Prerequisite: Doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Foundations, Leadership and Administration

**EDAD 76529 LEADING FOR SOCIAL JUSTICE**

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 Type(s): Field Experience, Lecture  
Department: Foundations, Leadership and Administration



### **EDAD 76531 INSTRUCTIONAL LEADERSHIP**

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 Type(s): Field Experience, Lecture

Department: Foundations, Leadership and Administration

### **EDAD 76533 CENTRAL OFFICE ADMINISTRATION**

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

Schedule Type(s): Field Experience, Lecture

Department: Foundations, Leadership and Administration

### **EDAD 76534 THE SUPERINTENDENCY**

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 Type(s): Lecture

Department: Foundations, Leadership and Administration

### **EDAD 76536 THE ADMINISTRATOR'S ROLE IN CURRICULUM DEVELOPMENT**

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 Type(s): Lecture

Department: Foundations, Leadership and Administration

### **EDAD 76537 THE PRINCIPAL AS EDUCATIONAL LEADER**

Focus on the role of the principal as a leader for understanding the societal and cultural context of education; teaching and learning processes; ethical and moral issues for administrators; and stakeholder empowerment for school improvement. Prerequisite: EDAD 6/76526.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Foundations, Leadership and Administration

### **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 Type(s): Field Experience, Lecture

Department: Foundations, Leadership and Administration

### **EDAD 76540 WOMEN IN LEADERSHIP**

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 Type(s): Lecture

Department: Foundations, Leadership and Administration

### **EDAD 76542 PRINCIPLES AND TECHNIQUES OF SUPERVISION**

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 Type(s): Lecture

Department: Foundations, Leadership and Administration

### **EDAD 76543 SCHOOL ADMINISTRATION IN URBAN SETTINGS**

This course is designed to provide students with opportunities to discuss and investigate the unique challenges of leading inner-city schools. Issues of focus include transportation, staffing, extracurricular support for students and more. Prerequisite: Doctoral standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Foundations, Leadership and Administration

### **EDAD 76544 COMMUNITY RELATIONS AND COMMUNICATION SKILLS**

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 Type(s): Field Experience, Lecture

Department: Foundations, Leadership and Administration

### **EDAD 76595 SPECIAL TOPICS IN EDUCATIONAL ADMINISTRATION**

(Repeatable for credit) 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 Type(s): Lecture

Department: Foundations, Leadership and Administration

### **EDAD 76596 INDIVIDUAL INVESTIGATION IN EDUCATIONAL ADMINISTRATION**

(Repeatable for credit) 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 Type(s): Individual Investigation

Department: Foundations, Leadership and Administration

### **EDAD 76602 TECHNOLOGY LEADERSHIP IN EDUCATION**

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 Type(s): Field Experience, Lecture

Department: Foundations, Leadership and Administration

### **EDAD 76747 PERSONNEL**

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 Type(s): Lecture

Department: Foundations, Leadership and Administration

#### **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 Type(s): Lecture

Department: Foundations, Leadership and Administration

#### **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 Type(s): Dissertation

Department: Foundations, Leadership and Administration

#### **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 Type(s): Dissertation

Department: Foundations, Leadership and Administration

#### **EDAD 86558 ADVANCED EDUCATIONAL LEADERSHIP**

This advanced leadership seminar is designed to provide the opportunity for students to gain additional knowledge and skills in educational leadership, to improve research writing and teaching skills; to share and discuss leadership knowledge and insights with their peers and to defend their work before their peers. Prerequisite: EDAD 6/86657. Doctoral standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Foundations, Leadership and Administration

#### **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 Type(s): Seminar

Department: Foundations, Leadership and Administration

#### **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 Type(s): Research

Department: Foundations, Leadership and Administration

### ***Educational Psychology and Foundations (EDPF)***

#### **EDPF 70094 COLLEGE TEACHING**

(Repeatable for credit) 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 Type(s): Lecture

Department: Education

### ***Education (EDUC)***

#### **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. Prerequisite: ITEC 19525 and EPSY 29525. Corequisite: EDUC 49525.

12.000 Credit hours

12.000 Other hours

Levels: Undergraduate

Schedule Type(s): Practicum

Department: Education

Course Attributes: Experiential Learning Requirement

### ***Electrical/Electronic and Related Engineering Technologies (EERT)***

#### **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

Levels: Undergraduate

Schedule Type(s): Combined Lecture and Lab

Department: Regional

Course Attributes: CTAG Electrical Engineer Technologies

#### **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.

3.000 Credit hours

2.000 Lecture hours

2.000 Lab hours

Levels: Undergraduate

Schedule Type(s): Combined Lecture and Lab

Department: Regional

#### **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.

2.000 Credit hours

2.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Regional

#### **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.

4.000 Credit hours

3.000 Lecture hours

2.000 Lab hours

Levels: Undergraduate

Schedule Type(s): Combined Lecture and Lab

Department: Regional

#### **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 Type(s): Lecture

Department: Regional

#### **EERT 21096 INDIVIDUAL INVESTIGATION IN ELECTRICAL/ENGINEERING TECHNOLOGY**

(Repeatable 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 Type(s): Individual Investigation

Department: Regional

#### **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 Type(s): Lecture

Department: Regional



**EERT 22002 INDUSTRIAL CONTROLS**

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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

**EERT 22003 TECHNICAL COMPUTING**

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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

**EERT 22004 DIGITAL SYSTEMS**

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.  
4.000 Credit hours  
3.000 Lecture hours  
2.000 Lab hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Regional  
Course Attributes: CTAG Electrical Engineer Technology

**EERT 22005 ELECTRONIC INSTRUMENTATION**

Understanding of automation control and process characteristics. Application of various type of measurement devices & control equipment. Use of modern simulation software for process control and troubleshooting. Prerequisite: EERT 12010.  
3.000 Credit hours  
2.000 Lecture hours  
2.000 Lab hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Regional

**EERT 22006 ELECTRICAL MACHINES**

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 Type(s): Lecture  
Department: Regional

**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 Type(s): Combined Lecture and Lab  
Department: Regional

**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 Type(s): Combined Lecture and Lab  
Department: Regional

**EERT 22013 INDUSTRIAL ELECTRONICS**

Solid state devices used in industry, emphasizing thyristors, thyatrons, relaxation oscillators, timing circuits, solid state switches and power supply regulation. Prerequisite: EERT 12010 or 22002.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

**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 Type(s): Combined Lecture and Lab  
Department: Regional

**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 Type(s): Lecture  
Department: Regional

**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 Type(s): Lecture  
Department: Regional

**EERT 22017 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  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Regional

**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 Type(s): Combined Lecture and Lab  
Department: Regional

**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 Type(s): Lecture  
Department: Regional

**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.  
2.000 Credit hours  
2.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Regional

**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.  
3.000 Credit hours  
2.000 Lecture hours  
2.000 Lab hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Regional



## Environmental Health Sciences (EHS)

### 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.  
1.000 to 3.000 Credit hours  
1.000 to 3.000 Other hours  
Levels: Graduate  
Schedule Type(s): Individual Investigation  
Department: Environmental Health Sciences

### 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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Environmental Health Sciences

### EHS 53009 EMERGING ENVIRONMENTAL HEALTH ISSUES AND RESPONSES

Provides an overview of emerging environmental health issues that will impact the public's health. Prerequisite: graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Environmental Health Sciences

### 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 Type(s): Lecture  
Department: Environmental Health Sciences

### 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 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture, Seminar  
Department: Environmental Health Sciences

### 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 Type(s): Lecture  
Department: Environmental Health Sciences

### 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 Type(s): Lecture  
Department: Environmental Health Sciences

### 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 Type(s): Lecture  
Department: Environmental Health Sciences

## Engineering of Information Technology (EIRT)

### EIRT 22032 PC NETWORK ENGINEERING II

A course dealing with the network concepts and methodologies, implementation, monitoring, performance evaluation, service, optimization and control of modern network systems. Two hours lecture and two hours lab. Prerequisite: EERT 22018.  
3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Regional

### EIRT 22033 FIBER OPTICS TECHNOLOGY

A course in the concepts and application of fiber optic technology to industrial, medical, local area networks and digital communication systems.

One hour lecture and 2 hours lab. Prerequisite: MATH 19002 and EERT 12001.  
2.000 Credit hours  
2.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Regional

### ELS 63094 COLLEGE TEACHING IN EXERCISE, LEISURE AND SPORT

(Repeatable for credit) Guided teaching experiences in educational settings. Prerequisite: Special approval and graduate standing.  
2.000 Credit hours  
2.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Education

### ELS 65025 CONTEMPORARY ISSUES IN SPORT PEDAGOGY

Investigation and study of current problems, issues and trends in sport pedagogy. Prerequisites: ELS 65044 and 65055 and graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Education

### ELS 73094 COLLEGE TEACHING IN EXERCISE, LEISURE AND SPORT

(Repeatable for credit) Guided teaching experiences in educational settings. Prerequisite: Special approval and doctoral standing.  
2.000 Credit hours  
2.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Education

## Executive Master's Business Administration (EMBA)

### 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 Type(s): Lecture  
Department: Business Administration

### 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 Type(s): Lecture  
Department: Business Administration


**EMBA 67031 FINANCIAL REPORTING FOR EXECUTIVES-EMBA**

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  
Schedule Type(s): Lecture  
Department: Business Administration

**EMBA 67032 ACCOUNTING INFORMATION FOR EXECUTIVES-EMBA**

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 Type(s): Lecture  
Department: Business Administration

**EMBA 67040 OPERATIONS MANAGEMENT-EMBA**

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 Type(s): Lecture  
Department: Business Administration

**EMBA 67041 APPLIED STATISTICAL ANALYSIS-EMBA**

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 Type(s): Lecture  
Department: Business Administration

**EMBA 67042 MANAGEMENT INFORMATION SYSTEMS-EMBA**

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 Type(s): Lecture  
Department: Business Administration

**EMBA 67043 DYNAMICS OF LEADERSHIP FOR EXECUTIVES-EMBA**

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 Type(s): Lecture  
Department: Business Administration

**EMBA 67051 MARKETING MANAGEMENT-EMBA**

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 Type(s): Lecture  
Department: Business Administration

**EMBA 67058 MARKETING STRATEGY AND PLANNING-EMBA**

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 Type(s): Lecture  
Department: Business Administration

**EMBA 67061 FINANCIAL PLANNING AND STRATEGY-EMBA**

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 Type(s): Lecture  
Department: Business Administration

**EMBA 67062 MONEY AND CAPITAL MARKETS-EMBA**

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 business systems. Prerequisite: graduate standing.  
2.000 Credit hours  
2.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Business Administration

**EMBA 67070 ORGANIZATIONAL ANALYSIS AND DESIGN-EMBA**

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 Type(s): Lecture  
Department: Business Administration

**EMBA 67071 HUMAN RESOURCE MANAGEMENT-EMBA**

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 Type(s): Lecture  
Department: Business Administration

**EMBA 67082 LEGAL AND SOCIAL IMPACT ON MANAGERIAL DECISION-MAKING-EMBA**

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 Type(s): Lecture  
Department: Business Administration

**EMBA 67085 EXECUTIVE POLICIES AND PLANNING-EMBA**

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 Type(s): Lecture  
Department: Business Administration

**EMBA 67090 APPLIED RESEARCH DESIGN-EMBA**

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 Type(s): Lecture  
Department: Business Administration

**EMBA 67091 SEMINAR IN EXECUTIVE SKILLS DEVELOPMENT-EMBA**

(Repeatable for credit) 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 Type(s): Seminar  
Department: Business Administration

**EMBA 67191 SEMINAR IN CURRENT ISSUES FOR EXECUTIVE DEVELOPMENT-EMBA**

(Repeatable for credit) 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 Type(s): Seminar  
 Department: Business Administration

### **EMBA 67291 EMBA RESIDENCY SEMINAR**

(Repeatable for credit) A two-to-four-day intensive introduction to basic concepts and integration of EMBA program content. Emphasis on group analysis and/or simulation. Prerequisite: graduate standing.  
 1.000 or 2.000 Credit hours  
 1.000 or 2.000 Other hours  
 Levels: Graduate  
 Schedule Type(s): Seminar  
 Department: Business Administration

## **English (ENG)**

### **ENG 11001 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. Prerequisite: ACT English score 1-16; or SAT writing score 200-420; or COMPASS writing score of 0-68.  
 3.000 Credit hours  
 3.000 Lecture hours  
 Levels: Undergraduate  
 Schedule Type(s): Lecture  
 Department: English

### **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. Prerequisite: grade of C (2.000) or better in ENG 11001; and special approval.  
 3.000 Credit hours  
 3.000 Lecture hours  
 Levels: Undergraduate  
 Schedule Type(s): Lecture  
 Department: English  
 Course Attributes: Kent Core-Composition, LER-Composition, Transfer Module-Composition

### **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. Prerequisites: ACT English score of 17-26; or SAT writing score of 430-590; or Compass writing score 69 and above.  
 3.000 Credit hours  
 3.000 Lecture hours  
 Levels: Undergraduate  
 Schedule Type(s): Lecture  
 Department: English  
 Course Attributes: Kent Core-Composition, LER-Composition, Transfer Module-Composition

### **ENG 12001 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.

Prerequisite: none.  
 2.000 Credit hours  
 5.000 Lecture hours  
 Levels: Undergraduate  
 Schedule Type(s): Lecture  
 Department: English

### **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. Prerequisite: none.  
 2.000 Credit hours  
 5.000 Lecture hours  
 Levels: Undergraduate  
 Schedule Type(s): Lecture  
 Department: English

### **ENG 12003 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. Prerequisite: none.  
 2.000 Credit hours  
 5.000 Lecture hours  
 Levels: Undergraduate  
 Schedule Type(s): Lecture  
 Department: English

### **ENG 12004 ESL WRITING LEVEL IV**

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. Prerequisite: none.  
 2.000 Credit hours  
 5.000 Lecture hours  
 Levels: Undergraduate  
 Schedule Type(s): Lecture  
 Department: English

### **ENG 12005 ESL WRITING LEVEL V**

Introduction to the purpose, format and structure of an essay. Practice of narrative and explanatory essays. Prerequisite: none.  
 2.000 Credit hours  
 5.000 Lecture hours  
 Levels: Undergraduate  
 Schedule Type(s): Lecture  
 Department: English

### **ENG 12006 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. Prerequisite: none.  
 2.000 Credit hours  
 5.000 Lecture hours  
 Levels: Undergraduate  
 Schedule Type(s): Lecture  
 Department: English

### **ENG 12007 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. Prerequisite: none.  
 2.000 Credit hours  
 5.000 Lecture hours  
 Levels: Undergraduate

Schedule Type(s): Lecture  
 Department: English

### **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.  
 2.000 Credit hours  
 5.000 Lecture hours  
 Levels: Undergraduate  
 Schedule Type(s): Lecture  
 Department: English

### **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. Prerequisite: none.  
 2.000 Credit hours  
 5.000 Lecture hours  
 Levels: Undergraduate  
 Schedule Type(s): Lecture  
 Department: English

### **ENG 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.  
 2.000 Credit hours  
 5.000 Lecture hours  
 Levels: Undergraduate  
 Schedule Type(s): Lecture  
 Department: English

### **ENG 12095 SPECIAL TOPICS IN ESL**

(Repeatable twice) Overview of skills related to a special topic in second language learning. Prerequisite: none.  
 1.000 to 2.000 Credit hours  
 3.000 to 5.000 Lecture hours  
 Levels: Undergraduate  
 Schedule Type(s): Lecture  
 Department: English

### **ENG 12101 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. Prerequisite: none.  
 2.000 Credit hours  
 5.000 Lecture hours  
 Levels: Undergraduate  
 Schedule Type(s): Lecture  
 Department: English

### **ENG 12102 ESL READING LEVEL II**

Practice in basic reading strategies and development. Support of vocabulary development. Prerequisite: none.  
 2.000 Credit hours  
 5.000 Lecture hours  
 Levels: Undergraduate  
 Schedule Type(s): Lecture





Department: English

### ENG 12103 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. Prerequisites: none.  
2.000 Credit hours  
5.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### ENG 12104 ESL READING LEVEL IV

Practice of reading and summarizing strategies; skimming and scanning texts; support of vocabulary development. Prerequisites: none.  
2.000 Credit hours  
5.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### ENG 12105 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. Prerequisites: none.  
2.000 Credit hours  
5.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### ENG 12106 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. Prerequisites: none.  
2.000 Credit hours  
5.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### ENG 12107 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. Prerequisite: none.  
2.000 Credit hours  
5.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### ENG 12108 ESL READING LEVEL VIII

Practice identifying communicative functions of texts; practice reading strategies. Support of vocabulary development and extensive reading. Prerequisites: none.  
2.000 Credit hours  
5.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### ENG 12109 ESL READING LEVEL IX

Identifying communicative functions of texts; reading strategies; skimming and scanning. Support of vocabulary development and extensive reading. Prerequisites: none.  
2.000 Credit hours  
5.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### ENG 12110 ESL READING LEVEL X

Practice with communicative functions of texts; strategies for academic reading. Support of vocabulary development and extensive reading. Prerequisites: none.  
2.000 Credit hours  
5.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### ENG 12201 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. Prerequisite: none.  
2.000 Credit hours  
5.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### ENG 12202 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. Prerequisites: none.  
2.000 Credit hours  
5.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### ENG 12203 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. Prerequisites: none.  
2.000 Credit hours  
5.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### ENG 12204 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. Prerequisites: none.  
2.000 Credit hours  
5.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### ENG 12205 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. Prerequisites: none.  
2.000 Credit hours  
5.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### ENG 12206 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. Prerequisites: none.  
2.000 Credit hours  
5.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### ENG 12207 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. Prerequisites: none.  
2.000 Credit hours  
5.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### ENG 12208 ESL LISTENING LEVEL VIII

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.  
2.000 Credit hours  
5.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### ENG 12209 ESL LISTENING LEVEL IX

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.  
2.000 Credit hours  
5.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### 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.  
2.000 Credit hours  
5.000 Lecture hours



Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

**ENG 12301 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. Prerequisite: none.  
1.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

**ENG 12302 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. Prerequisites: none.  
1.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

**ENG 12303 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.  
1.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

**ENG 12304 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. Prerequisites: none.  
1.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

**ENG 12305 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. Prerequisites: none.  
1.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

**ENG 12306 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. Prerequisites: none.  
1.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

**ENG 12307 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. Prerequisites: none.  
1.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

**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.  
1.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

**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.  
1.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

**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.  
1.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

**ENG 12401 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. Prerequisite: none.  
2.000 Credit hours  
5.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

**ENG 12402 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. Prerequisites: none.  
2.000 Credit hours  
5.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

**ENG 12403 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. Prerequisites: none.  
2.000 Credit hours  
5.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

**ENG 12404 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. Prerequisites: none.  
2.000 Credit hours  
5.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

**ENG 12405 ESL GRAMMAR LEVEL V**

Application of word classes, especially verbs (tense and aspect), causal and phrasal verb syntax, verbal nouns, conjunctions as well as statement and question syntax, positive and negative clauses, and question tags as appropriate to level. Prerequisites: none.  
2.000 Credit hours  
5.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

**ENG 12406 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. Prerequisites: none.  
2.000 Credit hours  
5.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

**ENG 12407 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. Prerequisites: none.

2.000 Credit hours

5.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: English

**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.

2.000 Credit hours

5.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: English

**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.

2.000 Credit hours

5.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: English

**ENG 12410 ESL GRAMMAR 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.

2.000 Credit hours

5.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: English

**ENG 12500 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. Prerequisite: none.

1.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: English

**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.

1.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: English

**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.

1.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: English

**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.

2.000 Credit hours

5.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: English

**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.

2.000 Credit hours

5.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: English

**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 Type(s): Lecture

Department: English

**ENG 12708 ESL BUSINESS ENGLISH II**

Development of oral and written business communication skills. Prerequisite: minimum grade of C- (1.700) in ENG 12701; and special approval.

2.000 Credit hours

5.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: English

**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 Type(s): Lecture

Department: English

**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 Type(s): Lecture

Department: English

**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 Type(s): Lecture

Department: English

Course Attributes: Diversity Course-Domestic

**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 Type(s): Lecture

Department: English

Course Attributes: Diversity Course-Domestic

**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 Type(s): Lecture

Department: English

Course Attributes: Diversity Course-Domestic

**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 27 and above; or SAT Writing score of 600 and above.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate



Schedule Type(s): Lecture  
Department: English  
Course Attributes: Kent Core-Composition, LER-Composition, Transfer Module-Composition

### **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 Type(s): Lecture  
Department: English  
Course Attributes: Kent Core-Humanities, LER-Humanities, Transfer Module-Humanities

### **ENG 22071 GREAT BOOKS I**

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 Type(s): Lecture  
Department: English  
Course Attributes: Kent Core-Humanities, LER-Humanities, Transfer Module-Humanities

### **ENG 22072 GREAT BOOKS II**

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  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English  
Course Attributes: Kent Core-Humanities, LER-Humanities, Transfer Module-Humanities

### **ENG 22073 MAJOR MODERN WRITERS: BRITISH AND UNITED STATES**

Introduction to British and U.S. writers of the 20th century; study of their works in their literary and cultural contexts. Prerequisite: none.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English  
Course Attributes: Kent Core-Humanities, LER-Humanities, Transfer 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 Type(s): Lecture  
Department: English

### **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.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English  
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 Type(s): Lecture  
Department: English  
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 HONR 10197.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### **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 HONR 10197.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### **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 Type(s): Lecture  
Department: English

### **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 Type(s): Lecture  
Department: English

### **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 Type(s): Lecture  
Department: English  
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 Type(s): Lecture  
Department: English

### **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 Type(s): Lecture  
Department: English

### **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 Type(s): Lecture  
Department: English

### **ENG 30063 BUSINESS AND PROFESSIONAL WRITING**

Analysis of how textual genre functions in business and professional settings. Students gain extensive individual and collaborative practice writing in these genres. Prerequisite: ENG 21011 or HONR 10297; and junior standing.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture





Department: English  
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 Type(s): Lecture  
Department: English

### **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 Type(s): Lecture  
Department: English

### **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 Type(s): Lecture  
Department: English  
Course Attributes: Experiential Learning Requirement

### **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 Type(s): Lecture  
Department: English

### **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 Type(s): Lecture  
Department: English

### **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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### **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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### **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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### **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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### **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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### **ENG 31001 FUNDAMENTAL ENGLISH GRAMMAR**

Study of grammatical structures and matters of usage and style in edited U.S. English.  
Prerequisite: none.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### **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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### **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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate

Schedule Type(s): Lecture  
Department: English

### **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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### **ENG 31005 CHILD SECOND LANGUAGE ACQUISITION**

Explores theory, research and teaching/learning applications of second language acquisition in children. Prerequisite: none.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### **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 Type(s): Lecture  
Department: English  
Course Attributes: Writing Intensive Course

### **ENG 31007 TESL PEDAGOGY**

Theoretical bases, approaches, techniques of second language pedagogy at the elementary and secondary levels. Inquiry into ESL methods, materials and lesson planning. Prerequisite: none.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### **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: none.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### **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.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: English

### **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 Type(s): Lecture

Department: English

### **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 Type(s): Lecture

Department: English

### **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 Type(s): Lecture

Department: English

### **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 Type(s): Lecture

Department: English

### **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 Type(s): Lecture

Department: English

### **ENG 33010 AFRICAN-AMERICAN LITERATURE TO 1900**

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 Type(s): Lecture

Department: English

### **ENG 33012 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

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: English

### **ENG 33013 PAN-AFRICAN WOMEN'S LITERATURE**

Introduces students to literary works by African and Caribbean women. Prerequisite: ENG 11011.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: English

### **ENG 33014 AFRICAN-AMERICAN WOMEN'S LITERATURE**

Introduces students to literary works by African-American women. Prerequisite: ENG 11011.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: English

### **ENG 33015 AFRICAN LITERATURES**

Examines works of major 20th-century African, African American and Caribbean writers and intellectuals. Authors include Niane, Achebe, Emecheta, Prince, Hurston, Hughes, Césaire, Senghor, Soyinka and many others. Prerequisite: ENG 11011 or HONR 10197.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: English

### **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 Type(s): Lecture

Department: English

### **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 Type(s): Lecture

Department: English

### **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 Type(s): Lecture

Department: English

### **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

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: English

### **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.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: English

### **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.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: English

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.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: English



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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### 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: junior standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### 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 30001; and ENG 25001 or ENG 25002.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### 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 Type(s): Lecture  
Department: English

### 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 Type(s): Lecture  
Department: English

### 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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### 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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### 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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English  
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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### 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 30001; and ENG 25001 or ENG 25002.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### 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 30001; and ENG 25001 or ENG 25002.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### 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 11011 or ENG 11002 or HONR 10197; and ENG 24001; and junior standing.  
3.000 Credit hours

3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### ENG 38895 SPECIAL TOPICS IN WRITING

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 Type(s): Lecture  
Department: English

### 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 Type(s): Lecture  
Department: English

### ENG 39195 SPECIAL TOPICS IN DRAMA

(Repeatable for credit when topic varies) Study of selected topics, themes, or periods in drama such as Gender Construction, Obsession, or Medieval Drama. Prerequisite: junior standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### ENG 39295 SPECIAL TOPICS IN POETRY

(Repeatable for credit when topics varies) Study of selected topics in poetry such as poetic form, historical and cultural contexts, and artistic movements. Prerequisite: ENG 21011 or HONR 10297.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### ENG 39395 SPECIAL TOPICS IN FICTION

(Repeatable for credit when topics varies) Study of selected topics in fiction such as the autobiographical novel, the novella and the short story. Prerequisite: ENG 21011 or HONR 10297.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### 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 30001; and ENG 25001 or ENG 25002.  
3.000 Credit hours  
3.000 Lecture hours



Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### **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 30001; and ENG 25001 or ENG 25002.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### **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 30001; and ENG 25001 or ENG 25002.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### **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 Type(s): Lecture  
Department: English

### **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 Type(s): Lecture  
Department: English

### **ENG 40010 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: ENG 25001 and 25002 and 30001; and junior standing and special approval.

2.000 Credit hours  
2.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### **ENG 41001 SOCIOLINGUISTICS IN SCHOOLING**

Examines the interactions between society and language. Explores pedagogical implications of language variation. Prerequisite: ENG 21011 or HONR 10297.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English  
Course Attributes: Writing Intensive Course

### **ENG 41002 COMPUTERS IN L2 TEACHING**

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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

### **ENG 41009 STUDENT TEACHING**

Supervised practicum in the teaching of English as a Second Language, grades pre-12. Prerequisite: ITEC 19525 and EPSY 29525 and CULT 29535.

Corequisite: ENG 41525.  
9.000 Credit hours  
9.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Practicum  
Department: English  
Course Attributes: Experiential Learning Requirement

### **ENG 41092 ESL/EFL PRACTICUM I**

(Repeatable for credit) This course provides students practical teaching opportunities in teaching English as a second/foreign language. Prerequisite: none.

3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Practicum  
Department: English  
Course Attributes: Experiential Learning Requirement

### **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 Type(s): Workshop  
Department: English

### **ENG 41094 COLLEGE TEACHING ASSISTANT**

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 Type(s): Field Experience, Practicum  
Department: English  
Course Attributes: Experiential Learning Requirement

### **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 Type(s): Individual Investigation  
Department: English

### **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 Type(s): Research  
Department: English  
Course Attributes: Experiential Learning Requirement

### **ENG 41192 ESL/EFL PRACTICUM II**

This course provides students seeking educational licensure opportunities in teaching English as a second/foreign language. Prerequisite: none.

3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Practicum  
Department: English  
Course Attributes: Experiential Learning Requirement

### **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 Type(s): Research  
Department: English  
Course Attributes: Experiential Learning Requirement

### **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. Prerequisites: none.

3.000 or 6.000 Credit hours  
3.000 or 6.000 Other hours  
Levels: Undergraduate





Schedule Type(s): Practicum  
Department: English  
Course Attributes: Experiential Learning  
Requirement

#### **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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

#### **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  
Levels: Undergraduate  
Schedule Type(s): Field Experience, Practicum  
Department: English  
Course Attributes: Experiential Learning  
Requirement

#### **ENG 42192 SERVICE LEARNING IN ENGLISH STUDIES**

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  
Levels: Undergraduate  
Schedule Type(s): Field Experience, Practicum  
Department: English  
Course Attributes: Experiential Learning  
Requirement

#### **ENG 43092 TEACHING POETRY IN THE SCHOOLS**

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.  
3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Field Experience, Practicum  
Department: English  
Course Attributes: Experiential Learning  
Requirement

#### **ENG 46203 TWENTIETH-CENTURY EUROPEAN LITERATURE**

Major European writers of the 20th century; modernism, post-modernism and related movements. Prerequisite: Junior standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

#### **ENG 49091 SENIOR SEMINAR**

(Repeatable for credit) Intensive study of a special topic in English studies. Students will complete a long writing project during the semester. Enrollment limited to English majors.  
Prerequisite: ENG 30001; and ENG 25001 or ENG 25002.  
3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Seminar  
Department: English  
Course Attributes: Writing Intensive Course

#### **ENG 49095 SENIOR SPECIAL TOPICS**

(Repeatable for credit) Intensive study of topics that will vary each semester. Prerequisite: ENG 30001; and ENG 25001 or ENG 25002.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: English

#### **ENG 51002 COMPUTERS IN SECOND LANGUAGE TEACHING**

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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: English

#### **ENG 51009 STUDENT TEACHING**

Supervised practicum in the teaching of ESL, grades P-12. Prerequisite: Admission to student teaching and graduate standing.  
9.000 Credit hours  
9.000 Other hours  
Levels: Graduate  
Schedule Type(s): Practicum  
Department: English

#### **ENG 56203 TWENTIETH-CENTURY EUROPEAN LITERATURE**

Major European writers of the 20th century: Modernism, Postmodernism and related movements. Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: English

#### **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 Type(s): Lecture  
Department: English

#### **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 Type(s): Lecture  
Department: English

#### **ENG 62291 SEMINAR: BRITISH LITERATURE 1800 TO PRESENT**

(Repeatable for credit) 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 Type(s): Seminar  
Department: English

#### **ENG 63001 METHODOLOGY OF TESL**

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 Type(s): Lecture  
Department: English

#### **ENG 63033 THEORIES IN SECOND LANGUAGE ACQUISITION**

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  
Schedule Type(s): Lecture  
Department: English

#### **ENG 63034 LITERATE PRACTICES AND SOCIOLINGUISTICS**

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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: English

#### **ENG 63037 THE PRAGMATICS OF CONVERSATION**

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 Type(s): Lecture  
Department: English

**ENG 63038 TEACHING LITERATURE AND CULTURE**

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 Type(s): Lecture

Department: English

**ENG 63039 SECOND LANGUAGE CURRICULUM AND TESTING**

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 Type(s): Lecture

Department: English

**ENG 63040 LINGUISTICS FOR THE LANGUAGE PROFESSIONS**

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 Type(s): Lecture

Department: English

**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 Type(s): Lecture

Department: English

**ENG 63043 SECOND LANGUAGE WRITING**

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 Type(s): Lecture

Department: English

**ENG 63044 SECOND LANGUAGE READING**

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 Type(s): Seminar

Department: English

**ENG 63098 RESEARCH IN SECOND LANGUAGE PEDAGOGY**

(Repeatable for credit) Students will learn how second language research influences their teaching practices by studying research texts and recent journal articles and conducting a research project. Prerequisite: Special approval of instructor and graduate standing.

3.000 Credit hours

3.000 Other hours

Levels: Graduate

Schedule Type(s): Research

Department: English

**ENG 63391 SEMINAR: LINGUISTICS**

(Repeatable for credit) 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 Type(s): Seminar

Department: English

**ENG 64070 WRITING POETRY**

Advanced workshop in creative writing.

Prerequisite: Graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: English

**ENG 64071 WRITING FICTION**

Advanced workshop in the writing of fiction.

Prerequisite: Graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: English

**ENG 65011 INTRODUCTION TO THE FIELD OF WRITING: THEORY RESEARCH/PRACTICE**

Survey introduces writing studies from various perspectives: rhetorical and composition theory, disciplinarily and professionalization, several 20th century theoretical influences and Soviet activity theory. Prerequisite: Graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: English

**ENG 65012 READING AND INTERPRETING RESEARCH ON WRITING**

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 Type(s): Lecture

Department: English

**ENG 65022 RHETORICAL THEORY: GREEK AND ROMAN**

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 Type(s): Lecture

Department: English

**ENG 65023 RHETORICAL THEORY: 18TH, 19TH AND 20TH CENTURIES**

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

Levels: Graduate

Schedule Type(s): Lecture

Department: English

**ENG 65027 ROLE OF COMPOSITION**

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

Levels: Graduate

Schedule Type(s): Seminar

Department: English

**ENG 65035 LINGUISTICS FOR RHETORICIANS**

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

Levels: Graduate

Schedule Type(s): Seminar

Department: English

**ENG 65044 RESEARCH DESIGN**

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

Levels: Graduate

Schedule Type(s): Seminar

Department: English

**ENG 65051 LITERACY: FUNCTIONS, PRACTICES AND HISTORY**

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

Levels: Graduate

Schedule Type(s): Lecture

Department: English

#### **ENG 65052 WRITING ACTIVITY AS SOCIAL PRACTICE**

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 Type(s): Lecture

Department: English

#### **ENG 65053 WRITING TECHNOLOGIES**

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 Type(s): Lecture

Department: English

#### **ENG 65057 SEMEIOTICS**

(Cross-listed with MCLS 60020 and PHIL 61055) An introduction to contemporary theories of semeiotics 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 Type(s): Lecture

Department: English

#### **ENG 66002 BRITISH AND IRISH LITERATURE FROM THE EARLY ROMANTICS ONWARD**

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 Type(s): Lecture

Department: English

#### **ENG 66051 SHAKESPEARE**

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 Type(s): Lecture

Department: English

#### **ENG 66101 LITERATURE OF THE UNITED STATES THROUGH THE CIVIL WAR**

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 Type(s): Lecture

Department: English

#### **ENG 66103 ETHNIC LITERATURE OF THE UNITED STATES**

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 Type(s): Lecture

Department: English

#### **ENG 66104 AFRICAN-AMERICAN LITERATURE**

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 Type(s): Lecture

Department: English

#### **ENG 66302 POST-COLONIAL LITERATURE IN ENGLISH**

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 Type(s): Lecture

Department: English

#### **ENG 66401 LITERARY MOVEMENTS**

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 Type(s): Lecture

Department: English

#### **ENG 66501 NARRATIVE LITERATURE**

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 Type(s): Lecture

Department: English

#### **ENG 66502 DRAMATIC LITERATURE**

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 Type(s): Lecture

Department: English

#### **ENG 66503 POETRY AND/OR POETIC LITERATURE**

Close reading of selected poems and other poetic forms by writers of Britain, Ireland or 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 Type(s): Lecture

Department: English

#### **ENG 66504 WOMEN WRITERS**

Close readings of important works written in English by women from one or more periods in literary history. Prerequisite: Graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: English

#### **ENG 66595 SPECIAL TOPICS: AUTHORS AND AUTHORSHIP**

(Repeatable for credit) 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 Type(s): Lecture

Department: English

#### **ENG 66706 METHODS IN THE STUDY OF LITERATURE**

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 Type(s): Lecture

Department: English

#### **ENG 66791 SEMINAR: BRITISH AND IRISH LITERATURE**

(Repeatable for credit) 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 Type(s): Seminar

Department: English

**ENG 66891 SEMINAR: LITERATURE OF THE UNITED STATES**

(Repeatable for credit) 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 Type(s): Seminar

Department: English

**ENG 66895 SPECIAL TOPICS**

(Repeatable for credit) Study of selected special topics in literature. Prerequisite: Graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: English

**ENG 66991 SEMINAR: GENRE**

(Repeatable for credit) 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 Type(s): Seminar

Department: English

**ENG 67101 FEMINIST THEORY AND CRITICISM**

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

Levels: Graduate

Schedule Type(s): Lecture

Department: English

**ENG 67102 GENDER THEORY AND CRITICISM**

An overview of the current field of literature-related discourses on gender construction, with attention to crucial historical texts which have shaped the contemporary debate. Prerequisite: Graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: English

**ENG 67103 PSYCHOANALYTIC THEORY AND CRITICISM**

(Repeatable for credit) Study of important issues and concepts in psychoanalytic theory and criticism. Prerequisite: Graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: English

**ENG 67104 SOCIAL AND CULTURAL THEORY AND CRITICISM**

(Repeatable for credit) 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

Levels: Graduate

Schedule Type(s): Lecture

Department: English

**ENG 67591 SEM: THEORY AND CRITICISM**

(Repeatable for credit when topic varies) In-depth study of important topics in contemporary theory and criticism. Prerequisite: Graduate standing.

3.000 Credit hours

3.000 Other hours

Levels: Graduate

Schedule Type(s): Seminar

Department: English

**ENG 67601 DOCUMENTS AND TEXTS**

Surveys the forms in which written texts are preserved and the ways they are transmitted, revised and mediated. Emphasizes early and modern printing and analytical bibliography. Prerequisite: Graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: English

**ENG 67691 SEMINAR: SCHOLARLY EDITING**

(Repeatable for credit when topic varies) In-depth treatment of various topics from modern scholarly editing. Prerequisite: Graduate standing.

3.000 Credit hours

3.000 Other hours

Levels: Graduate

Schedule Type(s): Seminar

Department: English

**ENG 68093 VARIABLE TITLE WORKSHOP IN ENGLISH**

(Repeatable for a maximum 8 credit hours)

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 Type(s): Workshop

Department: English

**ENG 68096 INDIVIDUAL INVESTIGATION**

(Repeatable for credit) 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 Type(s): Individual Investigation

Department: English

**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 Type(s): Research

Department: English

**ENG 68392 PRACTICUM IN TEACHING COLLEGE ENGLISH**

(Repeatable for credit) Practical training and experience in teaching beginning composition courses. Prerequisite: Graduate standing.

3.000 Credit hours

3.000 Other hours

Levels: Graduate

Schedule Type(s): Practicum

Department: English

**ENG 68492 PRACTICUM IN TEACHING INTERNATIONAL STUDENTS**

(Repeatable for credit) Practical training and experience in teaching English composition to international students. Prerequisite: Graduate standing.

3.000 Credit hours

3.000 Other hours

Levels: Graduate

Schedule Type(s): Practicum

Department: English

**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 Type(s): Master's Thesis

Department: English

**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 Type(s): Master's Thesis

Department: English

**ENG 72291 SEMINAR: BRITISH LITERATURE 1800 TO PRESENT**

(Repeatable for credit) 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 Type(s): Seminar

Department: English

**ENG 73001 METHODOLOGY OF TESL**

The theory and methodology of teaching English as a second language. Prerequisite: Doctoral standing.

3.000 Credit hours





3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: English

### **ENG 73033 THEORIES IN SECOND LANGUAGE ACQUISITION**

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 Type(s): Lecture  
Department: English

### **ENG 73034 LITERATE PRACTICES AND SOCIOLINGUISTICS**

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 Type(s): Lecture  
Department: English

### **ENG 73391 SEMINAR: LINGUISTICS**

(Repeatable for credit) 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 Type(s): Seminar  
Department: English

### **ENG 74070 WRITING POETRY**

Advanced workshop in creative writing. Prerequisite: Doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: English

### **ENG 74071 WRITING FICTION**

Advanced workshop in the writing of fiction. Prerequisite: Doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: English

### **ENG 75011 INTRODUCTION TO THE FIELD OF WRITING: THEORY RESEARCH/PRACTICE**

Survey introduces writing studies from various perspectives: rhetorical and composition theory, disciplinarily and professionalization, several 20th century theoretical influences and Soviet activity theory. Prerequisite: Doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: English

### **ENG 75012 READING AND INTERPRETING RESEARCH ON WRITING**

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 Type(s): Lecture  
Department: English

### **ENG 75022 RHETORICAL THEORY: GREEK AND ROMAN**

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 Type(s): Lecture  
Department: English

### **ENG 75023 RHETORICAL THEORY: 18TH, 19TH AND 20TH CENTURIES**

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 Type(s): Lecture  
Department: English

### **ENG 75027 ROLE OF COMPOSITION**

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  
Levels: Graduate  
Schedule Type(s): Seminar  
Department: English

### **ENG 75035 LINGUISTICS FOR RHETORICIANS**

Provides an introduction to linguistic theories, concepts and tools relevant to the teaching an researching of various dimensions of written texts. Prerequisite: doctoral standing.  
3.000 Credit hours  
3.000 Other hours  
Levels: Graduate  
Schedule Type(s): Seminar  
Department: English

### **ENG 75044 RESEARCH DESIGN**

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 Type(s): Seminar  
Department: English

### **ENG 75051 LITERACY: FUNCTIONS, PRACTICES AND HISTORY**

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 Type(s): Lecture  
Department: English

### **ENG 75052 WRITING ACTIVITY AS SOCIAL PRACTICE**

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 Type(s): Lecture  
Department: English

### **ENG 75053 WRITING TECHNOLOGIES**

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 Type(s): Lecture  
Department: English

### **ENG 75057 SEMEIOTICS**

An introduction to contemporary theories of semeiotics and to the application of those theories to linguistics literature translation and technology. Prerequisite: Doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: English

### **ENG 76002 BRITISH AND IRISH LITERATURE FROM THE EARLY ROMANTICS ONWARD**

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 Type(s): Lecture  
Department: English

### **ENG 76051 SHAKESPEARE**

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 Type(s): Lecture  
Department: English

**ENG 76101 LITERATURE OF THE UNITED STATES THROUGH THE CIVIL WAR**

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 Type(s): Lecture  
Department: English

**ENG 76103 ETHNIC LITERATURE OF THE UNITED STATES**

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: Doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: English

**ENG 76104 AFRICAN-AMERICAN LITERATURE**

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 Type(s): Lecture  
Department: English

**ENG 76302 POST-COLONIAL LITERATURE IN ENGLISH**

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 Type(s): Lecture  
Department: English

**ENG 76401 LITERARY MOVEMENTS**

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 Type(s): Lecture  
Department: English

**ENG 76501 NARRATIVE LITERATURE**

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 Type(s): Lecture  
Department: English

**ENG 76502 DRAMATIC LITERATURE**

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 Type(s): Lecture  
Department: English

**ENG 76503 POETRY AND/OR POETIC LITERATURE**

Close reading of selected poems and other poetic forms by writers of Britain, Ireland or 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 Type(s): Lecture  
Department: English

**ENG 76504 WOMEN WRITERS**

Close readings of important works written in English by women from one or more periods in literary history. Prerequisite: Doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: English

**ENG 76595 SPECIAL TOPICS: AUTHORS AND AUTHORSHIP**

(Repeatable for credit) 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 Type(s): Lecture  
Department: English

**ENG 76706 METHODS IN THE STUDY OF LITERATURE**

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 Type(s): Lecture  
Department: English

**ENG 76791 SEMINAR: BRITISH AND IRISH LITERATURE**

(Repeatable for credit) In-depth treatment of various topics from old English literature, Beowulf, Middle English literature, and Chaucer. Prerequisite: Doctoral standing.  
3.000 Credit hours  
3.000 Other hours  
Levels: Graduate  
Schedule Type(s): Seminar  
Department: English

**ENG 76891 SEMINAR: LITERATURE OF THE UNITED STATES**

(Repeatable for credit) 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.  
3.000 Credit hours  
3.000 Other hours  
Levels: Graduate  
Schedule Type(s): Seminar  
Department: English

**ENG 76895 SPECIAL TOPICS**

(Repeatable for credit) Study of selected special topics in literature. Prerequisite: Doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: English

**ENG 76991 SEMINAR: GENRE**

(Repeatable for credit) 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.  
3.000 Credit hours  
3.000 Other hours  
Levels: Graduate  
Schedule Type(s): Seminar  
Department: English

**ENG 77101 FEMINIST THEORY AND CRITICISM**

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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: English

**ENG 77102 GENDER THEORY AND CRITICISM**

An overview of the current field of literature-related discourses on gender construction, with attention to crucial historical texts which have shaped the contemporary debate. Prerequisite: Doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: English

**ENG 77103 PSYCHOANALYTIC THEORY AND CRITICISM**

(Repeatable for credit) 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 Type(s): Lecture  
Department: English



### ENG 77104 SOCIAL AND CULTURAL THEORY AND CRITICISM

(Repeatable for credit) 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 Type(s): Lecture

Department: English

### ENG 77591 SEMINAR: THEORY AND CRITICISM

(Repeatable for credit) 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 Type(s): Seminar

Department: English

### ENG 77601 DOCUMENTS AND TEXTS

Surveys the forms in which written texts are preserved and the ways they are transmitted, revised and mediated. Emphasizes early and modern printing and analytical bibliography. Prerequisite: Doctoral standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: English

### ENG 77691 SEMINAR: SCHOLARLY EDITING

(Repeatable for credit when topic varies) In-depth treatment of various topics from modern scholarly editing. Prerequisite: Doctoral standing.

3.000 Credit hours

3.000 Other hours

Levels: Graduate

Schedule Type(s): Seminar

Department: English

### ENG 78096 INDIVIDUAL INVESTIGATION

(Repeatable for credit) 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 Type(s): Individual Investigation

Department: English

### ENG 78392 PRACTICUM IN TEACHING COLLEGE ENGLISH

(Repeatable for credit) Practical training and experience in teaching beginning composition courses. Prerequisite: Doctoral standing.

3.000 Credit hours

3.000 Other hours

Levels: Graduate

Schedule Type(s): Practicum

Department: English

### ENG 78492 PRACTICUM IN TEACHING INTERNATIONAL STUDENTS

(Repeatable for credit) Practical training and experience in teaching English composition to

international students. . Prerequisite: Doctoral standing.

3.000 Credit hours

3.000 Other hours

Levels: Graduate

Schedule Type(s): Practicum

Department: English

### ENG 85024 DOMAIN RHETORICS AND THE CONSTRUCTION OF KNOWLEDGE

Course examines disciplinarily 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 Type(s): Lecture

Department: English

### 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 Type(s): Lecture

Department: English

### ENG 85033 THE RHETORICAL NATURE AND FUNCTION OF EXTENDED DISCOURSE

Examines rhetorical nature and function of written discourse from social, cultural and psychological perspectives and how discourse production and interpretation interact with relevant contexts. Prerequisite: ENG 63031 or ENG 73031; and 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 Type(s): Lecture

Department: English

### 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 Type(s): Lecture

Department: English

### ENG 85042 DISCOURSE ANALYSIS

Course explores various approaches to discourse analysis (e.g., speech act theory pragmatics

ethnography of communication conversation analysis) and applies them to linguistic analyses of discourse. Prerequisite: ENG 63031 or ENG 73031; and 9 doctoral hours in 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 Type(s): Lecture

Department: English

### 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 Type(s): Lecture

Department: English

### 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 Type(s): Lecture

Department: English

### 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 Type(s): Lecture

Department: English

### 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.

1.000 to 15.000 Credit hours

1.000 to 15.000 Other hours

Levels: Graduate

Schedule Type(s): Research

Department: English

### 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.



15.000 Credit hours  
15.000 Other hours  
Levels: Graduate  
Schedule Type(s): Dissertation  
Department: English

### **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.  
15.000 Credit hours  
15.000 Other hours  
Levels: Graduate  
Schedule Type(s): Dissertation  
Department: English

## ***Entrepreneurship (ENTR)***

### **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 Type(s): Lecture  
Department: Marketing and Entrepreneurship

### **ENTR 27065 ENTREPRENEURIAL EXPERIENCE I**

First of two-course sequence designed to immerse entrepreneurship majors into the dynamics of starting and running a micro-business. Focuses on identifying market needs, researching financial viability of business venture to meet that need, and marshaling the resources to launch a business. Prerequisites: BUS 10123; and ENTR 27056; and minimum cumulative GPA of 2.250; and entrepreneurship (ENTR) major.  
3.000 Credit hours  
3.000 Lab hours  
Levels: Undergraduate  
Schedule Type(s): Laboratory  
Department: Marketing and Entrepreneurship  
Course Attributes: Experiential Learning Requirement

### **ENTR 27075 ENTREPRENEURIAL EXPERIENCE II**

Continuation of Entrepreneurial Experience I; focuses on growing and running the micro-business throughout the academic year with planned liquidation or shut down by the end of the academic year. Prerequisites: ENTR 27056 with a minimum C (2.000) grade; and BUS 10123; and ENTR 27065; and minimum cumulative GPA of 2.250; and entrepreneurship (ENTR) major.  
3.000 Credit hours  
3.000 Lab hours  
Levels: Undergraduate  
Schedule Type(s): Laboratory  
Department: Marketing and Entrepreneurship

### **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: none.  
1.000 Credit hours  
1.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Marketing and Entrepreneurship

### **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 2.250; and entrepreneurship (ENTR) major or minor.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Marketing and Entrepreneurship

### **ENTR 37065 ENTREPRENEURIAL FINANCE**

Introduces students to issues related to capital formation in, and the financial management of, new or young ventures. Students are introduced to sources of capital. The majority of the course focuses on how to identify and substantiate capital Requirements, manage cash flows and grow appropriately in a capital-constrained environment. Prerequisites: ACCT 23020; and ECON 22060; and ENTR 27056; and minimum cumulative GPA of 2.250; and entrepreneurship (ENTR) major or minor.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Marketing and Entrepreneurship

### **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 2.250; and entrepreneurship (ENTR) major or minor.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Marketing and Entrepreneurship

### **ENTR 37192 PRACTICUM IN ENTREPRENEURSHIP**

(Repeatable for a total of 3 credit hours) Supervised work in an entrepreneurially oriented organization to obtain experience in operating a small or entrepreneurial firm. Prerequisites: ENTR 27056; and minimum cumulative GPA of

2.250; and entrepreneurship (ENTR) major or minor.  
1.000 to 3.000 Credit hours  
1.000 to 3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Practicum  
Department: Marketing and Entrepreneurship  
Course Attributes: Experiential Learning Requirement

### **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 2.250.  
1.000 to 4.000 Credit hours  
1.000 to 4.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Marketing and Entrepreneurship

### **ENTR 45096 INDIVIDUAL INVESTIGATION IN ENTREPRENEURSHIP**

(Repeatable for credit) Independent investigation of appropriate problem undertaken by a senior entrepreneurship major. Prerequisite: special approval.  
1.000 to 3.000 Credit hours  
1.000 to 3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Individual Investigation  
Department: Marketing and Entrepreneurship

### **ENTR 47045 ENTREPRENEURIAL LEADERSHIP I**

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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Marketing and Entrepreneurship

### **ENTR 47046 ENTREPRENEURIAL LEADERSHIP II**

Continuation of Entrepreneurial Leadership I. Focuses on the practical aspects of mentoring students in ENTR 27065 or ENTR 27075 with respect to starting and growing their ventures. Puts a student in a position of a mentor. Places special attention on different approaches to leadership, team formation, and effective team management. Prerequisite: Entrepreneurship (ENTR) major; and minimum cumulative 2.250 GPA; and ENTR 47045.  
1.000 to 3.000 Credit hours  
1.000 to 3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Marketing and Entrepreneurship

### **ENTR 47065 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 37065 and 37075 and entrepreneurship (ENTR) major.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Marketing and Entrepreneurship

Course Attributes: Writing Intensive Course

#### **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 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Marketing and Entrepreneurship

#### **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 2.250.

1.000 to 4.000 Credit hours

1.000 to 4.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Marketing and Entrepreneurship

#### **ENTR 47292 ENTREPRENEURIAL INTERNSHIP**

(Repeatable for a total of 3 credit hours)

Preparation of research report concurrent with on-the-job experience with cooperating business or other organization. Repeatable up to 6 credit hours. Prerequisites: ENTR 27075; and minimum cumulative GPA of 2.250; and entrepreneurship (ENTR) major; and special approval.

1.000 to 6.000 Credit hours

1.000 to 6.000 Other hours

Levels: Undergraduate

Schedule Type(s): Practicum

Department: Marketing and Entrepreneurship

Course Attributes: Experiential Learning

Requirement

### ***Epidemiology (EPI)***

#### **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 Type(s): Individual Investigation

Department: Epidemiology and Biostatistics

#### **EPI 52017 FUNDAMENTALS OF PUBLIC HEALTH EPIDEMIOLOGY**

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 Type(s): Lecture

Department: Epidemiology and Biostatistics

#### **EPI 60191 VARIABLE CONTENT SEMINAR IN EPIDEMIOLOGY**

(Repeatable for credit) 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 Type(s): Seminar

Department: Epidemiology and Biostatistics

#### **EPI 60195 SPECIAL TOPICS IN EPIDEMIOLOGY**

(Repeatable for a maximum 6 credit hours) Special topics to sample new offerings on topics in epidemiology. Prerequisites (edited): Graduate standing.

1.000 to 3.000 Credit hours

1.000 to 3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Epidemiology and Biostatistics

#### **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 Type(s): Lecture

Department: Epidemiology and Biostatistics

#### **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 Type(s): Lecture

Department: Epidemiology and Biostatistics

#### **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 Type(s): Lecture

Department: Epidemiology and Biostatistics

#### **EPI 63017 EPIDEMIOLOGICAL ANALYSIS**

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 Type(s): Lecture

Department: Epidemiology and Biostatistics

#### **EPI 63034 LONGITUDINAL DATA ANALYSIS**

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 Type(s): Lecture

Department: Epidemiology and Biostatistics

#### **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 Type(s): Lecture  
Department: Epidemiology and Biostatistics

#### **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 Type(s): Lecture  
Department: Epidemiology and Biostatistics

#### **EPI 73025 EMERGING ISSUES IN INFECTIOUS DISEASE 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 Type(s): Lecture  
Department: Epidemiology and Biostatistics

#### **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 Type(s): Lecture  
Department: Epidemiology and Biostatistics

#### **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 Type(s): Lecture  
Department: Epidemiology and Biostatistics

#### **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 Type(s): Lecture  
Department: Epidemiology and Biostatistics

#### **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 Type(s): Lecture  
Department: Epidemiology and Biostatistics

#### **EPI 73034 LONGITUDINAL DATA ANALYSIS**

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  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Epidemiology and Biostatistics

#### **EPI 80191 VARIABLE CONTENT SEMINAR IN EPIDEMIOLOGY**

(Repeatable for a maximum of 6 credit hours)  
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  
Levels: Graduate  
Schedule Type(s): Seminar  
Department: Epidemiology and Biostatistics

#### **EPI 80195 SPECIAL TOPICS IN EPIDEMIOLOGY**

(Repeatable for a maximum of 6 credits hours)  
Special topics to sample new offerings on topics in epidemiology. Prerequisites (edited): Doctoral standing.

1.000 to 3.000 Credit hours  
1.000 to 3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Epidemiology and Biostatistics

#### **EPI 83017 EPIDEMIOLOGICAL ANALYSIS**

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 Type(s): Lecture  
Department: Epidemiology and Biostatistics

### **Educational Psychology (EPSY)**

#### **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 Type(s): Lecture  
Department: Lifespan Development and Educational Sciences  
Course Attributes: TAG Education

#### **EPSY 49525 RELATIONAL LEARNING IN EDUCATION**

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-led research. Course may be repeated for maximum 9 credit hours. Prerequisite: special approval.  
3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Seminar  
Department: Lifespan Development and Educational Sciences

#### **EPSY 50093 VARIABLE TITLE WORKSHOP IN EDUCATIONAL PSYCHOLOGY**

(Repeatable for a maximum of 6 credit hours) 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 Type(s): Workshop  
Department: Lifespan Development and Educational Sciences

#### **EPSY 60199 THESIS I**

This 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 Type(s): Master's Thesis  
Department: Lifespan Development and Educational Sciences

#### **EPSY 60299 THESIS II**

This student 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 Type(s): Master's Thesis  
Department: Lifespan Development and Educational Sciences

#### **EPSY 65520 CHILD AND ADOLESCENT DEVELOPMENT**

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 Type(s): Lecture  
Department: Lifespan Development and Educational Sciences

#### **EPSY 65521 ADULT DEVELOPMENT**

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 Type(s): Lecture  
Department: Lifespan Development and Educational Sciences

#### **EPSY 65523 LIFE SPAN DEVELOPMENT**

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 Type(s): Lecture  
Department: Lifespan Development and Educational Sciences

#### **EPSY 65524 LEARNING THEORIES**

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 Type(s): Lecture  
Department: Lifespan Development and Educational Sciences

#### **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 Type(s): Lecture  
Department: Lifespan Development and Educational Sciences

#### **EPSY 68901 PSYCHOLOGICAL FOUNDATIONS OF EDUCATION I**

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 Type(s): Lecture  
Department: Lifespan Development and Educational Sciences

#### **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 Type(s): Seminar  
Department: Lifespan Development and Educational Sciences

#### **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 Type(s): Lecture  
Department: Lifespan Development and Educational Sciences

#### **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 Type(s): Individual Investigation  
Department: Lifespan Development and Educational Sciences

#### **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 Type(s): Research  
Department: Lifespan Development and Educational Sciences

#### **EPSY 70093 VARIABLE TOPIC WORKSHOP IN EDUCATIONAL PSYCHOLOGY**

(Repeatable once for a maximum of 6 credit hours) 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 Type(s): Workshop  
Department: Lifespan Development and Educational Sciences

#### **EPSY 75524 LEARNING THEORIES**

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 Type(s): Lecture  
Department: Lifespan Development and Educational Sciences

#### **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 Type(s): Lecture  
Department: Lifespan Development and Educational Sciences

#### **EPSY 77450 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: graduate standing. Corequisite: ITEC 77450.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Lifespan Development and Educational Sciences

#### **EPSY 78905 EDUCATIONAL PSYCHOLOGY**

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 Type(s): Lecture  
Department: Lifespan Development and Educational Sciences

#### **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 Type(s): Seminar  
Department: Lifespan Development and Educational Sciences

#### **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 Type(s): Dissertation  
Department: Lifespan Development and Educational Sciences

#### **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  
Schedule Type(s): Dissertation  
Department: Lifespan Development and Educational Sciences

#### **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 Type(s): Seminar  
Department: Lifespan Development and Educational Sciences

#### **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 Type(s): Lecture  
Department: Lifespan Development and Educational Sciences

#### **EPSY 89096 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: doctoral standing and special approval.  
1.000 to 3.000 Credit hours  
1.000 to 3.000 Other hours  
Levels: Graduate  
Schedule Type(s): Individual Investigation  
Department: Lifespan Development and Educational Sciences

#### **EPSY 89098 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: doctoral standing and special approval.  
1.000 to 15.000 Credit hours  
1.000 to 15.000 Other hours  
Levels: Graduate  
Schedule Type(s): Research  
Department: Lifespan Development and Educational Sciences

### ***Evaluation and Measurement (EVAL)***

#### **EVAL 45610 CLASSROOM ASSESSMENT**

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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Foundations, Leadership and Administration

#### **EVAL 50093 VT WKSP EVAL AND MEASUREMENT**

(Repeatable once for a maximum of 6 credit hours) 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 Type(s): Workshop  
Department: Foundations, Leadership and Administration

#### **EVAL 55610 CLASSROOM ASSESSMENT**

Instruction on contemporary and classic theories on 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: graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Foundations, Leadership and Administration

#### **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 Type(s): Master's Thesis  
Department: Foundations, Leadership and Administration

#### **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 Type(s): Master's Thesis  
Department: Foundations, Leadership and Administration

#### **EVAL 65510 STATISTICS I FOR EDUCATIONAL SERVICES**

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 Type(s): Lecture  
Department: Foundations, Leadership and Administration





### **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  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Foundations, Leadership and Administration

### **EVAL 68710 CLASSICAL TEST THEORY**

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  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Foundations, Leadership and Administration

### **EVAL 68713 MULTIVARIATE ANALYSIS IN EDUCATIONAL RESEARCH**

Objectives are to enable students to select and use multivariate methods appropriately, to develop knowledge/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; EVAL 65510; EVAL 78716 or 85515.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Foundations, Leadership and Administration

### **EVAL 68714 FACTOR ANALYSIS IN EDUCATIONAL RESEARCH**

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; EVAL 65510; and EVAL 78716 or 85515.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Foundations, Leadership and Administration

### **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 Type(s): Seminar

Department: Foundations, Leadership and Administration

### **EVAL 68792 ADVANCED PRACTICUM AND INTERNSHIP IN EVALUATION AND MEASUREMENT**

(Repeatable for credit) Supervised program in field setting involving application of theories, principles and methodology in evaluation and measurement. Planned with and supervised by graduate faculty member. Prerequisite: graduate standing and special approval.  
2.000 to 6.000 Credit hours  
2.000 to 6.000 Other hours  
Levels: Graduate  
Schedule Type(s): Practicum  
Department: Foundations, Leadership and Administration

### **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 Type(s): Lecture  
Department: Foundations, Leadership and Administration

### **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 Type(s): Individual Investigation  
Department: Foundations, Leadership and Administration

### **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 Type(s): Research  
Department: Foundations, Leadership and Administration

### **EVAL 68807 EVALUATION IN EDUCATION**

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 Type(s): Lecture  
Department: Foundations, Leadership and Administration

### **EVAL 70093 VARIABLE TOPIC WORKSHOP IN EVALUATION AND MEASUREMENT**

(Repeatable for credit) 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 Type(s): Workshop  
Department: Foundations, Leadership and Administration

### **EVAL 75510 STATISTICS I FOR EDUCATIONAL SERVICES**

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 Type(s): Lecture  
Department: Foundations, Leadership and Administration

### **EVAL 75610 CLASSROOM ASSESSMENT**

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 Type(s): Lecture  
Department: Foundations, Leadership and Administration

### **EVAL 78710 CLASSICAL TEST THEORY**

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 Type(s): Lecture  
Department: Foundations, Leadership and Administration

### **EVAL 78711 MODERN TEST THEORY: ITEM RESPONSE THEORY**

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; EVAL 75510 and 78710.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Foundations, Leadership and Administration

### **EVAL 78712 GENERALIZABILITY THEORY**

Students develop the knowledge and skills necessary to use Generalizability Theory (GT) methods as well as to organize, manipulate, analyze and interpret data from GT studies.

Prerequisite: doctoral standing; EVAL 75510; and EVAL 78716 or 85515.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Foundations, Leadership and Administration

### **EVAL 78713 MULTIVARIATE ANALYSIS IN EDUCATIONAL RESEARCH**

Objectives are to enable students to select and use multivariate methods appropriately, to develop knowledge/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; EVAL 75510; and EVAL 78716 or 85515.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Foundations, Leadership and Administration

### **EVAL 78714 FACTOR ANALYSIS IN EDUCATIONAL RESEARCH**

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 65510; and EVAL 78716 or 85515.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Foundations, Leadership and Administration

### **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 Type(s): Lecture

Department: Foundations, Leadership and Administration

### **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 Type(s): Lecture

Department: Foundations, Leadership and Administration

### **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

Levels: Graduate

Schedule Type(s): Seminar

Department: Foundations, Leadership and Administration

### **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

Levels: Graduate

Schedule Type(s): Dissertation

Department: Foundations, Leadership and Administration

### **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

Levels: Graduate

Schedule Type(s): Dissertation

Department: Foundations, Leadership and Administration

### **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

Levels: Graduate

Schedule Type(s): Lecture

Department: Foundations, Leadership and Administration

### **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

Levels: Graduate

Schedule Type(s): Lecture

Department: Foundations, Leadership and Administration

### **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 Type(s): Lecture

Department: Foundations, Leadership and Administration

### **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 Type(s): Lecture

Department: Foundations, Leadership and Administration

### **EVAL 88791 SEM: EVALUATION AND MEASURE**

(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 Type(s): Seminar

Department: Foundations, Leadership and Administration

### **EVAL 88792 ADVANCED PRACTICUM AND INTERNSHIP IN EVALUATION AND MEASUREMENT**

(Repeatable for credit) Supervised program in field setting involving application of theories, principles and methodology in evaluation and measurement. Planned with and supervised by graduate faculty member. Prerequisite: doctoral standing and special approval.

2.000 to 6.000 Credit hours



2.000 to 6.000 Other hours  
Levels: Graduate  
Schedule Type(s): Practicum  
Department: Foundations, Leadership and Administration

#### **EVAL 88795 ST: 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 Type(s): Lecture  
Department: Foundations, Leadership and Administration

#### **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  
1.000 to 3.000 Other hours  
Levels: Graduate  
Schedule Type(s): Individual Investigation  
Department: Foundations, Leadership and Administration

#### **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  
Levels: Graduate  
Schedule Type(s): Research  
Department: Foundations, Leadership and Administration

### ***Environmental Health and Safety (EVHS)***

#### **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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

#### **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

Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

#### **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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

#### **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 Type(s): Lecture  
Department: Regional

#### **EVHS 20002 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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

#### **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 Type(s): Lecture  
Department: Regional

#### **EVHS 20006 FIRE PREVENTION AND CONTROL**

Conditions and properties conducive 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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

#### **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 Type(s): Lecture  
Department: Regional

#### **EVHS 20020 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 (29CFR 1910.120). Prerequisite: None.  
4.000 Credit hours  
4.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

#### **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  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture, Practicum  
Department: Regional  
Course Attributes: Experiential Learning Requirement

#### **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 Type(s): Lecture  
Department: Regional

#### **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  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture, Practicum  
Department: Regional  
Course Attributes: Experiential Learning Requirement

#### **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 Type(s): Lecture

Department: Regional

### **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 Type(s): Individual Investigation

Department: Regional

## ***Exercise Physiology (EXPH)***

### **EXPH 50612 EXERCISE LEADERSHIP FOR THE OLDER ADULT**

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

Levels: Graduate

Schedule Type(s): Combined Lecture and Lab

Department: Health Sciences

### **EXPH 53093 VARIABLE TITLE WORKSHOP IN EXERCISE SCIENCE AND EXERCISE PHYSIOLOGY**

(Repeatable for credit) 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 Type(s): Workshop

Department: Health Sciences

### **EXPH 55065 EXERCISE TESTING**

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 Type(s): Combined Lecture and Lab

Department: Health Sciences

### **EXPH 55070 ELECTROCARDIOGRAPHY FOR THE EXERCISE PHYSIOLOGIST**

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 Type(s): Lecture

Department: Health Sciences

### **EXPH 55080 PHYSIOLOGY OF EXERCISE**

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 Type(s): Combined Lecture and Lab

Department: Health Sciences

### **EXPH 60610 PHYSIOLOGY OF AGING: IMPLICATIONS FOR HUMAN BEHAVIOR**

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 Type(s): Lecture

Department: Health Sciences

### **EXPH 63050 RESEARCH PROCESS IN ATHLETIC TRAINING AND EXERCISE PHYSIOLOGY**

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 Type(s): Combined Lecture and Lab

Department: Health Sciences

### **EXPH 63051 QUANTITATIVE AND RESEARCH METHODS IN ATHLETIC TRAINING AND EXERCISE PHYSIOLOGY**

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 Type(s): Combined Lecture and Lab

Department: Health Sciences

### **EXPH 63052 ADVANCED RESEARCH DESIGN AND STATISTICS IN EXERCISE PHYSIOLOGY**

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 Type(s): Lecture

Department: Health Sciences

### **EXPH 63095 RESEARCH SEMINAR**

(Repeatable for credit) 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 Type(s): Seminar

Department: Health Sciences

### **EXPH 63096 INDIVIDUAL INVESTIGATION IN EXERCISE PHYSIOLOGY**

(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

Levels: Graduate

Schedule Type(s): Individual Investigation

Department: Health Sciences

### **EXPH 63098 RESEARCH**

(Repeatable for credit) Research or individual investigation. Prerequisite: Graduate standing.

1.000 to 15.000 Credit hours

1.000 to 15.000 Other hours

Levels: Graduate

Schedule Type(s): Research

Department: Health Sciences

### **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 Type(s): Workshop

Department: Health Sciences

### **EXPH 63195 SPECIAL TOPICS IN EXERCISE PHYSIOLOGY**

(Repeatable for credit) 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 Type(s): Lecture

Department: Health Sciences

### **EXPH 63199 THESIS I**

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

3.000 Other hours

Levels: Graduate

Schedule Type(s): Master's Thesis

Department: Health Sciences

### **EXPH 63299 THESIS II**

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

Levels: Graduate

Schedule Type(s): Master's Thesis





Department: Health Sciences

### **EXPH 65075 MUSCLE FUNCTION AND EXERCISE**

Characteristics of skeletal muscle related to contraction during exercise, strength, elasticity, fatigue, and training. Electromyography analysis of muscle function emphasized. Prerequisites: graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Health Sciences

### **EXPH 65076 ENVIRONMENTAL STRESS AND EXERCISE**

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  
Levels: Graduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Health Sciences

### **EXPH 65080 PHYSIOLOGICAL BASIS OF EXERCISE AND SPORT**

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  
Levels: Graduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Health Sciences

### **EXPH 65081 ENERGY METABOLISM AND BODY COMPOSITION**

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 Type(s): Lecture  
Department: Health Sciences

### **EXPH 65082 CARDIO-RESPIRATORY FUNCTION**

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 Type(s): Lecture  
Department: Health Sciences

### **EXPH 65083 EXERCISE ENERGY METABOLISM**

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 Type(s): Combined Lecture and Lab  
Department: Health Sciences

### **EXPH 65084 CARDIOVASCULAR-RESPIRATORY DYNAMICS DURING EXERCISE**

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 Type(s): Combined Lecture and Lab  
Department: Health Sciences

### **EXPH 65086 NEUROBIOLOGY OF MOVEMENT AND EXERCISE**

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 Type(s): Combined Lecture and Lab  
Department: Health Sciences

### **EXPH 65192 INTERNSHIP IN EXERCISE PHYSIOLOGY**

(Repeatable for a maximum of 8 credit hours)  
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  
7.000 to 42.000 Other hours  
Levels: Graduate  
Schedule Type(s): Practicum  
Department: Health Sciences

### **EXPH 70610 PHYSIOLOGY OF AGING: IMPLICATIONS FOR HUMAN BEHAVIOR**

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 Type(s): Lecture  
Department: Health Sciences

### **EXPH 73050 RESEARCH PROCESSES IN ATHLETIC TRAINING AND EXERCISE PHYSIOLOGY**

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 Type(s): Combined Lecture and Lab  
Department: Health Sciences

### **EXPH 73051 QUANTITATIVE AND RESEARCH METHODS IN ATHLETIC TRAINING AND EXERCISE PHYSIOLOGY**

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 Type(s): Combined Lecture and Lab  
Department: Health Sciences

### **EXPH 73052 ADVANCED RESEARCH DESIGN AND STATISTICS IN EXERCISE PHYSIOLOGY**

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 Type(s): Lecture  
Department: Health Sciences

### **EXPH 73095 RESEARCH SEMINAR**

(Repeatable for credit) 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 Type(s): Seminar  
Department: Health Sciences

### **EXPH 73096 INDIVIDUAL INVESTIGATION IN EXERCISE PHYSIOLOGY**

(Repeatable for a maximum of 6 credit hours)  
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 Type(s): Individual Investigation  
Department: Health Sciences

### **EXPH 73195 SPECIAL TOPICS IN EXERCISE PHYSIOLOGY**

(Repeatable for a maximum of 6 credit hours)  
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 Type(s): Lecture  
Department: Health Sciences

**EXPH 75075 MUSCLE FUNCTION AND EXERCISE**

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 Type(s): Lecture  
Department: Health Sciences

**EXPH 75076 ENVIRONMENTAL STRESS AND EXERCISE**

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 Type(s): Combined Lecture and Lab  
Department: Health Sciences

**EXPH 75081 ENERGY METABOLISM AND BODY COMPOSITION**

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 Type(s): Lecture  
Department: Health Sciences

**EXPH 75082 CARDIO-RESPIRATORY FUNCTION**

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 Type(s): Lecture  
Department: Health Sciences

**EXPH 75083 EXERCISE ENERGY METABOLISM**

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 Type(s): Combined Lecture and Lab  
Department: Health Sciences

**EXPH 75084 CARDIOVASCULAR-RESPIRATORY DYNAMICS DURING EXERCISE**

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 Type(s): Combined Lecture and Lab  
Department: Health Sciences

**EXPH 75086 NEUROBIOLOGY OF EXERCISE AND MOVEMENT**

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 Type(s): Combined Lecture and Lab  
Department: Health Sciences

**EXPH 75192 INTERNSHIP IN EXERCISE PHYSIOLOGY**

(Repeatable for a maximum of 8 credit hours) Field experience in exercise physiology programs and testing in KSU adult fitness program or cooperating agencies. Prerequisites: doctoral standing and special approval.  
1.000 to 6.000 Credit hours  
7.000 to 42.000 Other hours  
Levels: Graduate  
Schedule Type(s): Practicum  
Department: Health Sciences

**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 Type(s): Research  
Department: Health Sciences

**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 Type(s): Dissertation  
Department: Health Sciences

**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 Type(s): Dissertation  
Department: Health Sciences

**Exercise Science (EXSC)****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  
Schedule Type(s): Lecture  
Department: Health Sciences

**EXSC 25057 HUMAN ANATOMY AND PHYSIOLOGY I**

(Equivalent to 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 Type(s): Combined Lecture and Lab  
Department: Health Sciences

**EXSC 25058 HUMAN ANATOMY AND PHYSIOLOGY II**

(Equivalent to 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.  
3.000 Credit hours  
2.000 Lecture hours  
2.000 Lab hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Health Sciences

**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.  
3.000 Credit hours  
2.000 Lecture hours  
2.000 Lab hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Health Sciences

**EXSC 35023 PERSONAL TRAINING 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 and EXSC 25058.  
2.000 Credit hours  
1.000 Lecture hours  
2.000 Lab hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Health Sciences

#### **EXSC 35054 BIOMECHANICS**

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; and ATTR 25058 or EXSC 25058.  
3.000 Credit hours  
2.000 Lecture hours  
2.000 Lab hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Health Sciences

#### **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.  
3.000 Credit hours  
2.000 Lecture hours  
2.000 Lab hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Health Sciences

#### **EXSC 35075 EXERCISE PROGRAMMING**

Problems and issues in developing exercise programs in institutional and commercial settings. Prerequisite: ATTR 25057 or EXSC 25057; and ATTR 25058 or EXSC 25058.  
3.000 Credit hours  
2.000 Lecture hours  
2.000 Lab hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Health Sciences

#### **EXSC 40612 EXERCISE LEAD FOR OLDER ADULT**

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 Type(s): Combined Lecture and Lab  
Department: Health Sciences

#### **EXSC 43093 VARIABLE TITLED WORKSHOP IN EXERCISE SCIENCE AND EXERCISE PHYSIOLOGY**

(Repeatable for credit) 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 Type(s): Workshop  
Department: Health Sciences

#### **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 Type(s): Research  
Department: Health Sciences  
Course Attributes: Experiential Learning Requirement

#### **EXSC 45065 EXERCISE TESTING**

Lecture and laboratory experiences dealing with the administration and interpretation of exercise tests. Prerequisites: ATTR 25057 or EXSC 25057; and ATTR 25058 or EXSC 25058.  
3.000 Credit hours  
2.000 Lecture hours  
2.000 Lab hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Health Sciences

#### **EXSC 45070 ELECTROCARDIOGRAPHY FOR THE EXERCISE PHYSIOLOGIST**

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; and ATTR 25058 or EXSC 25058.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Health Sciences

#### **EXSC 45080 PHYSIOLOGY OF EXERCISE**

Response of the human to acute and chronic exercise with emphasis on the underlying physiological mechanisms. Prerequisite: ATTR 25057 or EXSC 25057; and ATTR 25058 or EXSC 25058.  
3.000 Credit hours  
2.000 Lecture hours  
2.000 Lab hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Health Sciences

#### **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  
Levels: Undergraduate  
Schedule Type(s): Individual Investigation  
Department: Health Sciences

#### **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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Health Sciences

#### **EXSC 45481 SENIOR SEMINAR IN EXERCISE SCIENCE**

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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Health Sciences

#### **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. 105 clock hours per credit hour. Prerequisite: special approval.  
1.000 to 8.000 Credit hours  
7.000 to 42.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Practicum  
Department: Health Sciences  
Course Attributes: Experiential Learning Requirement

#### **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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Health Sciences

### ***Fashion Design and Merchandising (FDM)***

#### **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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Fashion Design and Merchandising

**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

Levels: Undergraduate

Schedule Type(s): Laboratory

Department: Fashion Design and Merchandising

**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 Type(s): Combined Lecture and Lab

Department: Fashion Design and Merchandising

**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 Type(s): Combined Lecture and Lab

Department: Fashion Design and Merchandising

**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 Type(s): Combined Lecture and Lab

Department: Fashion Design and Merchandising

**FDM 15043 WORKROOM TECHNIQUES I**

Introduction to basic construction skills using apparel workroom methods and industrial sewing equipment. Prerequisite: Fashion design or fashion merchandising major. Prerequisite: fashion design (FD) major.

2.000 Credit hours

4.000 Lab hours

Levels: Undergraduate

Schedule Type(s): Laboratory

Department: Fashion Design and Merchandising

**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: minimum grade of C

(2.000) in FDM 15043.

2.000 Credit hours

4.000 Lab hours

Levels: Undergraduate

Schedule Type(s): Laboratory

Department: Fashion Design and Merchandising

**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 Type(s): Studio

Department: Fashion Design and Merchandising

**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 Type(s): Lecture

Department: Fashion Design and Merchandising

**FDM 20020 FASHION MERCHANDISING PRESENTATIONS**

Study of fashion information, research sources and visual presentation formats used in the fashion industry. Prerequisite: minimum grade of C (2.000) in FDM 10010 and fashion merchandising major.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Fashion Design and Merchandising

**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: minimum grade of C (2.000) in FDM 10030 and fashion merchandising (FM) major.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Fashion Design and Merchandising

**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: minimum grade of C (2.000) in FDM 10030 and fashion design (FD) major.

3.000 Credit hours

5.000 Other hours

Levels: Undergraduate

Schedule Type(s): Combined Lecture and Lab

Department: Fashion Design and Merchandising

**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: minimum grade of C (2.000) in FDM 10050.

3.000 Credit hours

6.000 Other hours

Levels: Undergraduate

Schedule Type(s): Studio

Department: Fashion Design and Merchandising

**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: minimum grade of C (2.000) in FDM 10020 and FDM 10140. Corequisite: FDM 20141.

3.000 Credit hours

6.000 Lab hours

Levels: Undergraduate

Schedule Type(s): Laboratory

Department: Fashion Design and Merchandising

**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: minimum grade of C (2.000) in FDM 20121. Corequisite: FDM 20142.

3.000 Credit hours

6.000 Lab hours

Levels: Undergraduate

Schedule Type(s): Laboratory

Department: Fashion Design and Merchandising

**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: minimum grade of C (2.000) in FDM 10140 and FDM 10020. Corequisite: FDM 20141.

3.000 Credit hours

6.000 Lab hours

Levels: Undergraduate

Schedule Type(s): Laboratory

Department: Fashion Design and Merchandising

**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: minimum grade of C (2.000) in FDM 20131. Corequisite: FDM 20142.

3.000 Credit hours

6.000 Lab hours





Levels: Undergraduate  
Schedule Type(s): Laboratory  
Department: Fashion Design and Merchandising

#### **FDM 20141 FLAT PATTERN/DRAPING I**

Development of basic bodice, skirt and sleeve muslins and slopers. Patternmaking principles of dart manipulation and added fullness. Construction techniques for bodice, skirt, sleeve, collar and shirt variations. Introduction to computer patternmaking and specification sheets. Prerequisite: minimum C (2.000) grade in FDM 10030 and FDM 15044. Pre/corequisite: minimum C (2.000) grade in MATH 11009 or MATH 11010 or MATH 11012. Corequisite: FDM 20121 or FDM 20131.  
3.000 Credit hours  
6.000 Lab hours  
Levels: Undergraduate  
Schedule Type(s): Laboratory  
Department: Fashion Design and Merchandising

#### **FDM 20142 FLAT PATTERN/DRAPING II**

Development of torso sloper. Drafting and draping contoured bodice and torso patterns. Pattern development, construction and fitting of spring dress from sketch. Sleeve/bodice combinations. Pant sloper development. Prerequisite: minimum grade of C (2.000) in FDM 20141. Corequisite: FDM 20122 or 20132.  
3.000 Credit hours  
6.000 Lab hours  
Levels: Undergraduate  
Schedule Type(s): Laboratory  
Department: Fashion Design and Merchandising

#### **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: minimum grade of C (2.000) in FDM 10030 and FDM 15055.  
3.000 Credit hours  
6.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Fashion Design and Merchandising

#### **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: minimum grade of C (2.000) in FDM 10030 and FDM 15055.  
3.000 Credit hours  
6.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Fashion Design and Merchandising

#### **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.  
3.000 Credit hours  
5.000 Other hours  
Levels: Undergraduate

Schedule Type(s): Studio  
Department: Fashion Design and Merchandising

#### **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: minimum grade of C (2.000) in FDM 10010; and fashion design (FD) or fashion merchandising (FM) major.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Fashion Design and Merchandising

#### **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 as part of a group. Prerequisites: FDM 10010 with a minimum grade of C; and fashion merchandising major.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Fashion Design and Merchandising

#### **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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Fashion Design and Merchandising

#### **FDM 30050 FASHION TECHNOLOGY: COMPUTER INTEGRATED TEXTILE DESIGN**

The use of Computer Integrated Design tools to produce textile prints, woven and knits for professional presentation scenarios. Prerequisite: minimum grade of C (2.000) in FDM 10050.  
3.000 Credit hours  
5.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Fashion Design and Merchandising

#### **FDM 30083 PROFESSIONAL SEMINAR**

Professional development strategies for fashion and related careers. Emphasis is on verbal and written communication skills. Prerequisite: minimum grade of C (2.000) in FDM 20020 or 20142; and junior or senior standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Fashion Design and Merchandising  
Course Attributes: Writing Intensive Course

#### **FDM 30121 FASHION DESIGN I**

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: minimum grade of C (2.000) in FDM 20122. Corequisite: FDM 30141.  
3.000 Credit hours  
6.000 Lab hours  
Levels: Undergraduate  
Schedule Type(s): Laboratory  
Department: Fashion Design and Merchandising

#### **FDM 30122 FASHION DESIGN II**

Research and theoretical development of fashion lines for specialized markets. Continued development of drawing and rendering skills. Prerequisite: minimum grade of C (2.000) in FDM 30121. Corequisite: FDM 30142.  
3.000 Credit hours  
6.000 Lab hours  
Levels: Undergraduate  
Schedule Type(s): Laboratory  
Department: Fashion Design and Merchandising

#### **FDM 30123 CAD FOR FASHION APPLICATIONS**

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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Fashion Design and Merchandising

#### **FDM 30124 APPAREL MANUFACTURING PROCESSES**

Students learn seam/stitch classifications, costing, sourcing and lab testing quality assurance. Assembly-line and modular manufacturing are discussed. Prerequisite: minimum C (2.000) grade in FDM 20040 and 20132 and 20142.  
3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Fashion Design and Merchandising

#### **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: minimum grade of C (2.000) in FDM 20132 and 20142.  
3.000 Credit hours  
6.000 Lab hours  
Levels: Undergraduate  
Schedule Type(s): Laboratory  
Department: Fashion Design and Merchandising

#### **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: minimum grade of C (2.000) in FDM 20142.  
1.000 Credit hours  
1.500 Other hours  
Levels: Undergraduate



Schedule Type(s): Combined Lecture and Lab  
Department: Fashion Design and Merchandising

**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: minimum grade of C (2.000) in FDM 20142. Corequisite: FDM 30121. 3.000 Credit hours  
6.000 Lab hours  
Levels: Undergraduate  
Schedule Type(s): Laboratory  
Department: Fashion Design and Merchandising

**FDM 30142 FASHION STUDIO II**

Advanced draping, patternmaking and construction techniques are used to create original garments designed in Fashion Design II. Prerequisite: minimum grade of C (2.000) in FDM 30141. Corequisite: FDM 30122. 3.000 Credit hours  
6.000 Lab hours  
Levels: Undergraduate  
Schedule Type(s): Laboratory  
Department: Fashion Design and Merchandising

**FDM 30151 ADVANCED PATTERNMAKING FOR TECHNICAL DESIGN**

Flat pattern assignments for advanced, complex garments. Suits, outerwear, cut/sew knits will all be covered. Students will make patterns by traditional methods as well as by computer. Prerequisite: minimum grade of C (2.000) in FDM 20142. 2.000 Credit hours  
4.000 Lab hours  
Levels: Undergraduate  
Schedule Type(s): Laboratory  
Department: Fashion Design and Merchandising

**FDM 30152 APPAREL PROTOTYPE PRODUCTION AND ANALYSIS**

Production of sample garments for a variety of apparel markets focusing on analysis of fit. Menswear, children's wear, missy, petites and plus size markets are covered. Woven and knit classifications are produced. Prerequisite: minimum grade of C (2.000) in FDM 20142. 3.000 Credit hours  
6.000 Lab hours  
Levels: Undergraduate  
Schedule Type(s): Laboratory  
Department: Fashion Design and Merchandising

**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: minimum grade of C (2.000) in FDM 10030 and fashion design (FD) major. 2.000 Credit hours  
4.000 Lab hours  
Levels: Undergraduate  
Schedule Type(s): Laboratory  
Department: Fashion Design and Merchandising

**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 Type(s): Studio  
Department: Fashion Design and Merchandising

**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 Type(s): Studio  
Department: Fashion Design and Merchandising

**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: minimum grade of C (2.000) in FDM 20122 and FDM 20153 and FDM 20154; and special approval. 6.000 Credit hours  
12.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Fashion Design and Merchandising

**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: minimum grade of C (2.000) in FDM 30161 or FDM 30171 or FDM 30181; and special approval. 6.000 Credit hours  
12.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Fashion Design and Merchandising

**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: minimum grade of C (2.000) in FDM 20122 and FDM 20153 and FDM 20154; and special approval. 6.000 Credit hours  
12.000 Other hours  
Levels: Undergraduate

Schedule Type(s): Studio  
Department: Fashion Design and Merchandising

**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: minimum grade of C (2.000) in FDM 30161 or FDM 30171 or FDM 30181; and special approval. 6.000 Credit hours  
12.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Fashion Design and Merchandising

**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: minimum grade of C (2.000) in FDM 20122 and FDM 20153 and FDM 20154; and special approval. 6.000 Credit hours  
12.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Fashion Design and Merchandising

**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 Type(s): Studio  
Department: Fashion Design and Merchandising

**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: minimum C (2.000) grade in FDM 20020; and MKTG 25010. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Fashion Design and Merchandising

**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: minimum grade of C (2.000) in FDM 20030 and fashion merchandising (FM) major.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Fashion Design and Merchandising

#### **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: minimum C (2.000) grade in FDM 20263; and MATH 11009 or MATH 11010 or MATH 11012.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Fashion Design and Merchandising

#### **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: Minimum grade of C (2.000) in FDM 20013.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Fashion Design and Merchandising  
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: minimum grade of C (2.000) in FDM 25011.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Fashion Design and Merchandising

#### **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  
Levels: Undergraduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Fashion Design and Merchandising

#### **FDM 35063 VISUAL MERCHANDISING AND DISPLAY**

Theory and practice of merchandise presentation for the purpose of promotion and sales. Prerequisite: fashion merchandising (FM) major.  
3.000 Credit hours  
1.000 Lecture hours

4.000 Lab hours  
Levels: Undergraduate  
Schedule Type(s): Laboratory, Lecture  
Department: Fashion Design and Merchandising

#### **FDM 35070 THE LUXURY MARKET**

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. Prerequisite: none.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Fashion Design and Merchandising

#### **FDM 35080 FASHION IN THE MEDIA**

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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Fashion Design and Merchandising

#### **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: minimum grade of C (2.000) in FDM 20122; and special approval.  
3.000 Credit hours  
6.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Fashion Design and Merchandising

#### **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: minimum grade of C (2.000) in FDM 20122; and special approval.  
3.000 Credit hours  
6.000 Other hours  
Levels: Undergraduate  
Schedule Type(s): Studio  
Department: Fashion Design and Merchandising

#### **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: minimum grade of C (2.000) in FDM 20263; and MATH 11009 or MATH 11010 or MATH 11012.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Fashion Design and Merchandising

#### **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 Type(s): Lecture  
Department: Fashion Design and Merchandising

#### **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. Prerequisite: 2.5 cumulative GPA. Corequisite: FDM 20030 or FDM 20142.  
1.000 Credit hours  
1.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Fashion Design and Merchandising

#### **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: minimum grade of C (2.000) in FDM 35900.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Fashion Design and Merchandising

#### **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 Type(s): Lecture  
Department: Fashion Design and Merchandising

#### **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

Levels: Undergraduate

Schedule Type(s): Combined Lecture and Lab

Department: Fashion Design and Merchandising

### **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

Levels: Undergraduate

Schedule Type(s): Combined Lecture and Lab

Department: Fashion Design and Merchandising

### **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

Levels: Undergraduate

Schedule Type(s): Combined Lecture and Lab

Department: Fashion Design and Merchandising

### **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: minimum grade of C (2.000) in FDM 10050.

3.000 Credit hours

5.000 Other hours

Levels: Undergraduate

Schedule Type(s): Studio

Department: Fashion Design and Merchandising

### **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 minimum grade of C (2.000) in FDM 30162 or FDM 30172 or FDM 30182.

6.000 Credit hours

12.000 Other hours

Levels: Undergraduate

Schedule Type(s): Studio

Department: Fashion Design and Merchandising

Course Attributes: Experiential Learning

Requirement

### **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: minimum grade of C (2.000) in FDM 30122. Corequisite: FDM 40141.

3.000 Credit hours

6.000 Lab hours

Levels: Undergraduate

Schedule Type(s): Laboratory

Department: Fashion Design and Merchandising

### **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: minimum grade of C (2.000) in FDM 40121. Corequisite: FDM 40142.

3.000 Credit hours

6.000 Lab hours

Levels: Undergraduate

Schedule Type(s): Laboratory

Department: Fashion Design and Merchandising

### **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: minimum grade of C (2.000) in FDM 30131. Corequisite: FDM 40151.

3.000 Credit hours

6.000 Lab hours

Levels: Undergraduate

Schedule Type(s): Laboratory

Department: Fashion Design and Merchandising

### **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: minimum grade of C (2.000) in FDM 40131. Corequisite: FDM 40152.

3.000 Credit hours

6.000 Lab hours

Levels: Undergraduate

Schedule Type(s): Laboratory

Department: Fashion Design and Merchandising

### **FDM 40141 FASHION STUDIO III**

Development of pattern work, specification sheets and muslins for original line. Faculty and external professional critiques. Prerequisite: FDM 30142. Corequisite: FDM 40121.

3.000 Credit hours

6.000 Lab hours

Levels: Undergraduate

Schedule Type(s): Laboratory

Department: Fashion Design and Merchandising

### **FDM 40142 FASHION STUDIO IV**

Construction and completion of garments for original line. Faculty and external professional critiques. Prerequisite: minimum grade of C (2.000) in FDM 40121 and 40141. Corequisite: FDM 40122.

3.000 Credit hours

6.000 Lab hours

Levels: Undergraduate

Schedule Type(s): Laboratory

Department: Fashion Design and Merchandising

### **FDM 40151 TECHNICAL DESIGN STUDIO I**

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: minimum grade of C (2.000) in FDM 30131 and FDM 30132 and FDM 30124 and FDM 30151 and FDM 30152 .

Corequisite: FDM 40131.

3.000 Credit hours

6.000 Lab hours

Levels: Undergraduate

Schedule Type(s): Laboratory

Department: Fashion Design and Merchandising

### **FDM 40152 TECHNICAL DESIGN STUDIO II**

Continued work on collaborative collections.

Student teams work on different classifications.

The prototypes are produced in final fabrics.

Faculty and external professional critiques.

Prerequisite: minimum grade of C (2.000) in FDM 40151. Corequisite: FDM 40132.

2.000 Credit hours

4.000 Lab hours

Levels: Undergraduate

Schedule Type(s): Laboratory

Department: Fashion Design and Merchandising

### **FDM 40199 SENIOR FASHION DESIGN THESIS II**

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: minimum grade of C (2.000) in FDM 40099.

3.000 Credit hours

6.000 Other hours

Levels: Undergraduate

Schedule Type(s): Studio

Department: Fashion Design and Merchandising

Course Attributes: Experiential Learning

Requirement

### **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: MATH 10041 and MKTG 25010.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Fashion Design and Merchandising





### **FDM 40291 SEMINAR IN FASHION MERCHANDISING**

(Repeatable for credit) Capstone 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: minimum C (2.000) grade in FDM 30260 and FDM 30262 and FDM 35011 and FDM 35270.

3.000 Credit hours

3.000 Other hours

Levels: Undergraduate

Schedule Type(s): Seminar

Department: Fashion Design and Merchandising

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: minimum grade of C (2.000) in FDM 30213.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Fashion Design and Merchandising

### **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: minimum grade of C (2.000) in FDM 30262 and 35270.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Fashion Design and Merchandising

### **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 Type(s): Lecture

Department: Fashion Design and Merchandising

### **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: minimum grade of C (2.000) in FDM 30083 and junior standing and special approval.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture, Practicum

Department: Fashion Design and Merchandising

Course Attributes: Experiential Learning Requirement

### **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

1.000 to 3.000 Other hours

Levels: Undergraduate

Schedule Type(s): Workshop

Department: Fashion Design and Merchandising

### **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 Type(s): Lecture

Department: Fashion Design and Merchandising

### **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 Type(s): Individual Investigation

Department: Fashion Design and Merchandising

### **FDM 45192 INTERNSHIP IN FASHION 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. Prerequisites: Minimum grade of C (2.000) in 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 Type(s): Practicum

Department: Fashion Design and Merchandising

Course Attributes: Experiential Learning Requirement

### **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 Type(s): Lecture

Department: Fashion Design and Merchandising

### **FDM 45292 INTERNSHIP IN FASHION DESIGN**

(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: Minimum grade of C (2.000) in FDM 30083 and 30121; fashion design (FD) major; and special approval for internship site.

3.000 Credit hours

3.000 Other hours

Levels: Undergraduate

Schedule Type(s): Practicum

Department: Fashion Design and Merchandising

Course Attributes: Experiential Learning Requirement

### **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 Type(s): Field Experience

Department: Fashion Design and Merchandising

Course Attributes: Experiential Learning Requirement

### **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 Type(s): Field Experience

Department: Fashion Design and Merchandising

Course Attributes: Experiential Learning Requirement

### **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

Levels: Undergraduate

Schedule Type(s): Field Experience

Department: Fashion Design and Merchandising

Course Attributes: Experiential Learning Requirement

### **FDM 60010 THEORIES IN FASHION**

Focuses on the meaning, context and intent of fashion design to contemporary society.

Prerequisite: admission to the MBA program and graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Fashion Design and Merchandising

### **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.



Prerequisites: admission to MBA program and graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Fashion Design and Merchandising

#### **FDM 60030 RESEARCH METHODS IN FASHION DESIGN AND MERCHANDISING**

Critical evaluation of research, theoretical and scholarly review articles related to apparel and textiles. Learn and practice skills needed to understand and critically evaluate research, theory and scholarly works. Examine in-depth scholarly literature on one topic within apparel and textiles. Write and present a scholarly review of literature. Prerequisites: Admission to MBA program and graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Fashion Design and Merchandising

#### **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 60020 and 60030; admission to MBA program; and graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Fashion Design and Merchandising

### ***Fire and Emergency Services Administration (FESA)***

#### **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 Type(s): Lecture  
Department: Regional

#### **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 Type(s): Lecture  
Department: Regional

#### **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 Type(s): Lecture  
Department: Regional

#### **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 Type(s): Lecture  
Department: Regional

#### **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 Type(s): Lecture  
Department: Regional

#### **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 Type(s): Lecture  
Department: Regional

#### **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  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

#### **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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

#### **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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

#### **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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

#### **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: none.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Regional

#### **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 Type(s): Lecture  
Department: Regional

#### **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 Type(s): Lecture  
Department: Regional

### **Finance (FIN)**

#### **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 Type(s): Lecture  
Department: Finance  
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 Type(s): Lecture  
Department: Finance

#### **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 ACCT 11000; and ECON 22060 or HONR 21197; and ECON 22061.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Finance

#### **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 FIN 36053.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Finance

#### **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 FIN 36053.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Finance

#### **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 FIN 36053.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Finance

#### **FIN 36061 REAL ESTATE PRINCIPLES**

Principles and practices of real estate, real estate laws, contractual instruments, valuation, financing and markets in commercial and residential real estate. Prerequisite: cumulative 2.500 GPA; and Finance (FIN) major or minor; and junior standing.  
3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Finance

#### **FIN 36063 INDIVIDUAL INVESTMENT ANALYSIS AND STRATEGIES**

Examination of investment analysis and strategies with emphasis on individuals. Open only to non-finance major. Cannot be counted toward finance major. Either this course or FIN 36059 but not both, can count as an elective in a College of Business Administration program. Prerequisite: cumulative 2.500 GPA; and FIN 36053; not open to finance (FIN) majors.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Finance

#### **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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Finance

#### **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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Finance

#### **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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Finance

#### **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 Type(s): Lecture



Department: Finance

### **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 Type(s): Lecture  
Department: Finance

### **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 Type(s): Lecture  
Department: Finance  
Course Attributes: Experiential Learning Requirement, 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 Type(s): Lecture  
Department: Finance

### **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 Type(s): Lecture  
Department: Finance

### **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 Type(s): Lecture  
Department: Finance

### **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 Type(s): Individual Investigation  
Department: Finance

### **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: cumulative 2.500 GPA; and Finance (FIN) major and special approval.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture, Practicum  
Department: Finance  
Course Attributes: Experiential Learning Requirement

### **FIN 46295 FINANCE SPECIAL TOPICS**

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 Type(s): Lecture  
Department: Finance

### **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 Type(s): Lecture  
Department: Finance

### **FIN 66061 FINANCIAL MANAGEMENT I**

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 Type(s): Lecture  
Department: Finance

### **FIN 66062 FINANCIAL MANAGEMENT II**

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 Type(s): Lecture  
Department: Finance

### **FIN 66063 FINANCIAL MARKETS AND INSTITUTIONS**

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  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Finance

### **FIN 66064 INTERNATIONAL FINANCIAL MANAGEMENT**

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  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Finance

### **FIN 66066 ADVANCED SECURITY AND INVESTMENT THEORY**

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  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Finance

### **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  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Finance

### **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  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Finance

### **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 Type(s): Lecture  
Department: Finance

#### **FIN 66081 DERIVATIVES II**

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 Type(s): Lecture  
Department: Finance

#### **FIN 66084 FINANCIAL ENGINEERING**

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 Type(s): Lecture  
Department: Finance

#### **FIN 66085 FIXED INCOME MARKETS**

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 Type(s): Lecture  
Department: Finance

#### **FIN 76061 FINANCIAL MANAGEMENT I**

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 Type(s): Lecture  
Department: Finance

#### **FIN 76062 FINANCIAL MANAGEMENT II**

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 Type(s): Lecture  
Department: Finance

#### **FIN 76063 FINANCIAL MARKETS AND INSTITUTIONS**

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 Type(s): Lecture  
Department: Finance

#### **FIN 76064 INTERNATIONAL FINANCIAL MANAGEMENT**

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 Type(s): Lecture  
Department: Finance

#### **FIN 76066 ADVANCED SECURITY AND INVESTMENT THEORY**

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  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Finance

#### **FIN 76081 DERIVATIVES II**

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 Type(s): Lecture  
Department: Finance

#### **FIN 76084 FINANCIAL ENGINEERING**

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 doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Finance

#### **FIN 76085 FIXED INCOME MARKETS**

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 doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Finance

#### **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 Type(s): Lecture  
Department: Finance

#### **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 Type(s): Lecture  
Department: Finance

#### **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 Type(s): Lecture  
Department: Finance

#### **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 Type(s): Lecture

Department: Finance

### **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 Type(s): Research

Department: Finance

## ***French (FR)***

### **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 Type(s): Lecture

Department: Modern and Classical Language Studies

### **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 Type(s): Lecture

Department: Modern and Classical Language Studies

### **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 Type(s): Lecture

Department: Modern and Classical Language Studies

### **FR 23202 INTERMEDIATE FRENCH II**

Continuation of FR 23201. Prerequisite: FR 23201.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Modern and Classical Language Studies

### **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 Type(s): Lecture

Department: Modern and Classical Language Studies

### **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 Type(s): Lecture

Department: Modern and Classical Language Studies

### **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 Type(s): Lecture

Department: Modern and Classical Language Studies

### **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 Type(s): Lecture

Department: Modern and Classical Language Studies

### **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 Type(s): Lecture

Department: Modern and Classical Language Studies

### **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 Type(s): Lecture

Department: Modern and Classical Language Studies

### **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

Schedule Type(s): Lecture

Department: Modern and Classical Language Studies

### **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 Type(s): Lecture

Department: Modern and Classical Language Studies

Course Attributes: 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 Type(s): Lecture

Department: Modern and Classical Language Studies

Course Attributes: 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 Type(s): Lecture

Department: Modern and Classical Language Studies

Course Attributes: 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

Schedule Type(s): Lecture

Department: Modern and Classical Language Studies

### **FR 43091 FRENCH SEMINAR**

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 Type(s): Seminar  
Department: Modern and Classical Language Studies

**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 Type(s): Individual Investigation  
Department: Modern and Classical Language Studies

**FR 43213 FRENCH COMPOSITION-ADVANCED**

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 Type(s): Lecture  
Department: Modern and Classical Language Studies

**FR 43216 CONTEMPORARY FRENCH CULTURE**

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 Type(s): Lecture  
Department: Modern and Classical Language Studies

**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 Type(s): Lecture  
Department: Modern and Classical Language Studies  
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 Type(s): Lecture  
Department: Modern and Classical Language Studies

**FR 43366 STUDIES IN NINETEENTH-CENTURY FRENCH LITERATURE**

Study of selected topics in nineteenth-century French literature. Prerequisite: 6 semester hours from the 33330-level.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Modern and Classical Language Studies

**FR 43369 TWENTIETH-CENTURY FRENCH POETRY**

A study of selected poetry of Apollinaire, Breton, Mansour, Eluard, Michaux, Char, Reverdy, Ponge, Guillevic, Jabes, 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-level.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Modern and Classical Language Studies

**FR 43370 THE TWENTIETH CENTURY FRENCH THEATRE**

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 Type(s): Lecture  
Department: Modern and Classical Language Studies

**FR 43380 FRANCOPHONE LITERATURE**

A study of writers, movements or works representative of French speaking national cultures outside of France. May be repeated for credit as course content changes. Prerequisite: 6 semester hours from the FR 33330-level.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Modern and Classical Language Studies

**FR 53091 FRENCH SEMINAR**

(Repeatable for credit) Topic to be announced. Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Other hours  
Levels: Graduate  
Schedule Type(s): Seminar  
Department: Modern and Classical Language Studies

**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 Type(s): Lecture  
Department: Modern and Classical Language Studies

**FR 53216 CONTEMPORARY FRENCH CULTURE**

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 Type(s): Lecture  
Department: Modern and Classical Language Studies

**FR 53366 STUDIES IN 19TH-CENTURY FRENCH LITERATURE**

Study of selected topics in nineteenth-century French literature. Prerequisite: 6 hours from 33330- level and graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Modern and Classical Language Studies

**FR 53369 20TH-CENTURY FRENCH POETRY**

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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Modern and Classical Language Studies

**FR 53370 20TH-CENTURY FRENCH THEATRE**

Studies in French drama since 1900. Prerequisite: 6 hours from 33330-level and graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Modern and Classical Language Studies

**FR 53380 FRANCOPHONE LITERATURE**

A study of writers, movements or works representative of French speaking national cultures outside of France. May be repeated for credit as course content changes. Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Modern and Classical Language Studies

**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.  
2.000 Credit hours  
2.000 Lecture hours  
Levels: Graduate



Schedule Type(s): Lecture  
Department: Modern and Classical Language Studies

### 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.

1.000 to 15.000 Credit hours

1.000 to 15.000 Other hours

Levels: Graduate

Schedule Type(s): Research

Department: Modern and Classical Language Studies

### 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.

2.000 to 6.000 Credit hours

2.000 to 6.000 Other hours

Levels: Graduate

Schedule Type(s): Master's Thesis

Department: Modern and Classical Language Studies

### 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.

4.000 Credit hours

4.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Modern and Classical Language Studies

### FR 63202 READING FRENCH FOR GRADUATE STUDENTS

Practice in the reading and translation of French texts in the student's specialized field and in more general areas. Prerequisite: Graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Modern and Classical Language Studies

### 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.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Modern and Classical Language Studies

### 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 Type(s): Lecture

Department: Modern and Classical Language Studies

### 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 Type(s): Lecture

Department: Modern and Classical Language Studies

### 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 Type(s): Master's Thesis

Department: Modern and Classical Language Studies

### 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 Type(s): Lecture

Department: Modern and Classical Language Studies

## Green and Alternative Energy (GAE)

### 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

Schedule Type(s): Lecture

Department: Regional

### 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 Type(s): Lecture

Department: Regional

### 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 Type(s): Lecture

Department: Regional

### 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 Type(s): Lecture

Department: Regional

## Graduate College (GCOL)

### GCOL 61093 WORKSHOP IN COLLEGE TEACHING

(Repeatable for credit) Orientation to college teaching for new teaching assistants. Prerequisite: Graduate standing.

1.000 or 2.000 Credit hours

1.000 or 2.000 Other hours

Levels: Graduate

Schedule Type(s): Workshop

Department: Research and Graduate Studies

### GCOL 71093 WORKSHOP IN COLLEGE TEACHING

(Repeatable for credit) Orientation to college teaching for new teaching assistants. Prerequisite: Doctoral standing.

1.000 or 2.000 Credit hours

1.000 or 2.000 Other hours

Levels: Graduate

Schedule Type(s): Workshop

Department: Research and Graduate Studies





## Geography (GEOG)

### 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 Type(s): Lecture

Department: Geography

Course Attributes: Kent Core-Social Sciences, LER-Social Sciences, Transfer Module-Social Sciences

### 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 Type(s): Lecture

Department: Geography

### GEOG 17063 WORLD GEOGRAPHY

Examination and comparison of geographic conditions in different regions of the world. Stresses inter-relationships between people and resources within and between regions and countries. Prerequisite: None.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Geography

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

### 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 Type(s): Lecture

Department: Geography

Course Attributes: Diversity Course-Domestic, Kent Core-Social Sciences, LER-Social Sciences, Transfer Module-Social Sciences

### 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 Type(s): Lecture

Department: Geography

### 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 land-formation 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 Type(s): Lecture

Department: Geography

Course Attributes: Kent Core-Basic Sciences, LER-Basic Sciences, TAG Social/Behavior Sciences, Transfer Module-Natural Sciences

### 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 Type(s): Laboratory

Department: Geography

Course Attributes: Kent Core-Basic Sciences, Kent Core-Basic Sciences Lab, LER-Basic Sciences, Transfer Module-Natural Sciences

### GEOG 22040 INTRODUCTION TO GLOBAL TOURISM

Introduction to travel and tourism around the world, including tourism technologies, cultural and natural environments as attraction, s benefits of travel, travel ethics, and sustainable development. Prerequisite: None.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Geography

### 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 Type(s): Lecture

Department: Geography

Course Attributes: Diversity Course-Global, Kent Core-Social Sciences, LER-Social Sciences, Transfer Module-Social Sciences

### 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 Type(s): Lecture

Department: Geography

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 Type(s): Lecture

Department: Geography

### 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.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Geography

### 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.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Geography

### 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.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Geography

### 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.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Geography

Course Attributes: Diversity Course-Global

### 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 Type(s): Lecture  
Department: Geography

### **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 Type(s): Lecture  
Department: Geography

### **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 Type(s): Lecture  
Department: Geography  
Course Attributes: Diversity Course-Global

### **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 Type(s): Lecture  
Department: Geography

### **GEOG 37040 GEOGRAPHY OF AFRICA**

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 Type(s): Lecture  
Department: Geography  
Course Attributes: Diversity Course-Global

### **GEOG 37050 GEOGRAPHY OF RUSSIA AND THE COMMONWEALTH OF INDEPENDENT STATES**

Study of the physical, economic, 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 Type(s): Lecture  
Department: Geography  
Course Attributes: Diversity Course-Global

### **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 Type(s): Lecture  
Department: Geography  
Course Attributes: Diversity Course-Global

### **GEOG 37070 GEOGRAPHY OF EAST AND SOUTHEAST ASIA**

Analysis of the physical and cultural geography of East and Southeast Asia, extending from Japan and China to Burma and Indonesia. Prerequisite: None.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Geography  
Course Attributes: Diversity Course-Global

### **GEOG 37079 GEOGRAPHY OF SOUTH ASIA**

Physical and cultural geography of South Asian region including India, Pakistan, Bangladesh, Nepal, Bhutan and the Maldives Islands. Prerequisite: None.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Geography  
Course Attributes: Diversity Course-Global

### **GEOG 37084 GEOGRAPHY OF SOUTH AMERICA**

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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Geography  
Course Attributes: Diversity Course-Global

### **GEOG 37085 GEOGRAPHY OF CENTRAL AMERICA AND MEXICO**

Geographic analysis and interpretation of major regions of Central America, Mexico and the Caribbean. Evaluation of physical environments and development problems. Prerequisite: None.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Geography  
Course Attributes: Diversity Course-Global

### **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 Type(s): Lecture  
Department: Geography

### **GEOG 39161 INTRODUCTION TO CARTOGRAPHY**

Map making from compilation through reproduction; development of skills in drafting, generalization, symbolization, design familiarization with relief representation, statistical maps and map projections. Prerequisite: GEOG 29160 and MATH 10041. Corequisite: GEOG 39162.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Geography

### **GEOG 39162 INTRODUCTION TO CARTOGRAPHY LABORATORY**

Practical experience in mapmaking. Actual map compilation design, drafting and reproduction is stressed. Corequisite: GEOG 39161.  
1.000 Credit hours  
3.000 Lab hours  
Levels: Undergraduate  
Schedule Type(s): Laboratory  
Department: Geography

### **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 Type(s): Seminar  
Department: Geography  
Course Attributes: Writing Intensive Course

### **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 Type(s): Practicum  
Department: Geography  
Course Attributes: Experiential Learning Requirement

### **GEOG 40195 SPECIAL TOPICS IN GEOGRAPHY**

(Repeatable for credit) Prerequisite: special approval.  
1.000 to 3.000 Credit hours  
1.000 to 3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Geography



### **GEOG 40292 FIELD EXPERIENCE IN GEOGRAPHY**

(Repeatable for credit) 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 Type(s): Field Experience  
Department: Geography  
Course Attributes: Experiential Learning  
Requirement, 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 Type(s): Practicum  
Department: Geography  
Course Attributes: Experiential Learning  
Requirement

### **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 Type(s): Individual Investigation  
Department: Geography

### **GEOG 41050 POLAR AND ALPINE ENVIRONMENTS**

The geographic features of the Earth's cold treeless regions are examined including climate, soils, glaciers, permafrost, plant and animal life and human activities. Prerequisite: GEOG 21062.

3.000 Credit hours  
3.000 Lecture hours

Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Geography

### **GEOG 41052 GLACIERS AND GLACIATION**

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 Type(s): Lecture  
Department: Geography

### **GEOG 41066 CLIMATE CHANGE AND ITS IMPACT**

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: GEOG 31062 and GEOG 31064.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture

Department: Geography

### **GEOG 41073 CONSERVATION OF NATURAL RESOURCES**

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 Type(s): Lecture  
Department: Geography

### **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  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Geography

### **GEOG 42040 TOURISM DEVELOPMENT AND RECREATIONAL TRAVEL**

**Investigation of travel and tourism development** using an interdisciplinary social science approach. Prerequisite: RPTM 36060.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Geography

### **GEOG 42052 MEDICAL GEOGRAPHY**

Geographic patterns of morbidity and mortality in the past and the present; diffusion of diseases and medicine; health in Third World emphasized.

Prerequisite: GEOG 22061.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Geography

### **GEOG 42064 HISTORICAL GEOGRAPHY OF THE UNITED STATES AND CANADA**

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.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Geography

### **GEOG 44010 GEOGRAPHY OF THE GLOBAL ECONOMY**

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.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Geography  
Course Attributes: Writing Intensive Course

### **GEOG 44070 SPATIAL ANALYSIS AND LOCATION THEORY**

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.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Geography

### **GEOG 45085 URBAN TRANSPORTATION**

Spatial analysis of urban transportation, travel behavior, modes. Trip generation and distribution models, transportation planning, urban transportation problems. Prerequisite: none.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Geography

### **GEOG 46035 MARKETING GEOGRAPHY**

Study of spatial arrangements and functions of market centers and the internal spatial patterns of retail stores, location analysis and site selection. Practicum required. Prerequisite: GEOG 36065.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Geography

### **GEOG 46070 URBAN AND REGIONAL PLANNING**

Analysis of geographical aspects of planning for cities and regions. Prerequisite: none.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Geography

### **GEOG 46092 INTERNSHIP IN GEOGRAPHY AND PLANNING**

(Repeatable for credit) 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 Type(s): Practicum  
Department: Geography  
Course Attributes: Experiential Learning  
Requirement

### **GEOG 49070 GEOGRAPHIC INFORMATION SCIENCE**

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: At least 6 hours of geography.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture



Department: Geography

**GEOG 49076 SPATIAL PROGRAMMING**

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 Type(s): Lecture

Department: Geography

**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 Type(s): Lecture

Department: Geography

**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 Type(s): Research

Department: Geography

Course Attributes: Experiential Learning Requirement

**GEOG 49162 ADVANCED CARTOGRAPHY**

Study of the design and production of complex maps. Symbolization, composition and color utilization. Prerequisite: GEOG 39161.

Corequisite: GEOG 49163.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Geography

**GEOG 49163 ADVANCED CARTOGRAPHY LABORATORY**

Practical experience in the techniques of production and reproduction of maps.

Corequisite: GEOG 49162.

1.000 Credit hours

3.000 Lab hours

Levels: Undergraduate

Schedule Type(s): Laboratory

Department: Geography

**GEOG 49165 GEOMAPPING**

Information theory, data collection, automated mapping systems. Representation of surfaces lines and points, geographic data structures and applications. Mapping by line printer, interactive terminals. Prerequisite: GEOG 39002 or GEOG 39161.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Geography

**GEOG 49198 RESEARCH IN CARTOGRAPHY AND GIS**

(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 Type(s): Research

Department: Geography

Course Attributes: Experiential Learning Requirement

**GEOG 49230 REMOTE SENSING**

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 Type(s): Lecture

Department: Geography

**GEOG 49480 FIELD STUDY IN GEOGRAPHY**

Present methods of planning and structuring field studies, the techniques of mapping and data gathering in the analysis of local field problems. Prerequisite: Geography (GEOG) major.

3.000 Credit hours

3.000 Other hours

Levels: Undergraduate

Schedule Type(s): Field Experience

Department: Geography

**GEOG 49890 APPLIED GEOGRAPHY**

Detailed investigation of application of geographic techniques and knowledge toward problem solving in the "real world." Prerequisite: 10 undergraduate geography hours.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Geography

**GEOG 50195 SPECIAL TOPICS IN GEOGRAPHY**

(Repeatable for credit) 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 Type(s): Lecture

Department: Geography

**GEOG 50292 FIELD EXPERIENCE IN GEOGRAPHY**

(Repeatable for credit) 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 Type(s): Field Experience

Department: Geography

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 Type(s): Practicum

Department: Geography

**GEOG 51050 POLAR AND ALPINE ENVIRONMENTS**

The geographic features of the earth's cold treeless regions are examined including climate, soils, glaciers, permafrost, plant and animal life and human activities. Prerequisite: GEOG 21062 and graduate standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Geography

**GEOG 51052 GLACIERS AND GLACIATION**

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 Type(s): Lecture

Department: Geography

**GEOG 51066 CLIMATE CHANGE AND ITS IMPACTS**

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 Type(s): Lecture

Department: Geography

**GEOG 51073 CONSERVATION OF OUR NATURAL RESOURCES**

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 Type(s): Lecture

Department: Geography

**GEOG 51082 GEOGRAPHY OF SOILS**

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 Type(s): Lecture

Department: Geography

**GEOG 52052 MEDICAL GEOGRAPHY**





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 Type(s): Lecture  
Department: Geography

#### **GEOG 52064 HISTORICAL GEOGRAPHY OF THE UNITED STATES AND CANADA**

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: Graduate standing.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Geography

#### **GEOG 54010 GEOGRAPHY OF THE GLOBAL ECONOMY**

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 Type(s): Lecture  
Department: Geography

#### **GEOG 54070 SPATIAL ANALYSIS AND LOCATION THEORY**

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 Type(s): Lecture  
Department: Geography

#### **GEOG 55085 URBAN TRANSPORTATION**

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 Type(s): Lecture  
Department: Geography

#### **GEOG 56035 MARKETING GEOGRAPHY**

Study of spatial arrangement and functions of market centers and the internal spatial patterns of retail-wholesale facilities in urban areas. Prerequisite: Graduate standing.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture

Department: Geography

#### **GEOG 56070 URBAN AND REGIONAL PLANNING**

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 Type(s): Lecture  
Department: Geography

#### **GEOG 56092 INTERNSHIP IN GEOGRAPHY AND PLANNING**

(Repeatable for credit) Pre-professional 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  
Levels: Graduate  
Schedule Type(s): Practicum  
Department: Geography

#### **GEOG 59070 GEOGRAPHIC INFORMATION SCIENCE**

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.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Geography

#### **GEOG 59076 SPATIAL PROGRAMMING**

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 Type(s): Lecture  
Department: Geography

#### **GEOG 59080 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 4/59070 and graduate standing.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Geography

#### **GEOG 59162 ADVANCED CARTOGRAPHY**

Study of the design and production of complex maps, symbolization, composition and color

utilization. Prerequisite: GEOG 39161 and graduate standing. Corequisite: GEOG 5/79163.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Geography

#### **GEOG 59163 ADVANCED CARTOGRAPHY LABORATORY**

Practical experience in the techniques of the production and reproduction of maps. Prerequisite: Graduate standing.

1.000 Credit hours  
3.000 Lab hours  
Levels: Graduate  
Schedule Type(s): Laboratory  
Department: Geography

#### **GEOG 59165 GEOMAPPING**

Information theory, data collection, automated mapping systems, representation of surfaces, lines and points, geographic data structures and applications. Mapping by line printer, plotters and interactive terminals. Prerequisite: Graduate standing.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Geography

#### **GEOG 59230 REMOTE SENSING**

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 Type(s): Lecture  
Department: Geography

#### **GEOG 59480 FIELD STUDY IN GEOGRAPHY**

Presents methods of planning and structuring field studies, the techniques of mapping and data gathering in the analysis of local field problems. Prerequisite: Special approval and graduate standing.

3.000 Credit hours  
3.000 Other hours  
Levels: Graduate  
Schedule Type(s): Field Experience  
Department: Geography

#### **GEOG 60191 SEMINAR IN TOPICAL GEOGRAPHY**

(Repeatable for credit) Seminar in one of the major topical fields in geography offered by title in given semester. Prerequisite: Graduate standing.

3.000 Credit hours  
3.000 Other hours  
Levels: Graduate  
Schedule Type(s): Seminar  
Department: Geography

#### **GEOG 60197 INTRADEPARTMENTAL COLLOQUIUM**

(Repeatable for credit) One hour credit per semester. Prerequisite: Graduate standing.

2.000 Credit hours  
2.000 Other hours  
Levels: Graduate



Schedule Type(s): Colloquium  
Department: Geography

### **GEOG 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  
Schedule Type(s): Master's Thesis  
Department: Geography

### **GEOG 60299 THESIS II**

Thesis students must continue registration each semester until all degree Requirements are met. Prerequisite: GEOG 60199 and graduate standing.  
2.000 Credit hours  
2.000 Other hours  
Levels: Graduate  
Schedule Type(s): Master's Thesis  
Department: Geography

### **GEOG 60800 SEMINAR IN THE DEVELOPMENT OF GEOGRAPHIC THOUGHT**

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.  
3.000 Credit hours  
3.000 Other hours  
Levels: Graduate  
Schedule Type(s): Seminar  
Department: Geography

### **GEOG 60881 CONTEMPORARY ISSUES IN GEOGRAPHY**

Review of some of the important philosophical, methodological and contextual research areas in geography. Designed to expose students to potential research areas. Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Geography

### **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 Type(s): Research  
Department: Geography

### **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 Type(s): Research  
Department: Geography

### **GEOG 67091 SEMINAR IN REGIONAL GEOGRAPHY**

(Repeatable for credit) Seminar on one of the major regions of world offered by title in given semester. Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Other hours  
Levels: Graduate  
Schedule Type(s): Seminar  
Department: Geography

### **GEOG 69004 ANALYSIS OF SPATIAL DATA**

Application of distance measures and taxonomic techniques, analysis of association between different distributions, explanation and prediction of spatial and temporal trends--regression methods (linear and nonlinear), trend surface techniques, and spatial autocorrelation to the geographic analysis and spatial distributions. Prerequisite: GEOG 39002 and graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Geography

### **GEOG 69010 URBAN INFORMATION AND SYSTEMS METHODOLOGY**

Urban information processing procedures for acquiring and using information; research design which emphasizes systems planning prior to research; quantitative methods and stress analysis of statistical results. Prerequisite: Graduate standing.  
2.000 Credit hours  
2.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Geography

### **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.  
3.000 Credit hours  
3.000 Other hours  
Levels: Graduate  
Schedule Type(s): Seminar  
Department: Geography

### **GEOG 70191 SEMINAR IN TOPICAL GEOGRAPHY**

(Repeatable for credit) 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 Type(s): Seminar  
Department: Geography

### **GEOG 70195 SPECIAL TOPICS IN GEOGRAPHY**

(Repeatable for credit) Special topics in geography. Prerequisite: Doctoral standing.  
1.000 to 3.000 Credit hours  
1.000 to 3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Geography

### **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 Type(s): Field Experience  
Department: Geography

### **GEOG 70800 SEMINAR IN THE DEVELOPMENT OF GEOGRAPHIC THOUGHT**

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 Type(s): Seminar  
Department: Geography

### **GEOG 71050 POLAR AND ALPINE ENVIRONMENTS**

The geographic features of the Earth's cold treeless regions are examined including climate, soils, glaciers, permafrost, plant and animal life and human activities. Prerequisite: GEOG 21062 and doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Geography

### **GEOG 71052 GLACIERS AND GLACIATION**

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 Type(s): Lecture  
Department: Geography

### **GEOG 71066 CLIMATE CHANGE AND ITS IMPACTS**

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 Type(s): Lecture  
Department: Geography

### **GEOG 71073 CONSERVATION OF OUR NATURAL RESOURCES**

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 Type(s): Lecture  
Department: Geography

**GEOG 71082 GEOGRAPHY OF SOILS**

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 Type(s): Lecture

Department: Geography

**GEOG 72052 MEDICAL GEOGRAPHY**

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 Type(s): Lecture

Department: Geography

**GEOG 72064 HISTORICAL GEOGRAPHY OF THE UNITED STATES AND CANADA**

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 Type(s): Lecture

Department: Geography

**GEOG 74010 GEOGRAPHY OF THE GLOBAL ECONOMY**

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 Type(s): Lecture

Department: Geography

**GEOG 74070 SPATIAL ANALYSIS AND LOCATION THEORY**

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.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Geography

**GEOG 75085 URBAN TRANSPORTATION**

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.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Geography

**GEOG 76035 MARKETING GEOGRAPHY**

Study of spatial arrangement and functions of market centers and the internal spatial patterns of retail-wholesale facilities in urban areas.

Prerequisite: Doctoral standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Geography

**GEOG 76070 URBAN AND REGIONAL PLANNING**

Analysis of the geographical aspects of planning for cities and regions. Prerequisite: Doctoral standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Geography

**GEOG 76081 SEMINAR IN URBAN GEOGRAPHY**

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 Type(s): Seminar

Department: Geography

**GEOG 79004 ANALYSIS OF SPATIAL DATA**

Application of distance measures and taxonomic techniques, analysis of association between different distributions, explanation and prediction of spatial and temporal trends--regression methods (linear and nonlinear), trend surface techniques, and spatial auto correlation to the geographic analysis and spatial distributions.

Prerequisite: GEOG 39002 and doctoral standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Geography

**GEOG 79010 URBAN INFORMATION AND SYSTEMS METHODOLOGY**

Urban information processing procedures for acquiring and using information; research design which emphasizes systems planning prior to research quantitative methods and stress analysis of statistical results. Prerequisite: Doctoral standing.

2.000 Credit hours

2.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Geography

**GEOG 79070 GEOGRAPHIC INFORMATION SCIENCE**

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.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Geography

**GEOG 79076 SPATIAL PROGRAMMING**

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.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Geography

**GEOG 79080 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 4/5/79070 and doctoral standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Geography

**GEOG 79162 ADVANCED CARTOGRAPHY**

Study of the design and production of complex maps, symbolization composition and color utilization. Prerequisite: GEOG 39161 and doctoral standing. Corequisite: GEOG 5/79163.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Geography

**GEOG 79163 ADVANCED CARTOGRAPHY LABORATORY**

Practical experience in the techniques of the production and reproduction of maps.

Prerequisite: Doctoral standing.

1.000 Credit hours

3.000 Lab hours

Levels: Graduate

Schedule Type(s): Laboratory

Department: Geography

**GEOG 79165 GEOMAPPING**

Information theory, data collection, automated mapping systems, representation of surfaces, lines and points, geographic data structures and applications. Mapping by line printer plotters and interactive terminals. Prerequisite: Doctoral standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Type(s): Lecture

Department: Geography

**GEOG 79230 REMOTE SENSING**

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 Type(s): Lecture  
Department: Geography

**GEOG 79480 FIELD STUDY IN GEOGRAPHY**

Presents methods of planning and structuring field studies, the techniques of mapping and data gathering in the analysis of local field problems. Prerequisite: Special approval and doctoral standing.  
3.000 Credit hours  
3.000 Other hours  
Levels: Graduate  
Schedule Type(s): Field Experience  
Department: Geography

**GEOG 80197 INTRADEPARTMENTAL COLLOQUIUM**

(Repeatable for credit)One hour credit per semester. Prerequisite: Doctoral standing.  
2.000 Credit hours  
2.000 Other hours  
Levels: Graduate  
Schedule Type(s): Colloquium  
Department: Geography

**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  
Levels: Graduate  
Schedule Type(s): Dissertation  
Department: Geography

**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 Type(s): Dissertation  
Department: Geography

**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 Type(s): Research  
Department: Geography

**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 Type(s): Research  
Department: Geography

**GEOG 81098 RESEARCH IN URBAN CLIMATOLOGY**

(Repeatable for credit)Research on basic climatological processes both macro and micro by use of established instrument stations. Influence of expanding urbanization on climatic modification. Prerequisite: Doctoral standing.  
2.000 or 3.000 Credit hours  
2.000 to 3.000 Other hours  
Levels: Graduate  
Schedule Type(s): Research  
Department: Geography

**GEOG 82091 RESEARCH IN HUMAN RESOURCES**

(Repeatable for credit)Research on basic processes related to formation of cultural environment. Investigation of significant variables in human resource allocation and utilization, manpower, education, etc. as factors in growth and development of region. Prerequisite: Doctoral standing.  
2.000 or 3.000 Credit hours  
2.000 or 3.000 Other hours  
Levels: Graduate  
Schedule Type(s): Research  
Department: Geography

**GEOG 89082 FOREIGN FIELD RESEARCH**

Application of field, statistical and cartographic techniques to methodological or conceptual problems in foreign region. Emphasis on research design. Prerequisite: Special approval and doctoral standing.  
1.000 to 5.000 Credit hours  
1.000 to 5.000 Other hours  
Levels: Graduate  
Schedule Type(s): Field Experience  
Department: Geography

**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.  
1.000 to 3.000 Credit hours  
1.000 to 3.000 Other hours  
Levels: Graduate  
Schedule Type(s): Research  
Department: Geography

**Geology (GEOL)****GEOL 11040 EARTH DYNAMICS**

Application of basic concepts and theories of Earth science to the interpretation of Earth

materials and dynamic processes (erosion, sedimentation, volcanism, continental drift).

Prerequisite: None.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Geology  
Course Attributes: Kent Core-Basic Sciences, LER-Basic Sciences, TAG Science, Transfer Module-Natural Sciences

**GEOL 11041 EARTH DYNAMICS LABORATORY**

Laboratory study of minerals, rocks, aerial photos, topographic maps and geologic maps. Pre- or corequisite: GEOL 11040.  
1.000 Credit hours  
3.000 Lab hours  
Levels: Undergraduate  
Schedule Type(s): Laboratory  
Department: Geology  
Course Attributes: Kent Core-Basic Sciences, Kent Core-Basic Sciences Lab, LER-Basic Sciences, TAG Science, Transfer Module-Natural Sciences

**GEOL 11042 EARTH HISTORY**

Application of basic concepts and theories of Earth science to the interpretation of the origin and evolution of the solar system, the Earth, the structures of the crust and life. Prerequisite: None.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Geology  
Course Attributes: Kent Core-Basic Sciences, LER-Basic Sciences, TAG Science, Transfer Module-Natural Sciences

**GEOL 11043 EARTH HISTORY LABORATORY**

Laboratory study of fossils, sedimentary rocks and geologic maps in the framework of interpreting Earth history. Pre- or corequisite: GEOL 11042.  
1.000 Credit hours  
3.000 Lab hours  
Levels: Undergraduate  
Schedule Type(s): Laboratory  
Department: Geology  
Course Attributes: Kent Core-Basic Sciences, Kent Core-Basic Sciences Lab, LER-Basic Sciences, TAG Science, Transfer Module-Natural Sciences

**GEOL 21062 ENVIRONMENTAL GEOLOGY**

Application of geology to environmental problems, including natural resource extraction, water supply, pollution, waste disposal, landslides, floods and land use planning. Field trips. Lecture three hours weekly. Prerequisite: None.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Type(s): Lecture  
Department: Geology  
Course Attributes: Kent Core-Basic Sciences, LER-Basic Sciences, Transfer Module-Natural Sciences



**GEOL 21080 OCEANOGRAPHY**

Introduction to geological, physical, chemical and biological nature of the oceans. Prerequisite: None.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Geology

Course Attributes: Kent Core-Basic Sciences, LER-Basic Sciences, Transfer Module-Natural Sciences

**GEOL 22000 INTRODUCTORY GEOLOGY SEMINAR**

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.

1.000 Credit hours

1.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Geology

**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 Type(s): Combined Lecture and Lab

Department: Geology

**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 Type(s): Laboratory, Lecture

Department: Geology

**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 Type(s): Combined Lecture and Lab

Department: Geology

**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 Type(s): Combined Lecture and Lab

Department: Geology

**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; and either BSCI 10002 or 10110.

4.000 Credit hours

5.000 Other hours

Levels: Undergraduate

Schedule Type(s): Combined Lecture and Lab

Department: Geology

Course Attributes: Writing Intensive Course

**GEOL 40095 SELECTED TOPICS IN GEOLOGY**

(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 Type(s): Lecture

Department: Geology

**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 Type(s): Individual Investigation

Department: Geology

**GEOL 41025 GENERAL GEOPHYSICS**

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 Type(s): Lecture

Department: Geology

**GEOL 41073 GEOLOGY OF OHIO**

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 Type(s): Lecture

Department: Geology

**GEOL 41077 GEOLOGY OF THE NATIONAL PARKS**

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 Type(s): Lecture

Department: Geology

**GEOL 41079 ALL ABOUT DINOSAURS**

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 Type(s): Lecture

Department: Geology

**GEOL 41080 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: GEOL 31080.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Geology

**GEOL 41082 ADVANCED STRUCTURAL GEOLOGY**

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 Type(s): Lecture

Department: Geology

**GEOL 41092 SUMMER FIELD CAMP**

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 Type(s): Practicum

Department: Geology

Course Attributes: Experiential Learning Requirement

**GEOL 42030 REMOTE SENSING**

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 Type(s): Lecture

Department: Geology

**GEOL 42035 SCIENTIFIC METHODS IN GEOLOGY**

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

2.000 Lecture hours

2.000 Lab hours

Levels: Undergraduate

Schedule Type(s): Combined Lecture and Lab

Department: Geology

**GEOL 42067 INTRODUCTORY HYDROGEOLOGY**

Occurrence of ground water in geologic materials; emphasizing utilization conservation and management of ground water resources. Lecture two hours lab two hours weekly. Prerequisite: MATH 12002; and GEOL 31070 and GEOL 32066.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Geology

**GEOL 42068 CONTAMINANT HYDROLOGY AND HYDROGEOLOGY**

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 Type(s): Lecture

Department: Geology

**GEOL 42069 HYDROGEOCHEMISTRY**

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 Type(s): Lecture

Department: Geology

**GEOL 42074 ENVIRONMENTAL CORE AND WELL LOGGING**

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 Type(s): Lecture

Department: Geology

**GEOL 42078 ENGINEERING GEOLOGY**

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 Type(s): Combined Lecture and Lab

Department: Geology

**GEOL 43040 PRINCIPLES OF GEOCHEMISTRY**

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 Type(s): Lecture

Department: Geology

**GEOL 43042 ENVIRONMENTAL GEOCHEMISTRY**

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 Type(s): Lecture

Department: Geology

**GEOL 43044 ENVIRONMENTAL ISOTOPES**

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.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Geology

**GEOL 43066 OPTICAL PETROGRAPHY**

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.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Type(s): Lecture

Department: Geology

**GEOL 44052 GLACIERS AND GLACIATION**

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 Type(s): Lecture

Department: Geology

**GEOL 44070 SEDIMENTOLOGY AND STRATIGRAPHY**

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 and GEOL 34061.

4.000 Credit hours

3.000 Lecture hours

2.000 Lab hours

Levels: Undergraduate

Schedule Type(s): Combined Lecture and Lab

Department: Geology

**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 Type(s): Lecture

Department: Geology

**GEOL 50095 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 Type(s): Lecture

Department: Geology

**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 Type(s): Lecture

Department: Geology

**GEOL 51073 GEOLOGY OF OHIO**

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 Type(s): Lecture



Department: Geology

### **GEOL 51077 GEOLOGY OF THE NATIONAL PARKS**

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 Type(s): Lecture  
Department: Geology

### **GEOL 51079 ALL ABOUT DINOSAURS**

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 Type(s): Lecture  
Department: Geology

### **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 Type(s): Lecture  
Department: Geology

### **GEOL 51082 ADVANCED STRUCTURAL GEOLOGY**

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 Type(s): Lecture  
Department: Geology

### **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. 6.000 Credit hours  
42.000 Other hours  
Levels: Graduate  
Schedule Type(s): Practicum  
Department: Geology

### **GEOL 52030 REMOTE SENSING**

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 Type(s): Lecture  
Department: Geology

### **GEOL 52035 SCIENTIFIC METHODS IN GEOLOGY**

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 Type(s): Combined Lecture and Lab  
Department: Geology

### **GEOL 52067 INTRODUCTORY HYDROGEOLOGY**

Occurrence of ground water in geologic materials; emphasizing utilization, conservation and management of ground water resources. Lecture two hours, laboratory two hours weekly. Prerequisite: graduate standing. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Geology

### **GEOL 52068 CONTAMINANT HYDROLOGY AND HYDROGEOLOGY**

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 Type(s): Lecture  
Department: Geology

### **GEOL 52069 HYDROGEOCHEMISTRY**

Processes and evolution of the chemical composition of water in the natural hydrologic cycle. Methods of hydro chemical 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 Type(s): Lecture  
Department: Geology

### **GEOL 52074 ENVIRONMENTAL CORE AND WELL LOGGING**

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 Type(s): Lecture  
Department: Geology

### **GEOL 52078 ENGINEERING GEOLOGY**

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 Type(s): Combined Lecture and Lab  
Department: Geology

### **GEOL 53040 PRINCIPLES OF GEOCHEMISTRY**

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: graduate standing. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Geology

### **GEOL 53042 ENVIRONMENTAL GEOCHEMISTRY**

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 Type(s): Lecture  
Department: Geology

### **GEOL 53044 ENVIRONMENTAL ISOTOPES**

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 Type(s): Lecture  
Department: Geology

### **GEOL 53066 OPTICAL PETROGRAPHY**

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 Type(s): Lecture  
Department: Geology

**GEOL 54052 GLACIERS AND GLACIATION**

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 Type(s): Lecture  
Department: Geology

**GEOL 54070 SEDIMENTOLOGY AND STRATIGRAPHY**

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 Type(s): Combined Lecture and Lab  
Department: Geology

**GEOL 54074 PALEOCEANOGRAPHY**

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 Type(s): Lecture  
Department: Geology

**GEOL 60080 RESEARCH ORIENTATION**

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 Type(s): Lecture  
Department: Geology

**GEOL 60091 SEMINAR**

(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 Type(s): Seminar  
Department: Geology

**GEOL 60094 COLLEGE TEACHING OF APPLIED GEOLOGY**

(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 Type(s): Lecture  
Department: Geology

**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 Type(s): Lecture  
Department: Geology

**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 Type(s): Research  
Department: Geology

**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 Type(s): Master's Thesis  
Department: Geology

**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 Type(s): Master's Thesis  
Department: Geology

**GEOL 61050 PRECAMBRIAN GEOLOGY**

Study of earth history and processes during the Precambrian, including role of plumes, meteorite bombardment and tectonic processes on crustal evolution. Covers age of the earth, formation and growth of crust, superplume and supercontinent cycles, United Plates of America. Prerequisite: Graduate standing. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Geology

**GEOL 62011 HYDROLOGY**

Introduction to hydrologic measurements, properties of water precipitation, evapotranspiration runoff computations, stream flow and flood routing. Prerequisite: graduate standing. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Geology

**GEOL 62067 GEOPHYSICAL FLUID DYNAMICS**

Consideration of basic physical equations of fluid flow. Application to hydraulics, atmosphere,

oceans and mechanics of ice motion. Numerical and computer implementation. Prerequisite: graduate standing. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Geology

**GEOL 62068 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: graduate standing. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Geology

**GEOL 62079 ADVANCED ENGINEERING GEOLOGY**

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  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Geology

**GEOL 62082 INTRODUCTION TO SOIL MECHANICS**

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  
Levels: Graduate  
Schedule Type(s): Combined Lecture and Lab  
Department: Geology

**GEOL 62083 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: graduate standing. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Geology

**GEOL 62084 FOUNDATION ENGINEERING**

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 graduate standing. 3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture





Department: Geology

### **GEOL 63063 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: graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Geology

### **GEOL 63067 CARBONATE ROCKS**

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 Type(s): Lecture  
Department: Geology

### **GEOL 63069 CLAY MINERALOGY**

Clay mineral classification, structures, identification. Formation, geochemical principles, chemical weathering, diagenesis, metamorphism, wallrock alteration. Industrial uses, engineering applications. Lecture two hours laboratory, two hours weekly. Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Geology

### **GEOL 64028 PALEOECOLOGY**

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 Type(s): Lecture  
Department: Geology

### **GEOL 64030 SYSTEMATIC INVERTEBRATE PALEONTOLOGY I**

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 Type(s): Lecture  
Department: Geology

### **GEOL 64032 SYSTEMATIC INVERTEBRATE PALEONTOLOGY II**

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 Type(s): Lecture  
Department: Geology

### **GEOL 64034 MICROPALEONTOLOGY**

Study of more important microfossil groups found in geologic record, emphasizing Foraminifera, Ostracoda and Conodonts. Techniques for collecting, preparing and studying microfossils. Prerequisite: graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Geology

### **GEOL 64036 CENOZOIC CLIMATE CHANGE**

An overview of the concepts and principles involved in interpreting global and hemispheric Cenozoic climate change (past 65 million years). Emphasis on particular temporal and spatial scales and cycles. Extensive reading in scientific journals. Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Geology

### **GEOL 64065 SEDIMENTOLOGY**

Fluid dynamics, grain transport, sedimentary structures, granulometry, bedform and facies sequences, and facies architecture. Interpretation of continental and marine classic depositional environments and processes. Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Geology

### **GEOL 70080 RESEARCH ORIENTATION**

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 Type(s): Lecture  
Department: Geology

### **GEOL 70091 SEMINAR**

(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  
Levels: Graduate  
Schedule Type(s): Seminar  
Department: Geology

### **GEOL 70094 COLLEGE TEACHING OF APPLIED GEOLOGY**

(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  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Geology

### **GEOL 71050 PRECAMBRIAN GEOLOGY**

Study of earth history and processes during the precambrian, including role of plumes, meteorite bombardment and tectonic processes on crustal evolution. Covers age of the earth, formation and growth of crust, Superplume and supercontinent cycles, United Plates of America. Prerequisite: Doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Geology

### **GEOL 72011 HYDROLOGY**

Introduction to hydrologic measurements, properties of water precipitation, evapotranspiration, runoff computations, stream flow and flood routing. Prerequisite: doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Geology

### **GEOL 72030 REMOTE SENSING**

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 Type(s): Lecture  
Department: Geology

### **GEOL 72067 GEOPHYSICAL FLUID DYNAMICS**

Consideration of basic physical equations of fluid flow. Application to hydraulics, atmosphere, oceans and mechanics of ice motion. Numerical and computer implementation. Prerequisite: doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Geology

### **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 Type(s): Lecture  
Department: Geology

### **GEOL 72069 HYDROGEOCHEMISTRY**

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 Type(s): Lecture  
Department: Geology

#### **GEOL 72079 ADVANCED ENGINEERING GEOLOGY**

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  
Schedule Type(s): Lecture  
Department: Geology

#### **GEOL 72082 INTRODUCTION TO SOIL MECHANICS**

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 Type(s): Combined Lecture and Lab  
Department: Geology

#### **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 Type(s): Lecture  
Department: Geology

#### **GEOL 72084 FOUNDATION ENGINEERING**

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 Type(s): Lecture  
Department: Geology

#### **GEOL 73042 ENVIRONMENTAL GEOCHEMISTRY**

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 Type(s): Lecture  
Department: Geology

#### **GEOL 73044 ENVIRONMENTAL ISOTOPES**

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 Type(s): Lecture  
Department: Geology

#### **GEOL 73055 ADVANCED IGNEOUS AND METAMORPHIC PETROLOGY**

Petrogenic processes relevant to evolution of selected rock groups. Petrologic techniques and methods of analysis. Microscopic study of selected rock suites. Required field trip. Prerequisite: GEOL 4 53066 and doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Geology

#### **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 Type(s): Lecture  
Department: Geology

#### **GEOL 73067 CARBONATE ROCKS**

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 Type(s): Lecture  
Department: Geology

#### **GEOL 73069 CLAY MINERALOGY**

Clay mineral classification, structures, identification. Formation, geochemical principles, chemical weathering, diagenesis, metamorphism, wallrock alteration. Industrial uses, engineering applications. Lecture two hours laboratory, two hours weekly. Prerequisite: Doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture

Department: Geology

#### **GEOL 74028 PALEOECOLOGY**

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 Type(s): Lecture  
Department: Geology

#### **GEOL 74030 SYSTEMATIC INVERTEBRATE PALEONTOLOGY I**

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 Type(s): Lecture  
Department: Geology

#### **GEOL 74032 SYSTEMATIC INVERTEBRATE PALEONTOLOGY II**

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 Type(s): Lecture  
Department: Geology

#### **GEOL 74034 MICROPALAEONTOLOGY**

Study of more important microfossil groups found in geologic record, emphasizing Foraminiferida, Ostracoda and Conodonts. Techniques for collecting, preparing and studying microfossils. Prerequisite: doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Geology

#### **GEOL 74036 CENOZOIC CLIMATE CHANGE**

An overview of the concepts and principles involved in interpreting global and hemispheric Cenozoic climate change (past 65 million years). Emphasis on particular temporal and spatial scales and cycles. Extensive reading in scientific journals. Prerequisite: Doctoral standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Type(s): Lecture  
Department: Geology

#### **GEOL 74052 GLACIERS AND GLACIATION**

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 Type(s): Lecture  
Department: Geology

#### **GEOL 74065 SEDIMENTOLOGY**

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 Type(s): Lecture  
Department: Geology

#### **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 Type(s): Seminar  
Department: Geology

#### **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 Type(s): Lecture  
Department: Geology

#### **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 Type(s): Research  
Department: Geology

#### **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 Type(s): Dissertation  
Department: Geology

#### **GEOL 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: GEOL 80199 and doctoral standing.

15.000 Credit hours  
15.000 Other hours  
Levels: Graduate  
Schedule Type(s): Dissertation  
Department: Geology

### *German (GER)*

#### **GER 11201 - ELEMENTARY GERMAN I**

An introduction to the German language in the context of the cultures of German-speaking lands.

Prerequisite: None.  
4. 000 Credit hours  
4. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Modern and Classical Language Studies

#### **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.

4. 000 Credit hours  
4. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Modern and Classical Language Studies

#### **GER 21201 - INTERMEDIATE GERMAN I**

Continued development of speaking, listening, reading and writing skills using a variety of cultural materials. Prerequisite: GER 11202.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Modern and Classical Language Studies

#### **GER 21202 - INTERMEDIATE GERMAN II**

Continuation of GER 21201. Prerequisite: GER 21201.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Modern and Classical Language Studies

#### **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  
Department: Modern and Classical Language Studies

#### **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  
Department: Modern and Classical Language Studies

#### **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  
Department: Modern and Classical Language Studies

#### **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  
Department: Modern and Classical Language Studies

#### **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  
Department: Modern and Classical Language Studies

#### **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  
Department: Modern and Classical Language Studies

#### **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  
Department: Modern and Classical Language Studies

#### **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



Department: Modern and Classical Language Studies

**GER 41095 - SPECIAL TOPICS**

(Repeatable for credit) 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

Department: Modern and Classical Language Studies

**GER 41096 - INDIVIDUAL INVESTIGATION**

(Repeatable for credit) 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

1. 000 TO 3. 000 Other hours

Levels: Undergraduate

Schedule Types: Individual Investigation

Department: Modern and Classical Language Studies

**GER 41211 - ADVANCED GERMAN COMPOSITION AND CONVERSATION**

Advanced practice in speaking and writing German. Prerequisite: GER 31211.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

**GER 41216 - CONTEMPORARY GERMAN CULTURE**

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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

Course Attributes: Writing Intensive Course

**GER 41230 - ADVANCED TRANSLATION PRACTICE: GERMAN**

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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

Course Attributes: Writing Intensive Course

**GER 41240 - BUSINESS AND SPECIAL TEXTS: GERMAN**

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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

**GER 41330 - TWENTIETH-CENTURY GERMAN AUTHORS**

A survey of the major movements and authors of the twentieth century. Prerequisite: Special approval.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

Course Attributes: Writing Intensive Course

**GER 41332 - GERMAN LITERATURE BY WOMEN**

Readings of works by female German authors. Taught in German. Prerequisite: Junior standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

**GER 41334 - THE GERMAN NOVELLA**

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

Levels: Undergraduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

**GER 41335 - GERMAN DRAMA**

An examination of the development of the drama in Germany, Austria and Switzerland. Taught in German. Prerequisite: Six hours of upper division German courses.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

**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

Levels: Undergraduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

**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

Department: Modern and Classical Language Studies

**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

Department: Modern and Classical Language Studies

**GER 41365 - CLASSICAL GERMAN LITERATURE**

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

Department: Modern and Classical Language Studies

Course Attributes: Writing Intensive Course

**GER 41399 - RESEARCH PROJECT IN GERMAN LITERATURE**

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

Department: Modern and Classical Language Studies

Course Attributes: Experiential Learning Requirement

**GER 41731 - SURVEY OF GERMAN CINEMA**

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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

**GER 51095 - SPECIAL TOPICS**

(Repeatable for credit) 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





Department: Modern and Classical Language Studies

#### **GER 51096 - INDIVIDUAL INVESTIGATION**

(Repeatable for credit) 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

Department: Modern and Classical Language Studies

#### **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

Department: Modern and Classical Language Studies

#### **GER 51216 - CONTEMPORARY GERMAN CULTURE**

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

Department: Modern and Classical Language Studies

#### **GER 51330 - 20TH-CENTURY GERMAN AUTHORS**

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

Department: Modern and Classical Language Studies

#### **GER 51332 - GERMAN LITERATURE BY WOMEN**

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

Department: Modern and Classical Language Studies

#### **GER 51334 - THE GERMAN NOVELLA**

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

Department: Modern and Classical Language Studies

#### **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

Department: Modern and Classical Language Studies

#### **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

Schedule Types: Lecture

Department: Modern and Classical Language Studies

#### **GER 51365 - CLASSICAL GERMAN LITERATURE**

Reading and critical analysis of major works of the classical age with emphasis on Goethe.

Prerequisite: Graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

#### **GER 51731 - SURVEY OF GERMAN CINEMA**

A survey of major contributions to the German cinema from the beginnings to the present; taught in German. Prerequisite: Graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

#### **GER 61001 - GRADUATE RESEARCH AND WRITING IN GERMAN**

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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

#### **GER 61010 - THE PRACTICE OF GERMAN TRANSLATION**

Students apply linguistic and communication science concepts to case studies of language mediation. Corequisite: TRST 60010 and graduate standing.

2. 000 Credit hours

2. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

#### **GER 61091 - VARIABLE TOPIC SEMINAR**

(Repeatable for credit) Topic announced in schedule of classes. Prerequisite: Graduate standing.

3. 000 Credit hours

3. 000 Other hours

Levels: Graduate

Schedule Types: Seminar

Department: Modern and Classical Language Studies

#### **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

Department: Modern and Classical Language Studies

#### **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

Department: Modern and Classical Language Studies

#### **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

Department: Modern and Classical Language Studies

#### **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

Department: Modern and Classical Language Studies

**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  
Department: Modern and Classical Language Studies

**GER 61350 - SEMINAR ON THE LYRIC**

Prerequisite: Graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Modern and Classical Language Studies

**GER 61354 - SEMINAR ON GERMAN DRAMA**

Prerequisite: Graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Modern and Classical Language Studies

**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  
Department: Modern and Classical Language Studies

**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  
Department: Modern and Classical Language Studies

**Gerontology (GERO)****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  
Department: Lifespan Development and Educational Sciences  
Course Attributes: Diversity Course-Domestic, Kent Core-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  
Department: Lifespan Development and Educational Sciences

**GERO 41095 - SPECIAL TOPICS IN GERONTOLOGY**

(Repeatable for credit) 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  
Department: Lifespan Development and Educational Sciences

**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  
Department: Lifespan Development and Educational Sciences

**GERO 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 28 clock hours per week at internship site is required. Prerequisite: human development and family studies (HDFS) majors and senior standing.  
6. 000 Credit hours  
2. 000 Lecture hours  
4. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Lecture, Practicum or Internship  
Department: Lifespan Development and Educational Sciences  
Course Attributes: Experiential Learning Requirement

**GERO 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 28 clock hours per week is required. Prerequisite: human development and family studies (HDFS) major and senior standing.  
6. 000 Credit hours  
2. 000 Lecture hours  
4. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Lecture, Practicum or Internship  
Department: Lifespan Development and Educational Sciences

Course Attributes: Experiential Learning Requirement

**GERO 44030 - ADULT DEVELOPMENT AND AGING**

Examines developmental processes across adulthood. Evaluation of theoretical models and scientific literature. Prerequisite: Human development and family studies (HDFS) majors.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Lifespan Development and Educational Sciences  
Course Attributes: Writing Intensive Course

**GERO 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 44030.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Lifespan Development and Educational Sciences

**GERO 44032 - LONG TERM CARE ADMINISTRATION**

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  
Department: Lifespan Development and Educational Sciences

**GERO 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. 500 required. Prerequisite: HDFS 44018; human development and family studies (HDFS) majors and senior standing.  
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  
Department: Lifespan Development and Educational Sciences  
Course Attributes: Experiential Learning Requirement

**GERO 51095 - SPECIAL TOPICS IN GERONTOLOGY**

(Repeatable for credit) 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  
Department: Lifespan Development and Educational Sciences

#### **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  
Department: Lifespan Development and Educational Sciences

#### **GERO 54030 - ADULT DEVELOPMENT AND AGING**

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  
Department: Lifespan Development and Educational Sciences

#### **GERO 54032 - LONG TERM CARE ADMINISTRATION**

Presents an overview and introduction to the principles of long-term care (LTC) administration and other administration options. Prerequisite: graduate standing.

3. 000 Credit hours  
3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture  
Department: Lifespan Development and Educational Sciences

#### **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  
Department: Lifespan Development and Educational Sciences

#### **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  
Department: Lifespan Development and Educational Sciences

### **General Medicine (GMD)**

#### **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  
Department: Podiatric Medicine

#### **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

Schedule Types: Lecture  
Department: Podiatric Medicine

#### **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  
Department: Podiatric Medicine

#### **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  
Department: Podiatric Medicine

#### **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  
Department: Podiatric Medicine

#### **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  
Department: Podiatric Medicine

#### **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  
Department: Podiatric Medicine

### **Greek (GRE)**

#### **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  
Department: Modern and Classical Language Studies

#### **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  
Department: Modern and Classical Language Studies

#### **GRE 14205 - ELEMENTARY MODERN GREEK I**

An introduction to the modern Greek language in the context of Greek culture. Prerequisite: None.

4. 000 Credit hours

4. 000 Lecture hours



Levels: Undergraduate  
Schedule Types: Lecture  
Department: Modern and Classical Language Studies

#### **GRE 14206 - ELEMENTARY MODERN GREEK II**

A continuation of the introduction to the modern Greek language in the context of Greek culture. Prerequisite: GRE 14205.

4. 000 Credit hours  
4. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Modern and Classical Language Studies

#### **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  
Department: Modern and Classical Language Studies

#### **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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Modern and Classical Language Studies

#### **GRE 24208 - INTERMEDIATE MODERN GREEK I**

Continued development of speaking, listening, reading and writing skills using a variety of cultural materials. Prerequisite: GRE 14206.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Modern and Classical Language Studies

#### **GRE 24209 - INTERMEDIATE MODERN GREEK II**

Advanced readings in prose and poetry, emphasizing such 20th century demotic authors as Nikos Kazantzakis, Elias Venezis, George Seferis and Constantine Cavafy. Prerequisite: GRE 24208.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Modern and Classical Language Studies

#### **GRE 34350 - ADVANCED PROSE AUTHORS**

Selections from major prose authors. Emphasis on Attic orators and the contributions of rhetoric; also readings from ancient Greek historians especially Thucydides. Prerequisite: GRE 24202.

3. 000 Credit hours

3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Modern and Classical Language Studies

#### **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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Modern and Classical Language Studies

#### **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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Modern and Classical Language Studies

#### **GRE 40393 - VARIABLE TITLE WORKSHOP**

(Repeatable for credit) 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  
Levels: Undergraduate  
Schedule Types: Workshop  
Department: Modern and Classical Language Studies

#### **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  
Levels: Undergraduate  
Schedule Types: Individual Investigation  
Department: Modern and Classical Language Studies

#### **GRE 50393 - VARIABLE TITLE WORKSHOP IN GREEK**

(Repeatable for credit) 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  
Department: Modern and Classical Language Studies

## ***Development and Family Studies (HDFS)***

#### **HDFS 14027 - INTRODUCTION TO HUMAN DEVELOPMENT AND FAMILY STUDIES**

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.

2. 000 Credit hours  
2. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Lifespan Development and Educational Sciences

#### **HDFS 24011 - INTERPERSONAL RELATIONSHIPS AND FAMILIES**

(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.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Lifespan Development and Educational Sciences  
Course Attributes: Diversity Course-Domestic

#### **HDFS 24012 - CHILD DEVELOPMENT**

General development of the child from prenatal through middle childhood. Prerequisite: HDFS 24011.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Lifespan Development and Educational Sciences

#### **HDFS 24013 - EARLY ADOLESCENCE**

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.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Lifespan Development and Educational Sciences

#### **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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Lifespan Development and Educational Sciences





### **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

Levels: Undergraduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

### **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

Levels: Undergraduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

### **HDFS 41093 - VARIABLE TOPIC WORKSHOP: HUMAN DEVELOPMENT AND FAMILY STUDIES**

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

Levels: Undergraduate

Schedule Types: Workshop

Department: Lifespan Development and Educational Sciences

### **HDFS 41095 - SPECIAL TOPICS IN HUMAN DEVELOPMENT AND FAMILY STUDIES**

(Repeatable for credit) 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

Department: Lifespan Development and Educational Sciences

### **HDFS 41096 - INDIVIDUAL INVESTIGATION**

(Repeatable for credit) 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

Department: Lifespan Development and Educational Sciences

### **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: Human development and family studies (HDFS) majors and senior standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

### **HDFS 44020 - ADOLESCENT DEVELOPMENT**

Study of adolescent development with emphasis on forces related to adolescent behavior in the family and society. Evaluation of current research.

Prerequisite: Human development and family studies (HDFS) majors.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

### **HDFS 44021 - FAMILY INTERVENTION ACROSS THE LIFESPAN**

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) majors.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

### **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

Levels: Undergraduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

### **HDFS 44023 - BUILDING FAMILY STRENGTHS**

The Building Family Strengths Model builds upon family life potential; based on extensive research emphasizing identified family strengths.

Prerequisite: Human development and family studies (HDFS) majors.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

### **HDFS 44028 - 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) majors.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

### **HDFS 44029 - 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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

### **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: human development and family studies (HDFS) major.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences

### **HDFS 44033 - NONPROFIT MANAGEMENT I**

An overview of nonprofit/human service organizations, including how to start and manage one, leadership, ethics, program development, service learning, board development, budgeting, legal aspects, advocacy and lobby, mission and vision, and fundraising. Prerequisite: None.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

### **HDFS 44034 - NONPROFIT MANAGEMENT II**

An overview of nonprofit/human service organizations, including conflict resolution, human resource management, risk management, marketing, ethics, leadership, intercultural sensitivity and social entrepreneurship.

Prerequisite: None.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

**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. Corequisites: human development and family studies (HDFS) major.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

**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: human development and family studies (HDFS) major.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

**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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

**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 human development and family studies (HDFS) majors.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

**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

Department: Lifespan Development and Educational Sciences

**HDFS 44092 - PRACTICUM IN HUMAN DEVELOPMENT AND FAMILY STUDIES**

(Repeatable for credit) 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 school agency before the first day of the semester in which student teaching internship will take place. Major GPA of 2. 500 is required. Prerequisite: HDFS 44018; and human development and family studies major (HDFS); 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

Department: Lifespan Development and Educational Sciences

Course Attributes: Experiential Learning Requirement

**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. Corequisite: HDFS 44035 and junior standing.

3. 000 TO 6. 000 Credit hours

3. 000 TO 6. 000 Other hours

Levels: Undergraduate

Schedule Types: Practicum or Internship

Department: Lifespan Development and Educational Sciences

Course Attributes: Experiential Learning Requirement

**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. Corequisite: HDFS 44036.

3. 000 TO 6. 000 Credit hours

9. 000 TO 18. 000 Other hours

Levels: Undergraduate

Schedule Types: Practicum or Internship

Department: Lifespan Development and Educational Sciences

Course Attributes: Experiential Learning Requirement

**HDFS 51093 - VARIABLE TITLE WORKSHOP IN 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: Graduate standing.

1. 000 TO 3. 000 Credit hours

1. 000 TO 3. 000 Other hours

Levels: Graduate

Schedule Types: Workshop

Department: Lifespan Development and Educational Sciences

**HDFS 51095 - SPECIAL TOPICS IN HUMAN DEVELOPMENT AND FAMILY STUDIES**

(Repeatable for credit) 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

Department: Lifespan Development and Educational Sciences

**HDFS 51096 - INDIVIDUAL INVESTIGATION**

(Repeatable for credit) 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

Department: Lifespan Development and Educational Sciences

**HDFS 54020 - ADOLESCENT DEVELOPMENT**

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

Department: Lifespan Development and Educational Sciences

**HDFS 54021 - FAMILY INTERVENTION ACROSS THE LIFE SPAN**

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

Department: Lifespan Development and Educational Sciences



### **HDFS 54023 - BUILDING FAMILY STRENGTHS**

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

Department: Lifespan Development and

Educational Sciences

### **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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and

Educational Sciences

### **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

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and

Educational Sciences

### **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. Prerequisite HDFS 54020 and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and

Educational Sciences

### **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 and 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

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and

Educational Sciences

### **HDFS 54039 - BEREAVEMENT, 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: graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and

Educational Sciences

### **HDFS 54092 - PRACTICUM IN HUMAN DEVELOPMENT AND FAMILY STUDIES**

(Repeatable for credit) 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

Department: Lifespan Development and

Educational Sciences

### **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

Department: Lifespan Development and

Educational Sciences

### **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

Department: Lifespan Development and

Educational Sciences

### **HDFS 61198 - MASTER'S PROJECT**

(Repeatable for credit) 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: Individual Investigation

Department: Lifespan Development and

Educational Sciences

### **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

Department: Lifespan Development and

Educational Sciences

### **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

Department: Lifespan Development and

Educational Sciences

### **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

Department: Lifespan Development and

Educational Sciences

### **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

Department: Lifespan Development and

Educational Sciences

### **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  
Department: Lifespan Development and Educational Sciences

## Hebrew (HEBR)

### 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  
Department: Modern and Classical Language Studies

### 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  
Department: Modern and Classical Language Studies

### 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  
Department: Modern and Classical Language Studies

### 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  
Department: Modern and Classical Language Studies

## Health Education (HED)

### 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  
Department: Health Sciences

### 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  
Department: Health Sciences

### 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  
Department: Health Sciences

### 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  
Department: Health Sciences

### HED 20000 - HEALTH EDUCATION FOR EARLY CHILDHOOD EDUCATORS

Investigate current health issues relevant to children in preschool environments/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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Health Sciences

### 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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Health Sciences

### 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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Health Sciences

### 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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Health Sciences

### 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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Health Sciences  
Course Attributes: Writing Intensive Course

### 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  
Department: Health Sciences

### 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  
Department: Health Sciences

### 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  
Department: Health Sciences

### 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: HED 11590 and HED 32542.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Health Sciences

**HED 34060 - SMALL GROUP PROCESSES**  
(Cross-listed with CHDS 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  
Department: Health Sciences

**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  
Department: Health Sciences

**HED 40093 - VARIABLE TITLE WORKSHOP IN HEALTH EDUCATION AND PROMOTION**

(Repeatable for credit) 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  
Department: Health Sciences

**HED 42041 - HEALTH COUNSELING**

Techniques of counseling applied to health education. Individual and group approaches relative to personal, family and societal health issues. This course includes 20 field/clinical hours. Prerequisite: None.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Health Sciences

**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.

9. 000 Credit hours  
9. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Practicum or Internship  
Department: Health Sciences  
Course Attributes: Experiential Learning Requirement

**HED 42575 - HEALTH AND LEARNING: STRATEGIES FOR STUDENTS AND TEACHERS**

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  
Department: Health Sciences

**HED 44025 - WOMEN'S HEALTH ISSUES**

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  
Department: Health Sciences

**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  
12. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Practicum or Internship  
Department: Health Sciences  
Course Attributes: Experiential Learning Requirement

**HED 44096 - INDIVIDUAL INVESTIGATION IN HEALTH EDUCATION AND PROMOTION**

(Repeatable for credit) Independent reading and/or research directed by a hed faculty member. Prerequisite: Permission.

1. 000 TO 3. 000 Credit hours  
1. 000 TO 3. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Individual Investigation  
Department: Health Sciences

**HED 44543 - ADMINISTRATION OF SCHOOL HEALTH PROGRAMS**

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  
Department: Health Sciences

**HED 44544 - SEXUALITY EDUCATION PROGRAMS**

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  
Department: Health Sciences

**HED 44550 - DRUG ABUSE AND VIOLENCE EDUCATION PROGRAMS**

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  
Department: Health Sciences

**HED 46052 - STRESS: RECOGNITION AND MANAGEMENT**

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  
Department: Health Sciences

**HED 46057 - ADVANCED HUMAN SEXUALITY**

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  
Department: Health Sciences

**HED 46070 - HEALTH RELATED ASPECTS OF AGING**

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  
Department: Health Sciences

**HED 47070 - AIDS: ISSUES, EDUCATION AND PREVENTION**

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

Department: Health Sciences

#### **HED 47091 - CURRENT ISSUES IN HEALTH EDUCATION AND PROMOTION**

(Repeatable for credit) 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

Department: Health Sciences

#### **HED 48092 - FIELD EXPERIENCE IN HEALTH EDUCATION AND PROMOTION**

(Repeatable for credit) 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

1. 000 TO 3. 000 Other hours

Levels: Undergraduate

Schedule Types: Field Experience

Department: Health Sciences

Course Attributes: Experiential Learning Requirement

#### **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 and HED 42358.

3. 000 Credit hours

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Seminar

Department: Health Sciences

#### **HED 50093 - VARIABLE TITLE WORKSHOP IN HEALTH EDUCATION AND PROMOTION**

(Repeatable for credit) 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

Department: Health Sciences

#### **HED 52041 - HEALTH COUNSELING**

Techniques of counseling applied to health education. Individual and group approaches relative to personal family and societal health issues. The course includes 20 field clinical hours. Prerequisite: Graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences

#### **HED 52575 - HEALTH AND LEARNING: STRATEGIES FOR STUDENTS AND TEACHERS**

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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences

#### **HED 54025 - WOMEN'S HEALTH ISSUES**

Traditional and feminist analysis of women's health issues and the health educational responses to those issues. Prerequisite: Graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences

#### **HED 54096 - INDIVIDUAL INVESTIGATION IN HEALTH EDUCATION AND PROMOTION**

(Repeatable for credit) 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.

1. 000 TO 3. 000 Credit hours

1. 000 TO 3. 000 Other hours

Levels: Graduate

Schedule Types: Individual Investigation

Department: Health Sciences

#### **HED 54543 - ADMINISTRATION OF SCHOOL HEALTH PROGRAMS**

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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences

#### **HED 54544 - SEXUALITY EDUCATION PROGRAMS**

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

Department: Health Sciences

#### **HED 54550 - DRUG ABUSE AND VIOLENCE EDUCATION PROGRAMS**

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

Department: Health Sciences

#### **HED 56057 - ADVANCED HUMAN SEXUALITY**

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

Department: Health Sciences

#### **HED 56070 - HEALTH RELATED ASPECTS OF AGING**

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

Department: Health Sciences

#### **HED 57070 - AIDS: ISSUES, EDUCATION AND PREVENTION**

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: Graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences

#### **HED 57091 - CURRENT ISSUES IN HEALTH EDUCATION AND PROMOTION**

(Repeatable for credit) 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

Department: Health Sciences

#### **HED 58092 - FIELD EXPERIENCE IN HEALTH EDUCATION AND PROMOTION**

(Repeatable for credit) 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

1. 000 TO 3. 000 Other hours

Levels: Graduate

Schedule Types: Field Experience

Department: Health Sciences

#### **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

Department: Health Sciences

#### **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

Levels: Graduate

Schedule Types: Masters Thesis

Department: Health Sciences

#### **HED 64010 - RESOURCES AND TRAINING IN HEALTH EDUCATION AND PROMOTION**

Focuses on locating, evaluating, and creating health education and promotion resources as well as gaining skills to enable the planning, facilitation, and evaluation of health promotion trainings. Students complete CITI training as a course competency. Prerequisite: graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences

#### **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

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences

#### **HED 64050 - HEALTH BEHAVIOR**

Analysis of a broad range of theoretical and empirical models of health and illness behavior. Prerequisite: HED 64010 and HED 64061 and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences

#### **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 an emphasis on implications for disease prevention, health promotion and behavioral intervention. Prerequisite: graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences

#### **HED 64055 - NEEDS ASSESSMENT AND PROGRAM PLANNING IN HEALTH PROMOTION**

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 64010 and HED 64061 and HED 64050 and HED 64063 and HED 64059 and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences

#### **HED 64057 - EVALUATION OF HEALTH PROMOTION PROGRAMS**

Reviews basic principles and types of evaluations. Students will develop an evaluation plan to determine effectiveness of program developed in HED 64055. Prerequisite: HED 64010 and 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

Department: Health Sciences

#### **HED 64058 - DEVELOPMENTAL APPROACH TO CONTENT AND RESOURCES IN HEALTH EDUCATION**

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

Department: Health Sciences

#### **HED 64059 - COMMUNICATION AND MARKETING IN HEALTH EDUCATION AND PROMOTION**

Introduction to the theory and practice of planning, implementing, and evaluating marketing and communication programs in health promotion. Prerequisites: HED 64010 and HED 64050 and HED 64061 and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences

#### **HED 64060 - GRANT WRITING FOR HEALTH EDUCATION AND PROMOTION**

Focuses on the development of basic grant writing skills for health educators, including the search for funding sources and proposal development. Prerequisite: Graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences

#### **HED 64061 - FOUNDATIONS OF HEALTH EDUCATION AND PROMOTION**

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

Department: Health Sciences

#### **HED 64062 - ADMINISTRATION OF HEALTH PROMOTION PROGRAMS**

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 64010 and HED 64061 and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences

#### **HED 64063 - STRATEGIES IN HEALTH EDUCATION AND PROMOTION**

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

Department: Health Sciences

#### **HED 64070 - WORKSITE HEALTH PROMOTION**

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

Department: Health Sciences

#### **HED 64080 - ADVOCACY AND POLICY ISSUES IN HEALTH EDUCATION AND PROMOTION**

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

Department: Health Sciences

#### **HED 64082 - READINGS IN HEALTH EDUCATION AND PROMOTION**

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

Department: Health Sciences

#### **HED 64094 - COLLEGE TEACHING OF HEALTH EDUCATION AND PROMOTION**

(Repeatable for credit) 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

Department: Health Sciences

#### **HED 64098 - PROJECT IN HEALTH EDUCATION AND PROMOTION**

(Repeatable for credit) Research or individual investigation for master's level graduate students. Prerequisite: Grading standing and special approval.

1. 000 TO 3. 000 Credit hours

1. 000 TO 3. 000 Other hours

Levels: Graduate

Schedule Types: Research

Department: Health Sciences

#### **HED 70093 - VARIABLE TITLE WORKSHOP IN HEALTH EDUCATION AND PROMOTION**

(Repeatable for credit) 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

Department: Health Sciences

#### **HED 74096 - INDIVIDUAL INVESTIGATION IN HEALTH EDUCATION AND PROMOTION**

(Repeatable for credit) 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

Department: Health Sciences

#### **HED 77091 - CURRENT ISSUES IN HEALTH EDUCATION AND PROMOTION**

(Repeatable for credit) 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

Department: Health Sciences

#### **HED 78092 - FIELD EXPERIENCE IN HEALTH EDUCATION AND PROMOTION**

(Repeatable for credit) 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

1. 000 TO 3. 000 Other hours

Levels: Graduate

Schedule Types: Field Experience

Department: Health Sciences

#### **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

Department: Health Sciences

#### **HED 80292 - PRACTICUM IN HEALTH EDUCATION AND PROMOTION**

3. 000 Credit hours

3. 000 Other hours

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Health Sciences

#### **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

15. 000 Other hours

Levels: Graduate

Schedule Types: Dissertation

Department: Health Sciences

#### **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. 000 Credit hours

3. 000 Other hours

Levels: Graduate

Schedule Types: Seminar

Department: Health Sciences

#### **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. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences

#### **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. 000 Credit hours

3. 000 Other hours

Levels: Graduate

Schedule Types: Seminar

Department: Health Sciences

#### **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. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences





### **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

Levels: Graduate  
Schedule Types: Lecture  
Department: Health Sciences

### **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

Levels: Graduate  
Schedule Types: Lecture  
Department: Health Sciences

### **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

Levels: Graduate  
Schedule Types: Lecture  
Department: Health Sciences

### **HED 84010 - RESOURCES AND TRAINING IN HEALTH EDUCATION AND PROMOTION**

Focuses on locating, evaluating and creating health education and promotion resources as well as gaining skills to enable the planning, facilitation and evaluation of health promotion trainings. Students complete CITI training as a course competency. Prerequisite: doctoral standing.

3. 000 Credit hours  
3. 000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture  
Department: Health Sciences

### **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

Levels: Graduate  
Schedule Types: Lecture  
Department: Health Sciences

### **HED 84050 - HEALTH BEHAVIOR**

Analysis of a broad range of theoretical and empirical models of health and illness behavior. Prerequisite: HED 64010; and HED 64061 or 84061 and doctoral standing.

3. 000 Credit hours  
3. 000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture  
Department: Health Sciences

### **HED 84051 - BIOBEHAVIORAL ASPECTS OF DISEASE PREVENTION IN HEALTH EDUCATION AND PROMOTION**

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  
Department: Health Sciences

### **HED 84055 - NEEDS ASSESS AND PROG/PLAN**

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 64010; and 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  
Department: Health Sciences

### **HED 84057 - EVALUATION OF HEALTH PROMOTION PROGRAMS**

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 64010; and 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  
Department: Health Sciences

### **HED 84058 - DEVELOPMENTAL APPROACH TO CONTENT AND RESOURCES IN HEALTH EDUCATION**

Focus on examination of six CDC problem priority areas through the lens of developmentally appropriate practice parameters for children and youth. Prerequisite: doctoral standing.

3. 000 Credit hours  
3. 000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture  
Department: Health Sciences

### **HED 84059 - COMMUNICATION AND MARKETING IN HEALTH EDUCATION AND PROMOTION**

Introduction to the theory and practice of planning, implementing, and evaluating marketing and communication programs in health promotion. Prerequisites: HED 64010; and HED 64050 or 84050; and HED 64061 or 84061; and doctoral standing.

3. 000 Credit hours  
3. 000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture  
Department: Health Sciences

### **HED 84060 - GRANT WRITING FOR HEALTH EDUCATION AND PROMOTION**

Focuses on the development of basic grant writing skills for health educators, including the search for funding sources and proposal development. Prerequisite: doctoral standing.

3. 000 Credit hours  
3. 000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture  
Department: Health Sciences

### **HED 84061 - FOUNDATIONS OF HEALTH EDUCATION AND PROMOTION**

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.

3. 000 Credit hours  
3. 000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture  
Department: Health Sciences

### **HED 84062 - ADMINISTRATION OF HEALTH PROMOTION PROGRAMS**

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 64010; and HED 64061 or 84061; and doctoral standing.

3. 000 Credit hours  
3. 000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture  
Department: Health Sciences

### **HED 84063 - STRATEGIES IN HEALTH EDUCATION AND PROMOTION**

Health education and promotion methods, techniques and strategies are presented for a variety of audiences, learning environments and intervention levels. Prerequisite: doctoral standing.

3. 000 Credit hours  
3. 000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture  
Department: Health Sciences

**HED 84066 - HEALTH IN THE DEVELOPING NATIONS**

Overview of national development, review of problems process and strategy of health development. Prerequisite: doctoral standing.

3. 000 Credit hours  
3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences

**HED 84070 - WORKSITE HEALTH PROMOTION**

Program planning and evaluation of health promotion programs in business and industry with an emphasis on the role of health educators.

Prerequisite: doctoral standing.

3. 000 Credit hours  
3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences

**HED 84080 - ADVOCACY AND POLICY ISSUES IN HEALTH EDUCATION AND PROMOTION**

Emphasizes the advocacy role of health educators. Includes use of research results to develop analyze and influence health policy.

Prerequisite: doctoral standing.

3. 000 Credit hours  
3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences

**HED 84082 - READINGS IN HEALTH EDUCATION AND PROMOTION**

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.

1. 000 TO 3. 000 Credit hours  
1. 000 TO 3. 000 Other hours

Levels: Graduate

Schedule Types: Individual Investigation

Department: Health Sciences

**HED 84094 - COLLEGE TEACHING OF HEALTH EDUCATION AND PROMOTION**

(Repeatable for credit) 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

Department: Health Sciences

**HED 84098 - PROJECT IN HEALTH EDUCATION AND PROMOTION**

(Repeatable for credit) 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

Department: Health Sciences

## *Higher Education (HIED)*

**HIED 66492 - INTERNSHIP IN HIGHER EDUCATION ADMINISTRATION**

(Repeatable for credit) Field-based internship requiring a separate project as designated 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  
3. 000 TO 6. 000 Other hours

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Foundations, Leadership and Administration

**HIED 66521 - EMPLOYMENT LAW**

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

Department: Foundations, Leadership and Administration

**HIED 66594 - INTERNSHIP IN COLLEGE TEACHING**

(Repeatable for credit) 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  
3. 000 Other hours

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Foundations, Leadership and Administration

**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

Department: Foundations, Leadership and Administration

**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

Department: Foundations, Leadership and Administration

**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

Department: Foundations, Leadership and Administration

**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

Department: Foundations, Leadership and Administration

**HIED 66601 - THE PRIVATE LIBERAL ARTS COLLEGE**

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

Department: Foundations, Leadership and Administration

**HIED 66651 - STUDENT AFFAIRS FUNCTIONS IN HIGHER EDUCATION**

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

Department: Foundations, Leadership and Administration

**HIED 66652 - LAW AND HIGHER EDUCATION**

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

Department: Foundations, Leadership and Administration



### **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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Foundations, Leadership and Administration

### **HIED 66654 - STUDENTS AND THE COLLEGE ENVIRONMENT**

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

Levels: Graduate

Schedule Types: Lecture

Department: Foundations, Leadership and Administration

### **HIED 66655 - CASE STUDIES IN HIGHER EDUCATION ADMINISTRATION**

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

Levels: Graduate

Schedule Types: Lecture

Department: Foundations, Leadership and Administration

### **HIED 66656 - HIGHER EDUCATION CURRICULUM**

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

Levels: Graduate

Schedule Types: Lecture

Department: Foundations, Leadership and Administration

### **HIED 66657 - LEADERSHIP IN EDUCATION ORGANIZATIONS**

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

Levels: Graduate

Schedule Types: Lecture

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **HIED 66660 - FACULTY ROLES AND RESPONSIBILITIES**

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

Department: Foundations, Leadership and Administration

### **HIED 66662 - POLITICS AND POWER IN ORGANIZATIONS**

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

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **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

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Foundations, Leadership and Administration

### **HIED 66666 - FINANCIAL MANAGEMENT IN HIGHER EDUCATION**

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

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Foundations, Leadership and Administration

### **HIED 66667 - BUSINESS ADMINISTRATION IN HIGHER EDUCATION**

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

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Foundations, Leadership and Administration

### **HIED 66668 - THE ADMINISTRATION OF DISTANCE AND CONTINUING EDUCATION PROGRAMS IN HIGHER EDUCATION**

Develop practical skills for leading continuing and distance education programs as educational institutions seek to meet the needs of students in an era of lifelong learning. Includes planning managing budgeting and marketing in an academic environment. 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

Department: Foundations, Leadership and Administration

### **HIED 66669 - ADMINISTRATION OF STUDENT DISABILITY SERVICES IN HIGHER EDUCATION**

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

Levels: Graduate

Schedule Types: Lecture

Department: Foundations, Leadership and Administration

### **HIED 66670 - INTERNATIONALIZATION OF HIGHER EDUCATION INSTITUTIONS**

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

Levels: Graduate

Schedule Types: Lecture

Department: Foundations, Leadership and Administration

### **HIED 66671 - THE ADMINISTRATION OF MULTICULTURALISM AND DIVERSITY IN HIGHER EDUCATION**

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

Levels: Graduate

Schedule Types: Lecture

Department: Foundations, Leadership and Administration

### **HIED 66672 - INTERNATIONAL STUDENTS AND AMERICAN COLLEGES**

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

Department: Foundations, Leadership and Administration

### **HIED 66673 - RESEARCH IN ADMINISTRATION OF INTERNATIONAL HIGHER EDUCATION**

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

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **HIED 66733 - INTERPERSONAL AND GROUP DYNAMICS IN EDUCATIONAL ORGANIZATIONS**

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

Department: Foundations, Leadership and Administration

### **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  
Department: Foundations, Leadership and Administration

#### **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  
Department: Foundations, Leadership and Administration

#### **HIED 76492 - INTERNSHIP IN HIGHER EDUCATION ADMINISTRATION**

(Repeatable for credit) Field-based internship requiring a separate project as designated 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  
3. 000 TO 6. 000 Other hours  
Levels: Graduate  
Schedule Types: Practicum or Internship  
Department: Foundations, Leadership and Administration

#### **HIED 76521 - EMPLOYMENT LAW**

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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Foundations, Leadership and Administration

#### **HIED 76594 - INTERNSHIP IN COLLEGE TEACHING**

(Repeatable for credit) 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  
3. 000 Other hours  
Levels: Graduate  
Schedule Types: Practicum or Internship  
Department: Foundations, Leadership and Administration

#### **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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Foundations, Leadership and Administration

#### **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  
Levels: Graduate  
Schedule Types: Individual Investigation  
Department: Foundations, Leadership and Administration

#### **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  
Department: Foundations, Leadership and Administration

#### **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  
Department: Foundations, Leadership and Administration

#### **HIED 76601 - THE PRIVATE LIBERAL ARTS COLLEGE**

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  
Department: Foundations, Leadership and Administration

#### **HIED 76651 - STUDENT AFFAIRS FUNCTIONS IN HIGHER EDUCATION**

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  
Department: Foundations, Leadership and Administration

#### **HIED 76652 - LAW AND HIGHER EDUCATION**

Provides for the examination of major legal aspects of the administration of institutions of higher learning. Prerequisite: Doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Foundations, Leadership and Administration

#### **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  
Department: Foundations, Leadership and Administration

#### **HIED 76654 - STUDENTS AND THE COLLEGE ENVIRONMENT**

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  
Department: Foundations, Leadership and Administration

#### **HIED 76655 - CASE STUDIES IN HIGHER EDUCATION ADMINISTRATION**

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  
Department: Foundations, Leadership and Administration

#### **HIED 76656 - HIGHER EDUCATION CURRICULUM**

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



Department: Foundations, Leadership and Administration

### **HIED 76657 - LEADERSHIP IN EDUCATION ORGANIZATIONS**

By learning to appraise their own leadership styles, students improve their leadership effectiveness and explore the relationship between leadership and college and university effectiveness. 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

Department: Foundations, Leadership and Administration

### **HIED 76658 - THE COMMUNITY COLLEGE**

A study of the foundations, structure, programs and issues of community college education in the United States. Prerequisite: doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Foundations, Leadership and Administration

### **HIED 76660 - FACULTY ROLES AND RESPONSIBILITIES**

A study of faculty roles and responsibilities in American higher education. Prerequisite: doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Foundations, Leadership and Administration

### **HIED 76662 - POLITICS AND POWER IN ORGANIZATIONS**

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: doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Foundations, Leadership and Administration

### **HIED 76663 - 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: doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **HIED 76666 - FINANCIAL MANAGEMENT IN HIGHER EDUCATION**

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

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Foundations, Leadership and Administration

### **HIED 76667 - BUSINESS ADMINISTRATION IN HIGHER EDUCATION**

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

Department: Foundations, Leadership and Administration

### **HIED 76668 - THE ADMINISTRATION OF DISTANCE AND CONTINUING EDUCATION PROGRAMS IN HIGHER EDUCATION**

Develop practical skills for leading continuing and distance education programs as educational institutions seek to meet the needs of students in an era of lifelong learning. Includes planning managing budgeting and marketing in an academic environment. 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

Department: Foundations, Leadership and Administration

### **HIED 76669 - ADMINISTRATION OF STUDENT DISABILITY SERVICES IN HIGHER EDUCATION**

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

Department: Foundations, Leadership and Administration

### **HIED 76670 - INTERNATIONALIZATION OF HIGHER EDUCATION INSTITUTIONS**

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

Schedule Types: Lecture

Department: Foundations, Leadership and Administration

### **HIED 76671 - THE ADMINISTRATION OF MULTICULTURALISM AND DIVERSITY IN HIGHER EDUCATION**

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

Department: Foundations, Leadership and Administration

### **HIED 76672 - INTERNATIONAL STUDENTS AND AMERICAN COLLEGES**

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

Department: Foundations, Leadership and Administration

### **HIED 76673 - RESEARCH IN ADMINISTRATION OF INTERNATIONAL HIGHER EDUCATION**

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

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **HIED 76733 - INTERPERSONAL AND GROUP DYNAMICS IN EDUCATIONAL ORGANIZATIONS**

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

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **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

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Foundations, Leadership and Administration

### **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

Levels: Graduate

Schedule Types: Seminar

Department: Foundations, Leadership and Administration

### **HIED 80085 - LEGAL RESEARCH IN EDUCATION**

Methods of legal research, case analysis and a "uniform system of citation" are studied.

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

Levels: Graduate

Schedule Types: Lecture

Department: Foundations, Leadership and Administration

### **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

Levels: Graduate

Schedule Types: Dissertation

Department: Foundations, Leadership and Administration

### **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

Levels: Graduate

Schedule Types: Dissertation

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

## **History (HIST)**

### **HIST 11050 - HISTORY OF CIVILIZATION I**

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

Department: History

Course Attributes: Diversity Course-Global, Kent Core-Humanities, Trnfr Module-Humanities

### **HIST 11051 - HISTORY OF CIVILIZATION II**

Continuation of HIST 11050. World history from mid-17th century to the present. Prerequisite: None.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: History

Course Attributes: Diversity Course-Global, Kent Core-Humanities, Trnfr Module-Humanities

### **HIST 12070 - HISTORY OF THE UNITED STATES: THE FORMATIVE PERIOD**

A survey of United States history through 1877.

Prerequisite: None.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: History

Course Attributes: Diversity Course-Domestic, Kent Core-Humanities, Trnfr Module-Humanities

### **HIST 12071 - HISTORY OF THE UNITED STATES: THE MODERN PERIOD**

A survey of United States history since 1877.

Prerequisite: None.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: History

Course Attributes: Diversity Course-Domestic, Kent Core-Humanities, 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

Department: History

### **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

Department: History

### **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

Department: History

### **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

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: History

### **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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: History

### **HIST 31050 - HISTORY AND SOCIETY OF MODERN GREECE**

Study of modern Greece concentrating on political, economic, cultural and societal developments since 1821. Prerequisite: None.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: History

### **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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: History

### **HIST 31053 - MODERN EUROPE, 1815 TO PRESENT**

Covers the political, social, and cultural history of Europe from the peace at the end of the Napoleonic wars to the present. Prerequisite: sophomore standing.

3. 000 Credit hours





3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: History

### **HIST 31061 - HISTORY OF OHIO**

Prerequisite: None.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: History

### **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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: History

### **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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: History

### **HIST 31081 - AFRICAN AMERICAN HISTORY: RECONSTRUCTION TO THE PRESENT**

(Cross-listed with PAS 33102) Survey of African American history from 1877 to the present. Course provides a general knowledge of the social, political and cultural history of African Americans from the end of the Reconstruction to the present. Prerequisite: HIST 31080 or PAS 33101.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: History

### **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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: History

### **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  
Department: History

### **HIST 31125 - ZIONISM AND ISRAEL**

Describes history of the Zionist movement from religious, ideological and political viewpoints and the relationship between Zionism and the state of Israel. Prerequisite: None.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: History

### **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  
Department: History

### **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  
Department: History

### **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  
Department: History

### **HIST 31130 - HISTORY OF AFRICAN CIVILIZATION**

Survey of cultural, political, social and economic history of Africa from antiquity to European conquest. Emphasis on pre-colonial. Prerequisite: None.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: History

### **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  
Department: History  
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  
Department: History

### **HIST 32050 - THE HISTORIAN'S CRAFT**

Introduction to the study and practice of historical writing including historical methods, historiography, primary and secondary source research, critical analysis of documentary sources, historical reasoning and the preparation of written reports. Emphasis on developing effective communication skills and research procedures, record-keeping, citation, and bibliography. Prepares students to do advanced work in history. Prerequisites: History major and 6 hours in history.  
3. 000 Credit hours  
3. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: History  
Course Attributes: Writing Intensive Course

### **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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: History

### **HIST 38195 - SPECIAL TOPICS IN EUROPE SINCE 1500**

(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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: History

### **HIST 38295 - SPECIAL TOPICS IN GLOBAL HISTORY**

(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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: History

**HIST 40092 - INTERNSHIP IN HISTORY**

(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.

3. 000 Credit hours

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Practicum or Internship

Department: History

Course Attributes: Experiential Learning Requirement

**HIST 40093 - WORKSHOP IN HISTORY**

(Repeatable for credit) (Cross-listed with HIST 50093) 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

Levels: Undergraduate

Schedule Types: Workshop

Department: History

**HIST 40197 - AMERICAN CULTURAL HERITAGE: THE ARTS AND SOCIETY**

(Cross-listed with HIST 50197 and HIST 70197) 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

Department: History

**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

Department: History

**HIST 41003 - HISTORY OF ANCIENT GREECE**

(Cross-listed with HIST 51003 and HIST 71003; and CLAS 41005 and CLAS 51005) 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

Department: History

**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

Department: History

**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

Department: History

**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

Department: History

**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

Department: History

**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

Department: History

**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

Department: History

**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

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: History

**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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: History

**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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: History

**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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: History

**HIST 41041 - HISTORY OF GERMANY, 1871-PRESENT**

(Cross-listed with HIST 51041 and HIST 71041) 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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: History

**HIST 41044 - IMPERIAL RUSSIA, 1689-1917**

(Cross-listed with HIST 51044 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: Junior standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: History



### **HIST 41045 - MODERN RUSSIA, 1917-PRESENT**

(Cross-listed with HIST 51045 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: Junior standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: History

### **HIST 41051 - POLITICS, CULTURE AND SOCIETY OF 20TH-CENTURY EUROPE**

Political, social and cultural change in Europe during the twentieth century. Topics include violence, war, revolution, economic crises, and social and political changes. Prerequisite: Junior standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: History

### **HIST 41056 - HISTORY OF COLONIAL AMERICA: 1492-1714**

(Cross-listed with HIST 51056 and HIST 71056)  
Major patterns of thought and behavior among Spanish, French and English expansionists; English colonization to 1714. Prerequisite: Junior standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: History

Course Attributes: Diversity Course-Domestic

### **HIST 41057 - EIGHTEENTH-CENTURY AMERICA: 1714-1789**

(Cross-listed with HIST 51057 and HIST 71057)  
Cultural development of English colonies; Great War for Empire; American Revolution and Constitution. Prerequisite: Junior standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: History

Course Attributes: Diversity Course-Domestic

### **HIST 41058 - JEFFERSON-JACKSON ERA, 1789-1848**

(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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: History

### **HIST 41060 - COMPARATIVE FASCISM**

(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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: History

### **HIST 41062 - THE UNITED STATES: THE WESTWARD MOVEMENT**

(Cross-listed with HIST 51062 and HIST 71062)  
The process of settlement from its beginnings; consequences for American history. Prerequisite: Junior standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: History

### **HIST 41065 - SECTIONAL CONFLICT AND CIVIL WAR**

(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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: History

### **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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: History

### **HIST 41070 - AMERICAN SOCIAL AND INTELLECTUAL HISTORY 1790-1876**

(Cross-listed with HIST 51070 and HIST 71070)  
Major currents of the period: social background of the early republic; religious development; impact of the frontier, abolition. This course may be used to satisfy the university diversity requirement. Prerequisite: Junior standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: History

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

Department: History  
Course Attributes: Diversity Course-Domestic

### **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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: History

### **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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: History

### **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  
Department: History

### **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  
Department: History

**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  
Department: History

**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  
Department: History

**HIST 41085 - THE SIXTIES IN AMERICA**

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.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: History

**HIST 41087 - PROGRESSIVE AMERICA: THE UNITED STATES, 1896-1919**

Major political, economic, social, cultural and diplomatic events from the crisis of the 1890s through the first World War. Prerequisite: Junior standing.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: History

**HIST 41088 - NEW ERA THROUGH WORLD WAR: THE UNITED STATES, 1920-1945**

(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.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: History

**HIST 41089 - RECENT AMERICA: THE UNITED STATES, 1945-PRESENT**

(Cross-listed with HIST 51089 and HIST 71089)  
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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: History

**HIST 41097 - COLLOQUIUM: SAINTS, MONKS, AND THE MEDIEVAL COMMUNITY**

(Cross-listed with HIST 51097 and HIST 71097)  
Investigates major religious institutions that shaped medieval European society and the impact on popular piety. Prerequisite: Junior standing.

3. 000 Credit hours  
3. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Colloquium  
Department: History

**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  
Department: History

**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  
Department: History

**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  
Department: History

**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  
Department: History

**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  
Department: History

**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  
Department: History

**HIST 42141 - COMPARATIVE THIRD WORLD REVOLUTIONS**

(Cross-listed with HIST 52141 and HIST 72141)  
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  
Department: History

**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  
Department: History

**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  
3. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Colloquium  
Department: History  
Course Attributes: Writing Intensive Course

**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

Levels: Undergraduate

Schedule Types: Colloquium

Department: History

Course Attributes: Diversity Course-Global, Writing Intensive Course

### **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

Levels: Undergraduate

Schedule Types: Colloquium

Department: History

### **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

Levels: Undergraduate

Schedule Types: Colloquium

Department: History

Course Attributes: Writing Intensive Course

### **HIST 48697 - COLLOQUIUM: U. S. MIDDLE PERIOD, 1820-1900**

(Cross-listed with HIST 58697 and HIST 78697)

Reading, discussion and written reviewing of important works on the period. Prerequisite: Junior standing.

3. 000 Credit hours

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Colloquium

Department: History

Course Attributes: Writing Intensive Course

### **HIST 48797 - COLLOQUIUM IN AFRICAN AMERICAN HISTORY TO 1877**

(Cross-listed with HIST 58797 and HIST 78797)

This colloquium specializes in African American history prior to 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

Department: History

### **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

Department: History

### **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

Department: History

### **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

Department: History

### **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

Department: History

### **HIST 49196 - INDIVIDUAL INVESTIGATION**

(Repeatable for credit)

2. 000 OR 3. 000 Credit hours

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Individual Investigation

Department: History

### **HIST 49199 - SENIOR HONORS PROJECT**

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

Department: History

Course Attributes: Experiential Learning Requirement

### **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

Department: History

### **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

Levels: Graduate

Schedule Types: Workshop

Department: History

### **HIST 50197 - AMERICA'S CULTURAL HERITAGE: THE ARTS AND SOCIETY**

(Repeatable for credit) (Cross-listed with HIST 40197 and HIST 70197) An examination of selected American arts in their cultural context. American studies methodologies and concepts of history. Prerequisite: Graduate standing.

3. 000 Credit hours

3. 000 Other hours

Levels: Graduate

Schedule Types: Colloquium

Department: History

### **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

Levels: Graduate

Schedule Types: Lecture

Department: History

### **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

Levels: Graduate

Schedule Types: Lecture

Department: History

### **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  
Levels: Graduate  
Schedule Types: Lecture  
Department: History

### **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  
Levels: Graduate  
Schedule Types: Lecture  
Department: History

### **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  
Department: History

### **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  
Department: History

### **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  
Department: History

### **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  
Levels: Graduate  
Schedule Types: Lecture  
Department: History

### **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  
Levels: Graduate  
Schedule Types: Lecture  
Department: History

### **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  
Levels: Graduate  
Schedule Types: Lecture  
Department: History

### **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  
Levels: Graduate  
Schedule Types: Lecture  
Department: History

### **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  
Levels: Graduate  
Schedule Types: Lecture  
Department: History

### **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  
Department: History

### **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  
Department: History

### **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  
Department: History

### **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  
Department: History

### **HIST 52140 - THE SIXTIES: A THIRD WORLD VIEW**

(Cross-listed with HIST 42140 and HIST 72140)  
Examines the political, social and cultural upheaval of the 1960s in Latin America, Africa and Asia. Prerequisite: Graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: History

### **HIST 52141 - COMPARATIVE THIRD WORLD REVOLUTIONS**

(Cross-listed with HIST 42141 and HIST 72141)  
Examination of 20th-century revolutions in Latin America, Africa and Asia focusing on ideologies and political leadership. Prerequisite: Graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: History

### **HIST 52142 - AFRO-LATIN AMERICA**

(Cross-listed with HIST 42142, HIST 72142 and PAS 43300) Course 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: graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: History



### **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  
Department: History

### **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  
Department: History

### **HIST 53800 - RELIGION AND SOCIETY IN THE MODERN WEST**

(Cross-listed with HIST 73800) Introduction to recent trends in the writing of European and comparative western religious history. Examines themes across societies with particular emphasis placed on gender, bourgeois culture, national identity, liberalism and democracy, the industrial working classes, race and racism, fascism and communism. Prerequisite: graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: History

### **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  
Department: History

### **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  
Department: History

### **HIST 59095 - 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. Repeatable. Prerequisite: graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: History

### **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  
Department: History

### **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  
Department: History

### **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  
Department: History

### **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  
Levels: Graduate  
Schedule Types: Lecture  
Department: History

### **HIST 61002 - HISTORIOGRAPHY**

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  
Levels: Graduate  
Schedule Types: Lecture  
Department: History

### **HIST 61070 - WRITING SEMINAR IN HISTORY**

(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  
Levels: Graduate  
Schedule Types: Seminar  
Department: History

### **HIST 62097 - PUBLIC HISTORY COLLOQUIUM**

(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  
Levels: Graduate  
Schedule Types: Colloquium  
Department: History

### **HIST 69199 - 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  
Department: History

### **HIST 69299 - THESIS II**

Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: HIST 69199 and graduate standing.  
2. 000 Credit hours  
2. 000 Other hours  
Levels: Graduate  
Schedule Types: Masters Thesis  
Department: History

### **HIST 69896 - INDIVIDUAL INVESTIGATION**

(Repeatable for credit) Prerequisite: Graduate standing.  
2. 000 OR 3. 000 Credit hours  
2. 000 TO 3. 000 Other hours  
Levels: Graduate  
Schedule Types: Individual Investigation  
Department: History

**HIST 69898 - RESEARCH**

(Repeatable for credit) Prerequisite: Graduate standing.

1. 000 TO 15. 000 Credit hours  
1. 000 TO 15. 000 Other hours

Levels: Graduate

Schedule Types: Research

Department: History

**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.

3. 000 TO 6. 000 Credit hours

3. 000 TO 6. 000 Other hours

Levels: Graduate

Schedule Types: Practicum or Internship

Department: History

**HIST 70197 - AMERICA'S CULTURAL HERITAGE: THE ARTS AND SOCIETY**

(Repeatable for credit) (Cross-listed with HIST 40197 and HIST 50197) An examination of selected American arts in their cultural context. American studies, methodologies and concepts of history. Prerequisite: Doctoral standing.

3. 000 Credit hours

3. 000 Other hours

Levels: Graduate

Schedule Types: Colloquium

Department: History

**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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: History

**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

Department: History

**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

Department: History

**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

Department: History

**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

Department: History

**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

Department: History

**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

Levels: Graduate

Schedule Types: Lecture

Department: History

**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

Levels: Graduate

Schedule Types: Lecture

Department: History

**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

Levels: Graduate

Schedule Types: Lecture

Department: History

**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

Levels: Graduate

Schedule Types: Lecture

Department: History

**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

Department: History

**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

Department: History

**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

Department: History

**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





Department: History

**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  
Department: History

**HIST 72141 - COMPARATIVE THIRD WORLD REVOLUTIONS**

(Cross-listed with HIST 42141 and HIST 52141)  
Examination of 20th-century revolutions in Latin America, Africa and Asia focusing on ideologies and political leadership. Prerequisite: Doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: History

**HIST 72142 - AFRO-LATIN AMERICA**

(Cross-listed with HIST 42142, HIST 52142 and PAS 43300) Course 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: doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: History

**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  
Department: History

**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

Department: History

**HIST 73800 - RELIGION AND SOCIETY IN THE MODERN WEST**

(Cross-listed with HIST 53800) Introduction to recent trends in the writing of European and comparative western religious history. Examines themes across societies with particular emphasis placed on gender, bourgeois culture, national identity, liberalism and democracy, the industrial working classes, race and racism, fascism and communism. Prerequisite: doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: History

**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  
Department: History

**HIST 78897 - COLLOQUIUM IN AFRICAN-AMERICAN HISTORY SINCE 1877**

(Repeatable for credit) (Cross-listed with HIST 48897 and HIST 58897) 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  
Department: History

**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  
Department: History

**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  
Department: History

**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  
Department: History

**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  
Levels: Graduate  
Schedule Types: Lecture  
Department: History

**HIST 81002 - HISTORIOGRAPHY**

Development of historical thinking. Students will read excerpts of famous historians and prepare papers. Prerequisite: Doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: History

**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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Seminar  
Department: History

**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.  
15. 000 Credit hours  
15. 000 Other hours  
Levels: Graduate  
Schedule Types: Dissertation  
Department: History

**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.  
15. 000 Credit hours  
15. 000 Other hours  
Levels: Graduate  
Schedule Types: Dissertation  
Department: History

**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  
Department: History

**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  
Department: History

## *Hospitality Management (HM)*

**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  
Department: Foundations, Leadership and Administration

**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  
Department: Foundations, Leadership and Administration

**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.  
2. 000 Credit hours  
2. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Foundations, Leadership and Administration

**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  
Department: Foundations, Leadership and Administration

**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  
Department: Foundations, Leadership and Administration  
Course Attributes: TAG - Health

**HM 23030 - LODGING OPERATIONS**

This course provides students with an introduction to lodging, resort operations and management. Skills needed to succeed in the field and career opportunities are emphasized. Prerequisite: None.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Foundations, Leadership and Administration

**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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Foundations, Leadership and Administration

**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.

5. 000 Credit hours  
5. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Foundations, Leadership and Administration

**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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Foundations, Leadership and Administration

**HM 33029 - CATERING AND BANQUET PREPARATION AND SERVICE**

Combines theoretical and practical applications of planning, merchandising, costing, producing and serving catered meals. Prerequisite: HM 33026.  
5. 000 Credit hours  
2. 000 Lecture hours  
3. 000 Lab hours  
Levels: Undergraduate  
Schedule Types: Laboratory, Lecture  
All Sections for this Course  
Department: Foundations, Leadership and Administration

**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.  
3. 000 Credit hours  
2. 000 Lecture hours  
2. 000 Lab hours  
Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab  
Department: Foundations, Leadership and Administration

**HM 33035 - HOSPITALITY SERVICE QUALITY MANAGEMENT**

The unique issues associated with managing guest satisfaction will be explored. The delivery of quality services and recovery from service failure in hospitality organizations will be studied from a human resource and organizational perspective. Prerequisite: MIS 24163.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Foundations, Leadership and Administration

**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

Department: Foundations, Leadership and Administration

### **HM 33040 - HOTEL CONVENTION SALES AND SERVICES**

From a hotel sales and convention services 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

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **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

Schedule Types: Lecture

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **HM 41093 - VARIABLE TOPIC WORKSHOP IN HOSPITALITY 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

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

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

Department: Foundations, Leadership and Administration

Course Attributes TAG - Health

### **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

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

Course Attributes: TAG - Health

### **HM 43040 - STRATEGIC LODGING 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

2. 000 Lecture hours

1. 000 Lab hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Foundations, Leadership and Administration

### **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  
Department: Foundations, Leadership and Administration

#### **HM 43044 - HOSPITALITY MEETINGS MANAGEMENT LABORATORY**

(Cross-listed 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: Laboratory  
Department: Foundations, Leadership and Administration

#### **HM 43092 - PRACTICUM IN HOSPITALITY MANAGEMENT**

Supervised professional experience in the hospitality industry including operations such as restaurants, hotels, clubs, health care, theme parks and food distribution. Bimonthly seminars 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  
21. 000 TO 42. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Practicum or Internship  
Department: Foundations, Leadership and Administration  
Course Attributes: Experiential Learning Requirement

#### **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  
Department: Foundations, Leadership and Administration

#### **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

Department: Foundations, Leadership and Administration

#### **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  
Department: Foundations, Leadership and Administration

#### **HM 53040 - STRATEGIC LODGING MANAGEMENT**

(Cross-listed with HM 43040) 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.  
3. 000 Credit hours  
2. 000 Lecture hours  
1. 000 Lab hours  
Levels: Graduate  
Schedule Types: Combined Lecture and Lab  
Department: Foundations, Leadership and Administration

#### **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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Foundations, Leadership and Administration

#### **HM 53044 - HOSPITALITY MEETINGS MANAGEMENT LABORATORY**

(Cross-listed with HM 43044) 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.  
2. 000 Credit hours  
2. 000 Lab hours  
Levels: Graduate  
Schedule Types: Laboratory  
Department: Foundations, Leadership and Administration

#### **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. Prerequisites: graduate standing and special approval.

1. 000 TO 15. 000 Credit hours  
1. 000 TO 15. 000 Other hours

Levels: Graduate

Schedule Types: Research

Department: Foundations, Leadership and Administration

#### **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.  
2. 000 TO 6. 000 Credit hours  
2. 000 TO 6. 000 Other hours  
Levels: Graduate  
Schedule Types: Research  
Department: Foundations, Leadership and Administration

#### **HM 61199 - THESIS I**

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  
Department: Foundations, Leadership and Administration

#### **HM 61299 - THESIS II**

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  
Department: Foundations, Leadership and Administration

#### **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  
Department: Foundations, Leadership and Administration

#### **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

Department: Foundations, Leadership and Administration

### 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

Department: Foundations, Leadership and Administration

### HM 63095 - SPECIAL TOPICS IN HOSPITALITY MANAGEMENT

(Repeatable for credit) Specialized offering of a major topic within hospitality management.

Prerequisite: graduate standing.

1. 000 TO 3. 000 Credit hours

1. 000 TO 3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Foundations, Leadership and Administration

## Honors (HONR)

### HONR 10096 - INDIVIDUAL HONORS WORK

(Repeatable for credit) Directed independent study for freshmen 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

Department: Honors

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

Department: Honors

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

Department: Honors

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

Department: Honors

### 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

Department: Honors

Course Attributes: Honors Course

### HONR 20197 - SOPHOMORE COLLOQUIUM

(Repeatable for credit) 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. 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

Department: Honors

Course Attributes: Honors Course

### HONR 20297 - SOPHOMORE COLLOQUIUM

(Repeatable for credit) See HONR 20197.

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

Department: Honors

Course Attributes: Honors Course

### HONR 30096 - INDIVIDUAL HONORS WORK

(Repeatable for credit) Directed independent study for juniors 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

Department: Honors

Course Attributes: Honors Course

### HONR 30197 - JUNIOR COLLOQUIUM

(Repeatable for credit) 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. 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

Department: Honors

Course Attributes: Honors Course

### HONR 30297 - JUNIOR COLLOQUIUM

(Repeatable for credit) See HONR 30197.

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

Department: Honors

Course Attributes: Honors Course

### HONR 40085 - SENIOR HONORS PORTFOLIO

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.

1. 000 Credit hours

1. 000 Other hours

Levels: Undergraduate

Schedule Types: Individual Investigation

Department: Honors

Course Attributes: Honors Course

### HONR 40096 - INDIVIDUAL HONORS WORK

(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.

1. 000 TO 4. 000 Credit hours

1. 000 TO 4. 000 Other hours

Levels: Undergraduate

Schedule Types: Individual Investigation

Department: Honors

Course Attributes: Honors Course

### HONR 40099 - SENIOR HONORS THESIS/PROJECT

Thesis or creative project. Prerequisite: Special approval of department.

1. 000 TO 10. 000 Credit hours

1. 000 TO 10. 000 Other hours

Levels: Undergraduate

Schedule Types: Senior Project/Honors Thesis

Department: Honors

Course Attributes: Experiential Learning Requirement, 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

Department: Honors

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

Department: Honors

Course Attributes: Honors Course

## ***Horticulture Technology (HORT)***

**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

Department: Biological Sciences

**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

Department: Biological Sciences

**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

Department: Biological Sciences

**HORT 26011 - COOPERATIVE WORK EXPERIENCE IN TREE CARE**

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

Department: Biological Sciences

**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

Department: Biological Sciences

**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

Department: Biological Sciences

**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

Department: Biological Sciences

**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

Department: Biological Sciences

**HORT 26021 - COOPERATIVE WORK EXPERIENCE IN LANDSCAPE MANAGEMENT**

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

Department: Biological Sciences

**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

Department: Biological Sciences

**HORT 26031 - COOPERATIVE WORK EXPERIENCE IN TURF GRASS MANAGEMENT**

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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Field Experience

Department: Biological Sciences

**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 aeration issues, topdressing and administrative concerns. Prerequisite: HORT 16001 and HORT 26031 and BSCI 16001.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Biological Sciences

**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.

3. 000 Credit hours

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Biological Sciences

**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.

3. 000 Credit hours



2. 000 Lecture hours

3. 000 Lab hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Biological Sciences

### **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.

3. 000 Credit hours

2. 000 Lecture hours

3. 000 Lab hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Biological Sciences

### **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

Department: Biological Sciences

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

Department: Biological Sciences

### **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

Department: Biological Sciences

### **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

Department: Biological Sciences

Course Attributes: Experiential Learning Requirement

### **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

Department: Biological Sciences

### **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

Department: Biological Sciences

### **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 pas 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

Department: Biological Sciences

Course Attributes: Experiential Learning Requirement

## **Health Policy and Management (HPM)**

### **HPM 50196 - INDIVIDUAL INVESTIGATION IN HEALTH POLICY AND MANAGEMENT**

(repeatable for maximum 6 credits) Individual graduate investigation or research in areas related to health policy and management. Prerequisite: graduate standing and special approval.

1. 000 TO 3. 000 Credit hours

Levels: Graduate

Schedule Types: Individual Investigation

Department: Health Policy and Management

### **HPM 52015 - EMERGING ISSUES IN PUBLIC HEALTH POLICY AND MANAGEMENT**

(Cross-listed with HPM 72015) An overview of emerging challenges in public health policy and management. Examples include pandemic H1N1 response, biopreparedness, national health care reform, public health financing challenges, global tuberculosis drug resistance. Prerequisite: graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Health Policy and Management

### **HPM 52016 - PUBLIC HEALTH ADMINISTRATION**

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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Health Policy and Management

### **HPM 53003 - HEALTH CARE SYSTEMS**

Provides a systems approach to delivering health care and public health services in the US. Includes and overview of public health, outpatient, inpatient, managed care, long term care and health services for special populations. Prerequisite: graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Health Policy and Management

### **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

Department: Health Policy and Management

**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

Department: Health Policy and Management

**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

Department: Health Policy and Management

**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

Department: Health Policy and Management

**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

1. 000 TO 3. 000 Credit hours

1. 000 TO 3. 000 Lecture hours

Levels: Graduate

Schedule Types: Seminar

Department: Health Policy and Management

**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

Department: Health Policy and Management

**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, biopreparedness, 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

Department: Health Policy and Management

**HPM 72030 - GRANT WRITING IN PUBLIC HEALTH**

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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Health Policy and Management

**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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Health Policy and Management

**HPM 73022 - STRATEGIC MANAGEMENT OF HEALTH CARE ORGANIZATIONS**

Covers basic and advanced principles of strategic management of health care organizations including service area analysis, internal environment analysis, developing and evaluating strategic alternatives and quality indicators. Prerequisite: doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Health Policy and Management

**HPM 73023 - OPERATIONS MANAGEMENT IN PUBLIC HEALTH**

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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Health Policy and Management

**HPM 73031 - PUBLIC HEALTH POLICY ANALYSIS**

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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Health Policy and Management

**HPM 80191 - VARIABLE CONTENT SEMINAR IN HEALTH POLICY AND MANAGEMENT**

(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.

1. 000 TO 3. 000 Credit hours

1. 000 TO 3. 000 Lecture hours

Levels: Graduate

Schedule Types: Seminar

Department: Health Policy and Management

**HPM 80195 - ST HEALTH POLICY AND MNGT**

(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.

1. 000 TO 3. 000 Credit hours

1. 000 TO 3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Health Policy and Management

## *Heritage Languages (HRTG)*

**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

Department: Modern and Classical Language Studies

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  
Department: Modern and Classical Language  
Studies  
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  
Department: Modern and Classical Language  
Studies  
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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Modern and Classical Language  
Studies  
Course Attributes: Variable Title

### **HRTG 30095 - SPECIAL TOPICS**

(Repeatable for credit) Topic announced in schedule of classes. Prerequisite: Permission.  
1. 000 TO 3. 000 Credit hours  
1. 000 TO 3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Modern and Classical Language  
Studies

## ***Human Services Technology (HST)***

### **HST 11000 - INTRODUCTION TO HUMAN SERVICES**

A survey of the role of human service technologists, their professional and ethical responsibilities, employment possibilities and avenues for professional advancement. Prerequisite: None.  
1. 000 Credit hours  
1. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **HST 11001 - GROUP PROCESS IN HUMAN SERVICES**

The structure and function of groups, focusing on problem solving and communication in human service agencies. Prerequisite: None.  
2. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **HST 11002 - SURVEY OF COMMUNITY RESOURCES**

A survey of providers at the federal, regional, state and local levels, including services provided and

regulations of private and public agencies.

Prerequisite: none.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **HST 21000 - DYNAMICS OF HELPING RELATIONSHIPS**

The dynamics of helping relationship in human services agencies. Skill development in listening and provision of assistance to clients is emphasized. Prerequisite: HST 11001.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **HST 21001 - ASSESSMENT OF CLIENT NEEDS**

An introduction to the evaluation of client needs and assessment of client condition. Prerequisite: HED 21050. Corequisites: HST 21092.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **HST 21002 - CLIENT ADVOCACY AND CASE MANAGEMENT IN HUMAN SERVICE ORGANIZATIONS**

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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **HST 21092 - INTERNSHIP IN HUMAN SERVICES TECHNOLOGY I**

(Repeatable for credit) Supervised field experience in a human service agency (minimum of 16 hours per week). Joint university-agency supervision. Prerequisite: Advisor special approval. Corequisites: HST 21001.  
3. 000 Credit hours  
3. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Practicum or Internship  
Department: Regional  
Course Attributes: Experiential Learning  
Requirement

### **HST 21192 - INTERNSHIP IN HUMAN SERVICES TECHNOLOGY II**

(Repeatable for credit) Continued supervised field experience in a human services agency (minimum 16 hours per week). Joint university-agency supervision. Prerequisites: HST 21092 and special approval. Corequisite: HST 21002.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Practicum or Internship  
Department: Regional  
Course Attributes: Experiential Learning  
Requirement

## ***High Technology Manufacturing Technology (HTMT)***

### **HTMT 23695 - SPECIAL TOPICS**

(Repeatable for credit) Special topics in lasers, photonics or semiconductor technology. Topics announced when scheduled. Repeated registration permitted. Prerequisite: Sophomore standing.  
1. 000 TO 3. 000 Credit hours  
1. 000 TO 3. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab  
Department: Regional

## ***Information Architecture and Knowledge Management (IAKM)***

### **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  
Levels: Undergraduate  
Schedule Types: Individual Investigation  
Department: Library and Information Science

### **IAKM 60001 - INFORMATION ARCHITECTURE AND KNOWLEDGE MANAGEMENT IN CONTEXT**

(Cross-listed with IAKM 80001) Overview of the Information Architecture and Knowledge Management (IAKM) program and its concentrations. Basic skills and understandings in information literacy, organization of knowledge, information sources and searching. Information sciences, systems, and professionals in the information society. Prerequisite: Graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

### **IAKM 60002 - KNOWLEDGE ORGANIZATION STRUCTURES, SYSTEMS AND SERVICES**

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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

**IAKM 60101 - INFORMATION ARCHITECTURE**

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. Prerequisite: graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

**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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

**IAKM 60103 - RESEARCHING THE USER EXPERIENCE**

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: graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

**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. Prerequisite: graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

**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: graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

**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  
Department: Library and Information Science

**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  
Department: Library and Information Science

**IAKM 60112 - ADVANCED INFORMATION ARCHITECTURE**

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 60101 or 80101; and graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

**IAKM 60113 - USER AND TASK ANALYSIS**

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 60101 or 80101; and 60103 or 80103; and graduate standing.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

**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 graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

**IAKM 60120 - USER EXPERIENCE DESIGN PRINCIPLES AND CONCEPTS**

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  
Department: Library and Information Science

**IAKM 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  
Department: Library and Information Science

**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  
Department: Library and Information Science



### **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

Department: Library and Information Science

### **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

Department: Library and Information Science

### **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

Schedule Types: Lecture

Department: Library and Information Science

### **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

Department: Library and Information Science

### **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

Department: Library and Information Science

### **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; and IAKM 60302 or 80302; and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Library and Information Science

### **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; and IAKM 60302 or 80302; and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Library and Information Science

### **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; and IAKM 60302 or 80302; and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Library and Information Science

### **IAKM 60313 - COMMUNITIES OF PRACTICE**

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 and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Library and Information Science

### **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

Department: Library and Information Science

### **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: graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Library and Information Science

**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: graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Library and Information Science

**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: graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Library and Information Science

**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: graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Library and Information Science

**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

Department: Library and Information Science

**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

Department: Library and Information Science

**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

Department: Library and Information Science

**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

Department: Library and Information Science

**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

Department: Library and Information Science

**IAKM 61095 - 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 are 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

Department: Library and Information Science

**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

Department: Library and Information Science

**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. Prerequisite: IAKM 60001 and 60002 and graduate standing and special approval.

3. 000 Credit hours

3. 000 Other hours

Levels: Graduate

Schedule Types: Research

Department: Library and Information Science

**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. Prerequisite: IAKM 60001 and 60002 and graduate standing.

2. 000 TO 6. 000 Credit hours

2. 000 TO 6. 000 Other hours

Levels: Graduate

Schedule Types: Masters Thesis

Department: Library and Information Science

**IAKM 61299 - THESIS II**

Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: IAKM 60001 and 60002 and 61199 and graduate standing.

2. 000 Credit hours

2. 000 Other hours

Levels: Graduate

Schedule Types: Masters Thesis

Department: Library and Information Science

**IAKM 80001 - INFORMATION ARCHITECTURE AND KNOWLEDGE MANAGEMENT IN CONTEXT**

(Cross-listed with IAKM 60001) Overview of the Information Architecture and Knowledge Management (IAKM) program and its concentrations. Basic skills and understandings in information literacy, organization of knowledge, information sources and searching. Information sciences, systems, and professionals in the information society. Prerequisite: doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Library and Information Science





### **IAKM 80002 - KNOWLEDGE ORGANIZATION STRUCTURES, SYSTEMS AND SERVICES**

(Cross-listed with IAKM 60002) 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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

### **IAKM 80101 - INFORMATION ARCHITECTURE**

(Cross-listed 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. Prerequisite: doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

### **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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

### **IAKM 80103 - RESEARCHING THE USER EXPERIENCE**

(Cross-listed 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. Prerequisite: doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

### **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: doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

### **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: doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

### **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  
Department: Library and Information Science

### **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  
Department: Library and Information Science

### **IAKM 80112 - ADVANCED INFORMATION ARCHITECTURE**

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 601010 or 80101; and doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

### **IAKM 80113 - USER AND TASK ANALYSIS**

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 60101 or 80101; and 60103 or 80103; and doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

### **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 doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

### **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  
Department: Library and Information Science

### **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  
Department: Library and Information Science

### **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  
Department: Library and Information Science

### **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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

### **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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

### **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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

### **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: doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

### **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; and 60302 or 80302; and doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

### **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; 60302 and 80302; and doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

### **IAKM 80313 - COMMUNITIES OF PRACTICE**

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 60313 or 80313; and doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

### **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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

### **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: doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

### **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: doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Library and Information Science

#### **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: doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Library and Information Science

#### **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: doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Library and Information Science

#### **IAKM 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 IAKM. Prerequisite: doctoral standing.

1. 000 TO 3. 000 Credit hours

1. 000 TO 3. 000 Lecture hours

Levels: Graduate

Schedule Types: Seminar

Department: Library and Information Science

#### **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

Department: Library and Information Science

#### **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

Department: Library and Information Science

#### **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

Department: Library and Information Science

### ***Interior Design (ID)***

#### **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

Department: Architecture

#### **ID 14012 - DESIGN AND HUMAN BEHAVIOR**

Introduces the concepts of human factors, the way in which humans relate to the physical environment within cultural milieu, 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

Department: Architecture

#### **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

Department: Architecture

#### **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

Department: Architecture

#### **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

Department: Architecture

#### **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

Department: Architecture

#### **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

Department: Architecture

### **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

Department: Architecture

### **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

Department: Architecture

### **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

Department: Architecture

### **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

Department: Architecture

### **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

Department: Architecture

### **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

Department: Architecture

### **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

Department: Architecture

### **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

Department: Architecture

### **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

Department: Architecture

### **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

Department: Architecture

### **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. 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

Department: Architecture

### **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

Department: Architecture

### **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

Department: Architecture

### **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  
Department: Architecture

#### **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  
Department: Architecture

#### **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  
Department: Architecture

#### **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  
Department: Architecture

#### **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  
Department: Architecture

#### **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  
Department: Architecture

#### **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  
Department: Architecture

#### **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  
Department: Architecture

#### **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  
Department: Architecture

#### **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  
Department: Architecture

#### **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  
Department: Architecture

#### **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  
Department: Architecture

#### **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  
Department: Architecture

#### **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  
Department: Architecture

#### **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  
Department: Architecture

#### **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  
Department: Architecture

#### **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  
Department: Architecture

#### **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  
Department: Architecture

#### **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  
Schedule Types: Lecture  
Department: Architecture

#### **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  
Department: Architecture

#### **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  
Department: Architecture

#### **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  
Department: Architecture

#### **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  
Department: Architecture  
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  
Department: Architecture

#### **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  
Department: Architecture  
Course Attributes: Experiential Learning Requirement

#### **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  
Department: Architecture

#### **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  
Department: Architecture

#### **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  
Department: Architecture  
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  
Department: Architecture

#### **ID 51095 - SPECIAL TOPICS IN INTERIOR DESIGN**

(Repeatable for credit) 1) 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  
Department: Architecture

#### **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  
Department: Architecture

#### **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  
Department: Architecture

#### **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  
Department: Architecture

### ***Industrial Engineering and Related Technologies (IERT)***

#### **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  
Department: Regional

#### **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  
1. 000 TO 4. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Individual Investigation  
Department: Regional

#### **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  
Department: Regional

#### **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  
Department: Regional

#### **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  
Department: Regional

#### **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  
Department: Regional

#### **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  
Department: Regional

#### **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  
Department: Regional  
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  
Department: Regional

#### **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  
Department: Regional

#### **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.  
1. 000 TO 3. 000 Credit hours  
1. 000 TO 3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

#### **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.  
1. 000 TO 3. 000 Credit hours  
1. 000 TO 3. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Individual Investigation  
Department: Regional

### ***Integrated Health Studies (IHS)***

#### **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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Health Sciences

#### **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.  
2. 000 Credit hours



2. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Seminar  
Department: Health Sciences

#### **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  
Department: Health Sciences

#### **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  
Department: Health Sciences  
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 44091.

3. 000 TO 10. 000 Credit hours  
3. 000 TO 10. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Practicum or Internship  
Department: Health Sciences  
Course Attributes: Experiential Learning Requirement

#### **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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Health Sciences

#### **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  
Levels: Undergraduate  
Schedule Types: Individual Investigation  
Department: Health Sciences

### ***Integrated Life Sciences (ILS)***

#### **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  
Levels: Undergraduate  
Schedule Types: Seminar  
Department: Arts and Sciences

#### **ILS 21092 - ILS 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  
Levels: Undergraduate  
Schedule Types: Seminar  
Department: Arts and Sciences  
Course Attributes: Experiential Learning Requirement

#### **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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Arts and Sciences  
Course Attributes: Experiential Learning Requirement

#### **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  
Department: Arts and Sciences

#### **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  
Department: Arts and Sciences

Course Attributes: Experiential Learning Requirement

#### **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  
Department: Arts and Sciences  
Course Attributes: Experiential Learning Requirement

#### **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  
Schedule Types: Lecture, Practicum or Internship  
Department: Arts and Sciences  
Course Attributes: Experiential Learning Requirement

#### **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  
Department: Arts and Sciences

#### **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: ILS 42591.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture, Practicum or Internship  
Department: Arts and Sciences  
Course Attributes: Experiential Learning Requirement, Writing Intensive Course

### ***Insurance Studies (INS)***

#### **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  
Department: Regional

### **INS 39000 - INSURANCE LAW, FINANCE AND RISK MANAGEMENT**

Advanced topics in the field of insurance including legal principles and liability, financial modeling, government regulation, investments, crime and bonds. Prerequisites: INS 29000; and BMRT 21011; and BMRT 21004 or MIS 24056.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **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 29000.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional  
Course Attributes: Writing Intensive Course

### **INS 49000 - LIFE AND HEALTH INSURANCE**

A detailed review of life and health insurance and their impact on individuals and society. The objective being a familiarization with various life and health products and how these products protect a person and their families against financial losses caused by death or disability. Prerequisite: INS 39000.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **INS 49001 - PROPERTY INSURANCE**

Advanced concepts in commercial and personal property insurance coverage including auto, home, buildings, business owners and general liability. Both domestic and international concepts are examined. Prerequisite: INS 39000.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **INS 49002 - LIABILITY INSURANCE**

Advanced concepts in commercial and personal liability insurance coverage including auto, home, Business owners and general and personal liability. Domestic and international government regulations are also examined. Prerequisite: INS 39000.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **INS 49092 - PRACTICUM IN INSURANCE**

(Repeatable for credit) Course requires an on-sight 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  
Department: Regional  
Course Attributes: Experiential Learning Requirement

## ***Italian (ITAL)***

### **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  
Department: Modern and Classical Language Studies

### **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  
Department: Modern and Classical Language Studies

### **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  
Department: Modern and Classical Language Studies

### **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  
Department: Modern and Classical Language Studies

### **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  
Department: Modern and Classical Language Studies

### **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  
Department: Modern and Classical Language Studies

### **ITAL 25209 - FIELD STUDY**

For residence and/or field research in an Italian-speaking community. Prior to registering for this course student must obtain departmental approval. Repeatable for a total of 6 hours. Prerequisite: Special approval.  
1. 000 TO 6. 000 Credit hours  
1. 000 TO 6. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Modern and Classical Language Studies

### **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  
Department: Modern and Classical Language Studies

### **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  
Department: Modern and Classical Language Studies

### **ITAL 35331 - EARLY ITALIAN LITERATURE**

A survey of Italian literature from its medieval origins to the Baroque period. Prerequisite: ITAL 35211.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Modern and Classical Language Studies  
Course Attributes: Writing Intensive Course

### **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  
Department: Modern and Classical Language Studies  
Course Attributes: 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

Department: Modern and Classical Language Studies

**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

Department: Modern and Classical Language Studies

**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.

1. 000 TO 6. 000 Credit hours

1. 000 TO 6. 000 Other hours

Levels: Undergraduate

Schedule Types: Workshop

Department: Modern and Classical Language Studies

**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

Department: Modern and Classical Language Studies

## *Information Technology for Administrative Professionals (ITAP)*

**ITAP 16605 - INTRODUCTION TO OPERATING SYSTEMS AND NETWORKING TECHNOLOGY**

(Cross-listed with COMT 11005) Lab-oriented survey of desktop/network OS essentials, including file/disk management, system tools utilization, resource sharing and introductory network concepts. Prerequisite: None.

3. 000 Credit hours

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Regional

**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. Lecture 2 hours. Lab 2 hours.

Prerequisite: none.

3. 000 Credit hours

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Regional

**ITAP 16621 - WORD PROCESSING II**

Design and create documents by using advanced features of word processing software. Lecture 2 hours, lab 2 hours. Prerequisite: ITAP 16620.

3. 000 Credit hours

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Regional

**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. Lecture 1 hour. Lab 2 hours.

Prerequisite: None.

2. 000 Credit hours

2. 000 Other hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Regional

**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

Department: Regional

**ITAP 16639 - DATABASE APPLICATIONS**

Concepts, terminology and use of current database software to manage and retrieve business information. Emphasis on hands-on experiences. Lecture 2 hour. Lab 2 hour. Prerequisite: None.

3. 000 Credit hours

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Regional

**ITAP 16649 - DATABASE APPLICATIONS FOR MEDICAL BILLING**

Overview database course designed for medical billing certificate majors as they add, query, and create forms and generate reports for medical environments. Prerequisite: medical billing certificate (C123) major.

1. 000 Credit hours

1. 000 Other hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Regional

**ITAP 16650 - SYSTEMS STUDIES FOR MEDICAL BILLING AND CODING**

Overview course to link knowledge of body systems with coding procedures in medical facilities. Corequisite: ITAP 26651 or HED 14020.

1. 000 Credit hours

1. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Regional

**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

Department: Regional

**ITAP 26611 - SPREADSHEET APPLICATIONS**

Use of electronic spreadsheets from beginning to advanced applications that may prepare for software certification. Lecture 2 hours. Lab 2 hours. Prerequisite: None.

3. 000 Credit hours

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Regional

**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. Lecture 2 hours, lab 2 hours. Prerequisite: ITAP 16620.

3. 000 Credit hours

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Regional

**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. Lecture 1 hour, lab 4 hours. Prerequisite: ITAP 26622.

3. 000 Credit hours

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Regional

**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



Department: Regional

### **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.

Lecture . 5 hours lab, 1 hour. Prerequisite: None.

1. 000 Credit hours

1. 000 Other hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Regional

### **ITAP 26637 - SPECIALIZED MACHINE TRANSCRIPTION**

Transcription of machine dictation emphasizing documents relating to the legal or medical professions. Includes application of language skills and mastery of proofreading/editing procedures and techniques. Prerequisite: ITAP 16620.

3. 000 Credit hours

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Regional

### **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

Department: Regional

### **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 will be included. Lecture 2 hours, lab 2 hours. Prerequisite: none.

3. 000 Credit hours

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Regional

### **ITAP 26651 - MEDICAL BILLING TERMINOLOGY**

Analysis of the language and terms used in medical billing environments. The medical billing context is used to frame the study of prefixes, suffixes and root words by specialty. Prerequisite: None.

2. 000 Credit hours

2. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Regional

Course Attributes: TAG - Health

### **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

Department: Regional

### **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

Levels: Undergraduate

Schedule Types: Lecture

Department: Regional

### **ITAP 26691 - SEMINAR FOR ADMINISTRATIVE PROFESSIONALS**

(Repeatable for credit) Refines job search strategies, integrates coursework with realistic office settings, presents interpersonal/ethical issues and provides outreach activities, emphasizing the total quality management environment. Prerequisite: Sophomore standing.

2. 000 Credit hours

2. 000 Other hours

Levels: Undergraduate

Schedule Types: Seminar

Department: Regional

### **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

Department: Regional

Course Attributes: Experiential Learning

Requirement

### **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 Other hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Regional

### **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

Levels: Undergraduate

Schedule Types: Individual Investigation

Department: Regional

## **Instructional Technology (ITEC)**

### **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

Department: Lifespan Development and Educational Sciences

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

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences

### **ITEC 47413 - DIGITAL VIDEO IN EDUCATION**

Design/production of instructional TV programming. Planning and scripting techniques. Hands-on experience with TV equipment. Students will digitize video footage, learn nonlinear editing techniques, export productions to tape/CD. Prerequisite: None.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

### **ITEC 47427 - 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: none.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

### **ITEC 47430 - 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: none.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

### **ITEC 47495 - SPECIAL TOPICS: EDUCATIONAL MEDIA**

(Repeatable for credit) Specialized offering in response to emerging or selected program needs in educational media and instructional design. Prerequisite: none.

1. 000 TO 5. 000 Credit hours

1. 000 TO 5. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

### **ITEC 47496 - INDIVIDUAL INVESTIGATION IN EDUCATIONAL MEDIA**

(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.

1. 000 TO 5. 000 Credit hours

1. 000 TO 5. 000 Other hours

Levels: Undergraduate

Schedule Types: Individual Investigation

Department: Lifespan Development and Educational Sciences

### **ITEC 50093 - VARIABLE TITLE WORKSHOP IN EDUCATIONAL MEDIA**

(Repeatable for credit) Prerequisite: Grading standing and special approval.

1. 000 TO 4. 000 Credit hours

1. 000 TO 4. 000 Other hours

Levels: Graduate

Schedule Types: Workshop

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences

### **ITEC 57413 - DIGITAL VIDEO IN EDUCATION**

Design/production of instructional TV programming. Planning and scripting techniques. Hands-on experience with TV equipment. Students will digitize video footage, learn nonlinear editing techniques, export productions to tape/cd. Prerequisite: Graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences





### **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

Department: Lifespan Development and Educational Sciences

### **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

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

### **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

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

### **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

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

### **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

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

### **ITEC 67437 - WEB DEVELOPMENT FOR EDUCATORS**

Provides an overview of basic website development and management in educational settings. Topics include HTML, cascading style sheets, dynamic webpages and database integration. Prerequisite: Graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

### **ITEC 67438 - INSTRUCTIONAL APPLICATIONS OF THE INTERNET**

Provides knowledge and skills needed to use the Internet effectively in instruction at all levels. Two major concentrations are computer-mediated communications and instructional Web site development. Prerequisite: Graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

### **ITEC 67439 - PORTFOLIO REVIEW**

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.

1. 000 Credit hours

1. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

### **ITEC 67442 - 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: graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

### **ITEC 67444 - TEACHING ONLINE COURSES**

Course 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: graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

### **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 is presented online. Prerequisite: graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences

### **ITEC 67492 - ADVANCED PRACTICUM AND INTERNSHIP IN INSTRUCTIONAL TECHNOLOGY**

Supervised program requiring application of theory and practice in instructional technology in either school or non-school 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.

1. 000 TO 10. 000 Credit hours

1. 000 TO 10. 000 Other hours

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Lifespan Development and Educational Sciences

### **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

1. 000 TO 5. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

**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

Department: Lifespan Development and Educational Sciences

**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

Department: Lifespan Development and Educational Sciences

**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

Department: Lifespan Development and Educational Sciences

**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

Department: Lifespan Development and Educational Sciences

**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

Department: Lifespan Development and Educational Sciences

**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

Department: Lifespan Development and Educational Sciences

**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

Department: Lifespan Development and Educational Sciences

**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

Department: Lifespan Development and Educational Sciences

**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

Department: Lifespan Development and Educational Sciences

**ITEC 77435 - 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: Doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

**ITEC 77436 - 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: Doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

**ITEC 77437 - WEB DEVELOPMENT FOR EDUCATORS**

Provides an overview of basic website development and management in educational settings. Topics include HTML, cascading style sheets, dynamic webpages and database integration. Prerequisite: Doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

**ITEC 77438 - INSTRUCTIONAL APPLICATIONS OF THE INTERNET**

Provides knowledge and skills needed to use the Internet effectively in instruction at all levels. Two major concentrations are computer-mediated communications and instructional Web site development. Prerequisite: Doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

**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

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

**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

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

#### **ITEC 77449 - 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 is presented online. Prerequisite: doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

#### **ITEC 77450 - LEARNING WITH INSTRUCTIONAL TECHNOLOGIES**

Accompanies the Educational Psychology doctoral seminar EPSY 77450: 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: graduate standing. Corequisite: EPSY 77450.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

#### **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

Department: Lifespan Development and Educational Sciences

#### **ITEC 77492 - ADVANCED PRACTICUM AND INTERNSHIP IN INSTRUCTIONAL TECHNOLOGY**

(Repeatable for credit) Supervised program requiring application of theory and practice in instructional technology in either school or non-school 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.

1. 000 TO 10. 000 Credit hours

1. 000 TO 10. 000 Other hours

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Lifespan Development and Educational Sciences

#### **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

Department: Lifespan Development and Educational Sciences

#### **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

Department: Lifespan Development and Educational Sciences

#### **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

Department: Lifespan Development and Educational Sciences

### *Japanese (JAPN)*

#### **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

Department: Modern and Classical Language Studies

#### **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

Levels: Undergraduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

#### **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

Levels: Undergraduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

#### **JAPN 25202 - INTERMEDIATE JAPANESE II**

Continuation of JAPN 25201. Prerequisite: JAPN 25201.

5. 000 Credit hours

5. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

#### **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

Levels: Undergraduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

#### **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: JAPN 25202.

5. 000 Credit hours

5. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

#### **JAPN 35102 - ADVANCED INTERMEDIATE JAPANESE II**

Continuation of JAPN 35101. Prerequisite: JAPN 35101.

5. 000 Credit hours

5. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

#### **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

Department: Modern and Classical Language Studies

**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: JAPN 35102.

5. 000 Credit hours

5. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

**JAPN 45202 - ADVANCED JAPANESE II**

Continuation of JAPN 45201. Prerequisite: JAPN 45201.

5. 000 Credit hours

5. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

**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

Department: Modern and Classical Language Studies

**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

Department: Modern and Classical Language Studies

**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

Department: Modern and Classical Language Studies

**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

Department: Modern and Classical Language Studies

**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

Department: Modern and Classical Language Studies

**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

3. 000 Other hours

Levels: Graduate

Schedule Types: Seminar

Department: Modern and Classical Language Studies

**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

Levels: Graduate

Schedule Types: Research

Department: Modern and Classical Language Studies

**JAPN 65240 - 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. Prerequisite: graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

**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

Levels: Graduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

**JAPN 65251 - SCIENTIFIC, TECHNICAL AND MEDICAL TRANSLATION**

An introduction to methods and resources for the translation of scientific, technical, industrial and medical documents. Prerequisite: MCLS 60010 and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

**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

Department: Modern and Classical Language Studies

## *Journalism and Mass Communication (JMC)*

**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

Department: Journalism and Mass Communication

**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. Not open to journalism and mass communication pre-majors or majors. Prerequisite: None.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Journalism and Mass Communication

Course Attributes: Diversity Course-Domestic, Kent Core-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

Department: Journalism and Mass Communication



**JMC 20004 - MEDIA WRITING**

Introduces students to variety of writing skills used in various media professions and demonstrates how writing types vary by audience. Incorporates grammar skills as part of the writing process. JMC majors must earn a B- (2.700) or better to move on in their major. Failure to earn a B- (2.700) or better after two attempts are not permitted to continue in the journalism and mass communication program. Pre/corequisite: JMC 20003 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

Department: Journalism and Mass

Communication

**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.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

**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

Department: Journalism and Mass

Communication

**JMC 20007 - MEDIA INFORMATION GATHERING**

Introduction to basic methods of gathering information in various fields of mass communication. Hands-on experience with qualitative, archival and quantitative methods. Methods include interviews, online searching and surveys. Prerequisite: 2.750 overall GPA and JMC 20003 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

Department: Journalism and Mass

Communication

**JMC 20008 - AUDIENCE ANALYSIS AND RESEARCH**

An overview of the principles used to understand, interpret and design audience research. This includes terminology methodologies of syndicated research, audience ratings analysis and psychographic lifestyle data. Prerequisite: 2.750 cumulative GPA; minimum grade of C- (1.700) JMC 20001 or JMC 20003; and minimum grade of

C- (1.700) JMC 20004 and JMC 21001; and a journalism and mass communication (JMC) major.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

**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

Department: Journalism and Mass

Communication

**JMC 21005 - ADVERTISING MESSAGING**

Introduces students to the history and development of 19th- to 21st-century advertising practices, along with a strong emphasis on college level writing skills. Prerequisites: 2.750 cumulative GPA; minimum grade of C- (1.700) in JMC 20001 or JMC 20003; and minimum grade of C- (1.700) in JMC 20004 and JMC 21001; and advertising (ADV) major or minor.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

**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

Department: Journalism and Mass

Communication

**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. Prerequisite: 2.750 overall GPA; integrated language arts (INLA), electronic media (ELMD) or news (NEWS) major.

1.000 Credit hours

1.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

**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 visual journalism (VJNL) major.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

Course Attributes: TAG - Communication

**JMC 22002 - VIDEOGRAPHY BASICS**

Instruction in basic camcorder videography 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

Department: Journalism and Mass

Communication

**JMC 22003 - VIDEOGRAPHY BASICS II**

Emphasis on video editing for broadcast news and electronic media production applications using computer video editing skills. Prerequisite: 2.750 overall GPA; and journalism and mass communication (JMC) major and JMC 22002 with a grade of C- (1.700) or better.

1.000 Credit hours

1.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

**JMC 22004 - VISUAL STORYTELLING**

Technical and digital skills needed to produce photos that communicate. Course will stress narrative work, detailed caption information and reporting. Prerequisite: 2.750 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

Department: Journalism and Mass

Communication

**JMC 23030 - BASIC VIDEO PRODUCTION**

Theoretical and practical application of program production for video. Prerequisite: 2.750 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

Department: Journalism and Mass Communication

### JMC 23031 - BASIC AUDIO PRODUCTION

Theoretical and practical application of program production for audio production. Prerequisite: 2. 750 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

Department: Journalism and Mass Communication

### JMC 26000 - GRAMMAR FOR JOURNALISTS

Designed to refine grammar skills for students who seek a career that relies heavily on journalistic communication skills. Prerequisite: JMC major or minor. Corequisite: JMC 26001.

1. 000 Credit hours

1. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Journalism and Mass Communication

### JMC 26001 - NEWSWRITING

Theory and practice in writing basic print and electronic news and feature stories. Prerequisite: grade of C- (1. 700) or better in JMC 20001 or JMC 20003; and a grade of C- (1. 700) or better in JMC 20006; and journalism and mass communication (JMC) or integrated language arts (INLA) major.

3. 000 Credit hours

3. 000 Lab hours

Levels: Undergraduate

Schedule Types: Laboratory

Department: Journalism and Mass Communication

### JMC 26005 - MULTIMEDIA STORYTELLING

Multimedia as story telling tools. Developing the multimedia mindset. Using different delivery platforms and understanding deadlines of various media forms. Formatting stories for web mobile delivery. Learning different multimedia formats. Using multimedia in breaking news situations. Creating multimedia features and packages. Standalone vs. complementary stories. Learning more about capturing and using video, audio and still photos. Ethical and legal issues surrounding online news reporting and presentation. Prerequisites: 2. 750 cumulative GPA; and a grade of C- (1. 700) in COMM 21000 and JMC 26001; and journalism (JNL), news (NEWS), public relations (PR) or visual journalism (VJNL) major.

3. 000 Credit hours

2. 000 Lecture hours

2. 000 Lab hours

Levels: Undergraduate

Schedule Types: Laboratory, Lecture

Department: Journalism and Mass Communication

### JMC 26007 - PRINT BEAT REPORTING

Gathering and writing news: interviewing techniques, cultivating sources, developing beats, meeting deadlines. Includes campus reporting for Daily Kent Stater. Prerequisite: 2. 750 overall GPA; and JMC 26001 and JMC 26005 with a grade of C- (1. 700) or better; and journalism and mass communication (JMC) major.

4. 000 Credit hours

2. 000 Lecture hours

4. 000 Lab hours

Levels: Undergraduate

Schedule Types: Laboratory, Lecture

Department: Journalism and Mass Communication

### JMC 26008 - BROADCAST BEAT REPORTING

Writing news, developing sources and beats, meeting deadlines as they relate to electronic media. Includes reporting campus news for daily broadcasts. Prerequisite: 2. 750 overall GPA; and JMC 20006 and 26001 with a grade of C- (1. 7) or better and a journalism and mass communication (JMC) major.

4. 000 Credit hours

4. 000 Lecture hours

0. 000 Lab hours

Levels: Undergraduate

Schedule Types: Laboratory, Lecture

Department: Journalism and Mass Communication

### 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

Levels: Undergraduate

Schedule Types: Lecture

Department: Journalism and Mass Communication

### JMC 30004 - WRITING FOR ELECTRONIC MEDIA

Application of standard writing styles and formats in the electronic media. Writing practice in commercials, continuity, promotions and introductory scriptwriting techniques.

Prerequisite: 2. 750 overall GPA; and a grade of B- (2. 700) or better in JMC 20004; and journalism and mass communication (JMC) major; and a score of at least 70% on the Grammar Usage and Punctuation (GUP) test.

2. 000 Credit hours

2. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Journalism and Mass Communication

### JMC 30034 - PROGRAMMING FOR ELECTRONIC MEDIA

Background analysis of radio, TV, cable and Internet programming and the relationship to audience needs, interests, expectations and audience measurement procedures. Prerequisite: 2. 750 overall GPA; and a grade of B- (2. 700) or

better in JMC 20004; and journalism and mass communication (JMC) major; and a score of at least 70% on the Grammar Usage and Punctuation (GUP) test.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Journalism and Mass Communication

### JMC 31002 - ADVERTISING COPYWRITING

Examination and practice in various forms of advertising copywriting and their applications. Prerequisites: 2. 750 cumulative GPA; minimum grade of B- (2. 700) or better in JMC 20004; minimum grade of C- (1. 700) in JMC 21001 and 31011; passage of the Grammar Usage and Punctuation (GUP) test with a 70% or better; and a journalism and mass communication (JMC) major.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Journalism and Mass Communication

Course Attributes: Writing Intensive Course

### JMC 31003 - ADVERTISING MEDIA PLANNING

Analysis, selection and scheduling of advertising media. Examination of advertising research, technique and application. Prerequisite: 2. 750 cumulative GPA; minimum grade of C- (1. 700) in JMC 20008 and 21001; minimum grade of B- (2. 700) in JMC 20004; passage of the Grammar Usage and Punctuation (GUP) test with a 70% or better; and a journalism and mass communication (JMC) major.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Journalism and Mass Communication

### JMC 31011 - CREATIVE ADVERTISING STRATEGIES

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. Prerequisite: 2. 750 overall GPA; and a grade of B- (2. 700) or better in JMC 20004; and JMC 21001 with a grade of C- (1. 700) or better.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Journalism and Mass Communication

### JMC 32001 - PHOTOJOURNALISM I

Production of photographs for newspapers, magazines and online news media. A laboratory course emphasizing color and black and white photography. Prerequisites: 2. 750 overall GPA; and minimum B- (2. 700) grade in JMC 20004; and minimum C- (1. 700) grade in JMC 22001 and VCD 37000; and minimum C- (1. 700) in JMC 22004; and journalism and mass communication



(JMC) major; and minimum 70% score on the Grammar Usage and Punctuation (GUP) test.

3. 000 Credit hours

2. 000 Lecture hours

2. 000 Lab hours

Levels: Undergraduate

Schedule Types: Laboratory, Lecture

Department: Journalism and Mass Communication

### **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. Prerequisite: 2. 750 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

Department: Journalism and Mass Communication

### **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. Prerequisites: JMC major; and 2. 750 overall GPA; JMC 20004 with a grade of B- (2. 700) or better; JMC 22004 with a grade of C- (1. 700) or better; Passage of the JMC Grammar, Usage and Punctuation (GUP) Test.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Journalism and Mass Communication

### **JMC 33024 - PERFORMANCE FOR ELECTRONIC MEDIA**

Development of effective communication techniques in performance situations for electronic media. Prerequisite: 2. 750 overall GPA and JMC 20003 with a grade of C- (1. 700) or better.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Journalism and Mass Communication

### **JMC 33032 - AUDIO STUDIO PRODUCTION**

Production of in-studio audio programming units, with laboratory unit required as part of course. Prerequisite: 2. 750 overall GPA; and JMC 23031 and JMC 30004 with a grade of C- (1. 700) or better; and a score of at least 70% on the Grammar Usage and Punctuation (GUP) test and a journalism and mass communication (JMC) major.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Journalism and Mass Communication

### **JMC 33033 - AUDIO FIELD PRODUCTION**

A study of the theory and craft of audio field production, providing analysis and practice of remote information gathering techniques and music recording. Prerequisite: 2. 750 overall GPA; and JMC 23031 and JMC 30004 with a grade of C- (1. 700) or better; and a journalism and mass communication (JMC) major; and a score of at least 70% on the Grammar Usage and Punctuation (GUP) test.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Journalism and Mass Communication

### **JMC 33036 - BASIC MEDIA 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. Prerequisite: 2. 750 overall GPA; and 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; and a score of at least 70% on the Grammar Usage and Punctuation (GUP) test.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Journalism and Mass Communication

### **JMC 33042 - VIDEO STUDIO PRODUCTION**

Study of producing and directing various types of video studio programs. Two hours lecture two hours lab. Prerequisite: 2. 750 overall GPA; and JMC 23030 with a grade of C- (1. 700) or better; and JMC 30004 with a grade of C- (1. 700) or better; 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

Department: Journalism and Mass Communication

### **JMC 33043 - VIDEO FIELD PRODUCTION**

Producing programs and packages with portable video equipment outside the studio. Editing program material. Two hours lecture three hours lab. Prerequisite: 2. 750 overall GPA; and JMC 22002 and 22003 and 23030 and 30004 all with a grade of C- (1. 700) or better; and a journalism and mass communication (JMC) major; and a score of at least 70% on the Grammar Usage and Punctuation (GUP) test.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Journalism and Mass Communication

### **JMC 33092 - RADIO-TELEVISION OPERATIONS**

(Repeatable for a maximum of 3 credit hours) Performance of assigned activities in radio or television under faculty supervision.

Prerequisite: 2. 750 overall GPA; and JMC 20003 with a grade of C- (1. 700) or better; and sophomore 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

Department: Journalism and Mass

Communication

Course Attributes: Experiential Learning Requirement

### **JMC 34038 - MEDIA SALES AND SALES MANAGEMENT**

Selling techniques in electronic and print media; sales policies procedures rate card structure sales proposals and related promotional aspects.

Prerequisite: 2. 750 overall GPA; and JMC 30034 or 31003 either 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

Department: Journalism and Mass Communication

### **JMC 36005 - COPYEDITING**

Improving the writing of other journalists and writing headlines. Intensive review of AP style and grammar. Prerequisite: 2. 750 overall GPA 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

Department: Journalism and Mass Communication

### **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.

Prerequisite: 2. 750 overall GPA; and a grade of B- (2. 700) or better in JMC 20004; and JMC 28001 with a grade of C- (1. 700) or better and a score of at least 70% on the Grammar Usage and Punctuation (GUP) test.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Journalism and Mass Communication

### **JMC 40004 - COMPUTER ASSISTED REPORTING**

Computer analysis of large data sets, focusing on government court police records for preparation of news stories basics of online searching software and databases. Prerequisite: 2. 750 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

Department: Journalism and Mass

Communication

### **JMC 40006 - LAW OF MASS COMMUNICATION**

Libel and slander; privacy copyright obscenity regulation of advertising broadcasting and corporate speech access to government legal; problems of new media. See your adviser for major specific prerequisite courses. Prerequisite:

2. 75 overall GPA; and journalism and mass communication (JMC) major and senior standing and special approval needed from department.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

### **JMC 40007 - REVIEWING THE ARTS**

Reviewing and criticizing of performing, visual and literary arts. Emphasis on books, film, TV and theatre. Prerequisite: 2. 750 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

Department: Journalism and Mass

Communication

### **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.

Prerequisite: 2. 750 overall GPA; and junior or senior standing and special approval.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

### **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. Prerequisite: 2. 750 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 B- (2. 700) or better in JMC 20004; and a score of at least 70% on the Grammar Usage and Punctuation (GUP) test.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

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. Prerequisites: 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

Department: Journalism and Mass

Communication

### **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. Prerequisite: 2. 750 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

Department: Journalism and Mass

Communication

### **JMC 40013 - TELEVISION SPORTS PRODUCTION**

A comprehensive study of the production of live action television. Prerequisite: 2. 750 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

Department: Journalism and Mass

Communication

### **JMC 40015 - MEDIA MANAGEMENT**

Exploring management issues unique to media organizations and the impact of those issues on the organization's structure, economics markets and employees. Prerequisite: 2. 750 overall GPA; and a B- (2. 700) or better in JMC 20004 and journalism and mass communication (JMC) major and senior standing and a score of at least 70% on the Grammar Usage and Punctuation (GUP) test.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

### **JMC 40016 - LAW OF ADVERTISING AND PUBLIC RELATIONS**

Regulation of advertising and corporate speech; first amendment libel and privacy legal problems of new media. Prerequisite: 2. 750 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

Department: Journalism and Mass

Communication

### **JMC 40020 - 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: 2. 750 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

Department: Journalism and Mass

Communication

### **JMC 40022 - FILM AS COMMUNICATION**

Study of the relationship of television and theatre films to the mass audience in terms of components and effects. Prerequisite: 2. 750 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

Department: Journalism and Mass

Communication

### **JMC 40023 - 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: 2. 750 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

Department: Journalism and Mass

Communication

### **JMC 40027 - MANAGING MEDIA DIVERSITY**

Aspects of diversity and how it changes our environment with emphasis on the field of mass communication. Prerequisite: none.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

### **JMC 40030 - 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: 2. 750 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

Department: Journalism and Mass Communication

#### **JMC 40035 - TELEVISION GRAPHICS**

Basic design, theory and technique in creating and preparing TV and video graphics. Prerequisite: 2. 750 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

Department: Journalism and Mass Communication

#### **JMC 40036 - NON-LINEAR 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. Prerequisite: 2. 750 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

Department: Journalism and Mass Communication

#### **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. Prerequisite: 2. 750 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

Department: Journalism and Mass Communication

#### **JMC 40091 - BUSINESS MEDIA SEMINAR**

Study of specialized business media and preparation of portfolio appropriate for these companies. Projects are aligned with student's major. Prerequisites: JMC 26001; or JMC 20004 and passage of the Grammar Usage and Punctuation (GUP) test with a 70 or better; and JMC major.

3. 000 Credit hours  
3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Seminar

Department: Journalism and Mass Communication

#### **JMC 40092 - INTERNSHIP**

(Repeatable once for credit) Experience in a professional setting under professional supervision in student's field of specialization. Prerequisite: 2. 750 overall GPA and special approval.

1. 000 Credit hours  
1. 000 Other hours

Levels: Undergraduate

Schedule Types: Practicum or Internship

Department: Journalism and Mass Communication

Course Attributes: Experiential Learning Requirement

#### **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

Department: Journalism and Mass Communication

#### **JMC 40096 - INDIVIDUAL PROJECTS IN MASS COMMUNICATIONS**

(Repeatable for credit) Individual research projects in mass communications. Letter grades and ip permissible. Prerequisite: 2. 750 overall GPA; 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

Department: Journalism and Mass Communication

#### **JMC 40099 - SENIOR HONORS PROJECT**

Thesis or other independent study project in mass communication. Ip grades permissible.

Prerequisite: 2. 75 overall GPA; open only to journalism and mass communication (JMC) majors admitted to the Honors College.

2. 000 TO 4. 000 Credit hours  
2. 000 TO 4. 000 Other hours

Levels: Undergraduate

Schedule Types: Senior Project/Honors Thesis

Department: Journalism and Mass Communication

Course Attributes: Experiential Learning Requirement

#### **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. Prerequisite: 2. 750 overall GPA and special approval.

1. 000 Credit hours  
1. 000 Other hours

Levels: Undergraduate

Schedule Types: Practicum or Internship

Department: Journalism and Mass Communication

Course Attributes: Experiential Learning Requirement

#### **JMC 40193 - VARIABLE TITLE WORKSHOP IN JMC**

(Repeatable for credit) Workshop setting dealing with topics in mass communications. Prerequisite: 2. 75 overall GPA and special approval.

1. 000 TO 3. 000 Credit hours  
1. 000 TO 3. 000 Other hours

Levels: Undergraduate

Schedule Types: Workshop

Department: Journalism and Mass Communication

#### **JMC 40196 - INDEPENDENT STUDY IN RADIO AND TELEVISION**

Research and writing on topics approved by the students' advisers and study directors. Repeatable for a total of 6 hours. Prerequisite: 2. 750 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

Department: Journalism and Mass Communication

#### **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. Prerequisite: 2. 750 overall GPA.

1. 000 TO 3. 000 Credit hours  
1. 000 TO 3. 000 Lab hours

Levels: Undergraduate

Schedule Types: Laboratory

Department: Journalism and Mass Communication

#### **JMC 41002 - ADVANCED ADVERTISING COPYWRITING**

Advanced copywriting projects in print advertising and corporate communications and execution of the entire print advertising campaigns. Prerequisite: 2. 750 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

Department: Journalism and Mass Communication

#### **JMC 41003 - ADVERTISING ACCOUNT MANAGEMENT**

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. Prerequisite: 2. 750 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

Department: Journalism and Mass Communication

**JMC 41005 - ADVERTISING CAMPAIGNS**

Analysis of the planning, financing and execution of an advertising campaign through case study methods. Prerequisite: 2. 750 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

Schedule Types: Lecture

Department: Journalism and Mass

Communication

**JMC 41081 - ADVERTISING PRACTICES**

The study of current advertising practices and issues. Prerequisite: 2. 750 overall GPA; and JMC 31002 and 31003 with a grade of C- (1. 700) or better.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

**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. Prerequisites: 2. 750 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

Department: Journalism and Mass

Communication

**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. Prerequisite: 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

Department: Journalism and Mass

Communication

**JMC 42005 - COLOR PHOTOGRAPHY**

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. Prerequisite: 2. 750 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

Department: Journalism and Mass

Communication

**JMC 42008 - ADVANCED PHOTOJOURNALISM**

Discussion of contemporary photojournalists and issues. Production of photo documentary multimedia and illustrations appropriate to photojournalism. Senior portfolio review.

Prerequisite: 2. 750 overall GPA; and JMC 26007 and 32002 both with a grade of C- (1. 700) or better.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

**JMC 42092 - PRACTICUM IN PHOTOGRAPHY**

(Repeatable for a total of 10 hours) Individual or group investigation into student selected areas of photographic field. Prerequisite: 2. 750 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

Department: Journalism and Mass

Communication

Course Attributes: Experiential Learning

Requirement

**JMC 43035 - ADVANCED TELEVISION NEWS PRODUCING**

Advanced understanding of how to produce news content for broadcast and the web. Prerequisite: 2. 750 overall GPA; and journalism and mass communication (JMC) major and special approval.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

**JMC 43036 - RECORD PROMOTION**

Class operates as an independent record label to critique, select, promote, publicize and sell original recorded music. Prerequisite: 2. 750 overall GPA; and journalism and mass communication (JMC) or communications studies (COMM) major.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

**JMC 44042 - LIVE SPORTS PRODUCTION**

The study and broadcast of live sporting events, sports news and sports commentary shows. Hands-on production of such sporting events as basketball, wrestling and gymnastics. Live broadcasts in both studio and remote locations. Prerequisites: 2. 750 overall GPA; and JMC 23030 and 23031 with a grade of C- (1. 700) or better; JMC 30004 with a grade of C- (1. 700) or better; JMC major; and a score of at least 70% on the Grammar, Usage & Punctuation (GUP) test.

Corequisites: JMC 44043 and 45000.

3. 000 Credit hours

2. 000 Lecture hours

2. 000 Lab hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Journalism and Mass

Communication

**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.

Prerequisites: 2. 750 overall GPA and JMC 23030 and 23031 with a grade of C- (1. 700) or better.

JMC 30004 with a grade of C- (1. 700) or better.

JMC major and a score of at least 70% on the

Grammar, Usage & Punctuation (GUP) test.

Corequisites: JMC 44042 and 45000.

3. 000 Credit hours

2. 000 Lecture hours

2. 000 Lab hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Journalism and Mass

Communication

**JMC 44045 - PROMOTIONS FOR ELECTRONIC MEDIA**

Fundamental and latest trends in broadcast and cable promotion. Prerequisite: 2. 750 cumulative GPA and journalism and mass communication (JMC) major.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

**JMC 44050 - AUDIO FOR VIDEO**

Understanding of the sonic aspects of visual productions including video studio, video field and online applications. Prerequisite: 2. 750 cumulative GPA and journalism and mass communication (JMC) major.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

**JMC 45000 - TELEVISION SPORTS GRAPHICS PRODUCTION**

Techniques in creating and preparing TV and video graphics for live sports events.

Prerequisites: 2. 750 overall GPA; and JMC 23030 and 23031 with a grade of C- (1. 700) or better.

JMC 30004 as a pre- or co-requisite with a grade of C- (1. 700) or better. JMC major and a score of at least 70% on the Grammar, Usage & Punctuation (GUP) test. Corequisites: JMC 44042 and 44043.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

**JMC 45001 - LIGHTING FOR VIDEO PRODUCTION**

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. Prerequisites: cumulative 2. 750 GPA; 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

Levels: Undergraduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

#### **JMC 45005 - 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: none.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

#### **JMC 45010 - DIGITAL FILM PREPRODUCTION**

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. Prerequisites: cumulative 2. 750 GPA; and a minimum grade of C- (1. 700) in JMC 23030.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

#### **JMC 45011 - DIGITAL FILM PRODUCTION**

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. Prerequisites: 2. 750 cumulative GPA; 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

Department: Journalism and Mass

Communication

#### **JMC 45013 - DIGITAL FILM POST PRODUCTION**

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.

Prerequisites: cumulative 2. 750 GPA; and

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

Department: Journalism and Mass

Communication

#### **JMC 45020 - 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: cumulative 2. 750 GPA.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

#### **JMC 46000 - NEWSPAPER DESIGN**

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 22001 or 22000; 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

Department: Journalism and Mass

Communication

#### **JMC 46001 - INFORMATION GRAPHICS**

introduction to shapes, color type and combinations of these for computer designed news graphics maps charts graphs and diagrams. Prerequisite: 2. 750 overall GPA; and a grade of B- (2. 700) or better in JMC 20004; and VCD 37000 with a grade of C- (1. 700) or better; and a journalism and mass communication (JMC) major; and a score of at least 70% on the Grammar Usage and Punctuation (GUP) test.

3. 000 Credit hours

2. 000 Lecture hours

2. 000 Lab hours

Levels: Undergraduate

Schedule Types: Laboratory, Lecture

Department: Journalism and Mass

Communication

#### **JMC 46003 - PRODUCING TELEVISION NEWS**

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. Prerequisite: 2. 750 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

Department: Journalism and Mass

Communication

#### **JMC 46006 - EDITORIAL WRITING**

Structures and purpose of editorial and column writing; study of editorial section of newspaper practice in writing editorials. Prerequisite: 2. 750 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

Department: Journalism and Mass

Communication

#### **JMC 46007 - REPORTING IN DEPTH**

Techniques involved in researching, interviewing and writing in depth news articles and analyses. Prerequisite: 2. 750 overall GPA; and JMC 26007 with a grade of C- (1. 700) or better or JMC 26008 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

Department: Journalism and Mass

Communication

#### **JMC 46009 - REPORTING PUBLIC AFFAIRS**

Instruction and practice in reporting all areas of public affairs, including government and the courts. Use of precision journalism techniques. Prerequisite: 2. 75 overall GPA; and JMC 26007 or 26008 with a grade of C- or better; and journalism and mass communication (JMC) major.

4. 000 Credit hours

2. 000 Lecture hours

2. 000 Lab hours

Levels: Undergraduate

Schedule Types: Laboratory, Lecture

Department: Journalism and Mass

Communication

#### **JMC 46016 - MAGAZINE PUBLISHING**

Overview of magazine publishing-editorial, advertising, circulation and production. Analysis of magazines. Prerequisite: 2. 750 overall GPA; and a grade of B- (2. 700) or better in JMC 20004; and a journalism and mass communication (JMC) major and junior standing; and a score of at least 70% on the Grammar Usage and Punctuation (GUP) test.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

#### **JMC 46018 - FEATURE WRITING**

Researching, writing and placement of feature stories in publications. Prerequisite: 2. 750 overall GPA; and JMC 26007 with a grade of C- (1. 700) or better.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate



Schedule Types: Lecture  
Department: Journalism and Mass  
Communication

**JMC 46020 - MAGAZINE DESIGN**

Marriage of words and visuals for designing magazine layouts and covers in desktop publishing. Prerequisite: 2. 750 overall GPA; and JMC 22000 and 26001 and 46016 and VCD 37000 all with a grade of C- (1. 700) or better.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Journalism and Mass  
Communication

**JMC 46021 - MAGAZINE WRITING AND EDITING**

Research, interviewing writing and marketing of major magazine articles. Also editing techniques for magazines. Prerequisite: 2. 750 overall GPA; and JMC 36005 and 40005 both with a grade of C- (1. 700) or better.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Journalism and Mass  
Communication

**JMC 46052 - ADVANCED BROADCAST NEWS PRACTICES**

Study of investigative news stories, newsroom operations, editing and producing broadcast news programs. Advanced projects in broadcast news. Prerequisite: 2. 750 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  
Department: Journalism and Mass  
Communication

**JMC 46054 - BROADCAST DOCUMENTARY**

Development of documentary form for radio and television. Analysis and production of documentaries. Utilization of audio and video recording and editing. Prerequisite: 2. 750 overall GPA; and 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  
3. 000 Lecture hours  
0. 000 Lab hours  
Levels: Undergraduate  
Schedule Types: Laboratory, Lecture  
Department: Journalism and Mass  
Communication

**JMC 46055 - ENTREPRENEURIAL DOCUMENTARY 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-profits and non-governmental agencies to develop photo reports and increase visibility and understanding with still and multimedia. Prerequisite: 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  
Department: Journalism and Mass  
Communication

**JMC 46056 - CYBERMEDIA PRODUCTION**

Prepares journalism students to work on media delivered online or by tablet. Deals with multimedia news, magazines, information design and photojournalism. Prerequisite: cumulative 2. 750 GPA; and a minimum grade of C- (1. 700) in JMC 26005 and JMC 36005 and VCD 37000; and journalism and mass communication major or minor.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Journalism and Mass  
Communication

**JMC 46057 - 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 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. Prerequisites: cumulative 2. 750 GPA; and a minimum grade of C- (1. 700) in JMC 22002 and 22003.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Journalism and Mass  
Communication

**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. Prerequisites: cumulative 2. 750 GPA; and sophomore, junior or senior standing in the College of Communication and Information.  
3. 000 Credit hours  
3. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Seminar  
Department: Journalism and Mass  
Communication

**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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Journalism and Mass  
Communication

**JMC 47004 - DESKTOP PUBLISHING FOR HIGH SCHOOL JOURNALISM TEACHERS**

Basics of InDesign desktop publishing program as it relates to high school newspapers and magazines. Prerequisite: none.  
1. 000 Credit hours  
1. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Journalism and Mass  
Communication

**JMC 48001 - MEDIA RELATIONS AND PUBLICITY**

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. Prerequisite: 2. 750 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  
Department: Journalism and Mass  
Communication  
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." Prerequisite: 2. 750 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  
Department: Journalism and Mass  
Communication

**JMC 48003 - PUBLIC RELATIONS ONLINE TACTICS**

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. Prerequisite: 2. 750 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  
Department: Journalism and Mass  
Communication

**JMC 48006 - PUBLIC RELATIONS PUBLICATIONS**

Planning, writing and design of organizational publications including newsletters brochures flyers promotional mailers and web sites. Course also explores the print production process. Prerequisite: 2. 750 overall GPA; and JMC 26001 and VCD 37000 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

Department: Journalism and Mass

Communication

#### **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. Prerequisites: 2. 750 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

Department: Journalism and Mass

Communication

#### **JMC 49021 - CORPORATE VIDEO**

The use of video in corporate and organizational environments. Emphasis is placed on the structure and function of the medium within each environment. Prerequisite: 2. 750 overall GPA; and two of the following: JMC 33033 and 33034 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

Department: Journalism and Mass

Communication

#### **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

Department: Journalism and Mass

Communication

#### **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

Department: Journalism and Mass

Communication

#### **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

Department: Journalism and Mass

Communication

#### **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

Department: Journalism and Mass

Communication

#### **JMC 50007 - REVIEWING THE ARTS**

Reviewing and criticism of performing, visual and literary arts. Emphasis on books, film, TV and theater. Prerequisite: Special approval and graduate standing.

2. 000 Credit hours

2. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

#### **JMC 50012 - 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. Prerequisite: JMC 50002 and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

#### **JMC 50013 - TELEVISION SPORTS PRODUCTION**

A comprehensive study of the production of live action television sports coverage. Prerequisite: journalism and mass communication (JMC) major and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

#### **JMC 50015 - MEDIA MANAGEMENT**

A study of administrative problems, methods, procedures in the management of media corporations. Prerequisite: Graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

#### **JMC 50016 - LAW FOR ADVERTISING AND PUBLIC RELATIONS**

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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

#### **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

Department: Journalism and Mass

Communication

#### **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

Department: Journalism and Mass

Communication

#### **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

Department: Journalism and Mass

Communication

#### **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  
Department: Journalism and Mass  
Communication

**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  
Department: Journalism and Mass  
Communication

**JMC 50036 - NON-LINEAR 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 file formats. Prerequisite: journalism and mass communication (JMC) major and graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Journalism and Mass  
Communication

**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  
Department: Journalism and Mass  
Communication

**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  
Department: Journalism and Mass  
Communication

**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  
Department: Journalism and Mass  
Communication

**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  
Department: Journalism and Mass  
Communication

**JMC 53036 - RECORD PROMOTION**

Class operates as an independent record label to critique, select, promote, publicize and seal 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  
Department: Journalism and Mass  
Communication

**JMC 53042 - VIDEO STUDIO PRODUCTION**

Study of producing and direction of various types of television studio programs. 2 hours lecture, 2 hours lab. Prerequisite: Special approval and graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Journalism and Mass  
Communication

**JMC 54045 - PROMOTIONS FOR ELECTRONIC MEDIA**

Fundamental and latest trends in broadcast and cable promotion. Prerequisite: journalism and mass communication (JMC) major and graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Journalism and Mass  
Communication

**JMC 54050 - AUDIO FOR VIDEO**

Understanding of the sonic aspects of visual productions including video studio, video field and online applications. Prerequisite: journalism and mass communication (JMC) major and graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Journalism and Mass  
Communication

**JMC 55001 - LIGHTING FOR VIDEO PRODUCTION**

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.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Journalism and Mass  
Communication

**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  
Department: Journalism and Mass  
Communication

**JMC 55010 - DIGITAL FILM PREPRODUCTION**

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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Journalism and Mass  
Communication

**JMC 55011 - DIGITAL FILM PRODUCTION**

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.  
6. 000 Credit hours  
2. 000 Lecture hours  
8. 000 Lab hours  
Levels: Graduate  
Schedule Types: Laboratory, Lecture  
Department: Journalism and Mass  
Communication

**JMC 55013 - DIGITAL FILM POST PRODUCTION**

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.

3. 000 Credit hours

2. 000 Lecture hours

2. 000 Lab hours

Levels: Graduate

Schedule Types: Laboratory, Lecture

Department: Journalism and Mass

Communication

### **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

Department: Journalism and Mass

Communication

### **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

Levels: Graduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

### **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

Levels: Graduate

Schedule Types: Laboratory, Lecture

Department: Journalism and Mass

Communication

### **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

Levels: Graduate

Schedule Types: Laboratory, Lecture

Department: Journalism and Mass

Communication

### **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

Levels: Graduate

Schedule Types: Laboratory, Lecture

Department: Journalism and Mass

Communication

### **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

Levels: Graduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

### **JMC 56009 - REPORTING PUBLIC AFFAIRS**

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.

4. 000 Credit hours

4. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

### **JMC 56016 - MAGAZINE 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

Department: Journalism and Mass

Communication

### **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

Department: Journalism and Mass

Communication

### **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

Department: Journalism and Mass

Communication

### **JMC 56021 - MAGAZINE WRITING AND EDITING**

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

Levels: Graduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

### **JMC 56052 - ADVANCED BROADCAST NEWS PRACTICES**

Study of investigative news stories, newsroom operations editing and producing broadcast news programs. Advanced projects in broadcast news. Prerequisite: JMC 55051 or JMC 56054 and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

### **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

Levels: Graduate

Schedule Types: Laboratory, Lecture

Department: Journalism and Mass

Communication

### **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

Levels: Graduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

### **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

Levels: Graduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

**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

Department: Journalism and Mass Communication

**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

Department: Journalism and Mass Communication

**JMC 57004 - DESKTOP PUBLISHING FOR HIGH SCHOOL JOURNALISM TEACHERS**

Basics of InDesign desktop publishing program as it relates to high school newspapers and magazines. Prerequisite: graduate standing.

1. 000 Credit hours

1. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Journalism and Mass Communication

**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

Department: Journalism and Mass Communication

**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

Department: Journalism and Mass Communication

**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

Department: Journalism and Mass Communication

**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

Department: Journalism and Mass Communication

**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

Department: Journalism and Mass Communication

**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.

1. 000 Credit hours

1. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Journalism and Mass Communication

**JMC 60001 - THEORY OF MASS COMMUNICATION**

Introduction to theory of mass communication, with emphasis on the process and effects of mass communication. Prerequisite: Graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Journalism and Mass Communication

**JMC 60002 - LEGAL PROBLEMS IN MASS COMMUNICATIONS**

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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Journalism and Mass Communication

**JMC 60003 - ETHICS OF MASS COMMUNICATIONS**

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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Journalism and Mass Communication

**JMC 60004 - 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: graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Journalism and Mass Communication

**JMC 60007 - RESEARCH METHODS IN MASS COMMUNICATION**

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

Department: Journalism and Mass Communication

**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

Department: Journalism and Mass Communication

**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

Department: Journalism and Mass

Communication

#### **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

Department: Journalism and Mass

Communication

#### **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

Levels: Graduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

#### **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

Levels: Graduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

#### **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

Levels: Graduate

Schedule Types: Individual Investigation

Department: Journalism and Mass

Communication

#### **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

Levels: Graduate

Schedule Types: Research

Department: Journalism and Mass

Communication

#### **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

Levels: Graduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

#### **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

Department: Journalism and Mass

Communication

#### **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

Department: Journalism and Mass

Communication

#### **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

Department: Journalism and Mass

Communication

#### **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

Department: Journalism and Mass

Communication

#### **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

Levels: Graduate

Schedule Types: Masters Thesis

Department: Journalism and Mass

Communication

#### **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

Levels: Graduate

Schedule Types: Individual Investigation

Department: Journalism and Mass

Communication

#### **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

Levels: Graduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

#### **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

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Journalism and Mass

Communication

**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

Department: Journalism and Mass

Communication

**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

Department: Journalism and Mass

Communication

**JMC 68004 - SOCIAL MEDIA AND PUBLIC RELATIONS**

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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

**JMC 68005 - STRATEGIC WRITING AND MESSAGING IN PUBLIC RELATIONS**

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

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

**JMC 68006 - VALUES AND ETHICS MANAGEMENT IN PUBLIC RELATIONS**

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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Journalism and Mass  
Communication

**JMC 68008 - PUBLIC RELATIONS MEASUREMENT AND RETURN ON INVESTMENT**

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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

**JMC 68009 - PUBLIC RELATIONS HISTORY AND THE MODERN WORLD**

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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

**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; JMC graduate student.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

**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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

**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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

**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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Journalism and Mass

Communication

**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

Department: Journalism and Mass

Communication

**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

Department: Journalism and Mass

Communication

**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

Department: Journalism and Mass

Communication



## Justice Studies (JUS)

### JUS 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

Department: Sociology

Course Attributes: TAG - Social/Behavior Sciences

### JUS 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: JUS 12000.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Sociology

### JUS 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: JUS 12000.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Sociology

Course Attributes: TAG - Social/Behavior Sciences

### JUS 22301 - THE INVESTIGATIVE PROCESS

An examination of established investigative processes, techniques employed in conducting a systematic investigation and legal implications. Prerequisite: JUS 12000.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Sociology

### JUS 25092 - FIELD PLACEMENT

(Repeatable for credit) Observational experience under the direction of supervising faculty in a justice agency. Prerequisite: Six hours of justice studies (JUS) including JUS 12000 and special approval.

1. 000 TO 6. 000 Credit hours

1. 000 TO 6. 000 Other hours

Levels: Undergraduate

Schedule Types: Field Experience

Department: Sociology

Course Attributes: Experiential Learning Requirement

### JUS 26701 - CORRECTIONS

Course topics include history of corrections, punishment, community corrections, correctional institutions, correctional administration, issues in corrections, and future trends of corrections.

Prerequisite: JUS 12000.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Sociology

Course Attributes: TAG - Social/Behavior Sciences

### JUS 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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Sociology

Course Attributes:

Kent Core-Social Sciences, Trnfr Module-Social Sciences

### JUS 27095 - SPECIAL TOPICS 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

Department: Sociology

### JUS 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: JUS 12000.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Sociology

### JUS 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: JUS 12000 and 22300; and sophomore standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Sociology

### JUS 32400 - RESEARCH METHODS IN JUSTICE STUDIES

Scientific approaches to the study of criminal justice. Survey of methods and designs used in

criminal justice research; uses of research in criminal justice. Exercises included. Prerequisite: JUS 12000 and junior standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Sociology

Course Attributes: Writing Intensive Course

### JUS 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: JUS 12000; and JUS 22300 or 27311; and sophomore standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Sociology

### JUS 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: JUS 12000 and junior standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Sociology

### JUS 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: JUS 12000 and sophomore standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Sociology

### JUS 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: JUS 12000 and sophomore standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Sociology

### JUS 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: JUS 12000 or PLST 18000; and junior standing.

3. 000 Credit hours



3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Sociology

### **JUS 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: JUS 12000.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Sociology

### **JUS 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: JUS 12000 and junior standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Sociology  
Course Attributes: TAG - Social/Behavior Sciences

### **JUS 36703 - JUVENILE DELINQUENCY**

Social and personal factors in juvenile delinquency; operation of juvenile justice system; prevention and control of delinquency.  
Prerequisite: JUS 12000 and 36702; and junior standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Sociology  
Course Attributes: Writing Intensive Course

### **JUS 37091 - SEMINAR IN CRITICAL ISSUES IN JUSTICE**

(Repeatable for credit) Intense analysis of issues significant and current in the justice field which are not covered in regular courses. Prerequisite: JUS 12000 and sophomore standing.  
1. 000 TO 3. 000 Credit hours  
1. 000 TO 3. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Seminar  
Department: Sociology

### **JUS 37095 - SPECIAL TOPICS IN 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: junior standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Sociology

### **JUS 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  
Department: Sociology  
Course Attributes: Diversity Course-Domestic

### **JUS 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  
Department: Sociology

Course Attributes: Diversity Course-Domestic

### **JUS 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  
Department: Sociology

Course Attributes: Diversity Course-Domestic

### **JUS 38007 - HUMAN SERVICE AGENCIES AND THE LAW**

Designed to acquaint the student with the substance and procedure of law pertaining to human service agencies. Included: definitions, terminology, topical areas and legal ethics.  
Prerequisite: JUS 12000 and sophomore standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Sociology

### **JUS 44400 - JUSTICE ADMINISTRATION**

Identification of administrative and management functions, leadership management styles and supervision of personnel in justice organizations.  
Prerequisite: JUS 12000 and 22300 and 26704; and junior standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Sociology

### **JUS 44411 - VARIETIES OF POLICE WORK**

Analysis of police practices and functions at the municipal, state and federal level including private security. Examination of emerging trends in policing will be considered. Prerequisite: JUS 12000 and 22300 and 26704; and junior standing.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Sociology

### **JUS 45093 - VARIABLE TITLE WORKSHOP IN JUSTICE STUDIES**

(Repeatable for credit) Prerequisite: Special approval.  
1. 000 TO 6. 000 Credit hours  
1. 000 TO 6. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Workshop  
Department: Sociology

### **JUS 45096 - INDIVIDUAL INVESTIGATION**

(Repeatable for credit) Involves an individual research project of considerable depths in a subject area not covered by regular course offerings. Prior consent of supervising faculty member is required. Prerequisites: JUS 120000 and 26704 and 32400; 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  
Department: Sociology

### **JUS 46701 - CRIME, JUSTICE AND SUBSTANCE ABUSE**

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: JUS 12000 and 26704; and junior standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Sociology

### **JUS 46705 - COMMUNITY CORRECTIONS**

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: 12 credit hours of justice studies (JUS) coursework, including JUS 12000 and 26701.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Sociology

### **JUS 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 justice studies (JUS) coursework, including JUS 12000 and 26701.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Sociology



**JUS 46708 - TREATMENT METHODS**

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: 12 credit hours of justice studies (JUS) coursework, including JUS 12000 and 26701.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Sociology

**JUS 46792 - INTERNSHIP**

(Repeatable for credit) Work experience under direction of supervising faculty member in private, federal, state or local justice agency or law agency. Prerequisite: 9 credit hours of justice studies (JUS) coursework, including JUS 12000; and a 2. 000 cumulative GPA and in justice studies (JUS); and junior standing and special approval.

3. 000 TO 12. 000 Credit hours  
3. 000 TO 12. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Practicum or Internship  
Department: Sociology  
Course Attributes: Experiential Learning Requirement

**JUS 46798 - RESEARCH IN 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: JUS 12000 and 26704 and 32400; and junior standing; and 3. 2 GPA overall; and special approval.

3. 000 TO 12. 000 Credit hours  
3. 000 TO 12. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Research  
Department: Sociology  
Course Attributes: Experiential Learning Requirement

**JUS 47095 - SPECIAL TOPICS IN JUSTICE STUDIES**

(Repeatable for credit) Intensive analysis of issues significant and current in the field which are not covered in regular courses. Prerequisite: JUS 12000 and 26704; and junior standing.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Sociology

**JUS 47211 - COURT FUNCTIONS**

Analysis of the structure, functions and critical role of incumbents in the criminal court. Prerequisite: JUS 12000 and 26704; and junior standing.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Sociology

**JUS 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: JUS 12000 and 26704; and junior standing.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Sociology

**JUS 55093 - VARIABLE TITLE WORKSHOP IN JUSTICE STUDIES**

(Repeatable for credit) 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  
Department: Sociology

**JUS 56701 - CRIME, JUSTICE AND SUBSTANCE ABUSE**

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  
Department: Sociology

**JUS 56705 - COMMUNITY CORRECTIONS**

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: Graduate standing.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Sociology

**JUS 56708 - TREATMENT METHODS**

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: Graduate standing.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Sociology

**JUS 57095 - SPECIAL TOPICS IN JUSTICE STUDIES**

(Repeatable for credit) Intensive analysis of issues significant and current in the field which are not covered in regular courses. 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  
Department: Sociology

**JUS 66199 - 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  
Department: Sociology

**JUS 66299 - THESIS II**

Thesis students must continue to register for each semester until all degree requirements are met. Prerequisites: JUS 66199 and graduate standing.

2. 000 Credit hours  
2. 000 Other hours  
Levels: Graduate  
Schedule Types: Masters Thesis  
Department: Sociology

**JUS 66761 - LAW, JUSTICE AND SOCIETY**

Course reviews the origins, structure and functioning of law in relation to social context and process. Topics to be covered include theories of law and society, law as a form of social control, and the use of law and legal institutions to address societal problems. Prerequisite: Graduate standing.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Sociology

**JUS 66762 - PROSEMINAR IN ISSUES IN CONTEMPORARY JUSTICE**

An analysis of current issues in the legislative, policing, judicial and correctional components of the justice system. Prerequisite: Graduate standing.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Sociology

**JUS 66763 - THEORIES OF CRIME AND DELINQUENCY**

Examination of major theoretical concepts in criminology that have been utilized to explain criminal behavior and juvenile delinquency. Includes discussion of social policy implications. Prerequisite: Graduate standing.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Sociology

**JUS 66764 - JUVENILE JUSTICE**

An analysis of the issues and current research related to juvenile delinquency and the juvenile justice process. Prerequisite: Graduate standing.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Sociology

**JUS 66765 - CRIMINAL VIOLENCE**

Course explores the many dimensions of criminal violence. Topics to be covered include patterns and trends, types of violence, the prediction and



etiology of violent behavior, and response/solutions to violence. Emphasis will be placed on the U. S. Prerequisite: Graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Sociology

### **JUS 66766 - INSTITUTIONAL CORRECTIONS**

Analysis of the correctional institution as a social system: formal structure and informal dynamics.

Basic operational problems and special programs within the institutional setting are considered.

Prerequisite: Graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Sociology

### **JUS 66767 - JUSTICE ADMINISTRATION**

Focuses on theory and practice in justice administration. Current organizational theories are considered in relation to the administration and management of criminal justice agencies.

Prerequisite: Special approval and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Sociology

### **JUS 66768 - RESEARCH METHODS IN JUSTICE STUDIES**

Methodological research designs and techniques utilized in criminal justice. Focuses on specific skills needed to complete basic and evaluative research in criminal justice. Prerequisite: Special approval and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Sociology

### **JUS 66770 - JUSTICE INSTITUTIONS**

This course introduces students to various institutions related to the U. S. criminal justice system. Students examine techniques for conducting institutional analysis and apply these techniques to law enforcement, judicial and correctional institutions. Prerequisite: JUS 66762 or POL 6/70701; and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Sociology

### **JUS 66772 - VICTIMOLOGY**

Patterns of victim-offender relationship. Role of victims in the justice studies process. Problems of adjustment to victimization and compensating the victim. Prerequisite: Graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Sociology

### **JUS 66773 - CONTEMPORARY POLICING**

The functions and dynamics of police work in contemporary society, current and emerging functions are emphasized. Prerequisite: Graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Sociology

### **JUS 66775 - RESEARCH METHODS IN JUSTICE STUDIES II**

Advanced topics in multivariate statistical analysis with applications in justice studies. Prerequisite: JUS 66768 and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Sociology

### **JUS 66792 - INTERNSHIP IN JUSTICE STUDIES**

(Repeatable for credit) Observation and work experience under direction of a faculty member in a justice institution. Prerequisite: Special approval and graduate standing.

4. 000 Credit hours

4. 000 Other hours

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Sociology

### **JUS 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

Department: Sociology

### **JUS 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

Department: Sociology

### **JUS 66798 - RESEARCH**

(Repeatable for credit) Pursuit of research interests. Prerequisite: Special approval and graduate standing.

1. 000 TO 6. 000 Credit hours

1. 000 TO 6. 000 Other hours

Levels: Graduate

Schedule Types: Research

Department: Sociology

## ***Kent Blossom Art (KBA)***

### **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

1. 000 TO 6. 000 Other hours

Levels: Undergraduate

Schedule Types: Studio

Department: Art

Course Attributes: Variable Title

### **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

Levels: Undergraduate

Schedule Types: Studio

Department: Art

Course Attributes: Variable Title

### **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

Levels: Graduate

Schedule Types: Studio

Department: Art

Course Attributes: Variable Title

### **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

Levels: Graduate

Schedule Types: Studio

Department: Art

Course Attributes: Variable Title

## ***Kent Blossom Music (KBM)***

### **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  
Department: Music

#### **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

Department: Music

#### **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

Department: Music

#### **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

Department: Music

#### **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

2. 000 TO 4. 000 Other hours

Levels: Graduate

Schedule Types: Combined Lecture and Lab

Department: Music

#### **KBM 50031 - CHAMBER MUSIC**

(Repeatable 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

Department: Music

#### **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

Department: Music

#### **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

Department: Music

#### **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

Department: Music

#### **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

Department: Music

#### **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

Department: Music

#### **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

Department: Music

### ***Kent Blossom Theatre (KBT)***

#### **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

Department: Theatre and Dance

Course Attributes: Experiential Learning Requirement

#### **KBT 22192 - PRACTICUM I: PERFORMANCE**

(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

Department: Theatre and Dance

Course Attributes: Experiential Learning Requirement

#### **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

Department: Theatre and Dance

#### **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

Department: Theatre and Dance

Course Attributes: Experiential Learning Requirement

#### **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

Department: Theatre and Dance

Course Attributes: Experiential Learning Requirement

**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

Department: Theatre and Dance

Course Attributes: Experiential Learning Requirement

**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

Department: Theatre and Dance

**KBT 60992 - PROFESSIONAL THEATRE INTERNSHIP I**

Cross-listed with THEA 60992) Intensive advanced training in practical aspects of production. Periodic seminars, laboratory sessions and performance in the Porthouse Theatre Company. Repeatable once. 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

Department: Theatre and Dance

**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

Department: Theatre and Dance

**KBT 61992 - PROFESSIONAL THEATRE INTERNSHIP II**

Intensive advanced training in practical aspects of production. Periodic seminars, laboratory sessions and performance in Porthouse Theatre Company. SU grading, IP permissible. Prerequisite: special approval and graduate standing.

1. 000 OR 6. 000 Credit hours

1. 000 TO 6. 000 Other hours

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Theatre and Dance

**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

Department: Theatre and Dance

**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

Department: Theatre and Dance

**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

Department: Theatre and Dance

**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

Department: Theatre and Dance

*Latin (LAT)*

**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

Department: Modern and Classical Language Studies

**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

Department: Modern and Classical Language Studies

**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

Department: Modern and Classical Language Studies

**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

Department: Modern and Classical Language Studies

**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

Department: Modern and Classical Language Studies

**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

Department: Modern and Classical Language Studies

**LAT 40393 - VARIABLE TITLE WORKSHOP**

(Repeatable for credit) Workshops individually designed to provide instruction and training in latin 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

Department: Modern and Classical Language Studies

**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  
Department: Modern and Classical Language Studies

#### **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  
Department: Modern and Classical Language Studies

#### **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  
Department: Modern and Classical Language Studies

#### **LAT 46351 - LATIN COMEDY**

Characteristics and history of Latin comedy; readings from Plautus and Terence. Prerequisite: LAT 36170 or LAT 36171.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Modern and Classical Language Studies

#### **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  
Department: Modern and Classical Language Studies

#### **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  
Department: Modern and Classical Language Studies

#### **LAT 46375 - LUCRETIVS**

De Rerum Natura. Prerequisite: LAT 36170 or LAT 36171.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Modern and Classical Language Studies

#### **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  
Department: Modern and Classical Language Studies

#### **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 36180 and LAT 37171 and graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Modern and Classical Language Studies

#### **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  
Department: Modern and Classical Language Studies

#### **LAT 56375 - LUCRETIVS**

De Rerum Natura. Prerequisite: Graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Modern and Classical Language Studies

#### **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  
Department: Modern and Classical Language Studies

#### **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  
Department: Modern and Classical Language Studies

#### **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  
Department: Modern and Classical Language Studies

#### **LAT 66351 - LATIN COMEDY**

Characteristics of Latin comedy; readings from Plautus and Terence. Prerequisite: Graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Modern and Classical Language Studies

#### **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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Modern and Classical Language Studies

#### **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: Seminar  
Department: Modern and Classical Language Studies

#### **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: Research  
Department: Modern and Classical Language Studies

### ***Legal Assisting Technology (LEGT)***

#### **LEGT 18000 - INTRODUCTION TO PARALEGAL STUDIES**

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. Course offered at the East Liverpool campus only. Prerequisite: None.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate



Schedule Types: Lecture  
Department: Regional

### **LEGT 18001 - LEGAL RESEARCH AND WRITING**

In-depth analysis of the legal research process and development of legal writing skills; opportunities to utilize research and writing skills are integrated into the course. Course offered at the East Liverpool campus only. Prerequisite: LEGT 18000.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **LEGT 18002 - CORPORATE LAW**

Introduction to corporation law and its application to client variations in practice. Course offered at the East Liverpool campus only. Prerequisite: LEGT 18001.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **LEGT 18003 - FAMILY LAW AND PROCEDURE**

Designed to acquaint the student with family law substance and practice. Included: definitions, terminology, topical areas and the philosophy underlying family law practice. Prerequisite: LEGT 18000.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **LEGT 18004 - TORT CLAIMS FOR PARALEGALS**

Focus on tort claims management for paralegals. Topics include injuries to person and property, negligence, strict and products liability, defenses, processing insurance claims and settlements. Prerequisite: LEGT 18000.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **LEGT 18005 - EMPLOYMENT REGULATIONS**

Introduction to the employment environment and various regulations pertaining to the workplace. Wage and hour statutes, wrongful discharge statutes, ERISA, Title VII, COBRS. Course offered at the East Liverpool campus only. Prerequisite: LEGT 18000.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **LEGT 21092 - INTERNSHIP**

(Repeatable for credit) Supervised field experience. This experience requires a minimum of 14 hours per week for unpaid work experiences or 20 hours per week for employment with pay. Course offered at the East Liverpool campus

only. Prerequisite: LEGT 28006 and special approval. Corequisite: LEGT 28008.

2. 000 Credit hours  
2. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture, Practicum or Internship  
Department: Regional  
Course Attributes: Experiential Learning Requirement

### **LEGT 27091 - SPECIAL TOPICS IN PARALEGAL 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: LEGT 18000.

2. 000 OR 3. 000 Credit hours  
2. 000 OR 3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **LEGT 28004 - PRINCIPLES AND PRACTICE OF LITIGATION**

Introduction to the rules of civil procedure, statutes of limitation and discovery. Includes the role of the legal assistant in preparing for litigation. Prerequisite: LEGT 18000.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **LEGT 28005 - CIVIL LITIGATION**

Role of paralegals in preparation for motions, trials and appeals. Specialized practices such as personal injury, medical malpractice, product and environmental liability. Prerequisite: LEGT 28004.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **LEGT 28006 - ADVANCED LEGAL RESEARCH AND WRITING**

Introduction to case analysis and preparation of argumentative memorandum. Including writing of factual memorandum, file summaries and advocacy letters. Course offered at the East Liverpool campus only. Prerequisite: LEGT 18001.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **LEGT 28007 - ESTATE AND PROBATE ADMINISTRATION**

A study of legal principles applicable to wills, organization and jurisdiction of probate court, estate administration in probate, and tax considerations in estate administration. Course offered at the East Liverpool campus only. Prerequisite: LEGT 28006.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **LEGT 28008 - PROFESSIONAL DEVELOPMENT FOR PARALEGALS**

Exploration and discussion of the paralegal field. Employment opportunities and responsibilities. Professional organizations and business etiquette. Prerequisite: LEGT 18001 and permission.

1. 000 Credit hours  
1. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

## ***University Libraries (LIB)***

### **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  
Department: University Libraries

### **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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: University Libraries

## ***Library and Information Science (LIS)***

### **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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Library and Information Science

### **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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Library and Information Science

#### **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  
Department: Library and Information Science

#### **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  
Department: Library and Information Science

#### **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  
Department: Library and Information Science

#### **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  
Department: Library and Information Science

#### **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  
Department: Library and Information Science

#### **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  
Department: Library and Information Science

#### **LIS 60199 - 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: 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  
Department: Library and Information Science

#### **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  
Department: Library and Information Science

#### **LIS 60600 - FOUNDATIONS OF LIBRARY AND INFORMATION SCIENCE**

Social, philosophical and historical foundations; information technology and the library; types of libraries and services, nationally and internationally; professional issues, research, literature, associations and education. 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  
Department: Library and Information Science

#### **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  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

#### **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  
Department: Library and Information Science

#### **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  
Department: Library and Information Science

#### **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  
Department: Library and Information Science

#### **LIS 60607 - SCHOOL LIBRARY MEDIA CENTER**

Management of school library media centers K-12. Prerequisite: Graduate standing and special approval.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

#### **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  
Department: Library and Information Science

#### **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  
Department: Library and Information Science

### **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  
Department: Library and Information Science

### **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  
Department: Library and Information Science

### **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 standing.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

### **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  
Department: Library and Information Science

### **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  
Department: Library and Information Science

### **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  
Department: Library and Information Science

### **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  
Schedule Types: Lecture  
Department: Library and Information Science

### **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  
Department: Library and Information Science

### **LIS 60620 - HEALTH INFORMATION RESOURCES**

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  
Department: Library and Information Science

### **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  
Department: Library and Information Science

### **LIS 60622 - SCIENCE/TECHNOLOGY INFORMATION SOURCES AND SERVICES**

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.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

### **LIS 60623 - BUSINESS/FINANCE INFORMATION SOURCES AND SERVICES**

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.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

### **LIS 60624 - CATALOGING FOR SCHOOL LIBRARY MEDIA CENTERS**

Organization and administration of print and nonprint materials in school library media centers. Application of appropriate descriptive cataloging rules, subject headings and classification policies for children's, young adult and educational materials K-12. Prerequisite: Graduate standing and special approval.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

### **LIS 60625 - LIBRARY MATERIALS AND SERVICES FOR VERY YOUNG CHILDREN**

Selection and utilization of materials in relation to needs, abilities and interests of the very young child. Prerequisite: Graduate standing.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

### **LIS 60626 - LIBRARY SERVICES TO YOUNG ADULTS**

Selection and utilization of books and materials in relation to needs, abilities and interests of young adults. Prerequisite: Graduate standing.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science





### **LIS 60628 - HUMANITIES INFORMATION SOURCES AND SERVICES**

Philosophy, literature, fine and performing arts. Prerequisite: LIS 60001 or 80001; and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Library and Information Science

### **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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Library and Information Science

### **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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Library and Information Science

### **LIS 60631 - INTRODUCTION TO DIGITAL PRESERVATION**

Approaches for preserving and maintaining access to digitized and born-digital text, images, data and audiovisual information. 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

Department: Library and Information Science

### **LIS 60632 - TECHNOLOGIES FOR DIGITAL PRESERVATION AND WEB ARCHIVING**

Essential technologies for building and maintaining robust, trusted digital repositories. Emphasis is on providing orientation to technologies sufficient to allow students to work with network administrators, programmers, and other personnel involved in providing technical support to develop digital repositories for preservation and archiving functions.

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

Department: Library and Information Science

### **LIS 60633 - DIGITAL CURATION**

Management and preservation of digital objects and records throughout their life cycle.

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

Department: Library and Information Science

### **LIS 60637 - METADATA ARCHITECTURE AND IMPLEMENTATION**

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. Prerequisite: LIS 60002 or 80002; and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Library and Information Science

### **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: graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Library and Information Science

### **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

Department: Library and Information Science

### **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

Department: Library and Information Science

### **LIS 60641 - INFORMATION STORAGE AND RETRIEVAL SYSTEMS**

Fundamentals of information storage and retrieval systems: components, models, file structure, information representation, human-computer interaction, standards, protocols and evaluation of system performance. Design and evaluation of information storage and retrieval including contributions from artificial intelligence and cognitive research. Prerequisite: LIS 60002 or 80002; and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Library and Information Science

### **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

Department: Library and Information Science

### **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

Department: Library and Information Science

### **LIS 60645 - DATABASE SYSTEMS**

Characteristics and concepts of database systems; types of database models conceptual database design and implementation the relational database model and its application key issues principles and techniques current database technologies. Prerequisite: Graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Library and Information Science

### **LIS 60646 - USER INTERFACES FOR INFORMATION RETRIEVAL SYSTEMS**

Hardware considerations and programming for the implementation of user interfaces of computerized information retrieval systems, primarily for Web interfaces but also online public access catalogs and other networked, client server



systems. Interface analysis, evaluation and design; and project design and implementation.

Prerequisite: Graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Library and Information Science

### **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

Department: Library and Information Science

### **LIS 60648 - ELECTRONIC PUBLISHING ON THE WEB**

Students gain the knowledge and skills to participate professionally in current electronic publishing activities, especially Web publishing and to contribute to future developments in an innovative socially responsible way. Prerequisite: Graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Library and Information Science

### **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

Department: Library and Information Science

### **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

Department: Library and Information Science

### **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

Schedule Types: Lecture

Department: Library and Information Science

### **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

Levels: Graduate

Schedule Types: Lecture

Department: Library and Information Science

### **LIS 60654 - PRESERVATION MANAGEMENT**

Types and causes of deterioration of various kinds of materials, storage and preventive maintenance, preservation through photographic reproduction and microforms, restoration of rare materials.

Prerequisite: Graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Library and Information Science

### **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

Department: Library and Information Science

### **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

Department: Library and Information Science

### **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

Department: Library and Information Science

### **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

Department: Library and Information Science

### **LIS 60670 - CULMINATING EXPERIENCE**

Under advisement of a faculty member, students will complete a project that serves as a culminating experience for the M. L. I. S. degree. The project may be a research paper, individual project or culminating practicum. Prerequisite: LIS 60001 and LIS 60002 and LIS 60003 and LIS 60600 and LIS 60610 and special approval and graduate standing. This course is not open to students in non-degree programs.

3. 000 Credit hours

3. 000 Other hours

Levels: Graduate

Schedule Types: Research

Department: Library and Information Science

### **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

Department: Library and Information Science

### **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

Department: Library and Information Science



### **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  
Department: Library and Information Science

### **LIS 60695 - SPECIAL PROBLEMS IN LIBRARY SCIENCE**

(Repeatable for credit) Individual research at high levels of specialization. Intended for persons in sixth year program. Prerequisite: Graduate standing and special approval.  
1. 000 TO 10. 000 Credit hours  
1. 000 TO 10. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

### **LIS 60700 - FOUNDATIONS OF MUSEUM STUDIES**

Intended for those interested in learning more about museums, but from the perspective of a librarian or trained information professional. Exposes students to various aspects of museums, including but not limited to: types of museums; history of museums; organization of museums; issues confronting museums; collections of museums (and how they are exhibited); architecture of museums; and role(s) of museums in a community and in society. Prerequisite: graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

### **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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

### **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  
Levels: Graduate

Schedule Types: Lecture  
Department: Library and Information Science

### **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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

### **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  
Department: Library and Information Science

### **LIS 60792 - INTERNSHIP IN LIBRARY SUPERVISION AND MANAGEMENT**

(Repeatable for credit) Supervised library work experience of an advanced professional nature that concentrates on developing skills in supervision and management. Intended for persons in the sixth-year program. Prerequisite: Graduate standing and special approval.  
2. 000 TO 10. 000 Credit hours  
2. 000 TO 10. 000 Other hours  
Levels: Graduate  
Schedule Types: Practicum or Internship  
Department: Library and Information Science

### **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  
Department: Library and Information Science

### **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  
Department: Library and Information Science

### **LIS 61096 - INDIVIDUAL INVESTIGATION**

(Repeatable for credit) Research or individual investigation for master's level graduate students. Maximum credit per registration 2 hours. Maximum credit toward master's degree 4 hours. Prerequisite: Special approval and graduate standing.  
1. 000 TO 2. 000 Credit hours  
1. 000 TO 2. 000 Other hours  
Levels: Graduate  
Schedule Types: Individual Investigation  
Department: Library and Information Science

### **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  
Department: Library and Information Science

### **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  
Department: Library and Information Science

### **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



Department: Library and Information Science

### **LIS 80600 - FOUNDATIONS OF LIBRARY AND INFORMATION SCIENCE**

Social, philosophical and historical foundations; information technology and the library; types of libraries and services, national and internationally; professional issues, research, literature, associations and education. Prerequisite: doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Library and Information Science

### **LIS 80601 - 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 doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Library and Information Science

### **LIS 80602 - 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 doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Library and Information Science

### **LIS 80603 - 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 doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Library and Information Science

### **LIS 80604 - 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: doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Library and Information Science

### **LIS 80607 - SCHOOL LIBRARY MEDIA CENTER**

Management of school library media centers K-12. Prerequisites: doctoral standing and special approval.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Library and Information Science

### **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

Department: Library and Information Science

### **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

Department: Library and Information Science

### **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

Department: Library and Information Science

### **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

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Library and Information Science

### **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

Department: Library and Information Science

### **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

Department: Library and Information Science

### **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

Department: Library and Information Science

### **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

Department: Library and Information Science

### **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

Department: Library and Information Science

### **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  
Department: Library and Information Science

#### **LIS 80620 - HEALTH INFORMATION RESOURCES**

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  
Department: Library and Information Science

#### **LIS 80621 - 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. Prerequisite: LIS 60001 or 80001; and doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

#### **LIS 80622 - SCIENCE AND TECHNOLOGY INFORMATION SOURCES AND SERVICES**

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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

#### **LIS 80623 - BUSINESS AND FINANCE INFORMATION SOURCES AND SERVICES**

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.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

#### **LIS 80624 - CATALOGING FOR SCHOOL LIBRARY MEDIA CENTERS**

Organization and administration of print and nonprint materials in school library media centers. Application of appropriate descriptive cataloging rules, subject headings and classification policies for children's, young adult and educational materials K-12. Prerequisite: doctoral standing and special approval.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

#### **LIS 80625 - LIBRARY MATERIALS AND SERVICES FOR VERY YOUNG CHILDREN**

Selection and utilization of materials in relation to needs, abilities and interests of the very young child. Prerequisite: doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

#### **LIS 80626 - LIBRARY SERVICES TO YOUNG ADULTS**

Selection and utilization of books and materials in relation to needs, abilities and interests of young adults. Prerequisite: doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

#### **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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

#### **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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

#### **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  
Department: Library and Information Science

#### **LIS 80631 - INTRODUCTION TO DIGITAL PRESERVATION**

Approaches for preserving and maintaining access to digitized and born-digital text, images, data and audiovisual information. 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  
Department: Library and Information Science

#### **LIS 80632 - TECHNOLOGIES FOR DIGITAL PRESERVATION AND WEB ARCHIVING**

Essential technologies for building and maintaining robust trusted digital repositories. Emphasis is on providing orientation to technologies sufficient to allow students to work with network administrators, programmers, and other personnel involved in providing technical support to develop digital repositories for preservation and archiving functions. 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  
Department: Library and Information Science

#### **LIS 80633 - DIGITAL CURATION**

Management and preservation of digital objects and records throughout their life cycle. 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  
Department: Library and Information Science

#### **LIS 80637 - METADATA ARCHITECTURE AND IMPLEMENTATION**

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. Prerequisite: LIS 60002 or 80002; and doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

#### **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: doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours



Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

### **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  
Department: Library and Information Science

### **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  
Department: Library and Information Science

### **LIS 80641 - INFORMATION STORAGE AND RETRIEVAL SYSTEMS**

Fundamentals of information storage and retrieval systems: components, models, file structure, information representation, human-computer interaction, standards, protocols and evaluation of system performance. Design and evaluation of information storage and retrieval including contributions from artificial intelligence and cognitive research. Prerequisite: LIS 60002 or 80002; and doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

### **LIS 80642 - IMPLEMENTATION OF INFORMATION STORAGE AND RETRIEVAL SYSTEMS**

Course has dual tracks: conceptual frameworks and basic technical skills. Covers all major aspects and latest advancements of an information retrieval system and their applications. Technical skills include Unix/Linux, PERL and CGI programming. Prerequisite: LIS 60002 or 80002; and doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

### **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  
Department: Library and Information Science

### **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  
Department: Library and Information Science

### **LIS 80645 - DATABASE SYSTEMS**

Characteristics and concepts of database systems; types of database models; conceptual database design and implementation; the relational database model and its application: key issues, principles and techniques; current database technologies. Prerequisite: doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

### **LIS 80646 - USER INTERFACES FOR INFORMATION RETRIEVAL SYSTEMS**

Hardware considerations and programming for the implementation of user interfaces of computerized information retrieval systems, primarily for Web interfaces, but also for online public access catalogs and other networked, client-server systems. Interface analysis, evaluation and design; project design and implementation. Prerequisite: doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

### **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  
Department: Library and Information Science

### **LIS 80648 - ELECTRONIC PUBLISHING ON THE WEB**

Students gain the knowledge and skills to participate professionally in current electronic publishing activities, especially Web publishing, and to contribute to future developments in an innovative, socially responsible way. Prerequisite: doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

### **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  
Department: Library and Information Science

### **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  
Department: Library and Information Science

### **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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science



### **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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

### **LIS 80654 - PRESERVATION MANAGEMENT**

Types and causes of deterioration of various kinds of materials, storage and preventive maintenance, preservation through photographic reproduction and microforms, restoration of rare materials. Prerequisites: doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

### **LIS 80661 - TECHNICAL SERVICES**

Principles, problems and current issues of acquiring, processing and preserving conserving 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  
Department: Library and Information Science

### **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  
Department: Library and Information Science

### **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 60660 or 80660; and doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

### **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  
Schedule Types: Lecture  
Department: Library and Information Science

### **LIS 80691 - SEMINAR IN LIBRARY SCIENCE**

(Repeatable for credit) 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  
Department: Library and Information Science

### **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  
Department: Library and Information Science

### **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  
Department: Library and Information Science

### **LIS 80700 - FOUNDATIONS OF MUSEUM STUDIES**

Intended for those interested in learning more about museums, but from the perspective of a librarian or trained information professional. Exposes students to various aspects of museums, including but not limited to: types of museums; history of museums; organization of museums; issues confronting museums; collections of museums (and how they are exhibited); architecture of museums; and role(s) of museums in a community and in society. Prerequisite: doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Library and Information Science

### **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  
Department: Library and Information Science

### **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  
Department: Library and Information Science

### **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  
Department: Library and Information Science

### **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  
Department: Library and Information Science

### **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  
Department: Library and Information Science

### LIS 81096 - INDIVIDUAL INVESTIGATION

(Repeatable for credit) Research or individual investigation for doctoral level students.

Prerequisites: doctoral standing  
1. 000 TO 2. 000 Credit hours  
1. 000 TO 2. 000 Other hours  
Levels: Graduate  
Schedule Types: Individual Investigation  
Department: Library and Information Science

## Mathematics (MATH)

### MATH 10006 - BASIC ALGEBRA I AND II

Covers exactly the same topics as MATH 10021 and 10022 combined. Not offered on every campus. Course does not count toward graduation. Prerequisite: none.

4. 000 Credit hours  
4. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Mathematical Sciences

### MATH 10007 - BASIC ALGEBRA III AND IV

Covers exactly the same topics as MATH 10023 and 10024 combined. Not offered on all campuses. Course does not count toward graduation. Prerequisite or corequisite: minimum C (2. 000) grade in MATH 10006 or in MATH 10022.

4. 000 Credit hours  
4. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Mathematical Sciences

### MATH 10020 - PRE-ALGEBRA

Properties of whole numbers, fractions, decimals, percent, 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: Lecture  
Department: Mathematical Sciences  
Course Attributes: ALEKS

### MATH 10021 - 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 10020; or ALEKS math lower-level minimum score of 17; or ALEKS math single assessment minimum score of 10.

2. 000 Credit hours  
2. 000 Lecture hours  
Levels: Undergraduate

Schedule Types: Lecture  
Department: Mathematical Sciences  
Course Attributes: ALEKS

### MATH 10022 - 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 or corequisite: minimum C (2. 000) grade in MATH 10021; or ALEKS math lower-level minimum score of 30; or ALEKS math single assessment minimum score of 25.

2. 000 Credit hours  
2. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Mathematical Sciences  
Course Attributes: ALEKS

### MATH 10023 - 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 or corequisite: minimum C (2. 000) grade in MATH 10006 or 10022; or ALEKS math lower-level minimum score 40; or ALEKS math upper-level minimum score of 15; or ALEKS math single assessment minimum score of 35.

2. 000 Credit hours  
2. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Mathematical Sciences  
Course Attributes: ALEKS

### MATH 10024 - 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 or corequisite: minimum C (2. 000) grade in MATH 10023; or ALEKS math upper-level minimum score of 30; or ALEKS math single assessment minimum score of 45.

2. 000 Credit hours  
2. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Mathematical Sciences  
Course Attributes: ALEKS

### MATH 10041 - ELEMENTARY PROBABILITY AND STATISTICS

Descriptive statistics, probability concepts, binomial and normal distributions. Sampling, estimation, hypothesis testing. Analysis of paired data, linear models and correlation. Prerequisite: minimum C (2. 000) grade in MATH 10007 or any math course 10023 and higher; or ALEKS math upper-level minimum score of 30; or ALEKS math single assessment minimum score of 45.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate

Schedule Types: Lecture  
Department: Mathematical Sciences

### 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: minimum C (2. 000) grade in MATH 10007 or any math course 10023 and higher; or ALEKS math upper-level minimum score of 30; or ALEKS math single assessment minimum score of 45.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Mathematical Sciences

Course Attributes:  
Kent Core-Math and Crit Reason, LER-Math and Crit Reasoning

### 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 10007 or MATH 10023; or ALEKS math upper-level minimum score of 30; or ALEKS math single assessment minimum score of 45.

4. 000 Credit hours  
4. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Mathematical Sciences  
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; binomial theorem. No credit earned for this course if student earned credit for MATH 11011 or 12001. Prerequisite: minimum C (2. 000) grade in MATH 10007 or MATH 10024; or ALEKS math upper-level minimum score of 40; or ALEKS math single assessment minimum score of 55.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Mathematical Sciences  
Course Attributes: Kent Core-Math and Crit Reason, LER-Math and Crit Reasoning, Trnfr Module-Mathematics

### 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: minimum C (2. 000) grade in MATH 11010; or ALEKS math upper-level minimum score of 50; or ALEKS math single assessment minimum score of 67.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture





Department: Mathematical Sciences  
 Course Attributes: Kent Core-Math and Crit Reason, LER-Math and Crit Reasoning, Trnfr Module-Mathematics

### **MATH 11022 - TRIGONOMETRY**

Solution of triangles, trigonometric equations and identities. Students who have not taken a previous mathematics course at Kent State must see an academic advisor for placement. Prerequisite: minimum C (2.000) grade in MATH 11010 (may be a corequisite); or ALEKS math single assessment minimum score of 67.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

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 11010 or MATH 11022. Prerequisite: minimum grade of B (3.000) or better in MATH 10024; or ALEKS placement score of 50-69.

5.000 Credit hours

5.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

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 or 12012. Prerequisite: minimum C (2.000) grade in MATH 11010 and MATH 11022; 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

Department: Mathematical Sciences

Course Attributes: Kent Core-Math and Crit Reason, LER-Math and Crit Reasoning, TAG - Mathematics, Trnfr Module-Mathematics

### **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.

5.000 Credit hours

5.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

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

Department: Mathematical Sciences

Course Attributes: Kent Core-Math and Crit Reason, LER-Math and Crit Reasoning, Trnfr Module-Mathematics

### **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.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

Course Attributes: Kent Core-Math and Crit Reason, LER-Math and Crit Reasoning, Trnfr Module-Mathematics

### **MATH 12021 - CALCULUS FOR LIFE SCIENCES**

Differential and integral calculus using examples and problems in life sciences. Prerequisite: Integrated life science (ILS) major; and ALEKS math upper-level minimum score 70 or ALEKS math single assessment score of 78-100.

4.000 Credit hours

4.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

### **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.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

### **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 10007 or any math course 10023 and higher; or ALEKS math upper-level minimum

score of 30; or ALEKS math single assessment minimum score of 45.

4.000 Credit hours

4.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

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.

4.000 Credit hours

4.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

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

Department: Mathematical Sciences

### **MATH 19099 - FIELD EXPERIENCE IN MATHEMATICS INSTRUCTION**

(Repeatable 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

Department: Mathematical Sciences

Course Attributes: Experiential Learning Requirement

### **MATH 20095 - SPECIAL TOPICS IN MATHEMATICS**

(Repeatable 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

Department: Mathematical Sciences

### **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.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

Course Attributes: TAG - Mathematics

**MATH 21092 - COMPUTER PRACTICUM**

(Repeatable 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

Department: Mathematical Sciences

Course Attributes: Experiential Learning Requirement

**MATH 22005 - ANALYTIC GEOMETRY AND CALCULUS III**

Study of functions of several variables, including partial derivatives and multiple integrals.

Prerequisite: MATH 12003.

4. 000 Credit hours

4. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

Course Attributes: TAG - Mathematics

**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: Grade of C (2. 000) or better in MATH 11010.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

**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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

**MATH 31011 - DISCRETE MATHEMATICS**

Discrete mathematical techniques and structures including finite set theory, graph theory, propositional calculus, combinatorics and discrete probability. Formal methodology and proof techniques. No credit for MATH 23022.

Prerequisite: MATH 12002. Pre/corequisite: MATH 21001.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

**MATH 31045 - FORMAL LOGIC**

(Cross-listed with CS 31045 and PHIL 31045)

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

Department: Mathematical Sciences

**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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

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.

4. 000 Credit hours

4. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

**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 32051 or MATH 21001; and MATH 22005.

4. 000 Credit hours

4. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

**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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

**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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

**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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

**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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

**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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

**MATH 40055 - ACTUARIAL MATHEMATICS I**

Topics from survival models, stochastic analysis of annuities and life insurance and casualty models. Prerequisite: MATH 30055 and MATH 40011.

4. 000 Credit hours

4. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

**MATH 40056 - ACTUARIAL MATHEMATICS II**

Benefit premiums, benefit reserves and their analysis, decrement models, joint survivorship, risk models. Prerequisite: MATH 40055.

4. 000 Credit hours

4. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

**MATH 40091 - SEMINAR IN ACTUARIAL MATHEMATICS**

Seminar course designed to prepare students for the society of actuaries examination on actuarial mathematics. Prerequisite: MATH 40056.

2. 000 Credit hours

2. 000 Other hours

Levels: Undergraduate

Schedule Types: Seminar

Department: Mathematical Sciences



### **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: Workshop

Department: Mathematical Sciences

### **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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

Course Attributes: 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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

Course Attributes: 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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

### **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 31045.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

### **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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

Course Attributes: 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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

Course Attributes: 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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

### **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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

### **MATH 42024 - NUMBERS AND GAMES**

The study of partisan and impartial combinatorial games; games as numbers; Grundy-Sprague theory. Prerequisite: MATH 21001.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

### **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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

### **MATH 42041 - 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 MATH 22005.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

### **MATH 42045 - INTRODUCTION TO PARTIAL DIFFERENTIAL EQUATIONS**

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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

### **MATH 42048 - INTRODUCTION TO COMPLEX VARIABLES**

Algebra of complex numbers, analytic functions, mappings, Cauchy integral theory, residue theory and applications. Prerequisite: MATH 22005.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

### **MATH 42091 - SEMINAR: MODELING PROJECTS**

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.

3. 000 Credit hours

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Seminar

Department: Mathematical Sciences

Course Attributes: Writing Intensive Course

### **MATH 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 23021.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

### **MATH 42202 - INTRODUCTION TO NUMERICAL COMPUTING II**

(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.



Prerequisite: MATH 42201; and MATH 32044 or 32052.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

### **MATH 45011 - DIFFERENTIAL GEOMETRY**

Analytic and metric differential geometry of curves and surfaces. Prerequisite: MATH 22005.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

### **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 or special approval of instructor.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

### **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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

### **MATH 46001 - ELEMENTARY TOPOLOGY**

Metric spaces, introduction to topological spaces, separation axioms. Prerequisite: MATH 22005.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

### **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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

### **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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Mathematical Sciences

### **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

Department: Mathematical Sciences

### **MATH 49996 - INDIVIDUAL STUDY**

(Repeatable for credit)

1. 000 TO 4. 000 Credit hours

1. 000 TO 4. 000 Other hours

Levels: Undergraduate

Schedule Types: Individual Investigation

Department: Mathematical Sciences

### **MATH 49998 - RESEARCH**

(Repeatable for credit)

1. 000 TO 15. 000 Credit hours

1. 000 TO 15. 000 Other hours

Levels: Undergraduate

Schedule Types: Research

Department: Mathematical Sciences

Course Attributes: Experiential Learning Requirement

### **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

Department: Mathematical Sciences

### **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

Department: Mathematical Sciences

### **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

Department: Mathematical Sciences

### **MATH 50055 - ACTUARIAL MATHEMATICS I**

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

Department: Mathematical Sciences

### **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

Department: Mathematical Sciences

### **MATH 50091 - SEMINAR IN ACTUARIAL MATHEMATICS**

(Repeatable for credit) Seminar course designed to prepare students for the society of actuaries examination on actuarial mathematics.

Prerequisite: MATH 50056; graduate standing.

2. 000 Credit hours

2. 000 Other hours

Levels: Graduate

Schedule Types: Seminar

Department: Mathematical Sciences

### **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

Department: Mathematical Sciences

### **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, constructability. Prerequisite: MATH 4/51001. Graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Mathematical Sciences

### **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

Levels: Graduate

Schedule Types: Lecture

Department: Mathematical Sciences



**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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Mathematical Sciences

**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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Mathematical Sciences

**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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Mathematical Sciences

**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  
Department: Mathematical Sciences

**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  
Department: Mathematical Sciences

**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  
Department: Mathematical Sciences

**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  
Department: Mathematical Sciences

**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  
Department: Mathematical Sciences

**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  
Department: Mathematical Sciences

**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  
Department: Mathematical Sciences

**MATH 52091 - SEMINAR: MODELING PROJECTS**

(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  
3. 000 Other hours  
Levels: Graduate  
Schedule Types: Seminar  
Department: Mathematical Sciences

**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  
Department: Mathematical Sciences

**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  
Department: Mathematical Sciences

**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  
Department: Mathematical Sciences

**MATH 55021 - 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. Graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Mathematical Sciences

**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  
Department: Mathematical Sciences

**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  
Department: Mathematical Sciences

**MATH 57011 - THEORY OF NUMBERS**

Divisibility properties of the integers, prime numbers, congruencies, 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

Department: Mathematical Sciences

**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

Department: Mathematical Sciences

**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

Department: Mathematical Sciences

**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

Department: Mathematical Sciences

**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

Department: Mathematical Sciences

**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

Department: Mathematical Sciences

**MATH 60061 - MATHEMATICAL STATISTICS I**

Statistics, distributions of statistics. Sampling distributions. Decision spaces and loss functions. Sufficiency and completeness. Estimation theory. Rao Blackwell and the Cramer Rao theorems. Prerequisite: MATH 4/52002. Graduate standing.

4. 000 Credit hours

4. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Mathematical Sciences

**MATH 60062 - MATHEMATICAL STATISTICS II**

Tests of statistical hypothesis. Neyman Pearson Lemma. Exponential families and invariance. Sequential tests. Non-parametric procedures. Prerequisite: MATH 6/70061. Graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Mathematical Sciences

**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

Levels: Graduate

Schedule Types: Lecture

Department: Mathematical Sciences

**MATH 60091 - SEMINAR IN STATISTICS & PROBABILITY**

(Repeatable for credit) Seminar on current research in statistics and probability. 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

Department: Mathematical Sciences

**MATH 60093 - VARIABLE TITLE WORKSHOP IN MATHEMATICS**

(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.

1. 000 TO 3. 000 Credit hours

1. 000 TO 3. 000 Other hours

Levels: Graduate

Schedule Types: Workshop

Department: Mathematical Sciences

**MATH 60094 - 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: Graduate standing.

1. 000 Credit hours

1. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Mathematical Sciences

**MATH 61051 - 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 graduate standing.

4. 000 Credit hours

4. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Mathematical Sciences

**MATH 61052 - 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 graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Mathematical Sciences

**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

Department: Mathematical Sciences

**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

Department: Mathematical Sciences

**MATH 62042 - METHODS OF APPLIED MATHEMATICS II**

Continuation of MATH 6/72041. Integral equations and Green's functions (Fredholm alternative, compact operators, distributions, weak solutions). Wave phenomena (dispersion, KdV equation). Stability and bifurcation (linearized stability analysis, turning points, Hopf bifurcation). Prerequisite: MATH 6/72041 and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Mathematical Sciences

**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

Levels: Graduate

Schedule Types: Lecture

Department: Mathematical Sciences

### **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 6/72051 and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Mathematical Sciences

### **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

Levels: Graduate

Schedule Types: Seminar

Department: Mathematical Sciences

### **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

Levels: Graduate

Schedule Types: Lecture

Department: Mathematical Sciences

### **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

Levels: Graduate

Schedule Types: Lecture

Department: Mathematical Sciences

### **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

Department: Mathematical Sciences

### **MATH 62202 - NUMERICAL COMPUTING II**

(Cross-listed with CS 62202 and CS 72202 and MATH 72202) A continuation of MATH 6/72201. Interpolation, numerical integration and differentiation, ordinary differential equations,

initial and boundary value problems, partial differential equations, fast Fourier transforms and applications. Prerequisite: MATH 52045 and 6/72201 and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Mathematical Sciences

### **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

Department: Mathematical Sciences

### **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

Department: Mathematical Sciences

### **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

Department: Mathematical Sciences

### **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

Levels: Graduate

Schedule Types: Lecture

Department: Mathematical Sciences

### **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

Levels: Graduate

Schedule Types: Lecture

Department: Mathematical Sciences

### **MATH 62263 - NUMERICAL SOLUTION OF LARGE SPARSE LINEAR SYSTEMS**

(Cross-listed with CS 62263 and CS 72263 and MATH 72263) Construction and analysis of iterative methods for large systems of linear algebraic equations. Jacobi, Gauss-Seidel, SOR. Polynomial acceleration methods, conjugate gradients. Multi-grid methods. Prerequisite: MATH 4/51021 and MATH 4/52202 and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Mathematical Sciences

### **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. Prerequisite MATH 4/52041 and MATH 4/52202 and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Mathematical Sciences

### **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

Levels: Graduate

Schedule Types: Seminar

Department: Mathematical Sciences

### **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

Department: Mathematical Sciences

### **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  
Department: Mathematical Sciences

#### **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  
Department: Mathematical Sciences

#### **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  
Levels: Graduate  
Schedule Types: Seminar  
Department: Mathematical Sciences

#### **MATH 64091 - SEMINAR IN MATHEMATICS EDUCATION**

(Repeatable for credit) Studies in geometry, algebra, mathematics for junior and senior high school. Mathematics content professionalized for teachers. Prerequisite: MATH 34001 and graduate standing.

3. 000 Credit hours  
3. 000 Other hours  
Levels: Graduate  
Schedule Types: Seminar  
Department: Mathematical Sciences

#### **MATH 66051 - INTRODUCTION TO TOPOLOGY I**

Set theory, topological spaces, continuity, product spaces, quotient spaces, separation axioms, compactness and metrizability. Prerequisite: Special approval and graduate standing.

4. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Mathematical Sciences

#### **MATH 66052 - INTRODUCTION TO TOPOLOGY II**

Geometric topology, including connectedness, continua, homotopy, the plane and 2 manifolds. Prerequisite: MATH 6/76051 and graduate standing.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Mathematical Sciences

#### **MATH 66091 - SEMINAR IN TOPOLOGY**

(Repeatable for credit) Seminar on current research in topology. 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  
Department: Mathematical Sciences

#### **MATH 67091 - SEMINAR IN NUMBER THEORY**

(Repeatable for credit) Seminar on current research in number theory. 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  
Department: Mathematical Sciences

#### **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  
Department: Mathematical Sciences

#### **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  
Department: Mathematical Sciences

#### **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  
Department: Mathematical Sciences

#### **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  
Department: Mathematical Sciences

#### **MATH 70052 - PROBABILITY II**

Characteristic functions, the central limit problem, conditional expectations, Martingale theory, Brownian motion. Prerequisite: MATH 6/70051 and doctoral standing.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Mathematical Sciences

#### **MATH 70061 - MATHEMATICAL STATISTICS I**

Statistics, distributions of statistics. Sampling distributions. Decision spaces and loss functions. Sufficiency and completeness. Estimation theory. Rao Blackwell and the Cramer Rao theorems. Prerequisite: MATH 4/52002.

4. 000 Credit hours

4. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Mathematical Sciences

#### **MATH 70062 - MATHEMATICAL STATISTICS II**

Tests of statistical hypothesis. Neyman Pearson Lemma. Exponential families and invariance. Sequential tests. Non parametric procedures. Prerequisite: MATH 6/70061 and doctoral standing.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Mathematical Sciences

#### **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.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Mathematical Sciences

#### **MATH 70091 - SEMINAR IN STATISTICS & PROBABILITY**

(Repeatable for credit) Seminar on current research in statistics and probability. Prerequisite: Special approval and doctoral standing.

1. 000 TO 3. 000 Credit hours  
3. 000 Other hours  
Levels: Graduate  
Schedule Types: Seminar  
Department: Mathematical Sciences

#### **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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Mathematical Sciences

#### **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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Mathematical Sciences

#### **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

Levels: Graduate

Schedule Types: Lecture

Department: Mathematical Sciences

### **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

Levels: Graduate

Schedule Types: Lecture

Department: Mathematical Sciences

### **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

Department: Mathematical Sciences

### **MATH 71012 - CHARACTERS OF FINITE GROUPS**

Development of characters of finite groups, their properties, orthogonality relations, integrality conditions. Applications include Burnside's  $p$ - $q$  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

Department: Mathematical Sciences

### **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

Department: Mathematical Sciences

### **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

Department: Mathematical Sciences

### **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

Department: Mathematical Sciences

### **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

Department: Mathematical Sciences

### **MATH 72001 - FUNCTIONAL ANALYSIS I**

A study of principles of linear analysis in the setting of normed linear spaces and topological vector spaces. Prerequisite: MATH 72052 and doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Mathematical Sciences

### **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

Department: Mathematical Sciences

### **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

Department: Mathematical Sciences

### **MATH 72042 - METHODS OF APPLIED MATHEMATICS II**

Continuation of MATH 6/72041. Integral equations and Green's functions (Fredholm alternative, compact operators, distributions, weak solutions). Wave phenomena (dispersion, KdV equation). Stability and bifurcation (linearized stability analysis, turning points, Hopf bifurcation). Prerequisite: MATH 6/72041 and doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Mathematical Sciences

### **MATH 72051 - 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 doctoral standing.

4. 000 Credit hours

4. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Mathematical Sciences

### **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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Mathematical Sciences

### **MATH 72091 - SEMINAR IN REAL ANALYSIS**

(Repeatable for credit) Seminar on current research in real 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

Department: Mathematical Sciences

### **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.

1. 000 TO 3. 000 Credit hours

1. 000 TO 3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Mathematical Sciences

### **MATH 72151 - FUNCTIONS OF A COMPLEX VARIABLE I, II**

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.

4. 000 Credit hours

4. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Mathematical Sciences

### **MATH 72152 - FUNCTIONS OF A COMPLEX VARIABLE I, II**

Topological properties of the complex plane; analytic, entire, meromorphic functions; analytic continuation; conformal mappings; Picard's theorem; Riemann surfaces. Prerequisite: 72151 and doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours



Levels: Graduate  
Schedule Types: Lecture  
Department: Mathematical Sciences

### **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  
Department: Mathematical Sciences

### **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  
Department: Mathematical Sciences

### **MATH 72202 - NUMERICAL COMPUTING II**

(Cross-listed with CS 62202 and CS 72202 and MATH 62202) A continuation of MATH 6/72201. Interpolation, numerical integration and differentiation, ordinary differential equations, initial and boundary value problems, partial differential equations, fast Fourier transforms and applications. Prerequisite: MATH 52045 and MATH 6/72201 and doctoral standing.

3. 000 Credit hours  
3. 000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture  
Department: Mathematical Sciences

### **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  
Department: Mathematical Sciences

### **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  
Department: Mathematical Sciences

### **MATH 72252 - NUMERICAL ANALYSIS II**

(Cross-listed with CS 62252 and CS 72252 and MATH 62252) 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 MATH 6/72251 and doctoral standing.

3. 000 Credit hours  
3. 000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture  
Department: Mathematical Sciences

### **MATH 72261 - NUMERICAL SOLUTION OF ORDINARY DIFFERENTIAL EQUATIONS**

(Cross-listed with CS 62261 and CS 72261 and MATH 62261) 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 doctoral standing.

3. 000 Credit hours  
3. 000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture  
Department: Mathematical Sciences

### **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  
Department: Mathematical Sciences

### **MATH 72263 - NUMERICAL SOLUTION OF LARGE SPARSE LINEAR SYSTEMS**

(Cross-listed with CS 62263 and CS 72263 and MATH 62263) Construction and analysis of iterative methods for large systems of linear algebraic equations. Jacobi, Gauss-Seidel, SOR. Polynomial acceleration methods, conjugate gradients. Multi-grid methods. Prerequisite: MATH 4/51021 and MATH 4/52202 and doctoral standing.

3. 000 Credit hours  
3. 000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture  
Department: Mathematical Sciences

### **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

Levels: Graduate  
Schedule Types: Lecture  
Department: Mathematical Sciences

### **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

Levels: Graduate  
Schedule Types: Seminar  
Department: Mathematical Sciences

### **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

Levels: Graduate  
Schedule Types: Lecture  
Department: Mathematical Sciences

### **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

Levels: Graduate  
Schedule Types: Seminar  
Department: Mathematical Sciences

### **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  
Department: Mathematical Sciences

### **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  
Department: Mathematical Sciences

### **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  
Department: Mathematical Sciences



### **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

Department: Mathematical Sciences

### **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

Department: Mathematical Sciences

### **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

Department: Mathematical Sciences

### **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

Department: Mathematical Sciences

### **MATH 77011 - ALGEBRAIC NUMBER THEORY**

Number fields and Dedekind domains; conjugates, norm and trace, discriminant, integral bases; arithmetic or quadratic and cyclotomic number fields; theory of ideals and class group; Dirichlet's theorem 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

Department: Mathematical Sciences

### **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

Department: Mathematical Sciences

### **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

Department: Mathematical Sciences

### **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

Department: Mathematical Sciences

### **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

Department: Mathematical Sciences

### **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

Department: Mathematical Sciences

### **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. 000 TO 15. 000 Credit hours

1. 000 TO 15. 000 Other hours

Levels: Graduate

Schedule Types: Research

Department: Mathematical Sciences

### **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. 000 Credit hours

15. 000 Other hours

Levels: Graduate

Schedule Types: Dissertation

Department: Mathematical Sciences

### **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. 000 Credit hours

15. 000 Other hours

Levels: Graduate

Schedule Types: Dissertation

Department: Mathematical Sciences

## ***Middle Childhood Education (MCED)***

### **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. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Teaching, Learning and Curriculum Studies

### **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

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Teaching, Learning and Curriculum Studies

### **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

Department: Teaching, Learning and Curriculum Studies

**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

Department: Teaching, Learning and Curriculum Studies

**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

Department: Teaching, Learning and Curriculum Studies

**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

Department: Teaching, Learning and Curriculum Studies

**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

Department: Teaching, Learning and Curriculum Studies

**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

Department: Teaching, Learning and Curriculum Studies

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

Department: Teaching, Learning and Curriculum Studies

**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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Teaching, Learning and Curriculum Studies

**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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Teaching, Learning and Curriculum Studies

**MCED 42358 - STUDENT TEACHING IN MIDDLE CHILDHOOD**

Full-time student teaching for twelve 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.

9. 000 Credit hours

9. 000 Other hours

Levels: Undergraduate

Schedule Types: Practicum or Internship

Department: Teaching, Learning and Curriculum Studies

Course Attributes: Experiential Learning Requirement

**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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Teaching, Learning and Curriculum Studies

**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

Department: Teaching, Learning and Curriculum Studies

**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

Department: Teaching, Learning and Curriculum Studies





### **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

Department: Teaching, Learning and Curriculum Studies

### **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

Department: Teaching, Learning and Curriculum Studies

### **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

Department: Teaching, Learning and Curriculum Studies

### **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

Department: Teaching, Learning and Curriculum Studies

### **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

Department: Teaching, Learning and Curriculum Studies

### **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

Department: Teaching, Learning and Curriculum Studies

### **MCED 52358 - STUDENT TEACHING IN MIDDLE CHILDHOOD**

Full-time student teaching for twelve 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: Special approval of program coordinator and graduate standing.

9. 000 Credit hours

9. 000 Other hours

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Teaching, Learning and Curriculum Studies

### **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

Department: Teaching, Learning and Curriculum Studies

### **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

Department: Teaching, Learning and Curriculum Studies

### **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

Department: Teaching, Learning and Curriculum Studies

## ***Modern and Classical Language Studies (MCLS)***

### **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

Department: Modern and Classical Language Studies

### **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

Department: Modern and Classical Language Studies

**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

Department: Modern and Classical Language Studies

**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

Department: Modern and Classical Language Studies

**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

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

Course Attributes: Diversity Course-Global

**MCLS 28404 - THE LATIN AMERICAN EXPERIENCE**

An introduction to various aspects of contemporary Latin American societies and cultures. Taught in English; knowledge of a foreign language is not necessary. Prerequisite: None.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

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

Department: Modern and Classical Language Studies

**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

Department: Modern and Classical Language Studies

**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

Department: Modern and Classical Language Studies

**MCLS 40093 - 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: Departmental special approval.

1. 000 TO 6. 000 Credit hours

1. 000 TO 6. 000 Other hours

Levels: Undergraduate

Schedule Types: Workshop

Department: Modern and Classical Language Studies

**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

Department: Modern and Classical Language Studies

**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

Department: Modern and Classical Language Studies

**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

Department: Modern and Classical Language Studies

**MCLS 40657 - STUDENT TEACHING OF A SECOND LANGUAGE**

Supervised practicum in the teaching of a second language, grades K-12. Prerequisite: Special approval.

3. 000 TO 9. 000 Credit hours

3. 000 TO 9. 000 Other hours

Levels: Undergraduate

Schedule Types: Practicum or Internship

Department: Modern and Classical Language Studies

Course Attributes: Experiential Learning Requirement

**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

Levels: Undergraduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

**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

Levels: Graduate

Schedule Types: Workshop

Department: Modern and Classical Language Studies

**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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Modern and Classical Language Studies

**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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Modern and Classical Language Studies

**MCLS 50655 - MULTIMEDIA, ONLINE INSTRUCTION AND SECOND LANGUAGE ACQUISITION**

Theoretical bases and application of methods and techniques of second language instruction in an online environment. Design and development of multimedia materials and lessons in a project-based learning environment. Prerequisite: Graduate standing and MCLS 50654.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Modern and Classical Language Studies

**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  
Department: Modern and Classical Language Studies

**MCLS 60020 - SEMEIOTICS**

(Cross-listed with ENG 65057 + ENG 75057 + 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  
Department: Modern and Classical Language Studies

**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  
Department: Modern and Classical Language Studies

**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  
Department: Modern and Classical Language Studies

**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  
Department: Modern and Classical Language Studies

**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  
Department: Modern and Classical Language Studies

**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  
Department: Modern and Classical Language Studies

**MCLS 60624 - HERITAGE LANGUAGE SPEAKERS IN THE FOREIGN LANGUAGE CLASSROOM**

Provides an understanding of the unique needs of heritage language speakers in the foreign language classroom and explores theoretical approaches and practical applications toward development of their literacy skills. Prerequisite: graduate standing.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture

Department: Modern and Classical Language Studies

**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  
Schedule Types: Lecture  
Department: Modern and Classical Language Studies

**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  
Department: Modern and Classical Language Studies

**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  
Department: Modern and Classical Language Studies

**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  
Department: Modern and Classical Language Studies

**MCLS 60698 - RESEARCH IN SECOND LANGUAGE PEDAGOGY**

(Repeatable for credit; cross-listed with ENG 63098) Students will learn how second language



research influences their teaching practices by studying research texts and recent journal articles and conducting a research project. Prerequisite: Special approval of instructor and graduate standing.

3. 000 Credit hours

3. 000 Other hours

Levels: Graduate

Schedule Types: Research

Department: Modern and Classical Language Studies

## ***Mechanical Engineering and Related Technologies (MERT)***

### **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

Department: Regional

### **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

Department: Regional

Course Attributes: CTAG - Mech Engineering Tech

### **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

Department: Regional

Course Attributes: CTAG - Mech Engineering Tech

### **MERT 12005 - PROPERTIES OF MATERIALS**

Covers the chemical and physical properties of engineering materials such as metals (ferrous and non-ferrous), 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

Schedule Types: Combined Lecture and Lab

Department: Regional

### **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

Department: Regional

### **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

Department: Regional

### **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

Department: Regional

### **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

Department: Regional

### **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

Department: Regional

### **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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Regional

### **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

Department: Regional

### **MERT 22095 - SPECIAL TOPICS IN MECHANICAL ENGINEERING TECHNOLOGY**

Special topics in mechanical engineering technology. Repeated registration permitted. Prerequisite: Permission.

1. 000 TO 3. 000 Credit hours

1. 000 TO 3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Regional

### **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

Department: Regional

### **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

Department: Regional





## **Manufacturing Engineering Technology (MFGT)**

### **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  
Department: Regional

### **MFGT 13001 - COMPUTER NUMERICAL CONTROL PROGRAMMING**

Lathe and mill computer numerical control (CNC) programming: conversational, M & G codes. Manual data input and off-line programming: offsets, cutter compensation, linear, circular and helical interpolation.

Prerequisites: MERT 12000 and MERT 12004.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **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  
Department: Regional

### **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  
Department: Regional

### **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  
Department: Regional

## **Management and Information Systems (MIS)**

### **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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Management Information Systems  
Course Attributes: TAG - Business

### **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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Management Information Systems  
Course Attributes: Trnfr Module-Mathematics

### **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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Management Information Systems

### **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  
Levels: Undergraduate  
Schedule Types: Workshop  
Department: Management Information Systems

### **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  
Department: Management Information Systems

### **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  
Department: Management Information Systems

### **MIS 34036 - ENTERPRISE SYSTEMS**

Introduction to the structure and use of Enterprise Computer Systems. Course topics include Networking, Telephony and VoIP, Mainframe and Client Server, 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  
Department: Management Information Systems

### **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  
Department: Management Information Systems

### **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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Management Information Systems

### **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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Management Information Systems

#### **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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Management Information Systems

#### **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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Management Information Systems

#### **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  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Management Information Systems

#### **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  
Department: Management Information Systems

#### **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  
Department: Management Information Systems

#### **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 with a minimum grade of C (2. 000); and MIS 24065. 3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Management Information Systems

#### **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. 3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Management Information Systems

#### **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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Management Information Systems

#### **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  
Levels: Undergraduate

Schedule Types: Lecture, Practicum or Internship  
Department: Management Information Systems  
Course Attributes: Experiential Learning Requirement

#### **MIS 34161 - 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: none. 3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Management Information Systems

#### **MIS 34162 - 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: none. 3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Management Information Systems

#### **MIS 34163 - 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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Management Information Systems

#### **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

Levels: Undergraduate

Schedule Types: Lecture

Department: Management Information Systems

### **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

Levels: Undergraduate

Schedule Types: Field Experience, Lecture

Department: Management Information Systems

### **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

Department: Management Information Systems

### **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

Department: Management Information Systems

### **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

Department: Management Information Systems

### **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

Department: Management Information Systems

### **MIS 44009 - THE BUSINESS CASE FOR SUSTAINABILITY**

Lays the foundation for sustainable development and the balance issues between economic, social and environmental interests. It frames the business enterprise within the natural and social environments, and surveys a variety of intersection points and the challenges they pose. Systems thinking and long term perspective are used to understand the potential consequences of organizational choices regarding goals and strategies, given consideration of how the natural environment increasingly drives the business environment. Prerequisites: minimum cumulative 2. 500 GPA; and junior standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Management Information Systems

### **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

Department: Management Information Systems

### **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

Department: Management Information Systems

### **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

Department: Management Information Systems

### **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

Department: Management Information Systems

### **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

Department: Management Information Systems

### **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

Department: Management Information Systems

Course Attributes: Experiential Learning

Requirement, 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 TCP/IP. Microsoft Windows and Linux/Unix 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

Department: Management Information Systems

#### **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

Department: Management Information Systems

#### **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

Department: Management Information Systems

#### **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

Department: Management Information Systems  
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 2.750 cumulative GPA; and MIS 24053 or COMT 11000; and MIS 34180 or BMRT 21006; and special approval.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Management Information Systems

**MIS 44093 - VARIABLE TITLE  
WORKSHOP IN MANAGEMENT AND  
INFORMATION SYSTEMS** 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

Department: Management Information Systems

#### **MIS 44095 - SPECIAL TOPICS IN MIS**

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

Department: Management Information Systems

#### **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

Department: Management Information Systems

#### **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

Department: Management Information Systems

#### **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 2.500 cumulative GPA.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Management Information Systems

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 2.750 GPA; and MIS 34180 or BMRT 21006; and special approval.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Management Information Systems

#### **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

Department: Management Information Systems

#### **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

Department: Management Information Systems

Course Attributes: Experiential Learning  
Requirement

#### **MIS 44195 - ADVANCED TOPICS IN HUMAN RESOURCE MANAGEMENT**

(Repeatable for credit) 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 2.750 cumulative GPA; and MIS 34180 or BMRT 21006; and special approval.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Management Information Systems

#### **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: 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  
 Department: Management Information Systems

#### **MIS 44292 - BUSINESS EXPERIENCE AND INTERNSHIP**

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  
 Department: Management Information Systems  
 Course Attributes: Experiential Learning Requirement

#### **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  
 Department: Management Information Systems

#### **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  
 Department: Management Information Systems

#### **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  
 Department: Management Information Systems  
 Course Attributes: Experiential Learning Requirement

#### **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  
 Department: Management Information Systems

#### **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  
 Department: Management Information Systems

#### **MIS 64013 - NONPARAMETRIC STATISTICS**

This course is a presentation of statistically sound techniques for analysts who want to adopt non-parametric procedures to their specific analytic needs. Prerequisite: MIS 64005 or 74005; and graduate standing.  
 3. 000 Credit hours  
 3. 000 Lecture hours  
 Levels: Graduate  
 Schedule Types: Lecture  
 Department: Management Information Systems

#### **MIS 64017 - 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 graduate standing.  
 3. 000 Credit hours  
 3. 000 Lecture hours  
 Levels: Graduate  
 Schedule Types: Lecture  
 Department: Management Information Systems

#### **MIS 64019 - 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 graduate standing.  
 3. 000 Credit hours  
 3. 000 Lecture hours  
 Levels: Graduate  
 Schedule Types: Seminar  
 Department: Management Information Systems

#### **MIS 64020 - 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 graduate standing.  
 3. 000 Credit hours  
 3. 000 Lecture hours  
 Levels: Graduate  
 Schedule Types: Lecture  
 Department: Management Information Systems

#### **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  
 Department: Management Information Systems

#### **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. Immerses 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  
 Department: Management Information Systems

#### **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  
 Department: Management Information Systems

#### **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

Department: Management Information Systems

### **MIS 64033 - MODERN MANUFACTURING MANAGEMENT**

Major areas of study: importance of manufacturing and competitive position of U. S. manufacturing; strategic and organizational responses to gain competitive advantage; developments in manufacturing systems and management techniques. Prerequisite: Special approval of instructor and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Management Information Systems

### **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

Department: Management Information Systems

### **MIS 64042 - MANAGEMENT INFORMATION SYSTEMS**

Theory, development application and management of information systems and their impact on people and organizations; emphasis on strategy, ethics and competitive advantage of modern technology. Prerequisite: graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Management Information Systems

### **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

Department: Management Information Systems

### **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

Department: Management Information Systems

### **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

Department: Management Information Systems

### **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

Department: Management Information Systems

### **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

Department: Management Information Systems

### **MIS 64108 - ADVANCED TOPICS IN HUMAN RESOURCES MANAGEMENT AND ORGANIZATIONAL BEHAVIOR**

Intensive investigation of selected topics in human resources management and/or organizational behavior. Students will be expected to undertake a research project on a topic jointly determined by the student and the instructor. Prerequisite: graduate standing and special approval of instructor.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Management Information Systems

### **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

Levels: Graduate

Schedule Types: Lecture

Department: Management Information Systems

### **MIS 64160 - 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: graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Management Information Systems

### **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

Levels: Graduate

Schedule Types: Lecture

Department: Management Information Systems

### **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

Levels: Graduate

Schedule Types: Lecture

Department: Management Information Systems

### **MIS 64270 - ORGANIZATIONAL ANALYSIS AND DESIGN**

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: graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Management Information Systems



### **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 Department: Management Information Systems

### **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 Department: Management Information Systems

### **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 Department: Management Information Systems

### **MIS 74013 - NON-PARAMETRIC STATISTICS**

This course is a presentation of statistically sound techniques for analysts who want to adopt non-parametric procedures to their specific analytic needs. Prerequisite: MIS 64005 or 74005; and doctoral standing. 3. 000 Credit hours 3. 000 Lecture hours Levels: Graduate Schedule Types: Lecture Department: Management Information Systems

### **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 Department: Management Information Systems

### **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 Department: Management Information Systems

### **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 Department: Management Information Systems

### **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 Department: Management Information Systems

### **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 Department: Management Information Systems

### **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 Department: Management Information Systems

### **MIS 74042 - MANAGEMENT INFORMATION SYSTEMS**

Theory, development application and management of information systems and their impact on people and organizations; emphasis on

strategy, ethics and competitive advantage of modern technology. Prerequisite: special approval and doctoral standing. 3. 000 Credit hours 3. 000 Lecture hours Levels: Graduate Schedule Types: Lecture Department: Management Information Systems

### **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 Department: Management Information Systems

### **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 Department: Management Information Systems

### **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 Department: Management Information Systems

### **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 Department: Management Information Systems

### **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  
Department: Management Information Systems

**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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Management Information Systems

**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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Management Information Systems

**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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Management Information Systems

**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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Management Information Systems

**MIS 84007 - INFORMATION TECHNOLOGY**

Overview of information technologies and their management. Emphasis is placed on current issues in each of the is technology types and business issues on their acquisition management and value. Prerequisite: doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Management Information Systems

**MIS 84012 - SCHEDULING AND PLANNING**

An introduction to production planning and scheduling models used to solve real world problems. Included are aggregate planning; nonlinear cost; production and work force smoothing; adaptive multistage models and pull systems (JIT, OPT). Prerequisite: doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Management Information Systems

**MIS 84015 - STOCHASTIC MODELS**

Mathematical modeling of systems involving one or more random variables: basic probability theory; Poisson process, Markov chain and Markov process with applications to production, inventory, reliability and queuing systems. Prerequisite: doctoral standing and special approval.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Management Information Systems

**MIS 84045 - SYSTEM DEVELOPMENT METHODOLOGIES**

Critical comparative analysis of various technological and organizational methods for design, construction and maintenance of information systems. Survey of contemporary technologies and extrapolation to possible futures. Prerequisite: doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Management Information Systems

**MIS 84047 - 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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Management Information Systems

**MIS 84080 - EMERGING HARDWARE AND SOFTWARE TECHNOLOGIES**

Investigation of selected emerging hardware and software technologies such as parallel processing systems, computer languages and operations systems, artificial intelligence, neural networks and chaos theory. Prerequisite: doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Management Information Systems

**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  
Department: Management Information Systems

**MIS 84108 - ADVANCED TOPICS IN HUMAN RESOURCE MANAGEMENT AND ORGANIZATIONAL BEHAVIOR**

Intensive investigation of selected topics in human resources management and/or organizational behavior. Students will be expected to undertake a research project on a topic jointly determined by the student and the instructor. Prerequisite: doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Management Information Systems

**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  
Department: Management Information Systems

**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  
Department: Management Information Systems

**MIS 84262 - COMPETITIVE STRATEGIC ANALYSIS**

Develops an understanding of the critical factors involved in formulating industry-analytic competitive strategy and evaluating its effectiveness. Prerequisite: doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Management Information Systems





#### **MIS 84263 - 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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Management Information Systems

#### **MIS 84266 - READINGS IN MANAGEMENT SYSTEMS**

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

Department: Management Information Systems

#### **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 defined. 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

Department: Management Information Systems

#### **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

Department: Management Information Systems

#### **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

Department: Management Information Systems

#### **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

Department: Management Information Systems

### ***Marketing (MKTG)***

#### **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

Department: Marketing and Entrepreneurship

Course Attributes: TAG - Business

#### **MKTG 35030 - 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; and minimum cumulative GPA of 2. 500; and marketing (MKTG) major.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Marketing and Entrepreneurship

#### **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

Department: Marketing and Entrepreneurship

#### **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

Department: Marketing and Entrepreneurship

#### **MKTG 35055 - INTERNET MARKETING**

This course will give students an understanding of the ways in which the Internet and the World Wide Web can be integrated into the marketing mix. In addition tools of marketing which are available via the Internet will be explored.

Prerequisite: MKTG 25010 or BMRT 21050 or MKTG 35035.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Marketing and Entrepreneurship

#### **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

Department: Marketing and Entrepreneurship

#### **MKTG 45046 - PERSONAL SELLING**

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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Marketing and Entrepreneurship

#### **MKTG 45047 - ADVANCED PROFESSIONAL SELLING**

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 MKTG 45026 or ENTR 37045; and a minimum cumulative GPA of 2. 500.

3. 000 Credit hours

2. 000 Lecture hours



1. 000 Lab hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Marketing and Entrepreneurship

### **MKTG 45060 - INTERNATIONAL MARKETING**

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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Marketing and Entrepreneurship

### **MKTG 45082 - SERVICE, RETAIL AND WEB-BASED MARKETING**

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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Marketing and Entrepreneurship

### **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; and marketing (MKTG) major; and senior standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Marketing and Entrepreneurship

Course Attributes: Experiential Learning Requirement, 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

Department: Marketing and Entrepreneurship

### **MKTG 45095 - SPECIAL TOPICS IN MARKETING**

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

Department: Marketing and Entrepreneurship

### **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

Department: Marketing and Entrepreneurship

### **MKTG 45292 - MARKETING INTERNSHIP**

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.

1. 000 TO 6. 000 Credit hours

1. 000 TO 6. 000 Other hours

Levels: Undergraduate

Schedule Types: Individual Investigation,

Practicum or Internship

Department: Marketing and Entrepreneurship

Course Attributes: Experiential Learning

Requirement

### **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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Marketing and Entrepreneurship

### **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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Marketing and Entrepreneurship

### **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

Department: Marketing and Entrepreneurship

### **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

Department: Marketing and Entrepreneurship

### **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

Department: Marketing and Entrepreneurship

### **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

Department: Marketing and Entrepreneurship

### **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

Levels: Graduate

Schedule Types: Lecture

Department: Marketing and Entrepreneurship

### **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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Marketing and Entrepreneurship

### **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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Marketing and Entrepreneurship

### **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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Marketing and Entrepreneurship

### **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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Marketing and Entrepreneurship

### **MKTG 75064 - 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: MKTG 65051 or 75051; and doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Marketing and Entrepreneurship

### **MKTG 75184 - 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: doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Marketing and Entrepreneurship

### **MKTG 85054 - 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 or 75051; and MKTG 65184 or 75184; and doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Marketing and Entrepreneurship

### **MKTG 85057 - MARKETING RESEARCH**

Focuses on the construction of a conceptual framework; the design of an experiment sampling plan data collection methods and the application of statistical techniques. Prerequisite: doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Marketing and Entrepreneurship

### **MKTG 85060 - 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. Prerequisites: MKTG 65051 or 75051; and doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Marketing and Entrepreneurship

### **MKTG 85063 - ANALYTICAL METHODS IN MARKETING RESEARCH**

Application of multivariate statistical techniques in marketing research. Prerequisite: doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Marketing and Entrepreneurship

### **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

Department: Marketing and Entrepreneurship

### **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

Department: Marketing and Entrepreneurship

### **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

Department: Marketing and Entrepreneurship

### **MKTG 85097 - SEMINAR IN MARKETING**

(Repeatable for credit) Investigation of selected topics in marketing. Prerequisite: doctoral standing.

3. 000 Credit hours

3. 000 Other hours

Levels: Graduate

Schedule Types: Colloquium

Department: Marketing and Entrepreneurship

### **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

Department: Marketing and Entrepreneurship

## **Managerial Marketing (MMTG)**

### **MMTG 35011 - MARKETING TOOLS**

Topics include the analytical, financial, statistical, communications, and decision-making skills and development of the technical competencies needed to succeed as a marketing professional in small-sized firms. Prerequisites: minimum cumulative 2. 500 GPA; and MIS 24053 and MKTG 25010; and managerial marketing (MMTG) major.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Marketing and Entrepreneurship

Course Attributes: Writing Intensive Course

### **MMTG 35021 - RESEARCH FOR MARKETING DECISIONS**

Focuses on the effective collection, organization, evaluation and use of data pertaining to marketing decision-making. Data analysis, interpretation and presentation methods suited for a small-sized firm are emphasized. Prerequisites: MMTG 35011 and minimum cumulative GPA of 2. 500.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Marketing and Entrepreneurship

### **MMTG 35023 - CUSTOMER ANALYSIS**

Addresses the methods marketers use to appraise the value of customer groups. Segmentation, target marketing, selected theories of consumer and buyer behavior, and database organization and analysis methods are covered. Prerequisite: MMTG 35011 and minimum cumulative GPA of 2. 500.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Marketing and Entrepreneurship

**MMTG 35024 - HANDS-ON TECHNOLOGY ENHANCEMENT LABORATORY**

Lab designed to expand student's abilities with spreadsheets, statistical packages and presentation software. Prerequisites: MIS 24053 or COMT 11000; and MKTG 25010 or BMRT 21050; 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  
Department: Marketing and Entrepreneurship

**MMTG 35026 - DECISION-MAKING SKILL ENHANCEMENT LABORATORY**

Lab designed to expand student's data interpretation, decision-making and creative problem-solving skills. Prerequisite: MMTG 35011 and minimum cumulative GPA of 2. 500.

1. 000 Credit hours  
2. 000 Lab hours  
Levels: Undergraduate  
Schedule Types: Laboratory  
Department: Marketing and Entrepreneurship

**MMTG 45020 - COMPETITIVE MARKET ANALYSIS**

Focuses on establishing and maintaining competitive positions in markets through product and pricing strategies driven by industry and competitive analysis. Methods for assessing market potential and forecasting are explored. Prerequisites: MMTG 35021 and 35023; and minimum cumulative GPA of 2. 500.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Marketing and Entrepreneurship

**MMTG 45026 - MARKETING COMMUNICATIONS LABORATORY**

Lab provides an overview of selling methods and practices. Students will engage in one-on-one role playing and other simulated selling scenarios. Prerequisites: MMTG 35021 and 35023; and minimum cumulative GPA of 2. 500.

1. 000 Credit hours  
2. 000 Lab hours  
Levels: Undergraduate  
Schedule Types: Laboratory  
Department: Marketing and Entrepreneurship

**MMTG 45030 - CHANNEL MANAGEMENT**

Addresses the management of suppliers and customers related to the buying and selling of goods and services. Topics include channel relationships and functions, distribution, cost management, exporting, negotiations, and sales force management. Prerequisites: MMTG 35021 and MMTG 35023; and minimum cumulative GPA of 2. 500.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Marketing and Entrepreneurship

**MMTG 45039 - PROMOTION MANAGEMENT**

Covers the promotional tools and their role in communicating with customers. Emphasis is on the selection, budgeting and implementation of promotional tools appropriate for smaller-sized enterprises. Prerequisites: MMTG 45020 and 45030; and minimum cumulative GPA of 2. 500.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Marketing and Entrepreneurship

**MMTG 45040 - INTEGRATED MARKETING STRATEGY**

This is the capstone course for managerial marketing majors. Emphasis is on the integration of marketing concepts and decision-making methods and skills to derive sound marketing decisions. Prerequisites: MMTG 45020 and minimum cumulative GPA of 2. 500.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Marketing and Entrepreneurship  
Course Attributes: Experiential Learning Requirement

**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  
Department: Marketing and Entrepreneurship

## *Military Science (MSCI)*

**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  
Department: Military Science

**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  
Department: Military Science

**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  
Department: Military Science

**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  
Department: Military Science

**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  
Department: Military Science

**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  
Department: Military Science

**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  
Department: Military Science

**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

Department: Military Science

### **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

Department: Military Science

### **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

Department: Military Science

### **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

Department: Military Science

### **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

Department: Military Science

### **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

Department: Military Science

### **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

Department: Military Science

### **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

Department: Military Science

### **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

Department: Military Science

## **Music (MUS)**

### **MUS 1110 - MUSIC FUNDAMENTALS**

Introduction to the pitch and rhythmic aspects of music. Emphasis on aural skills and music notation. Prepares students for MUS1111, 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

Department: Music

### **MUS 1111 - 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

Department: Music

### **MUS 1121 - THEORY**

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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Music

### **MUS 1122 - THEORY**

Continuation of basic elements of music--harmonic, melodic, rhythmic-- studied through analysis, composition, keyboard, singing and ear training. Chromatic materials emphasized.

Prerequisite: MUS 1121 with a grade of C- (1. 700) or better.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Music

### **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

Department: Music

### **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

Department: Music

### **MUS 17111 - PIANO CLASS**

Preparatory piano. Credit not acceptable on music major sequences. Piano literature and functional elements of sight-reading, transposition, harmonization and improvisation. Prerequisite: Special approval.

1. 000 Credit hours

1. 000 Lab hours

Levels: Undergraduate

Schedule Types: Laboratory

Department: Music

### **MUS 17112 - PIANO CLASS**

Preparatory piano. Credit not acceptable on music major sequences. Piano literature and functional elements of sight-reading, transposition, harmonization and improvisation. Prerequisite: MUS 17111 with a grade of C- (1. 700) or better.

1. 000 Credit hours

2. 000 Lab hours

Levels: Undergraduate

Schedule Types: Laboratory

Department: Music

### **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

Department: Music

**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- (1. 700) or better.

1. 000 Credit hours  
1. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Music

**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  
Department: Music

**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  
Department: Music

**MUS 21114 - 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- (1. 700) grade.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Music

**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- (1. 700) or better.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Music

**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- (1. 700) or better.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Music

**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- (1. 700) in MUS 21113.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Music

**MUS 21222 - AUDIO RECORDING II**

A study of multi-track mixing and recording techniques, session setup and management, and elements required for the reference mix.

Prerequisite: MUS 21221 with minimum C- (1. 700) grade.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Music

**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- (1. 700) in MUS 11121 and 11122.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Music

**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  
Department: Music

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  
Schedule Types: Lecture  
Department: Music  
Course Attributes: Diversity Course-Global, Kent Core-Fine Arts, LER-Fine Arts, Trnfr Module-Fine Arts

**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  
Department: Music  
Course Attributes: Diversity Course-Domestic

**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  
Department: Music

**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  
Department: Music  
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  
Levels: Undergraduate  
Schedule Types: Laboratory  
Department: Music

**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  
Levels: Undergraduate  
Schedule Types: Laboratory  
Department: Music

**MUS 25312 - WORLD MUSIC ENSEMBLE**

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  
Levels: Undergraduate  
Schedule Types: Studio  
Department: Music

**MUS 27111 - PIANO CLASS**

Continuation of piano classes. Credit acceptable on music major and minor sequences.

Prerequisite: MUS 17112 with a grade of C (1.700) or better.

2.000 Credit hours

2.000 Lab hours

Levels: Undergraduate

Schedule Types: Laboratory

Department: Music

**MUS 27112 - PIANO CLASS**

Continuation of piano classes. Credit acceptable on music major and minor sequences.

Prerequisite: MUS 27111.

2.000 Credit hours

2.000 Lab hours

Levels: Undergraduate

Schedule Types: Laboratory

Department: Music

**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

Department: Music

**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- (1.700) in 21114.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Music

**MUS 31114 - MUSIC PRODUCTION IV**

Continuation of Music Production III, creating audio for short video projects including the study of time code, synchronization, electronic editing, video and film transports, Dolby stereo, equipment interfacing and future developments. Prerequisite: Minimum grade of C- in MUS 31113.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Music

**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- (1.700) minimum grade.

2.000 Credit hours

2.000 Lecture hours

0.000 Lab hours

Levels: Undergraduate

Schedule Types: Laboratory, Lecture

Department: Music

**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

Levels: Undergraduate

Schedule Types: Private Lesson, Studio

Department: Music

**MUS 31221 - AUDIO RECORDING III**

A study of the elements, functions and techniques of digital audio multi-track mixing. Prerequisite: Minimum grade of C- (1.2) in MUS 21222.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Music

**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- (1.700) in MUS 31221.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Music

**MUS 32211 - MUSIC HISTORY TO 1750**

A survey of Western music history from early Christian chants through the Baroque style. Prerequisite: MUS 21121; and MUS 21122 with a grade of C- (1.700) or better; and junior standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Music

**MUS 32212 - MUSIC HISTORY 1750 TO 1900**

A survey of Western music history of the 18th and 19th centuries. Prerequisite: MUS 21121 and MUS 21122; and MUS 32211 with a grade of C- (1.700) or better and junior standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Music

Course Attributes: Writing Intensive Course

**MUS 33211 - 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. Twenty-five (25) field hours required.

Prerequisites: MUS 23241; and music (MUS) or music education (MUED) major; and junior standing. Corequisite: MUS 33212.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Music

**MUS 33212 - TEACHING SKILLS IN MUSIC EDUCATION: GENERAL/INSTRUMENTAL**

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.

1.000 Credit hours

1.000 Lab hours

Levels: Undergraduate

Schedule Types: Laboratory

Department: Music

**MUS 33213 - TEACHING SKILLS IN MUSIC EDUCATION: CHORAL/ORCHESTRAL**

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.

1.000 Credit hours

1.000 Lab hours

Levels: Undergraduate

Schedule Types: Laboratory

Department: Music

**MUS 33214 - MUSIC TECHNOLOGY FOR MUSIC EDUCATORS**

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: none.

1.000 Credit hours

1.000 Lecture hours

1.000 Lab hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Music

**MUS 33231 - 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. Twenty-five (25) field hours required. Prerequisites: MUS 23241 and 33211 and 34111; and junior standing. Corequisite: MUS 33213.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Music

**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.

2.000 Credit hours

4.000 Other hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Music

**MUS 35213 - STUDIO ENSEMBLE**

(Repeatable for a maximum of 16 credit hours) 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.

1. 000 Credit hours  
2. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Studio  
Department: Music

### **MUS 36011 - APPLIED MUSIC - JAZZ**

(Repeatable for credit) Private instrumental instruction in Jazz techniques. Prerequisite: audition and special approval.

2. 000 Credit hours  
0. 500 TO 1. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Private Lesson  
Department: Music

### **MUS 36111 - 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), 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  
All Sections for this Course  
Department: Music  
Course Attributes: TAG - Arts/Humanities

### **MUS 36311 - 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), 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  
Department: Music  
Course Attributes: TAG - Arts/Humanities

### **MUS 36411 - 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), 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  
Department: Music  
Course Attributes: TAG - Arts/Humanities

### **MUS 36412 - 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), 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  
Department: Music  
Course Attributes: TAG - Arts/Humanities

### **MUS 36413 - 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), 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  
Department: Music  
Course Attributes: TAG - Arts/Humanities

### **MUS 36414 - 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), 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  
Department: Music  
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  
Department: Music  
Course Attributes: TAG - Arts/Humanities

### **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  
Department: Music  
Course Attributes: TAG - Arts/Humanities

### **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  
Department: Music  
Course Attributes: TAG - Arts/Humanities

### **MUS 36514 - APPLIED MUSIC-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. 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  
Department: Music  
Course Attributes: TAG - Arts/Humanities

### **MUS 36515 - APPLIED MUSIC-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. 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  
Department: Music  
Course Attributes: TAG - Arts/Humanities

### **MUS 36611 - APPLIED MUSIC-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. 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  
Department: Music  
Course Attributes: TAG - Arts/Humanities

### **MUS 36612 - APPLIED MUSIC-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. 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  
Department: Music  
Course Attributes: TAG - Arts/Humanities





### **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

Department: Music

Course Attributes: TAG - Arts/Humanities

### **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

Department: Music

Course Attributes: TAG - Arts/Humanities

### **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

Department: Music

Course Attributes: TAG - Arts/Humanities

### **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: 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

Department: Music

Course Attributes: TAG - Arts/Humanities

### **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

Department: Music

Course Attributes: TAG - Arts/Humanities

### **MUS 36913 - APPLIED STUDIO MUSICIANSHIP**

(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

Department: Music

### **MUS 37111 - FUNCTIONAL PIANO**

Development of keyboard facility for practical purposes in classroom. Prerequisite: MUS 21122.

2. 000 Credit hours

4. 000 Lab hours

Levels: Undergraduate

Schedule Types: Laboratory

Department: Music

### **MUS 37113 - PIANO SKILLS FOR THE CHORAL/GENERAL MUSIC EDUCATOR**

Development of keyboard skills for practical purposes in the classroom and ensemble rehearsals. Prerequisite: MUS 21122 and 36111 with a minimum grade of C- (1. 7).

2. 000 Credit hours

1. 000 Lecture hours

1. 000 Lab hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Music

### **MUS 37114 - PIANO SKILLS FOR THE INSTRUMENTAL MUSIC EDUCATOR**

Development of keyboard skills for practical purposes in the classroom and ensemble rehearsals. Prerequisites: MUS 17112 and 21122; or minimum score of 80 on piano placement test.

1. 000 Credit hours

1. 000 Lab hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Music

### **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- (1. 700) 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

Levels: Undergraduate

Schedule Types: Practicum or Internship

Department: Music

Course Attributes: Experiential Learning Requirement

### **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

Levels: Undergraduate

Schedule Types: Lecture

Department: Music

### **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

Levels: Undergraduate

Schedule Types: Individual Investigation

Department: Music

### **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

Levels: Undergraduate

Schedule Types: Private Lesson

Department: Music

### **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- (1. 700) in MUS 31114.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Music

### **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- (1. 700) in MUS 41113.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Music

### **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.

3. 000 Credit hours

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Music

### **MUS 41141 - SIXTEENTH-CENTURY COUNTERPOINT**

Two-, three- and four part vocal counterpoint in 16th century style. Prerequisite: MUS 21122.

3. 000 Credit hours



3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Music

### **MUS 41151 - EIGHTEENTH-CENTURY COUNTERPOINT**

Technique of writing counterpoint in 18th-century style, especially that of J. S. Bach.  
Prerequisite: MUS 21122.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Music

### **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.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Music

### **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 (MUS) or music education (MUED) major.

2. 000 Credit hours  
2. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Music

### **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  
Levels: Undergraduate  
Schedule Types: Senior Project/Honors Thesis  
Department: Music  
Course Attributes: Experiential Learning Requirement

### **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  
Levels: Undergraduate  
Schedule Types: Private Lesson, Studio  
Department: Music

### **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- (1. 700) in MUS 31222.

3. 000 Credit hours

3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Music

### **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- (1. 700) in MUS 41221.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Music

### **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.

2. 000 Credit hours  
2. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Senior Project/Honors Thesis  
Department: Music  
Course Attributes: Experiential Learning Requirement

### **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.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Music

### **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  
Department: Music

### **MUS 41342 - JAZZ COMPOSING AND ARRANGING**

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  
Department: Music

### **MUS 41351 - JAZZ IMPROVISATION II**

The presentation of a methodical approach to learning standard Jazz repertoire. Prerequisite: MUS 41341 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  
Department: Music

### **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  
Department: Music

### **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  
Department: Music

### **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  
Department: Music

### **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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Music

### **MUS 42151 - ASIAN MUSICS**

Survey of Asian music. Emphasis on art, folk and popular music and relationships of these music to their respective cultures. Prerequisite: None.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Music

### **MUS 42161 - HISTORY OF JAZZ**

The evolution of jazz from its origin to present. Prerequisite: None.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Music  
Course Attributes: Diversity Course-Domestic



### **MUS 42171 - 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: none.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Music

### **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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Music  
Course Attributes: Diversity Course-Global

### **MUS 42221 - SYMPHONIC LITERATURE**

Historical and stylistic survey of music for large instrumental ensemble. Prerequisite: MUS 21122.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Music

### **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  
Department: Music

### **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 32212.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Music

### **MUS 42261 - OPERA LITERATURE**

The historical development of opera from the 17th century to the present. Detailed analysis of representative works. Prerequisite: MUS 32212.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Music

### **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 and special approval of instructor.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Music

### **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.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Music

### **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. Corequisite: MUS 49525.

9. 000 Credit hours  
9. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Practicum or Internship  
Department: Music  
Course Attributes: Experiential Learning Requirement

### **MUS 43211 - INSTRUMENTAL METHODS II**

Secondary instrumental instruction; program organization, budget, advocacy, assessment, rehearsal planning, literature and teaching techniques. Twenty-five (25) field hours required. Prerequisites: MUS 23241 and 34111 and 43231; and 3 credits with a C- (1. 700) or better in MUS 47411 or 47511 or 47611 or 47711; and junior standing. Corequisite: MUS 33213.

3. 000 Credit hours  
3. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab  
Department: Music

### **MUS 43231 - INSTRUMENTAL METHODS I**

Elementary and middle school instrumental instruction, program organization, rehearsal teaching techniques, lesson plans, literature, assessment, scheduling, recruiting. Twenty-five (25) field hours required. Prerequisites: 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. Corequisites: MUS 33212.

3. 000 Credit hours  
3. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab  
Department: Music

### **MUS 43241 - MARCHING BAND TECHNIQUES AND LITERATURE**

anization, 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.

1. 000 Credit hours  
1. 000 Lab hours  
Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab, Combined Lec/Lab-Open Learning  
Department: Music

### **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.

2. 000 Credit hours  
2. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Music

### **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.

3. 000 Credit hours  
3. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab  
Department: Music

### **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.

3. 000 Credit hours  
4. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab  
Department: Music

### **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.

3. 000 Credit hours  
4. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab  
Department: Music

### **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  
Department: Music  
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

Department: Music

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.

2. 000 Credit hours

4. 500 Other hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Music

#### **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

Department: Music

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

Department: Music

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

Department: Music

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.

1. 000 Credit hours

2. 000 Other hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Music

Course Attributes: TAG - Arts/Humanities

#### **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

Department: Music

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

Department: Music

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

Department: Music

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

Department: Music

Course Attributes: TAG - Arts/Humanities

#### **MUS 45224 - BASKETBALL BAND**

(Repeatable for credit) Study and performance of music for the basketball band. Prerequisite: Audition.

1. 000 Credit hours

4. 000 Other hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Music

#### **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. 500 Credit hours

1. 000 Lab hours

Levels: Undergraduate

Schedule Types: Laboratory

Department: Music

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

Department: Music

#### **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.

1. 000 Credit hours

2. 000 Other hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Music

#### **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.

1. 000 Credit hours

5. 000 Other hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Music

#### **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.

1. 000 Credit hours

2. 000 Other hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Music

#### **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.

1. 000 Credit hours

4. 000 Other hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Music

#### **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.

1. 000 Credit hours

2. 000 Other hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Music

### **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

Department: Music

### **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

Department: Music

### **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

Department: Music

### **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

All Sections for this Course

Department: Music

### **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

1. 000 Other hours

Levels: Undergraduate

Schedule Types: Private Lesson, Studio

Department: Music

### **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

Department: Music

### **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

Department: Music

### **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

Department: Music

### **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

Department: Music

### **MUS 46511 - 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) 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

Department: Music

### **MUS 46512 - 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) 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  
Department: Music

### **MUS 46513 - 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) 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

Department: Music

### **MUS 46514 - APPLIED MUSIC-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. 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

Department: Music

### **MUS 46515 - APPLIED MUSIC-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. 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

Department: Music

### **MUS 46611 - APPLIED MUSIC-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. 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

Department: Music

### **MUS 46612 - APPLIED MUSIC-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. 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

Department: Music

**MUS 46613 - 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) or music education (MUED) major.  
2. 000 OR 4. 000 Credit hours  
1. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Private Lesson, Studio  
Department: Music

**MUS 46614 - 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) or music education (MUED) major.  
2. 000 OR 4. 000 Credit hours  
1. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Private Lesson, Studio  
Department: Music

**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  
Department: Music

**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  
Department: Music

**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  
Department: Music

**MUS 47012 - FOLK GUITAR CLASS I**

Development of basic folk guitar performance skills. Prerequisite: None.  
2. 000 Credit hours  
2. 000 Other hours  
Levels: Undergraduate

Schedule Types: Combined Lecture and Lab  
Department: Music

**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  
Department: Music

**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  
Department: Music

**MUS 47311 - VOICE CLASS**

Class instruction in the fundamentals of correct breathing, tone production and diction. Prerequisite: None.  
1. 000 Credit hours  
2. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab  
Department: Music

**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  
Department: Music

**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  
Department: Music

**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  
Department: Music

**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  
Department: Music

**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  
Department: Music

**MUS 48111 - EURHYTHMICS**

Applied study of rhythm through kinesthetic, intellectual and emotional involvement. Movement experiences to strengthen concentration and communication between ear, brain and muscles that execute rhythm. Prerequisite: Music (MUS) majors.  
1. 000 Credit hours  
1. 000 Lecture hours  
1. 000 Lab hours  
Levels: Undergraduate  
Schedule Types: Laboratory, Lecture  
Department: Music

**MUS 48112 - EURHYTHMICS**

See MUS 48111. Prerequisite: MUS 48111.  
1. 000 Credit hours  
1. 000 Lecture hours  
1. 000 Lab hours  
Levels: Undergraduate  
Schedule Types: Laboratory, Lecture  
Department: Music

**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  
Department: Music

**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  
Department: Music



### **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.

2. 000 Credit hours

2. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Music

### **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

Department: Music

### **MUS 48251 - PEDAGOGY OF MUSIC THEORY**

The principles and techniques of teaching music theory. Prerequisite: MUS 21122.

2. 000 Credit hours

2. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Music

### **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

Department: Music

### **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

Department: Music

### **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.

1. 000 Credit hours

1. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Music

### **MUS 48598 - MUSIC RESEARCH**

(repeated registration permitted) research or individual investigation for undergraduate students. Prerequisite: Permission.

2. 000 OR 3. 000 Credit hours

2. 000 OR 3. 000 Other hours

Levels: Undergraduate

Schedule Types: Research

Department: Music

Course Attributes: Experiential Learning Requirement

### **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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Music

Course Attributes: Experiential Learning Requirement

### **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.

1. 000 TO 3. 000 Credit hours

1. 000 TO 3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Music

### **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

Department: Music

### **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

Department: Music

### **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

Department: Music

### **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

Department: Music

### **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: Private Lesson, Studio

Department: Music

### **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

Department: Music

### **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

Department: Music

### **MUS 51342 - JAZZ ARRANGING**

Arranging for the large and small jazz ensemble. Prerequisite: graduate standing.

2. 000 Credit hours

2. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Music

### **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

Department: Music

### **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



Department: Music

### **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

Department: Music

### **MUS 52151 - ASIAN MUSICS**

Survey of Asian music. Emphasis on art, folk and popular music and relationships of these music to their respective cultures. Prerequisite: Graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Music

### **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

Department: Music

### **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

Department: Music

### **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

Department: Music

### **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

Department: Music

### **MUS 52241 - 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 and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Music

### **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. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Music

### **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. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Music

### **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. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Music

### **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. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Music

### **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

Department: Music

### **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

Department: Music

### **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

Department: Music

### **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

Levels: Graduate

Schedule Types: Combined Lecture and Lab

Department: Music

### **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.

2. 000 Credit hours

4. 500 Other hours

Levels: Graduate

Schedule Types: Combined Lecture and Lab

Department: Music

### **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

Department: Music

### **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  
Department: Music

#### **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  
Department: Music

#### **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  
Department: Music

#### **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 in 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  
Department: Music

#### **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  
Department: Music

#### **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  
Department: Music

#### **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 in 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  
Department: Music

#### **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  
Department: Music

#### **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  
Department: Music

#### **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  
Department: Music

#### **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  
Department: Music

#### **MUS 55271 - NEW MUSIC ENSEMBLE**

(Repeatable for credit) 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  
Department: Music

#### **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  
Department: Music

#### **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  
Department: Music

#### **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  
Levels: Graduate  
Schedule Types: Private Lesson, Studio  
Department: Music

#### **MUS 58111 - EURHYTHMICS**

Applied study of rhythm through kinesthetic, intellectual and emotional involvement. Movement experiences to strengthen concentration and communication among ear, brain and muscles that execute rhythm. Prerequisite: graduate standing.  
1. 000 Credit hours  
1. 000 Lecture hours  
1. 000 Lab hours  
Levels: Graduate  
Schedule Types: Laboratory, Lecture  
Department: Music

#### **MUS 58112 - EURHYTHMICS**

A continuation of MUS 58111. Prerequisite: MUS 58111 and graduate standing.  
1. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Laboratory, Lecture  
Department: Music

#### **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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Music

#### **MUS 58222 - 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: graduate standing.  
2. 000 Credit hours  
2. 000 Lecture hours  
Levels: Graduate



Schedule Types: Lecture  
Department: Music

**MUS 58241 - VOICE PEDAGOGY**

Survey of techniques, practices and materials of teaching voice. Prerequisite: graduate standing.  
2. 000 Credit hours  
2. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Music

**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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Music

**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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Music

**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  
Department: Music

**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  
Department: Music

**MUS 61171 - ANALYTICAL TECHNIQUES I**

The application of standard analytical techniques to works of various style periods. Prerequisite: Graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Music

**MUS 61172 - ANALYTICAL TECHNIQUES II**

The application of standard analytical techniques to works of various style periods. Prerequisite: graduate standing.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Music

**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  
Department: Music

**MUS 62227 - HISTORY AND LITERATURE OF THE WIND BAND**

Historical survey of wind band literature and the development of the ensemble. Prerequisite: graduate standing.  
2. 000 Credit hours  
2. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Music

**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  
Department: Music

**MUS 62412 - INTRODUCTION TO ETHNOMUSICOLOGY**

A study of the history, concepts and methods of ethnomusicology, techniques of field research, transcription, analysis and bibliography. Prerequisite: MUS 52111 or MUS 52141 or MUS 52151 and graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Music

**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  
Department: Music

**MUS 62451 - INTRODUCTION TO MUSICOLOGY**

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  
Department: Music

**MUS 62511 - MUSIC HISTORY I**

A study of Western music history and its place in the medieval world to the beginning of the 16th century (ca. 1520). Prerequisite: Graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Music

**MUS 62521 - MUSIC HISTORY II**

A study of Western music history and its place in the cultural milieu of the late Renaissance and Baroque eras. Prerequisite: Graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Music

**MUS 62531 - MUSIC HISTORY III**

A study of Western music during the classical period and the classic tradition to the end of the 19th century. Prerequisite: Graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Music

**MUS 62541 - MUSIC HISTORY IV**

A study of romantically inclined composers to the end of the 19th century and major trends, techniques and composers since 1900. Prerequisite: Graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Music

**MUS 62601 - SEMINAR IN MUSICS OF AFRICA**

Specialized investigations of music cultures of Africa. Prerequisite: graduate standing.  
3. 000 Credit hours  
3. 000 Other hours  
Levels: Graduate  
Schedule Types: Seminar  
Department: Music

**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  
Levels: Graduate  
Schedule Types: Seminar  
Department: Music

**MUS 62604 - SEMINAR IN MUSICS OF EAST ASIA**

Specialized investigation of music cultures of East Asia. Prerequisite: graduate standing.  
3. 000 Credit hours  
3. 000 Other hours  
Levels: Graduate  
Schedule Types: Seminar  
Department: Music



### **MUS 62605 - SEMINAR IN MUSICS OF SOUTH ASIA**

Specialized investigation of music cultures of South Asia. Prerequisite: graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Music

### **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  
Department: Music

### **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.  
3. 000 OR 6. 000 Credit hours  
3. 000 TO 6. 000 Other hours  
Levels: Graduate  
Schedule Types: Research  
Department: Music

### **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  
Department: Music

### **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  
Department: Music

### **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  
Department: Music

### **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  
Department: Music

### **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  
Department: Music

### **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  
Department: Music

### **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  
Schedule Types: Lecture  
Department: Music

### **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  
Department: Music

### **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  
Department: Music

### **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  
Department: Music

### **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  
Department: Music

### **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 education situations. Prerequisite: graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Seminar  
Department: Music

### **MUS 64111 - CONDUCTING PROJECTS: CHORAL**

Choral conducting techniques, score analysis, rehearsal procedures and study of musical style. Repeatable credit. Prerequisite: graduate standing.  
2. 000 OR 4. 000 Credit hours  
1. 000 Other hours  
Levels: Graduate  
Schedule Types: Private Lesson  
Department: Music

### **MUS 64121 - CONDUCTING PROJECTS: BAND**

Band conducting techniques, score analysis rehearsal procedures and study of musical style. Repeatable credit. Prerequisite: graduate standing.  
2. 000 OR 4. 000 Credit hours  
1. 000 Other hours  
Levels: Graduate  
Schedule Types: Private Lesson  
Department: Music

### **MUS 64131 - CONDUCTING PROJECTS: ORCHESTRA**

Orchestra conducting techniques, score analysis, rehearsal procedures and study of musical style. Repeatable credit. Prerequisite: graduate standing.  
2. 000 OR 4. 000 Credit hours  
1. 000 Other hours  
Levels: Graduate  
Schedule Types: Private Lesson  
Department: Music

**MUS 66111 - APPLIED MUSIC-GRADUATE 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. Prerequisites: Music major and graduate standing.

2. 000 OR 4. 000 Credit hours

1. 500 OR 2. 000 Other hours

Levels: Graduate

Schedule Types: Private Lesson, Studio

Department: Music

**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

Department: Music

**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

Department: Music

**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

Department: Music

**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

Department: Music

**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: music major and graduate standing.

2. 000 OR 4. 000 Credit hours

1. 000 Other hours

Levels: Graduate

Schedule Types: Private Lesson, Studio

Department: Music

**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

Department: Music

**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

Department: Music

**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

Department: Music

**MUS 66513 - APPLIED MUSIC-GRADUATE CLARINET**

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

Department: Music

**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

Department: Music

**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

Department: Music

**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

Department: Music

**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

Department: Music

**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

Department: Music

**MUS 66614 - APPLIED MUSIC-GRADUATE 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. Prerequisites: music major and graduate standing.

2. 000 OR 4. 000 Credit hours

1. 000 Other hours

Levels: Graduate

Schedule Types: Private Lesson, Studio

Department: Music





### **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  
Department: Music

### **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  
Department: Music

### **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  
Department: Music

### **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  
Levels: Graduate  
Schedule Types: Masters Thesis  
Department: Music

### **MUS 68214 - PIANO PEDAGOGY AND MATERIALS I**

Teaching techniques and materials for the studio teacher including approach to philosophy of teaching, lesson structure and current innovations. Prerequisite: graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Music

### **MUS 68215 - PIANO PEDAGOGY AND MATERIALS II**

Teaching techniques and materials for the studio teacher; analysis of specific teaching problems including the teaching of 20th century music. Prerequisite: graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Music

### **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  
Levels: Graduate  
Schedule Types: Masters Thesis  
Department: Music

### **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  
Levels: Graduate  
Schedule Types: Research  
Department: Music

### **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  
Department: Music

### **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  
Department: Music

### **MUS 71121 - EVOLUTION OF MUSIC THEORY**

A systematic study of significant theoretical speculation as proposed in the writings of Western theorists, ca. 500 to the present. Prerequisite: Doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Music

### **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  
Department: Music

### **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

Department: Music

### **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  
Department: Music

### **MUS 71171 - ANALYTICAL TECHNIQUES I**

The application of standard analytical techniques to works of various style periods. Prerequisite: Doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Music

### **MUS 71172 - ANALYTICAL TECHNIQUES II**

The application of standard analytical techniques to works of various style periods. Prerequisite: Doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Music

### **MUS 71191 - SEMINAR IN 20TH-CENTURY MUSIC AND TECHNIQUES**

(Repeatable for a maximum of 6 credit hours) Detailed class analysis of scores using specified styles and techniques; individual projects in areas of particular interest to the student. Prerequisite: Doctoral standing.  
3. 000 Credit hours  
3. 000 Other hours  
Levels: Graduate  
Schedule Types: Seminar  
Department: Music

### **MUS 71195 - SPECIAL PROJECTS IN THEORETICAL STUDIES**

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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Music

### **MUS 72281 - SEMINAR IN MUSIC HISTORY AND LITERATURE**

Selected problems of research in music history and literature. Each student will be responsible for presenting papers for discussion. Repeatable credit. Prerequisite: Doctoral standing.  
3. 000 Credit hours  
3. 000 Other hours  
Levels: Graduate  
Schedule Types: Seminar  
Department: Music

**MUS 72412 - INTRODUCTION TO ETHNOMUSICOLOGY**

A study of the history, concepts and methods of ethnomusicology, techniques of field research, transcription analysis and bibliography.

Prerequisite: MUS 52111 or MUS 52141 or MUS 52151 and doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Music

**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

Department: Music

**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

Department: Music

**MUS 72511 - MUSIC HISTORY I**

A study of Western music history and its place in the medieval world to the beginning of the 16th century (ca. 1520). Prerequisite: Doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Music

**MUS 72521 - MUSIC HISTORY II**

A study of western music history and its place in the cultural milieu of the late Renaissance and Baroque eras. Prerequisite: Doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Music

**MUS 72531 - MUSIC HISTORY III**

A study of Western music during the classical period and the classic tradition to the end of the 19th century. Prerequisite: Doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Music

**MUS 72541 - MUSIC HISTORY IV**

A study of romantically inclined composers to the end of the 19th century and major trends, techniques and composers since 1900.

Prerequisite: Doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Music

**MUS 72601 - SEMINAR IN MUSICS OF AFRICA**

Specialized investigations of music cultures of Africa. Prerequisite: doctoral standing.

3. 000 Credit hours

3. 000 Other hours

Levels: Graduate

Schedule Types: Seminar

Department: Music

**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

Department: Music

**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

Schedule Types: Lecture

Department: Music

**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

Department: Music

**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

Department: Music

**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

Department: Music

**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

Department: Music

**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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Music

**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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Music

**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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Music

**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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Music

**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.

3. 000 Credit hours

3. 000 Lecture hours



Levels: Graduate  
Schedule Types: Seminar  
Department: Music

### **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  
Department: Music

### **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  
Department: Music

### **MUS 74111 - CONDUCTING PROJECTS: CHORAL**

Choral conducting techniques, score analysis, rehearsal procedures and study of musical style. Repeatable credit. Prerequisite: doctoral standing.  
2. 000 OR 4. 000 Credit hours  
1. 000 Other hours  
Levels: Graduate  
Schedule Types: Private Lesson  
Department: Music

### **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  
Department: Music

### **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  
Schedule Types: Private Lesson  
Department: Music

### **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.  
2. 000 Credit hours  
4. 500 Other hours  
Levels: Graduate  
Schedule Types: Combined Lecture and Lab

Department: Music

### **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  
Department: Music

### **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  
Department: Music

### **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  
Department: Music

### **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  
Department: Music

### **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  
Department: Music

### **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

Department: Music

### **MUS 76111 - APPLIED MUSIC-GRADUATE 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. Prerequisites: music major and doctoral standing.  
2. 000 OR 4. 000 Credit hours  
1. 000 Other hours  
Levels: Graduate  
Schedule Types: Private Lesson, Studio  
Department: Music

### **MUS 76311 - 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. Doctoral standing.  
2. 000 OR 4. 000 Credit hours  
1. 000 Other hours  
Levels: Graduate  
Schedule Types: Private Lesson, Studio  
Department: Music

### **MUS 76411 - 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. Doctoral standing.  
2. 000 OR 4. 000 Credit hours  
1. 000 Other hours  
Levels: Graduate  
Schedule Types: Private Lesson, Studio  
Department: Music

### **MUS 76412 - 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 doctoral standing.  
2. 000 OR 4. 000 Credit hours  
1. 000 Other hours  
Levels: Graduate  
Schedule Types: Private Lesson, Studio  
Department: Music

### **MUS 76413 - 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. Prerequisites: music major and doctoral standing.  
2. 000 OR 4. 000 Credit hours  
1. 000 Other hours  
Levels: Graduate  
Schedule Types: Private Lesson, Studio  
Department: Music

**MUS 76511 - 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 doctoral standing.

2. 000 OR 4. 000 Credit hours

1. 000 Other hours

Levels: Graduate

Schedule Types: Private Lesson, Studio

Department: Music

**MUS 76512 - 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 doctoral standing.

2. 000 OR 4. 000 Credit hours

3. 000 Other hours

Levels: Graduate

Schedule Types: Private Lesson, Studio

Department: Music

**MUS 76513 - 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 doctoral standing.

2. 000 OR 4. 000 Credit hours

1. 000 Other hours

Levels: Graduate

Schedule Types: Private Lesson, Studio

Department: Music

**MUS 76514 - 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. Prerequisite: Music major and special approval. Doctoral standing.

2. 000 OR 4. 000 Credit hours

1. 000 Other hours

Levels: Graduate

Schedule Types: Private Lesson, Studio

Department: Music

**MUS 76515 - APPLIED MUSIC-GRADUATE  
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.

Prerequisites: music major and doctoral standing.

2. 000 OR 4. 000 Credit hours

1. 000 Other hours

Levels: Graduate

Schedule Types: Private Lesson, Studio

Department: Music

**MUS 76611 - APPLIED MUSIC-GRADUATE  
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.

Prerequisites: music major and doctoral standing.

2. 000 OR 4. 000 Credit hours

1. 000 Other hours

Levels: Graduate

Schedule Types: Private Lesson, Studio

Department: Music

**MUS 76612 - APPLIED MUSIC-GRADUATE  
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.

Prerequisites: music major and doctoral standing.

2. 000 OR 4. 000 Credit hours

1. 000 Other hours

Levels: Graduate

Schedule Types: Private Lesson, Studio

Department: Music

**MUS 76613 - APPLIED MUSIC-GRADUATE  
TROMBONE**

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 doctoral standing.

2. 000 OR 4. 000 Credit hours

1. 000 Other hours

Levels: Graduate

Schedule Types: Private Lesson, Studio

Department: Music

**MUS 76614 - APPLIED MUSIC-GRADUATE  
EUPHONIUM**

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 doctoral standing.

2. 000 OR 4. 000 Credit hours

1. 000 Other hours

Levels: Graduate

Schedule Types: Private Lesson, Studio

Department: Music

**MUS 76615 - 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 doctoral standing.

2. 000 OR 4. 000 Credit hours

1. 000 Other hours

Levels: Graduate

Schedule Types: Private Lesson, Studio

Department: Music

**MUS 76711 - 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 doctoral standing.

2. 000 OR 4. 000 Credit hours

1. 000 Other hours

Levels: Graduate

Schedule Types: Private Lesson, Studio

Department: Music

**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

Department: Music

**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

Department: Music

**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

Department: Music

**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

Department: Music

**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

Department: Music

**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

Levels: Graduate

Schedule Types: Individual Investigation

Department: Music





### 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

Department: Music

### 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

Department: Music

### 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

Department: Music

### 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

Department: Music

### 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

Department: Music

### 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

Department: Music

### 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

Department: Music

## Nursing Technology (NST)

### 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.

5. 000 Credit hours

1. 000 Lecture hours

9. 000 Lab hours

1. 000 Other hours

Levels: Undergraduate

Schedule Types: Clinic, Laboratory, Lecture

Department: Regional

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 grade of C (2. 000) in BSCI 20020; and CHEM 10054 or (CHEM 10050 and CHEM 10052); and NRST 10001; and US 10097; and minimum cumulative GPA of 2. 000; and nursing technology (NRST) major.

6. 000 Credit hours

4. 000 Lecture hours

3. 000 Lab hours

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Clinic, Combined Lecture and Lab

Department: Regional

Course Attributes: CTAG - Nursing/ADN

### NRST 10006 - TRANSITIONS IN NURSING AGENCY

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. Prerequisites: BSCI 20020; and CHEM 10054 or CHEM 10050 and 10052; all with a minimum grade of C (2. 000) and cumulative GPA of 2. 700 or higher; nursing

technology (NRST) majors; and special approval from the nursing director.

3. 000 Credit hours

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Regional

### 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. Prerequisites: BSCI 20020; and CHEM 10054 or CHEM 10050 and 10052; all with a minimum grade of C (2. 000); cumulative GPS of 2. 700 or higher; nursing technology (NRST) major; and special approval of the nursing director.

5. 000 Credit hours

3. 500 Lecture hours

1. 500 Other hours

Levels: Undergraduate

Schedule Types: Clinic, Lecture

Department: Regional

### NRST 10009 - BASIC PRINCIPLES OF PHARMACOLOGY

Identify and apply the basic principles of pharmacology to client care. Explore pharmaceuticals, pharmacokinetics, pharmacodynamics, pharmacology-related math, drug classification, and safe preparation and administration of medications. Prerequisites: NRST major.

2. 000 Credit hours

2. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Regional

### NRST 20206 - NURSING AGENCY II

Nursing care of adults with intermediate therapeutic self-care demands. Emphasis is placed on the nurse as a provider of care. Prerequisite: a minimum grade of C (2. 000) in all of the following: NRST 10003; and BSCI 20021 and BSCI 20022; and PSYC 11762; and NUTR 33512; and a cumulative GPA of 2. 000 or better; and nursing technology (NRST) majors.

5. 000 Credit hours

5. 000 Other hours

Levels: Undergraduate

Schedule Types: Clinic, Laboratory, Lecture

Department: Regional

### NRST 20207 - PSYCHOSOCIAL SELF-CARE DEFICITS

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 relationships. Prerequisite: A minimum grade of C (2. 000) in all of the following: NRST 10003; BSCI 20021; BSCI 20022; PSYC 11762; NUTR 33512; and a minimum cumulative GPA 2. 000; 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  
Department: Regional

### **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 grade of C (2.000) in NRST 20206 and 20207; and NURS 20950; and ENG 11011 or HONR 10197; and minimum 2.000 cumulative GPA; and nursing (NRST) major.  
4.000 Credit hours  
3.000 Lecture hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Types: Clinic, Laboratory, Lecture  
Department: Regional

### **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: NRST 10003; and BSCI 20021 and 20022; and PSYC 11762; and NUTR 33512; and NURS 20950; and cumulative GPA of 2.000 or higher. Nursing technology (NRST) majors.  
2.000 Credit hours  
2.000 Other hours  
Levels: Undergraduate  
Schedule Types: Clinic, Laboratory, Lecture  
Department: Regional

### **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 grade of C (2.000) in all of the following: NRST 20206 and NRST 20207; and NURS 20950; and ENG 11011 or HONR 10197; and minimum cumulative 2.000 GPA.  
2.000 Credit hours  
2.000 Other hours  
Levels: Undergraduate  
Schedule Types: Clinic, Combined Lecture and Lab  
All Sections for this Course  
Department: Regional

### **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. Prerequisites: minimum grade of C (2.000) in NRST 20208; and minimum 2.000 cumulative GPA; and nursing (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  
Department: Regional

### **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  
Department: Regional

### **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  
Department: Regional

## ***National Student Exchange (NSE)***

### **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  
Department: Undergraduate Studies  
Course Attributes: Joint Program/Consortial Agreement

## ***Nursing (NURS)***

### **NURS 10050 - INTRODUCTION TO PROFESSIONAL NURSING**

Focus on nursing's development as a discipline and profession. The scope of nursing practice and the health care delivery system are discussed. Prerequisite: None.  
1.000 Credit hours  
1.000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Nursing

### **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  
Department: Nursing

### **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  
Department: Nursing

### **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 (2.000) 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  
Department: Nursing

### **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  
Department: Nursing  
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  
Department: Nursing

### **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  
Department: Nursing



### **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

Department: Nursing

### **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

Department: Nursing

### **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

Department: Nursing

### **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

Levels: Undergraduate

Schedule Types: Lecture

Department: Nursing

### **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

Levels: Undergraduate

Schedule Types: Clinic, Lecture

All Sections for this Course

Department: Nursing

### **NURS 30015 - PHARMACOLOGY FOR INFANTS, CHILDREN AND MATERNAL CHILD HEALTH**

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

Levels: Undergraduate

Schedule Types: Lecture

Department: Nursing

### **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

Levels: Undergraduate

Schedule Types: Clinic, Lecture

Department: Nursing

### **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.

5. 000 Credit hours

2. 500 Lecture hours

7. 500 Other hours

Levels: Undergraduate

Schedule Types: Clinic, Lecture

Department: Nursing

### **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.

4. 000 Credit hours

2. 000 Lecture hours

6. 000 Other hours

Levels: Undergraduate

Schedule Types: Clinic, Lecture

Department: Nursing

### **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

Department: Nursing

### **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

Department: Nursing

### **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

Levels: Undergraduate

Schedule Types: Lecture

Department: Nursing

### **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

Levels: Undergraduate

Schedule Types: Individual Investigation

Department: Nursing

### **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

Levels: Undergraduate



Schedule Types: Lecture  
Department: Nursing

### **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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Nursing

### **NURS 35040 - COMPLEMENTARY AND ALTERNATIVE MEDICINE**

(Repeatable for credit) Explores and critically analyzes complementary and alternative medicines (CAM) primarily being used in the United States through the review of evidenced based research compared to CAM practitioners' case studies. Synthesizing the exploration of CAM with traditional Western medicine, students examine a new evolving medicine called Integrative Medicine. Prerequisite: none.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Nursing

### **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.

2.000 TO 3.000 Credit hours  
2.000 TO 3.000 Other hours  
Levels: Undergraduate  
Schedule Types: Clinic, Seminar  
Department: Nursing

### **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.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Nursing  
Course Attributes: Writing Intensive Course

### **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.

4.000 Credit hours  
2.000 Lecture hours  
2.500 Other hours  
Levels: Undergraduate  
Schedule Types: Clinic, Lecture  
Department: Nursing

### **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.

4.000 Credit hours  
2.000 Lecture hours  
2.000 Other hours  
Levels: Undergraduate  
Schedule Types: Clinic, Lecture  
Department: Nursing

### **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  
Department: Nursing

### **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  
4.000 Lecture hours  
8.000 Other hours  
Levels: Undergraduate  
Schedule Types: Clinic, Lecture  
Department: Nursing  
Course Attributes: Experiential Learning Requirement

### **NURS 40062 - NURSE EXTERNSHIP IN NURSING PRACTICE**

Opportunity for professional nursing practice is expanded to a selected population with complex health care needs. Focus is on increasing theoretical knowledge base and using knowledge in complex care situations with patients and their families. Prerequisite: Senior standing and nursing (NURS) major.

4.000 Credit hours  
1.000 Lecture hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Types: Clinic, Lecture  
Department: Nursing

### **NURS 40075 - INFORMATION AND PATIENT CARE TECHNOLOGY FOR PROFESSIONAL NURSING PRACTICE**

Focuses on the use of information management and information systems, technology and the human/technology interface utilized in professional nursing practice. 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  
Department: Nursing

### **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 used in the development of a nursing research proposal. 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  
Schedule Types: Lecture  
Department: Nursing  
Course Attributes: Writing Intensive Course

### **NURS 40872 - INTRODUCTION TO NURSING RESEARCH**

Scientific approach and methods of research design in clinical nursing. Evaluation of specific nursing studies. Development of a researchable nursing problem analysis and critique of studies of problem and implications for clinical practice. Pre/corequisites: MATH 10041 or PSYC 21621 or SOC 32200 or GEOG 39002 or BMRT 21004 or MATH 30011 or MIS 24056 or PH 30002.





3. 000 Credit hours  
3. 000 Lecture hours  
0. 000 Lab hours  
Levels: Undergraduate  
Schedule Types: Laboratory, Lecture  
Department: Nursing

### **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  
Department: Nursing

### **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  
Department: Nursing

### **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: NURS 30160 and NURS 30361 and NURS 30462 and NURS 30870.  
2. 000 TO 4. 000 Credit hours  
4. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Individual Investigation  
Department: Nursing

### **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  
Department: Nursing

### **NURS 43000 - HEALTH PROMOTION IN PROFESSIONAL NURSING PRACTICE**

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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Nursing

### **NURS 44000 - POPULATION-BASED NURSING FOR PROFESSIONAL NURSING PRACTICE**

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.  
3. 000 Credit hours  
2. 000 Lecture hours  
6. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Clinic, Lecture  
Department: Nursing

### **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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Nursing

### **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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Nursing

### **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 pathophysiological 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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Nursing

### **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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Nursing

### **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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Nursing

### **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  
6. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Clinic  
Department: Nursing

### **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  
Department: Nursing

#### **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  
Department: Nursing

#### **NURS 60000 - ADULT CLINICAL NURSE SPECIALIST I**

Introduces students to the Clinical Nurse Specialist (CNS) role in a specialty area (identified as a population, type of problem, setting, type of care or disease/pathology/medical specialty) with an emphasis on the patient sphere. Students have the opportunity to apply and evaluate theory and research in advanced assessment, pathophysiological processes, evidence-based interventions for disease management, and principles of teaching and coaching across the continuum of adult healthcare settings. Focus is on acquiring advanced knowledge in patient diagnosis, management and treatment in a specialized area. Emphasis is on identification and management of symptoms, functional problems and risk behaviors commonly encountered in practice. Students select benchmarks and apply clinical measurement strategies in identifying achievement of clinical outcomes. Comprised of 3 didactic content hours per week and a clinical practicum of 7 hours per week. Prerequisite: NURS 60045 and graduate standing.  
4.000 Credit hours  
3.000 Lecture hours  
7.000 Other hours  
Levels: Graduate  
Schedule Types: Clinic, Lecture  
Department: Nursing

#### **NURS 60001 - PSYCHIATRIC MENTAL HEALTH ADVANCED PRACTICE NURSING ADULT I: INDIVIDUAL AND FAMILY**

Study of theoretical approaches to advanced psychiatric mental health nursing practice with individuals and families who are experiencing identified mental health problems. Clinical interviewing and assessment skills related to individuals and families are emphasized, as are basic elements related to individual and family/couple psychotherapy. Pre- or corequisites: NURS 60201 and graduate standing.

3.000 Credit hours  
3.000 Lecture hours  
2.000 Other hours  
Levels: Graduate  
Schedule Types: Clinic, Lecture  
Department: Nursing

#### **NURS 60002 - PSYCHIATRIC MENTAL HEALTH ADVANCED PRACTICE NURSING ADULT II: GROUP, ORGANIZATION AND COMMUNITY**

Study of the theoretical approaches to psychiatric mental health advanced practice nursing with groups, organizations and communities. Emphasis is on learning group psychotherapy, consultation and liaison skills. Students will develop skills in performing a community needs assessment. Prerequisite: NURS 60001 and graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
2.000 Other hours  
Levels: Graduate  
Schedule Types: Clinic, Lecture  
Department: Nursing

#### **NURS 60004 - PSYCHIATRIC MENTAL HEALTH ADVANCED PRACTICE NURSING CHILD/ADOLESCENT I: INDIVIDUAL AND FAMILY**

Study of theoretical approaches to advanced psychiatric mental health nursing practice with children, adolescents and families who are experiencing identified mental health problems. Clinical interviewing and assessment skills related to individuals and families are emphasized, as are basic elements related to individual and family/couple psychotherapy. Pre- or Corequisite: NURS 60208 and graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Nursing

#### **NURS 60005 - PSYCHIATRIC MENTAL HEALTH ADVANCED PRACTICE NURSE CHILD/ADOLESCENT II: GROUP, ORGANIZ AND COMMUNITY**

Study of the theoretical approaches to psychiatric mental health advanced practice nursing with groups, organizations and communities. Emphasis is on learning group psychotherapy with adolescents, consultation and liaison skills. Students will develop skills in performing a community needs assessment. Prerequisites: NURS 60004 and graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Nursing

#### **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 Other hours  
Levels: Graduate  
Schedule Types: Combined Lecture and Lab  
Department: Nursing

#### **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. Corequisite: NURS 60045.  
2.000 Credit hours  
2.000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Nursing

#### **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. Corequisite: NURS 60045.  
1.000 Credit hours  
2.000 Lab hours  
Levels: Graduate  
Schedule Types: Laboratory  
Department: Nursing

#### **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  
2.000 Credit hours  
6.000 Lab hours  
Levels: Graduate  
Schedule Types: Laboratory  
Department: Nursing

#### **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 across the lifespan. Develops understanding of psychopathology across the lifespan, which is integral to assessment and diagnosis processes. Prerequisite: graduate standing; and Psychiatric Mental Health Nursing Family Nurse Practitioner [PMNF] concentration.  
4.000 Credit hours  
4.000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Nursing



**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.

2. 000 Credit hours

6. 000 Lab hours

Levels: Graduate

Schedule Types: Laboratory

Department: Nursing

**NURS 60021 - ACUTE CARE FOR NURSE PRACTITIONERS**

(Repeatable 1 time for credit) Emphasizes core principles and competencies that direct the clinical practice of Acute Care Nurse Practitioners. APN Critical and Acute Care concepts are primary didactic objectives of course. Acute care foundations across continuum of health services highlighted. ADN student will be instructed and clinically mentored to utilize invasive interventions and procedures.

Prerequisite: NURS 60042 and graduate standing.

5. 000 Credit hours

3. 000 Lecture hours

14. 000 Other hours

Levels: Graduate

Schedule Types: Clinic, Lecture

Department: Nursing

**NURS 60022 - ACUTE CARE THERAPEUTICS**

(Repeatable 1 time for credit) Emphasizes clinical understanding, evidenced based selection, monitoring and use of selected pharmacologic agents, parental nutritional products, and hematological agents used in acute care, critical care, emergency and sub-acute patient populations. Management of fluid and electrolyte disorders, basic toxicology and hospital and community acquired infection related therapies.

Prerequisite: NURS 60441 and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Nursing

**NURS 60023 - ADULT CLINICAL NURSE SPECIALIST II**

Further develops the clinical nurse specialist (CNS) role with an emphasis on nursing and organizational spheres. Students use system-level thinking to identify and address nursing practice and organizational problems across the continuum of adult health settings. Essential core content includes research and scientific innovations, nurse sensitive outcomes, change theory, collaborative practice, technology and cost effectiveness. Focus is on developing solutions to problems identified in nursing and organizational spheres. Comprised of 2 didactic content hours per week and a clinical practicum of 14 hours per week. Prerequisites: NURS 60000 and 60045 and graduate standing.

4. 000 Credit hours

2. 000 Lecture hours

14. 000 Other hours

Levels: Graduate

Schedule Types: Clinic, Lecture

Department: Nursing

**NURS 60030 - 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: graduate standing.

1. 000 Credit hours

1. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Nursing

**NURS 60035 - ADULT CLINICAL NURSE SPECIALIST III**

Provides the clinical nurse specialist student the opportunity to apply previously acquired knowledge in advanced nursing practice in the patient, and nurse spheres with special emphasis on the organizational sphere in their clinical focus area. Focus is on role transition, clinical expertise, application and synthesis. Comprised of 2 didactic content hours per week and a clinical practicum of 14 hours per week. Prerequisite: NURS 60000 and 60023 and graduate standing.

4. 000 Credit hours

2. 000 Lecture hours

14. 000 Other hours

Levels: Graduate

Schedule Types: Clinic, Lecture

Department: Nursing

**NURS 60036 - WOMEN'S HEALTH NURSE PRACTITIONER CLINICAL PRACTICUM**

Emphasis will be placed on refinement of women's health nurse practitioner skills and expansion of knowledge base related to women's health in selected areas of concentration.

Prerequisite: NURS 60081 and graduate standing.

2. 000 TO 4. 000 Credit hours

2. 000 TO 4. 000 Other hours

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Nursing

**NURS 60037 - PEDIATRIC NURSE PRACTITIONER CLINICAL PRACTICUM**

Clinical focus is on advanced nursing practice in the primary care of children. Students improve on physical assessment skills diagnostic reasoning and critical thinking through practice. "IP" grade permissible. Prerequisite: graduate standing.

2. 000 TO 4. 000 Credit hours

6. 000 TO 12. 000 Other hours

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Nursing

**NURS 60041 - ADVANCED ASSESSMENT OF ADULT CLIENTS**

Assessment, reasoning and decision making skills for the advanced practice nurse to formulate comprehensive health data bases and therapeutic regimens for adult clients. Only students admitted

to the Adult NP, Family NP, Geriatric NP, Adult CNS, Women's Health NP and Acute Care NP concentrations or post-master's certificate programs may register for this course. Prerequisite: graduate standing.

3. 000 Credit hours

2. 000 Lecture hours

9. 000 Other hours

Levels: Graduate

Schedule Types: Clinic, Lecture

Department: Nursing

**NURS 60042 - ADULT PRIMARY HEALTH CARE I**

Advanced primary health care for the nurse practitioner student caring for adult clients with common acute and chronic disorders. Emphasis on nursing and health care management within a multidisciplinary context. Prerequisite: NURS 60041 and NURS 60045 and NURS 60206 and graduate standing.

5. 000 Credit hours

2. 000 Lecture hours

9. 000 Other hours

Levels: Graduate

Schedule Types: Clinic, Lecture

Department: Nursing

**NURS 60043 - ADULT PRIMARY HEALTH CARE II**

Advanced primary health care for the nurse practitioner student caring for adult clients with complex acute and chronic disorders. Emphasis on nursing and health care management in a multidisciplinary context. Prerequisite: NURS 60041 and NURS 60205 and NURS 60206 and NURS 60441. Graduate standing.

5. 000 Credit hours

2. 000 Lecture hours

9. 000 Other hours

Levels: Graduate

Schedule Types: Clinic, Lecture

Department: Nursing

**NURS 60045 - PATHOPHYSIOLOGY FOR ADVANCED PRACTICE NURSES**

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. Assumes students have basic understanding of human biology comparable to BSCI 20020, Structure and Function and BSCI 30030, Human Physiology content. Prerequisite: graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Nursing

**NURS 60050 - PHARMACOLOGY FOR WOMEN'S HEALTH NURSE PRACTITIONERS**

(Repeatable 1 time for credit) 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 60441 and 60080 and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours



Levels: Graduate  
Schedule Types: Lecture  
Department: Nursing

**NURS 60051 - NEUROBIOLOGY AND PSYCHOPHARMACOLOGY OF MAJOR PSYCHIATRIC DISORDERS ACROSS THE LIFESPAN**

Focuses on the neurobiology of severe and persistent psychiatric disorders across the lifespan. Addresses fundamental principles underlying psychopharmacology related to these disorders. Prerequisite: Graduate standing; and Psychiatric Mental Health Nursing Family Nurse Practitioner [PMNF] concentration.

4. 000 Credit hours  
4. 000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture  
Department: Nursing

**NURS 60072 - WOMEN'S HEALTH NURSE PRACTITIONER CAPSTONE**

Focus is on synthesizing women's health nurse practitioner knowledge and skills to provide expert care to a selected population of women's health clients. Prerequisite: NURS 60085 and graduate standing.

4. 000 Credit hours  
1. 000 Lecture hours  
11. 000 Other hours

Levels: Graduate  
Schedule Types: Clinic, Lecture  
Department: Nursing

**NURS 60074 - PEDIATRIC NURSE PRACTITIONER CAPSTONE**

Focus on synthesizing pediatric nurse practitioner knowledge and skills to provide expert care to a selected population of pediatric clients.

Prerequisite: graduate standing.  
4. 000 Credit hours  
1. 000 Lecture hours  
11. 000 Other hours

Levels: Graduate  
Schedule Types: Clinic, Lecture  
Department: Nursing

**NURS 60075 - PEDIATRIC CLINICAL NURSE SPECIALIST CAPSTONE**

Focus on synthesizing clinical nurse specialist knowledge and skills to provide expert care to a selected population of pediatric clients. .

Prerequisite: NURS 60031 and NURS 60032 and NURS 60033. Graduate standing.

4. 000 Credit hours  
1. 000 Lecture hours  
11. 000 Other hours

Levels: Graduate  
Schedule Types: Clinic, Lecture  
Department: Nursing

**NURS 60080 - HEALTH CARE OF THE WELL WOMAN**

Development of foundational basis for competent clinical practice of women within a healthcare setting. Clinical assessment skills are emphasized and the student is expected to concentrate efforts in attainment of and safe execution of skills pertinent to the care of the well woman. Course also focuses on the study of selected theories and models used by professional nurses when working with adolescent and adult women. Emphasis is placed on fertility control and is provided through

individually planned experiences with faculty who are serving as primary care providers in family planning and gynecology care settings. Course will also emphasize the coordination of care needed within the clinical setting through the diagnostic, planning and evaluational components pertinent to clinical practice. Only students admitted to the Women's Health NP concentration or post-master's certificate program may register for this course. Prerequisite: Graduate standing and NURS 60101.

3. 000 Credit hours  
3. 000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture  
Department: Nursing

**NURS 60081 - HEALTH CARE OF THE REPRODUCTIVE AGE WOMAN**

Application of nursing theory, 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 deviation from normal. Clinical assessment skills, including diagnosis, nursing intervention, treatment and evaluation are emphasized; students are expected to concentrate efforts in attaining and safely executing skills pertinent to caring for women during their reproductive years. Prerequisite: Graduate standing and NURS 60041 and 60080.

3. 000 Credit hours  
3. 000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture  
Department: Nursing

**NURS 60082 - GERIATRIC PRIMARY CARE I**

Major clinical course that develops the cognitive and perceptual skills needed to provide primary health care services to older adults in ambulatory care settings. Prerequisite: NURS 60041 and NURS 60206 and BSCI 60446; and graduate standing.

5. 000 Credit hours  
3. 000 Lecture hours  
14. 000 Other hours

Levels: Graduate  
Schedule Types: Lecture  
Department: Nursing

**NURS 60083 - GERIATRIC PRIMARY CARE II**

Focus on chronic and acute health problems common in geriatric patients. Develops the cognitive and perceptual skills needed to provide primary health care services to older adults in ambulatory and community care settings. Prerequisite: NURS 60082 and NURS 60192 and graduate standing.

5. 000 Credit hours  
3. 000 Lecture hours  
14. 000 Other hours

Levels: Graduate  
Schedule Types: Clinic, Lecture, Seminar  
Department: Nursing

**NURS 60085 - PRIMARY HEALTH CARE OF WOMEN**

Further development of a foundations basis for competent clinical practice within a healthcare setting. Introduces the student to the practice of primary health care of women including perimenopausal 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 social cultural aspects of care. Pathophysiology assessment and diagnostic techniques specific to the 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. Prerequisite: graduate standing and NURS 60081.

3. 000 Credit hours  
3. 000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture  
Department: Nursing

**NURS 60092 - NURSE PRACTITIONER SUMMER PRACTICUM**

(Repeatable for credit) Course provides an individualized, goal directed primary care clinical practicum and addresses professional issues of nurse practitioners. In addition, students will participate in the care of diverse culture population through the migrant farmer camp. Prerequisite: NURS 60041 and 60042 and graduate standing.

2. 000 Credit hours  
6. 000 Other hours

Levels: Graduate  
Schedule Types: Practicum or Internship  
Department: Nursing

**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 in nursing.

3. 000 Credit hours  
3. 000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture  
Department: Nursing

**NURS 60110 - ADULT GERONTOLOGY CLINICAL NURSE SPECIALIST I**

Introduction to the clinical nurse specialist (CNS) role with adult gerontological patients experiencing common health and illness conditions. Identification and management of symptoms, functional problems and risk behaviors are addressed. The focus of the course is on the evidence base for advanced nursing practice in health promotion and illness care to achieve clinical outcomes in selected patient conditions. Prerequisites: graduate standing; and Adult Gerontology Clinical Nurse Specialist [AGCN] concentration; and NURS 60007, NURS 60008 and NURS 60045 with a minimum "B" (3. 000) grade. Corequisites: NURS 60441 and 61192.





3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Nursing

#### **NURS 60120 - PRIMARY CARE I: ADULTS ACROSS THE LIFESPAN**

Introduction to the Advanced Practice Registered Nurse (APRN) role with adult patients across the lifespan. 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 60007 and NURS 60011. Corequisite: NURS 61292.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Nursing

#### **NURS 60125 - ADVANCED PRACTICE REGISTERED NURSE ROLE**

This course continues to develop competencies of the Advanced Practice Registered Nurse including requirements for practice, and prescribing. Quality of health care delivery across the lifespan through Advanced Practice Registered Nurse is examined. Prerequisites: graduate standing; and NURS 60120 and NURS 61292 with a minimum B (3. 000) grade. Corequisite: NURS 61892.  
1. 000 Credit hours  
1. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Nursing

#### **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, working with the multidisciplinary team members. The student will also have an experience caring for the underserved in the hospital and/or community setting. Additionally, the student will participate in an on-hands 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: graduate standing; and NURS 60045, NURS 60120, NURS 60441 and NURS 61292 with a minimum "B" (3. 000) grade. Corequisite: NURS 61392.  
1. 000 Credit hours  
1. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Nursing

#### **NURS 60140 - WOMEN'S HEALTH CARE NURSE PRACTITIONER I**

Development of foundational basis for competent clinical practice of women within a health care setting 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 evolutionary components pertinent to clinical practice. Only students admitted to the Women's Health NP concentration or post-master's certificate program may register for this course. Prerequisites: NURS 60007 and NURS 60045; and Women's Health Care Nurse Practitioner [WHNP] concentration or the Women's Health Nurse Practitioner [C807] certificate; and graduate standing. Corequisite: NURS 61492.  
2. 000 Credit hours  
2. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Nursing

#### **NURS 60151 - PSYCHIATRIC MENTAL HEALTH ADVANCED PRACTICE NURSE I: INDIVIDUAL 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 individual psychotherapy, as well as various theoretical approaches to individual psychotherapy are examined. Prerequisites: NURS 60011 and NURS 60012; and graduate standing. Corequisite: NURS 61592.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Nursing

#### **NURS 60160 - PRIMARY CARE PEDIATRICS**

Addresses the care of pediatric patients in a primary care setting. Focus will be on the acute illnesses and management of age and developmentally appropriate anticipatory guidance for infants and children. Prerequisites: graduate standing; and Advanced Practice Registered Nurse: Nurse Practitioner Family [APNF] concentration; and NURS 60007, 60013 and NURS 60030 with a minimum "B" (3. 000) grade. Corequisite: NURS 61692.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Nursing

#### **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. Prerequisites: NURS 60101 and NURS 60045; and graduate standing; and Pediatric Clinical Nurse Specialist [PCNS] or Pediatric Nurse Practitioner [PNPR] concentration. Corequisite: NURS 61792 and NURS 60007.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Nursing

#### **NURS 60192 - PRACTICUM: ADULT-GERIATRIC NURSE PRACTITIONER**

(Repeatable for credit) Provides individualized, goal directed clinical practicum in geriatric primary care. Addresses professional issues of geriatric nurse practitioners. Additionally, students participate in comprehensive geriatric assessment setting. Prerequisite: NURS 60082 and graduate standing.  
2. 000 Credit hours  
2. 000 Other hours  
Levels: Graduate  
Schedule Types: Clinic  
Department: Nursing

#### **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. Prerequisites: NURS 60401 or NURS 60001 or NURS 60021; and 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  
Department: Nursing

#### **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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Nursing

#### **NURS 60204 - HEALTH CARE ISSUES OF AGING: NURSING CONCEPTS**

This course focuses on the theory and research related to biophysiological, psychosocial, cultural, ethical developmental, environmental and policy factors related to aging and health. It is intended that students will gain a basic understanding of the multiple factors related to the functional health patterns among an older adult population and that this knowledge can be applied by professionals in research and practice with aging adults in a variety of health care settings. This course is open to graduate students in any discipline and is recommended for students in the Nursing of the Adult graduate program. Prerequisite: Graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Nursing

#### **NURS 60205 - INTRODUCTION TO APPLIED EPIDEMIOLOGY**

Seminar on basic epidemiology principles, concepts and procedures for disease surveillance and investigation. Prerequisite: Graduate standing.  
1. 000 Credit hours



1. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Nursing

**NURS 60206 - AMBULATORY  
DIAGNOSTICS FOR ADVANCED  
NURSING PRACTICE**

Experience for the nurse practitioner student in selection, safe use and interpretation of basic laboratory testing, screening and examinations for client management in primary care.  
Pre/corequisite: NURS 60041 and graduate standing.  
2. 000 Credit hours  
2. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Nursing

**NURS 60208 - THEORY FOR ADVANCED  
PSYCHIATRIC MENTAL HEALTH  
NURSING, CHILD AND ADOLESCENT  
FOCUS**

Major theories of historical importance to psychiatric nursing are studied. Significant relationships between various theories are examined and related to psychiatric nursing practice with children, adolescents and their families. Only students admitted to the Psychiatric Mental Health NP or CNS concentrations or post-master's certificate programs may register for this course. Prerequisite: Nursing (NURS) major and graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Nursing

**NURS 60210 - ADULT GERONTOLOGY  
CLINICAL NURSE SPECIALIST II**

Develop competencies of the clinical nurse specialist (CNS) role with adult gerontological patients experiencing common health and illness conditions including identification and management of symptoms, functional problems and risk behaviors. Patient outcomes and quality related to health care organization factors and environments of care are examined. Prerequisites: graduate standing; and NURS 60110 and 61192 with a minimum "B" (3. 000) grade. Corequisite: NURS 62192.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Nursing

**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 across the lifespan. Prerequisites: graduate standing; and NURS 60125 and NURS 61892 with a minimum B (3. 000) grade. Corequisite: NURS 62292.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate

Schedule Types: Lecture  
Department: Nursing

**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: graduate standing; and NURS 60130 and NURS 61392 with a minimum "B" (3. 000) grade. Corequisite: NURS 62392.  
4. 000 Credit hours  
4. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Nursing

**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 and 61492 with a minimum "B" (3. 000) grade; and graduate standing. Corequisite: NURS 62492.  
2. 000 Credit hours  
2. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Nursing

**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 60151 and NURS 61592 with a minimum "B" (3. 000) grade; and graduate standing. Corequisite: NURS 62592.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Nursing

**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: graduate standing; and NURS

60007, and NURS 60170 and NURS 61792 with minimum B (3. 000) grade. Corequisite: NURS 62792.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Nursing

**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  
Department: Nursing

**NURS 60292 - PRACTICUM: ADULT-  
GERIATRIC PRIMARY CARE NURSE**

(Repeatable for credit) Individually planned practicum in the final semester in which students test the effectiveness of various strategies inherent within the role of advanced practice nurse practitioner, and to demonstrate leadership through role implementation under the guidance of an experienced preceptor. Prerequisite: NURS 60041 and NURS 60082 and NURS 60083 and NURS 60192; and graduate standing.  
4. 000 Credit hours  
2. 000 Lecture hours  
8. 000 Other hours  
Levels: Graduate  
Schedule Types: Clinic  
Department: Nursing

**NURS 60299 - THESIS II**

Thesis students must continue registration each semester until all degree requirements are met. Prerequisite: NURS 60199 and graduate standing.  
2. 000 Credit hours  
2. 000 Other hours  
Levels: Graduate  
Schedule Types: Masters Thesis  
Department: Nursing

**NURS 60303 - GERONTOLOGICAL CNS I**

Introduces students to the Clinical Nurse Specialist (CNS) role in a specialty area with an emphasis on the patient sphere. Students have the opportunity to apply and evaluate theory and research in advanced assessment, pathophysiological processes, evidence-based interventions for disease management, and principles of teaching and coaching across the continuum of gerontological healthcare settings. The focus of the course is on acquiring advanced knowledge in patient diagnosis, management and treatment in care of the older adult. Emphasis is on identification and management of symptoms, functional problems, social, psychological, legal, economic issues facing the older adult and risk behaviors commonly encountered in practice. Students select benchmarks and apply clinical measurement strategies in identifying achievement



of clinical outcomes. Course comprises three didactic contact hours and seven clinical hours per week. Pre/corequisites: NURS 60101 and 60041 and 60045 and 60204; and graduate standing.

4. 000 Credit hours

3. 000 Lecture hours

1. 000 Other hours

Levels: Graduate

Schedule Types: Clinic, Lecture

Department: Nursing

#### **NURS 60304 - GERONTOLOGY CLINICAL NURSE SPECIALIST II**

Provides the Clinical Nurse Specialist student the opportunity to apply previously acquired knowledge in advanced gerontological nursing practice in the patient and nurse spheres with special emphasis on the organizational sphere. The focus of the course is on role transition, clinical expertise, application and synthesis.

Course comprises two didactic content hours and 14 clinical hours per week. Prerequisites: NURS 60303 and graduate standing.

4. 000 Credit hours

2. 000 Lecture hours

14. 000 Other hours

Levels: Graduate

Schedule Types: Clinic, Lecture

Department: Nursing

#### **NURS 60305 - GERONTOLOGICAL CLINICAL NURSE SPECIALIST III**

Provides the clinical nurse specialist student the opportunity to apply previously acquired knowledge in advanced gerontological nursing practice in the patient and nurse spheres with special emphasis on the organizational sphere. The focus of the course is on role transition, clinical expertise, application and synthesis.

Course comprises two didactic content hours and 14 clinical hours per week. Prerequisites: NURS 60304 and graduate standing.

4. 000 Credit hours

2. 000 Lecture hours

14. 000 Other hours

Levels: Graduate

Schedule Types: Clinic, Lecture

Department: Nursing

#### **NURS 60310 - ADULT GERONTOLOGY CLINICAL NURSE SPECIALIST III**

The focus is on the Clinical Nurse Specialist role in promoting patient outcomes within the organizational context. Clinical Nurse Specialist leadership competencies in consultation, mentoring, coaching, role modeling and education with the interdisciplinary health care team are developed. Strategies for maximizing system resources through financial principles and program development and evaluation are applied. Prerequisites: NURS 60210 and NURS 62192 with a minimum "B" (3. 000) grade. Corequisite: NURS 63192.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Nursing

#### **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

Department: Nursing

#### **NURS 60315 - BUDGETARY AND FISCAL MANAGEMENT FOR NURSES**

Examines management of fiscal resources in nursing service settings. Prerequisite: graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Nursing

#### **NURS 60320 - COMPREHENSIVE PRIMARY CARE III: ADULTS ACROSS THE LIFESPAN**

Synthesizes an understanding of the transition to the professional role of the primary care Advanced Practice Registered Nurse. Integration of practice, theory, leadership and evidence-based research will all be applied to primary care.

Prerequisites: graduate standing; and NURS 60220 and 62292 with a minimum B (3. 000) grade. Corequisite: NURS 63692.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Nursing

#### **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 will be given to the health promotion and disease detection as related to pediatric primary care, preconception, pregnancy, and post-partum patients. Major concepts underlying the content and practice are anticipatory guidance, health maintenance, risk detection and surveillance, primary, secondary and tertiary prevention, coordination and continuity of care, recognition and assessment of issues, needs, and problems, and comprehensive management. The student is guided in the planning and provision of family health care services within a framework which takes into consideration the behavioral and physical development of the individual woman and child; the interaction and relationship of her family or significant others, her community settings and resources. Prerequisites: graduate standing; and NURS 60220 and 62292 with a minimum "B" (3. 000) grade. Corequisite: NURS 63292.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Nursing

#### **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: graduate standing; and NURS 60230 and NURS 62392 with a minimum "B" (3. 000) grade. Corequisite: NURS 63392.

2. 000 Credit hours

2. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Nursing

#### **NURS 60332 - CLINICAL SPECIALIZATION IN PSYCHIATRIC MENTAL HEALTH NURSING**

Practicum to test out role of clinical specialist in psychiatric mental health nursing in a setting selected by student and preceptor. Prerequisites: NURS 65592 and graduate standing.

4. 000 Credit hours

3. 000 Lecture hours

3. 000 Other hours

Levels: Graduate

Schedule Types: Clinic, Lecture

Department: Nursing

#### **NURS 60340 - WOMEN'S HEALTH CARE NURSE PRACTITIONER III**

Understanding the legal and business aspects associated with refinement of women's health nurse practitioner skills and expansion of knowledge base related to women's health in selected areas of concentration. In this course they will also study the legal and business aspects associated with the role of the women's health nurse practitioner. Prerequisites: NURS 60240 and NURS 62492 with a minimum "B" (3. 000) grade; and graduate standing. Corequisite: NURS 63492.

2. 000 Credit hours

2. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Nursing

#### **NURS 60353 - PSYCHIATRIC MENTAL HEALTH ADVANCED PRACTICE NURSE III: ORGANIZATION AND COMM ASSESS AND CONSULTATION**

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 NURS 62592 with a minimum "B" (3. 000) grade; and graduate standing. Corequisite: NURS 63592.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Nursing

#### **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: graduate standing; and Psychiatric Mental Health Nursing Family Nurse Practitioner [PMNF] concentration; and NURS 60007 and NURS 60045.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Nursing

### **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: graduate standing; and NURS 60270 and NURS 62792 with a minimum B (3. 000) grade. Corequisite: NURS 63792.

1. 000 Credit hours

1. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Nursing

### **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: graduate standing; and NURS 60272 and 62992 with a minimum B (3. 00) grade or NURS 60370 and NURS 63792 with a minimum B (3. 00) grade. Corequisite: NURS 63992.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Nursing

### **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

Department: Nursing

### **NURS 60401 - NURSING RESEARCH METHODS I**

Introduces the research process. Elements of research design and methods for both quantitative and qualitative approaches are examined. Students develop a researchable problem for nursing practice for both approaches. Prerequisite: NURS 60101 and graduate standing.

2. 000 Credit hours

2. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Nursing

### **NURS 60402 - NURSING RESEARCH METHODS II**

Extends understanding of quantitative and qualitative research methods in knowledge development and application for nursing practice. Students develop approaches to data analysis to address nursing research problems, examine research utilization and evidence based practice models and critique research reports. Prerequisite: NURS 60401 and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Nursing

### **NURS 60432 - ADULT NURSE PRACTITIONER ROLE PRACTICUM**

An individually planned practicum in the final semester in which students perform in the role of a nurse practitioner in a selected multidisciplinary primary care context under guidance of an experienced preceptor. Prerequisite: graduate standing.

4. 000 Credit hours

12. 000 Other hours

Levels: Graduate

Schedule Types: Clinic

Department: Nursing

### **NURS 60440 - WOMEN'S HEALTH CARE NURSE PRACTITIONER IV**

Further development of a foundations basis 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 social cultural aspects of care. Pathophysiology assessment and diagnostic techniques specific to the 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 with a minimum "B" (3. 000) grade. Corequisite: NURS 64892.

2. 000 Credit hours

2. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Nursing

### **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

Levels: Graduate

Schedule Types: Lecture

Department: Nursing

### **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

Levels: Graduate

Schedule Types: Lecture

Department: Nursing

### **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

Levels: Graduate

Schedule Types: Lecture

Department: Nursing

### **NURS 60452 - PSYCHIATRIC MENTAL HEALTH FAMILY NURSE PRACTITIONER ROLE**

This is the final 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 with a minimum B (3. 000) grade. Corequisite: NURS 64592.

2. 000 Credit hours

2. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Nursing

### **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: graduate standing; and NURS 60372 and 63992 minimum B (3. 000) grade.

Corequisite: NURS 64792.

2. 000 Credit hours

2. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Nursing

### **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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Nursing

**NURS 60492 - FAMILY PRIMARY CARE NURSE PRACTITIONER ROLE PRACTICUM OBGYN AND PEDIATRICS**

(Repeatable for credit) Course content is organized around common health issues, needs and problems of women and children. Additional focus will be given to the health promotion and disease detection as related to pediatric primary care, preconception, pregnancy and post-partum patients. Prerequisite: NURS 60043 and graduate standing.  
5.000 Credit hours  
5.000 Other hours  
Levels: Graduate  
Schedule Types: Practicum or Internship  
Department: Nursing

**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  
Levels: Graduate  
Schedule Types: Individual Investigation  
Department: Nursing

**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  
Levels: Graduate  
Schedule Types: Research  
Department: Nursing

**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 60440 and NURS 64892; and graduate standing. Corequisite: NURS 65892.  
2.000 Credit hours  
2.000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Nursing

**NURS 60592 - NURSING EDUCATION PRACTICUM**

(Repeatable for credit) Curriculum design, implementation, and teaching experience with a nursing master teacher in higher education

undergraduate or graduate nursing classes. Prerequisites: NURS 60601 and 60602 and 60604 with a minimum "B" (3.000) grade; and graduate standing.  
3.000 TO 4.000 Credit hours  
2.000 Lecture hours  
7.000 TO 14.000 Other hours  
Levels: Graduate  
Schedule Types: Practicum or Internship  
Department: Nursing

**NURS 60601 - NURSING CURRICULUM AND INSTRUCTION IN HIGHER EDUCATION**

Web-based course for master's enrolled or master's prepared nurses to teach content and facilitate advanced critical thinking in the areas of curriculum planning, design, development, implementation and evaluation in higher education nursing. Prerequisite: Special approval of instructor and graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Nursing

**NURS 60602 - ROLES AND EVALUATION FOR NURSING CURRICULUMS IN HIGHER EDUCATION**

Web-based course for master's enrolled or master's prepared nurses focusing on content, theory, history and techniques of evaluation for nursing educational programs. Faculty and student roles, and legal and ethical issues are also addressed. Prerequisite: NURS 60601.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Nursing

**NURS 60604 - NURSING HEALTH CARE CLINICAL ISSUES IN A SPECIALTY AREA**

This 2 hour course focuses on the theory, research, and evidenced-based practice related to biophysiological, psychosocial, cultural, ethical, developmental, environmental and policy factors of a specialty clinical area in nursing practice. Students gain a basic understanding of the multiple factors related to healthcare issues among individuals in the specialty population. Prerequisite: NURS 60601 and graduate standing. Pre- or corequisite: NURS 60602.  
2.000 Credit hours  
2.000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Nursing

**NURS 60692 - PRACTICUM IN NURSING HIGHER EDUCATION CURRICULUM**

(Repeatable for credit) Curriculum design, implementation and teaching experience with nursing master teacher in higher education undergraduate or graduate nursing courses. Prerequisite: NURS 60601 and 60602 and graduate standing.  
3.000 Credit hours  
2.000 Lecture hours  
7.000 Other hours  
Levels: Graduate  
Schedule Types: Practicum or Internship

Department: Nursing

**NURS 60792 - PRACTICUM IN ACUTE CARE NURSE PRACTITIONER ROLE**

(Repeatable for credit) Individually planned practicum in which student performs in advanced practice role with an acutely ill population of clients of student's choice in a selected acute care setting. Students have an opportunity to test effectiveness of various strategies and demonstrate leadership under guidance of an experienced clinical preceptor and NP faculty preceptor. Prerequisite: graduate standing.  
2.000 TO 6.000 Credit hours  
1.000 TO 3.000 Lecture hours  
14.000 TO 28.000 Other hours  
Levels: Graduate  
Schedule Types: Lecture, Practicum or Internship  
Department: Nursing

**NURS 61003 - NEUROBIOLOGY AND PSYCHOPHARMACOLOGY OF MAJOR PSYCHIATRIC DISORDERS**

(Repeatable 1 time for credit) Focuses on the neurobiology of severe and persistent psychiatric disorders. 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  
Department: Nursing

**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  
Department: Nursing

**NURS 61021 - ADVANCED PEDIATRIC ASSESSMENT AND HEALTH PROMOTION**

Initial pediatric course emphasizes primary care of 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. Assessment and lab on first 4 Thursdays of semester. Clinicals will be held at primary care sites. Only students admitted to the Family NP, and Pediatric NP and CNS concentrations or post-master's certificate programs may register for this course. Pre/corequisite: NURS 60101 and graduate standing.  
5.000 Credit hours  
3.000 Lecture hours  
8.000 Other hours  
Levels: Graduate  
Schedule Types: Clinic, Lecture  
Department: Nursing

**NURS 61022 - PRIMARY CARE OF ACUTELY ILL CHILDREN**

Clinical course emphasizing development of competent clinical advanced practice nursing skills for, and comprehensive knowledge of, acute physical and psychosocial illnesses in children including diagnoses, management and evaluation in primary care. Clinical is in acute primary care setting. Prerequisite: NURS 61021 and graduate standing. Pre/corequisite: NURS 60045.

5. 000 Credit hours  
5. 000 Other hours  
Levels: Graduate  
Schedule Types: Clinic  
Department: Nursing

**NURS 61023 - CARE OF ACUTELY ILL CHILDREN**

Clinical course focuses on the complex physical and psychosocial needs of hospitalized acutely ill children and their families. Analysis and synthesis of holistic assessment serve as conceptual framework for advanced practice nursing interventions. Clinical sites individualized. Prerequisite: NURS 61021 and graduate standing. Pre/corequisite: NURS 60045.

5. 000 Credit hours  
5. 000 Other hours  
Levels: Graduate  
Schedule Types: Clinic  
Department: Nursing

**NURS 61024 - CARE OF CHRONICALLY ILL CHILDREN**

Clinical course emphasizing development of competent clinical advanced practice nursing skills for and comprehensive knowledge of chronic illnesses/conditions in children, including diagnoses management and evaluation in primary care. Concepts of chronic illness and interventions for families are explored. Clinical sites focus on chronic illnesses. Prerequisite: NURS 61022 and graduate standing.

4. 000 Credit hours  
2. 500 Lecture hours  
6. 000 Other hours  
Levels: Graduate  
Schedule Types: Clinic, Lecture  
Department: Nursing

**NURS 61095 - SPECIAL TOPICS IN NURSING**

(Repeatable 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  
Department: Nursing

**NURS 61192 - ADULT GERONTOLOGY CLINICAL NURSE SPECIALIST I PRACTICUM IN NURSING**

Practicum for the concepts introduced in Adult Gerontology Clinical Nurse Specialist I. Prerequisites: graduate standing; and Adult Gerontology Clinical Nurse Specialist [AGCN] concentration; and NURS 60007 and NURS

60008 with a minimum "B" (3. 000) grade.

Corequisite: NURS 60110.

2. 000 Credit hours

14. 000 Other hours

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Nursing

**NURS 61292 - PRIMARY CARE I PRACTICUM: ADULTS ACROSS THE LIFESPAN**

Practicum for the concepts introduced in Primary Care I: Across the Lifespan. Includes 105 practicum hours. Prerequisites: graduates standing; NURS 60007 and NURS 60011. Corequisite: NURS 60120.

1. 000 Credit hours

7. 000 Other hours

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Nursing

**NURS 61392 - ADULT GERONTOLOGY ACUTE CARE NURSE PRACTITIONER ROLE PRACTICUM**

(Course is repeatable) This is the practicum component that will introduce the student to the concepts of working with multi-disciplinary teams and follow the content taught in Adult Gerontology Acute Care Nurse Practitioner Role (NURS 60130). Prerequisites: graduate standing; and NURS 60120 and 61292 with a minimum of "B" (3. 000) grade. Corequisite: NURS 60130.

1. 000 TO 2. 000 Credit hours

5. 000 TO 10. 000 Other hours

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Nursing

**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: NURS 60007, NURS 60008, and NURS 60045; and Women's Health Care Nurse Practitioner [WHNP] concentration or the Women's Health Nurse Practitioner [C807] certificate; and graduate standing. Corequisite: NURS 60140.

1. 000 Credit hours

7. 000 Other hours

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Nursing

**NURS 61592 - PSYCHIATRIC MENTAL HEALTH ADVANCED PRACTICE NURSE I 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. Prerequisites: NURS 60012 and NURS 60051; and graduate standing. Corequisite: NURS 60151.

2. 000 Credit hours

14. 000 Other hours

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Nursing

**NURS 61692 - PRIMARY CARE PEDIATRICS PRACTICUM**

Practicum for Primary Care Pediatrics will be clinical experience to correspond with the content in the corresponding didactic course.

Prerequisites: graduate standing; and NURS 60007, NURS 60011 and NURS 60030 with a minimum "B" (3. 000) grade; and enrolled in Advanced Practice Registered Nurse: Nurse Practitioner Family [APNF] concentration. Corequisite: NURS 60160.

1. 000 Credit hours

7. 000 Other hours

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Nursing

**NURS 61792 - PEDIATRIC ASSESSMENT FOR ADVANCED PRACTICE NURSE PRACTICUM**

Practicum for the concepts introduced in Advanced Pediatric Assessment for Advanced Practice Nurses. Prerequisites: NURS 60101 and NURS 60045; and graduate standing; and Pediatric Clinical Nurse Specialist [PCNS] or Pediatric Nurse Practitioner [PNPR] concentration. Corequisite: NURS 60170 and NURS 60007.

1. 000 Credit hours

7. 000 Other hours

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Nursing

**NURS 61892 - ADVANCED PRACTICE REGISTERED NURSE ROLE PRACTICUM**

Practicum for the concepts introduced in Advanced Practice Registered Nurse Role. Includes 105 practicum hours. Prerequisites: graduate standing; and NURS 60120 and 61292 with a minimum B (3. 000) grade. Corequisite: NURS 60125.

1. 000 Credit hours

7. 000 Other hours

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Nursing

**NURS 62021 - ADVANCE PEDIATRIC ASSESSMENT AND HEALTH PROMOTION FOR PSYCHIATRIC MENTAL HEALTH**

Initial pediatric course emphasizes primary care of 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. Assessment lab on first 4 Thursdays of the semester. Prerequisite: graduate standing. Pre- or corequisite: NURS 60101.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Nursing

**NURS 62192 - ADULT GERONTOLOGY CLINICAL NURSE SPECIALIST II PRACTICUM IN NURSING**

Practicum for the concepts introduced in Adult Gerontology CNS II. This course has 210 practicum hours. Prerequisites: NURS 60110 and



NURS 61192 with a minimum "B" (3.000) grade.  
Corequisite: NURS 60210.  
2.000 Credit hours  
14.000 Other hours  
Levels: Graduate  
Schedule Types: Practicum or Internship  
Department: Nursing

**NURS 62292 - 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. Prerequisites: graduate standing; and NURS 60125 and NURS 61892 with a minimum B (3.000) grade. Corequisite: NURS 60220.  
1.000 Credit hours  
7.000 Other hours  
Levels: Graduate  
Schedule Types: Practicum or Internship  
Department: Nursing

**NURS 62392 - ADULT GERONTOLOGY ACUTE CARE NURSE PRACTITIONER I PRACTICUM**  
(Repeatable for a maximum of 4 credit hours)  
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. Prerequisite: graduate standing; and NURS 60130 and 61392 with a minimum "B" (3.000) grade. Corequisite: NURS 60230.  
2.000 TO 4.000 Credit hours  
10.000 TO 20.000 Other hours  
Levels: Graduate  
Schedule Types: Practicum or Internship  
Department: Nursing

**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 with a minimum "B" (3.000) grade; and graduate standing. Corequisite: NURS 60240.  
1.000 Credit hours  
7.000 Other hours  
Levels: Graduate  
Schedule Types: Practicum or Internship  
Department: Nursing

**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 with a minimum "B" (3.000) grade; and graduate standing. Corequisite: NURS 60251.  
1.000 Credit hours  
7.000 Other hours

Levels: Graduate  
Schedule Types: Practicum or Internship  
Department: Nursing

**NURS 62792 - PEDIATRIC NURSE PRACTITIONER I PRACTICUM**  
Practicum for the concepts introduced in Pediatric Nurse Practitioner I. Prerequisites: graduate standing; and Pediatric Nurse Practitioner [PNPR] concentration; and NURS 60007 and NURS 60170 with a minimum B (3.000) grade. Corequisite: NURS 60270.  
1.000 Credit hours  
7.000 Other hours  
Levels: Graduate  
Schedule Types: Practicum or Internship  
Department: Nursing

**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  
Levels: Graduate  
Schedule Types: Practicum or Internship  
Department: Nursing

**NURS 63192 - ADULT GERONTOLOGY CLINICAL NURSE SPECIALIST III PRACTICUM IN NURSING**  
Practicum for the concepts introduced in Adult Gerontology CNS III. Prerequisites: graduate standing; and NURS 60111 and NURS 62192 with a minimum "B" (3.000) grade. Corequisite: NURS 60310.  
1.000 Credit hours  
7.000 Other hours  
Levels: Graduate  
Schedule Types: Practicum or Internship  
Department: Nursing

**NURS 63292 - PRIMARY CARE: FAMILY HEALTH AND CHRONIC ILLNESS ACROSS THE LIFESPAN PRACTICUM**  
Practicum for Primary Care: Family Health and Chronic Illness Across the Lifespan (NURS 60325) will be the clinical experience to correspond with the content in the corresponding didactic course. 210 practicum hours. Prerequisites: graduate standing; and NURS 60220 and NURS 62292 with a minimum "B" (3.000) grade. Corequisite: NURS 60325.  
2.000 Credit hours  
14.000 Other hours  
Levels: Graduate  
Schedule Types: Practicum or Internship  
Department: Nursing

**NURS 63392 - ADULT GERONTOLOGY ACUTE CARE NURSE PRACTITIONER II PRACTICUM**  
(Repeatable for a maximum of 4 credit hours)  
The student will apply therapeutic measures for patients with specialty needs as it relates to acute, acute on chronic and chronic illness. Demonstrate competency in direct acute care of patients across the adult lifespan and demonstrate professional, compassionate care to patients and their significant others. Prerequisites: graduate standing; NURS 60230 and NURS 62392 with a

minimum "B" (3.000) grade. Corequisite: NURS 60330.  
2.000 TO 4.000 Credit hours  
10.000 TO 20.000 Other hours  
Levels: Graduate  
Schedule Types: Practicum or Internship  
Department: Nursing

**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. Prerequisites: NURS 60240 and NURS 62492 with a minimum "B" (3.000) grade; and graduate standing. Corequisite: NURS 60340.  
1.000 Credit hours  
7.000 Other hours  
Levels: Graduate  
Schedule Types: Practicum or Internship  
Department: Nursing

**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 60251 and NURS 62592 with a minimum "B" (3.000) grade; and graduate standing. Corequisite: NURS 60353.  
1.000 Credit hours  
7.000 Other hours  
Levels: Graduate  
Schedule Types: Practicum or Internship  
Department: Nursing

**NURS 63692 - COMPREHENSIVE PRIMARY CARE III PRACTICUM: ADULTS ACROSS THE LIFESPAN**  
Practicum for the concepts introduced in Comprehensive Primary Care III: Adults Across the Lifespan. 210 practicum hours. Prerequisites: graduate standing; and NURS 60220 and 62292 with a minimum B (3.000) grade. Corequisite: NURS 60320.  
2.000 Credit hours  
14.000 Other hours  
Levels: Graduate  
Schedule Types: Practicum or Internship  
Department: Nursing

**NURS 63792 - PEDIATRIC NURSE PRACTITIONER II PRACTICUM**  
Practicum for the concepts introduced in Pediatric Nurse Practitioner II. Prerequisites: graduate standing; and NURS 60270 and NURS 62792 with a minimum B (3.000) grade. Corequisite: NURS 60370.  
1.000 Credit hours  
7.000 Other hours  
Levels: Graduate  
Schedule Types: Practicum or Internship  
Department: Nursing

**NURS 63992 - CARE OF THE CHRONICALLY ILL CHILD FOR ADVANCE PRACTICE NURSE PRACTICUM**  
Practicum for the concepts introduced in Care of the Chronically Ill Child for Advance Practice Nurse. Prerequisites: graduate standing; and



NURS 60272 and NURS 62992 with a minimum "B" (3.000) grade or NURS 60370 and NURS 63792 with a minimum "B" (3.000) grade.  
Corequisite: NURS 60372.

1.000 Credit hours

7.000 Other hours

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Nursing

#### **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

Department: Nursing

#### **NURS 64592 - PSYCHIATRIC MENTAL HEALTH FAMILY NURSE PRACTITIONER ROLE PRACTICUM**

This is the final 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. Prerequisites: graduate standing. Pre/Corequisites: NURS 60353 and NURS 60355 with a minimum B (3.000) grade. Corequisite: NURS 60452.

2.000 Credit hours

14.000 Other hours

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Nursing

#### **NURS 64792 - PEDIATRIC NURSE PRACTITIONER III PRACTICUM**

Practicum for the concepts introduced in Pediatric Nurse Practitioner III. Prerequisites: graduate standing; and NURS 60372 and 63992 with a minimum B (3.000) grade; and special approval. Corequisite: NURS 60470.

2.000 Credit hours

14.000 Other hours

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Nursing

#### **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. This course has 105 clinical hours. Prerequisite: NURS 60340 and NURS 63492; and graduate standing. Corequisite: NURS 60440.

1.000 Credit hours

7.000 Other hours

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Nursing

#### **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

Department: Nursing

#### **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

Department: Nursing

#### **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

Department: Nursing

#### **NURS 65592 - PSYCHIATRIC MENTAL HEALTH NURSING PRACTICUM II**

(Repeatable for credit) Practicum continues to build knowledge and skills in mental health assessment, individual psychotherapy, and psychopharmacologic therapies with individuals experiencing chronic or acute mental illness. Learning group, family, and couples psychotherapy is emphasized. Group supervision is provided. Pre- or Corequisite: NURS 60002 or 60005; and graduate standing.

1.000 Credit hours

7.000 Other hours

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Nursing

#### **NURS 65692 - PSYCHIATRIC MENTAL HEALTH NURSING PRACTICUM III**

(Repeatable for credit) Focus of this practicum will be to learn group psychotherapy skills and to gain experience working with a PMH prescriber. This practicum requires students to complete 105 hours. Prerequisite: NURS 65592; and graduate standing. Corequisites: NURS 60002 or 60005.

1.000 Credit hours

8.500 Other hours

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Nursing

#### **NURS 65892 - WOMEN'S HEALTH CARE NURSE PRACTITIONER V PRACTICUM**

Practicum for concepts introduced in Women's Health Care Nurse Practitioner V. This course has 210 clinical hours. Prerequisites: graduate standing; and NURS 60440 and NURS 64892 with a minimum "B" (3.000) grade. Corequisite: NURS 60540.

2.000 Credit hours

14.000 Other hours

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Nursing

#### **NURS 66692 - PSYCHIATRIC MENTAL HEALTH NURSING PRACTICUM III**

(Repeatable for credit) Clinical course emphasizes consultation and liaison activities with agencies that serve the acutely and chronically ill.

Corequisite: NURS 60003 and graduate standing.

2.000 Credit hours

2.000 Other hours

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Nursing

#### **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

Department: Nursing

#### **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. Pre- or Corequisites: : NURS 70727 and doctoral standing.

3.000 Credit hours

3.000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Nursing



**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

Department: Nursing

**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

Department: Nursing

**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

Department: Nursing

**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. Pre- or corequisite: NURS 70710 and doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Nursing

**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

Levels: Graduate

Schedule Types: Lecture

Department: Nursing

**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

Levels: Graduate

Schedule Types: Lecture

Department: Nursing

**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

Levels: Graduate

Schedule Types: Lecture

Department: Nursing

**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. Pre- or corequisites: NURS 70705 and 70727 and doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Nursing

**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

Department: Nursing

Course Attributes: Joint Program/Consortial Agreement

**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

Department: Nursing

**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

Department: Nursing

**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

Department: Nursing

Course Attributes: Joint Program/Consortial Agreement

**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 70737.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Nursing

**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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Nursing

**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.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Nursing

**NURS 70792 - FIELD EXPERIENCE IN NURSING**

(Repeatable for credit) Individual enrollment in field experience settings related to nursing.

Prerequisite: Doctoral standing.  
1. 000 TO 12. 000 Credit hours  
1. 000 TO 12. 000 Other hours  
Levels: Graduate  
Schedule Types: Field Experience, Lecture  
Department: Nursing

**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.

2. 000 TO 6. 000 Credit hours  
2. 000 TO 6. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Nursing

**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  
Department: Nursing

**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  
Department: Nursing

**NURS 76199 - CAPSTONE PROJECT I**

(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  
Department: Nursing

**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  
Department: Nursing

**NURS 80199 - DISSERTATION I**

(Repeatable for credit) Independent doctoral research for the dissertation under faculty supervision. Registration of at least two semesters is required, continuing until completion of 30 credit hours. Akron 8200: 899. Prerequisite: doctoral standing and admission to doctoral candidacy.

15. 000 Credit hours  
15. 000 Other hours  
Levels: Graduate  
Schedule Types: Dissertation  
Department: Nursing

**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.

15. 000 Credit hours  
15. 000 Other hours  
Levels: Graduate  
Schedule Types: Dissertation  
Department: Nursing

**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  
Levels: Graduate  
Schedule Types: Seminar  
Department: Nursing

**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  
Department: Nursing

**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  
Department: Nursing

**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  
Department: Nursing

**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  
Department: Nursing

***Nutrition and Dietetics (NUTR)*****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.

1. 000 Credit hours  
1. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Health Sciences

**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  
Department: Health Sciences



### **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

Department: Health Sciences

Course Attributes:

Kent Core-Basic Sciences, LER-Basic Sciences

### **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

Department: Health Sciences

### **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

2. 000 Lecture hours

1. 000 Lab hours

Levels: Undergraduate

Schedule Types: Laboratory, Lecture

Department: Health Sciences

### **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

Department: Health Sciences

### **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

Department: Health Sciences

### **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

Department: Health Sciences

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

Department: Health Sciences

### **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

Department: Health Sciences

### **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

Department: Health Sciences

### **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

Department: Health Sciences

### **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

Department: Health Sciences

Course Attributes: Experiential Learning Requirement

### **NUTR 43518 - MATERNAL AND CHILD NUTRITION**

Nutrition requirements and problems: pregnancy, lactation, childhood and adolescence. Prerequisite: NUTR 33512.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Health Sciences

### **NUTR 43520 - NUTRITION FOR FITNESS**

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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Health Sciences

### **NUTR 43521 - FOOD CHOICES FOR PRESCRIBED DIETARY MODIFICATION**

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.

2. 000 Credit hours

2. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Health Sciences

### **NUTR 43523 - NUTRITION AND DIETETICS: PROFESSIONAL PRACTICE**

Development of professional awareness. Evaluation of professional growth and formulation of plans for continued growth. Prerequisite: Nutrition (NUTR) major and senior standing.

1. 000 Credit hours

1. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Health Sciences

### **NUTR 43532 - METH AND EXP NUTR OUTREACH**

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.

3. 000 Credit hours

2. 500 Lecture hours

0. 500 Other hours

Levels: Undergraduate

Schedule Types: Field Experience, Lecture

Department: Health Sciences

**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

Department: Health Sciences

**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

Department: Health Sciences

**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

Department: Health Sciences

**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

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences

**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

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences

**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

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences

**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

Levels: Graduate

Schedule Types: Laboratory, Lecture

Department: Health Sciences

**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

Levels: Graduate

Schedule Types: Laboratory, Lecture

Department: Health Sciences

**NUTR 53518 - MATERNAL AND CHILD NUTRITION**

Nutrition requirements and problems: pregnancy, lactation, childhood and adolescence. Prerequisite: nutrition (NUTR) major and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences

**NUTR 53520 - NUTRITION FOR FITNESS**

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: graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences

**NUTR 53521 - FOOD CHOICES FOR PRESCRIBED DIETARY MODIFICATION**

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.

2. 000 Credit hours

2. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences

**NUTR 53532 - METHODS AND EXPERIENCES IN NUTRITION OUTREACH**

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.

3. 000 Credit hours

2. 500 Lecture hours

0. 500 Other hours

Levels: Graduate

Schedule Types: Field Experience, Lecture

Department: Health Sciences

**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

Department: Health Sciences

**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

Department: Health Sciences

**NUTR 61198 - MASTER'S PROJECT**

(Repeatable for credit) 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: Individual Investigation

Department: Health Sciences

**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

Department: Health Sciences

**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





Schedule Types: Masters Thesis  
Department: Health Sciences

### **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  
Department: Health Sciences

### **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  
Department: Health Sciences

### **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  
Department: Health Sciences

### **NUTR 63523 - NUTRITION AND GERONTOLOGY**

Biochemistry of aging process and the interrelation of gerontology and nutrition. Prerequisites: NUTR 23511 and graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Health Sciences

### **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  
Department: Health Sciences

### **NUTR 63525 - DIETETIC PRACTICE: COMMUNITY**

Discussion focusing on nutrition care in the community setting. Evaluation and interpretation of the scientific literature. Prerequisite: Special approval and graduate standing.  
1. 000 Credit hours  
1. 000 Lecture hours  
Levels: Graduate

Schedule Types: Lecture  
Department: Health Sciences

### **NUTR 63526 - DIETETIC PRACTICE: MANAGEMENT**

Discussion focusing on the management of food and nutrition services. Evaluation and interpretation of the scientific literature. Prerequisite: Special approval and graduate standing.  
1. 000 Credit hours  
1. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Health Sciences

### **NUTR 63527 - DIETETIC PRACTICE: CLINICAL**

Discussion focusing on nutrition care in the acute practice setting. Evaluation and interpretation of the scientific literature. Prerequisite: Special approval and graduate standing.  
1. 000 Credit hours  
1. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Health Sciences

### **NUTR 63591 - NUTRITION SEMINAR**

(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. Prerequisite: Graduate standing.  
1. 000 TO 3. 000 Credit hours  
1. 000 TO 3. 000 Other hours  
Levels: Graduate  
Schedule Types: Seminar  
Department: Health Sciences

### **NUTR 63592 - DIETETIC INTERNSHIP**

(Repeatable for credit) Supervised practice component of dietetic internship. Prerequisite: Special approval and graduate standing.  
1. 000 TO 4. 000 Credit hours  
1. 000 TO 4. 000 Other hours  
Levels: Graduate  
Schedule Types: Practicum or Internship  
Department: Health Sciences

## ***Occupational Therapy Assistant Technology (OCAT)***

### **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  
Department: Regional

### **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: Occupational therapy assistant technology (OCAT) major.  
3. 000 Credit hours  
2. 000 Lecture hours  
3. 000 Lab hours  
Levels: Undergraduate  
Schedule Types: Laboratory, Lecture  
Department: Regional

### **OCAT 10002 - THERAPEUTIC TECHNIQUES I-PSYCHOSOCIAL**

Application of occupational therapy skills and techniques in treatment programs, concerned with psychosocial dysfunction. Prerequisite: Occupational therapy assistant technology (OCAT) major and OCAT 10000 with a minimum grade of C (2. 000).  
5. 000 Credit hours  
5. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **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.  
1. 000 Credit hours  
3. 000 Lab hours  
Levels: Undergraduate  
Schedule Types: Laboratory  
Department: Regional

### **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: special approval.  
1. 000 Credit hours  
1. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **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 10002 and PTST 10002 and occupational therapy assistant technology (OCAT) major.  
5. 000 Credit hours  
4. 000 Lecture hours  
3. 000 Lab hours  
8. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Clinic, Combined Lecture and Lab



Department: Regional

### **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 and special approval.

2. 000 Credit hours  
2. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **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: none.

3. 000 Credit hours  
2. 000 Lecture hours  
3. 000 Lab hours  
Levels: Undergraduate  
Schedule Types: Laboratory, Lecture  
Department: Regional

### **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  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **OCAT 20005 - CLINICAL APPLICATIONS**

Under the supervision of personnel in selected health care agencies, students apply knowledge, skills and techniques acquired in prior OCAT courses. Prerequisites: minimum grade of C (2. 000) in OCAT 10000 and 10001 and 10002 and 20000 and 20001 and 20003 and 20004 and 20006; and occupational therapy assistant technology (OCAT) major.

8. 000 Credit hours  
40. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Clinic  
Department: Regional

### **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) in PTST 10002 and OCAT 10002 and OCAT 20000; and occupational therapy assistant technology (OCAT) major.

3. 000 Credit hours  
2. 000 Lecture hours  
3. 000 Lab hours  
Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab  
Department: Regional

### **OCAT 20008 - 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 and 10001 and 10002 and 20000 and 20001 and 20003 and 20006 and 20005 all with a minimum grade of C (2. 000).

4. 000 Credit hours  
4. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Field Experience  
Department: Regional

### **OCAT 21095 - SPECIAL TOPICS IN OCCUPATIONAL THERAPIST ASSISTANT TECHNOLOGY**

(Repeatable for credit) Special topics in Occupational Therapy Assistant Technology; topics announced when scheduled. Prerequisite: occupational therapy assistant technology (OCAT) major.

1. 000 TO 4. 000 Credit hours  
1. 000 TO 4. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **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: occupational therapy assistant technology (OCAT) major.

1. 000 TO 4. 000 Credit hours  
1. 000 TO 4. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Individual Investigation  
Department: Regional

## ***Office of International Affairs (OIA)***

### **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  
Department: Office of Global Education  
Course Attributes: Joint Program/Consortial Agreement

## ***Podiatric Biomechanics/Orthopedics (ORT)***

### **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  
Department: Podiatric Medicine

### **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  
Department: Podiatric Medicine

### **ORT 80211 - BIOMECHANICS II**

Biomechanics II introduces common foot pathologies and their effects 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  
Department: Podiatric Medicine

### **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  
Department: Podiatric Medicine

### **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  
Department: Podiatric Medicine

## ***Public Administration (PADM)***

### **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



Department: Political Science

**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

Department: Political Science

**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

Department: Political Science

**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

Department: Political Science

**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

Department: Political Science

**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

Department: Political Science

**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

Schedule Types: Lecture

Department: Political Science

**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

Department: Political Science

**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

Department: Political Science

**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

Department: Political Science

**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

Department: Political Science

**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

Department: Political Science

**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

Department: Political Science

**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

Department: Political Science

**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

Department: Political Science

**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

Department: Political Science

#### **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

Department: Political Science

#### **PADM 60492 - 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

Department: Political Science

#### **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

Department: Political Science

### ***Pan-African Studies (PAS)***

#### **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

Department: Pan-African Studies

#### **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

Department: Pan-African Studies

#### **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 Andalusia 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

Department: Pan-African Studies

#### **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

Department: Pan-African Studies

#### **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

Department: Pan-African Studies

#### **PAS 20200 - RECOVERING THE PAST: KENT TO MEMPHIS**

Examines relevance of John Brown, Frederick Loudin and Fisk Jubilee Singers, and Ida B. Wells anti-lynching campaign today. Students travel to local Brown and Loudin sites, Harper's Ferry and Memphis. Prerequisite: none.

3. 000 Credit hours

2. 000 Lecture hours

1. 000 Other hours

Levels: Undergraduate

Schedule Types: Field Experience, Lecture

Department: Pan-African Studies

#### **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

Department: Pan-African Studies

#### **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

Department: Pan-African Studies

#### **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

Department: Pan-African Studies

#### **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

Department: Pan-African Studies

#### **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

Department: Pan-African Studies

Course Attributes: Diversity Course-Global, Kent Core-Humanities, Trnfr Module-Humanities

#### **PAS 23002 - BLACK EXPERIENCE II: 1865 TO PRESENT**

The second of two parts, this course covers the period 1865 to present and is a continuation of PAS 23001. Prerequisite: none.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Pan-African Studies

Course Attributes: Diversity Course-Domestic, Kent Core-Humanities, Trnfr Module-Humanities





### 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  
Department: Pan-African Studies

### 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  
Department: Pan-African Studies

### 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  
Department: Pan-African Studies

### 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  
Department: Pan-African Studies  
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  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Pan-African Studies

### 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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Pan-African Studies

### 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.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Pan-African Studies

### 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.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Pan-African Studies

### 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.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Pan-African Studies  
Course Attributes: Diversity Course-Domestic

### PAS 31092 - PRACTICUM IN AFRICAN THEATRE ARTS

(Repeatable 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: Permission.

3. 000 TO 6. 000 Credit hours  
3. 000 TO 6. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Practicum or Internship  
Department: Pan-African Studies

Course Attributes: Experiential Learning Requirement

### 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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Pan-African Studies

### 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  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Pan-African Studies

### 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, Césaire, Senghor, Soyinka and many others. Prerequisite: ENG 11011 or HONR 10197.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Pan-African Studies

### 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.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Pan-African Studies  
Course Attributes: Diversity Course-Domestic

### PAS 33101 - AFRICAN AMERICAN HISTORY: SLAVERY TO FREEDOM

(Cross-listed with HIST 31080) 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  
Levels: Undergraduate  
Schedule Types: Lecture



Department: Pan-African Studies

**PAS 33102 - AFRICAN AMERICAN HISTORY: RECONSTRUCTION TO THE PRESENT**

(Cross-listed with HIST 31081) Survey of African American history from 1877 to the present. Course provides a general knowledge of social, political and cultural history of African Americans from the end of the Reconstruction to the present. Prerequisite: PAS 33101 or HIST 31080. 3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Pan-African Studies

**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. 3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Pan-African Studies  
Course Attributes: Diversity Course-Domestic

**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  
Department: Pan-African Studies

**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  
Department: Pan-African Studies

**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  
Department: Pan-African Studies  
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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Pan-African Studies

**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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Pan-African Studies  
Course Attributes: Diversity Course-Domestic

**PAS 33508 - CARIBBEAN SOCIAL AND POLITICAL DIRECTIONS**

Twentieth-century West Indian social and political development; emphasis on federation, independence and nationalism in the Caribbean community as a sector of the total Pan-African community. Prerequisite: PAS 24407. 3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Pan-African Studies

**PAS 34000 - INTRODUCTION TO AFRICAN WORLD VIEW**

Investigates traditional African cosmological world views and aesthetics in global Africa. Prerequisite: PAS 23001 or PAS 23002. 3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Pan-African Studies  
Course Attributes: Diversity Course-Global

**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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Pan-African Studies

**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  
Department: Pan-African Studies

**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  
Department: Pan-African Studies

**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  
Department: Pan-African Studies  
Course Attributes: Writing Intensive Course

**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. 3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Pan-African Studies

**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  
Department: Pan-African Studies

**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

Department: Pan-African Studies

### **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

Schedule Types: Lecture

Department: Pan-African Studies

### **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, self-help organizations, etc. Prerequisite: none.

1. 000 TO 12. 000 Credit hours

1. 000 TO 12. 000 Other hours

Levels: Undergraduate

Schedule Types: Practicum or Internship

Department: Pan-African Studies

Course Attributes: Experiential Learning Requirement

### **PAS 42095 - SPECIAL TOPICS IN THE LITERATURE OF PAN-AFRICA**

(Repeatable for a maximum of 12 credit hours) Selected topics in orature, drama, poetry, prose, novel and criticism in various African world experiences and settings. Prerequisite: none.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Pan-African Studies

### **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

Department: Pan-African Studies

### **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

Department: Pan-African Studies

### **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

Department: Pan-African Studies

### **PAS 43300 - AFRO-LATIN AMERICA**

(Cross-listed with HIST 42142, HIST 52142 and HIST 72142) Course 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

Department: Pan-African Studies

### **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

Department: Pan-African Studies

### **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

Department: Pan-African Studies

### **PAS 45095 - SPECIAL TOPICS IN PEDAGOGY IN PAN-AFRICAN STUDIES**

(Repeatable for credit) Study of selected topics in issues, approaches and styles in the education of people of African descent in African and Western settings. Prerequisite: none.

3. 000 TO 12. 000 Credit hours

3. 000 TO 12. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Pan-African Studies

### **PAS 47010 - THEORETICAL APPROACHES TO PAN-AFRICAN STUDIES**

A critical analysis of the diverse approaches and underlying principles of Pan-African studies. Prerequisite: Senior standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Pan-African Studies

### **PAS 47091 - SENIOR SEMINAR IN PAN-AFRICAN STUDIES**

(Repeatable for credit) Students develop individual topical PAS research papers for presentation before departmental faculty, students and general public. Prerequisite: Pan-African studies (PAS) major with junior or senior standing.

3. 000 Credit hours

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Seminar

Department: Pan-African Studies

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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Pan-African Studies

### **PAS 47150 - THE UNDERGROUND RAILROAD**

This course examines the Underground Railroad and its impact as an American phenomenon. Related to the Underground Railroad research project under the Institute of African American Affairs. Prerequisite: PAS 23002 or PAS 13002.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Pan-African Studies

### **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

Department: Pan-African Studies

### **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

Department: Pan-African Studies

### **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  
Department: Pan-African Studies

## ***Physical Education Basic (PEB)***

### **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  
1. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Teaching, Learning and Curriculum Studies

### **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  
Department: Teaching, Learning and Curriculum Studies

### **PEB 10036 - FITNESS WALKING**

Application of sound training methods to achieve personal cardiovascular fitness through participation in a walking program. Prerequisite: None.

1. 000 Credit hours  
2. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Teaching, Learning and Curriculum Studies

### **PEB 10095 - SELECTED TOPICS: PHYSICAL EDUCATION ACTIVITIES**

(Repeatable for credit) Prerequisite: none.

1. 000 OR 2. 000 Credit hours  
1. 000 OR 2. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Teaching, Learning and Curriculum Studies

### **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  
0. 330 Lecture hours  
1. 330 Lab hours  
Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab  
Department: Teaching, Learning and Curriculum Studies

### **PEB 10102 - BEGINNING SWIMMING**

No or minimal swimming ability. Prerequisite: Special approval.

1. 000 Credit hours  
2. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Teaching, Learning and Curriculum Studies

### **PEB 10125 - BASKETBALL**

Prerequisite: None.

1. 000 Credit hours  
2. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Teaching, Learning and Curriculum Studies

### **PEB 10126 - BASKETBALL-VARSITY**

(Repeatable for credit) Controlled registration.

Prerequisite: none.  
1. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Teaching, Learning and Curriculum Studies

### **PEB 10202 - INTERMEDIATE SWIMMING**

Prerequisite: PEB 10102.

1. 000 Credit hours  
2. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Teaching, Learning and Curriculum Studies

### **PEB 10204 - BADMINTON**

Prerequisite: None.

1. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Teaching, Learning and Curriculum Studies

### **PEB 10304 - BOWLING**

Prerequisite: None.

1. 000 Credit hours  
1. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Teaching, Learning and Curriculum Studies

### **PEB 10305 - BILLIARDS**

Prerequisite: None.

1. 000 Credit hours  
2. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Teaching, Learning and Curriculum Studies

### **PEB 10306 - JOGGING**

Prerequisite: None.

1. 000 Credit hours  
2. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Teaching, Learning and Curriculum Studies

### **PEB 10325 - SOCCER**

(Repeatable for credit) Prerequisite: none.

1. 000 Credit hours  
2. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Teaching, Learning and Curriculum Studies

### **PEB 10403 - BEGINNING BALLROOM DANCE**

Prerequisite: None.

1. 000 Credit hours  
2. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Teaching, Learning and Curriculum Studies

### **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. Prerequisites: none.

1. 000 Credit hours  
2. 000 Lab hours  
Levels: Undergraduate  
Schedule Types: Laboratory  
Department: Teaching, Learning and Curriculum Studies

### **PEB 10425 - BASEBALL-VARSITY**

(Repeatable for credit) Controlled registration.

Prerequisite: None.  
1. 000 Credit hours  
2. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Teaching, Learning and Curriculum Studies

### **PEB 10426 - SOFTBALL-VARSITY**

(Repeatable for credit) . Controlled registration.

Prerequisite: none.  
1. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Teaching, Learning and Curriculum Studies

### **PEB 10504 - SAND VOLLEYBALL**

Basic instruction in Volleyball skills and Sand Volleyball game strategies. Prerequisite: none.

1. 000 Credit hours  
0. 330 Lecture hours  
1. 330 Lab hours  
Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab  
Department: Teaching, Learning and Curriculum Studies

### **PEB 10505 - VOLLEYBALL**

Prerequisite: None.

1. 000 Credit hours  
2. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Teaching, Learning and Curriculum Studies



**PEB 10515 - BEGINNING 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

Department: Teaching, Learning and Curriculum Studies

**PEB 10604 - BEGINNING GOLF**

Prerequisite: None.

- 1. 000 Credit hours
- 2. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Teaching, Learning and Curriculum Studies

**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

Department: Teaching, Learning and Curriculum Studies

**PEB 10704 - INTERMEDIATE GOLF**

Prerequisite: None.

- 1. 000 Credit hours
- 2. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Teaching, Learning and Curriculum Studies

**PEB 10724 - GOLF-VARSITY**

(Repeatable for credit) . Controlled registration.

Prerequisite: none.

- 1. 000 Credit hours
- 1. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Teaching, Learning and Curriculum Studies

**PEB 10904 - TENNIS**

Prerequisite: None.

- 1. 000 Credit hours
- 2. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Teaching, Learning and Curriculum Studies

**PEB 10906 - RACQUETBALL**

Prerequisite: None.

- 1. 000 Credit hours
- 2. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Teaching, Learning and Curriculum Studies

**PEB 11024 - TRACK AND FIELD-VARSITY**

(Repeatable for credit) . Controlled registration.

Prerequisite: none.

- 1. 000 Credit hours
- 2. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Teaching, Learning and Curriculum Studies

**PEB 11124 - GYMNASTICS-VARSITY**

(Repeatable for credit) . Controlled registration.

Prerequisite: none.

- 1. 000 Credit hours
- 2. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Teaching, Learning and Curriculum Studies

**PEB 11125 - FOOTBALL-VARSITY**

(Repeatable for credit) . Controlled registration.

Prerequisite: none.

- 1. 000 Credit hours
- 2. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Teaching, Learning and Curriculum Studies

**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: PEB 11245.

- 1. 000 Credit hours
- 1. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Teaching, Learning and Curriculum Studies

**PEB 11604 - BEGINNING KARATE**

Prerequisite: None.

- 1. 000 Credit hours
- 2. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Teaching, Learning and Curriculum Studies

**PEB 11605 - INTERMEDIATE KARATE**

Must have taken PEB 11604 or have three months of experience in Karate. Prerequisite: Special approval.

- 1. 000 Credit hours
- 2. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Teaching, Learning and Curriculum Studies

**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
- 0. 330 Lecture hours

1. 330 Lab hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Teaching, Learning and Curriculum Studies

**PEB 11634 - SELF-DEFENSE**

Prerequisite: None.

- 1. 000 Credit hours
- 2. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Teaching, Learning and Curriculum Studies

**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
- 0. 330 Lecture hours

1. 330 Lab hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Teaching, Learning and Curriculum Studies

**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

Levels: Undergraduate

Schedule Types: Laboratory

Department: Teaching, Learning and Curriculum Studies

**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
- 0. 330 Lecture hours

1. 330 Lab hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Teaching, Learning and Curriculum Studies

**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
- 0. 330 Lecture hours

1. 330 Lab hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Teaching, Learning and Curriculum Studies

**PEB 11825 - WRESTLING-VARSITY**

(Repeatable for credit) Controlled registration.

Prerequisite: none.

- 1. 000 Credit hours
- 2. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Teaching, Learning and Curriculum Studies

**PEB 11904 - BEGINNING ICE SKATING**

Prerequisite: None.

1. 000 Credit hours

1. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Teaching, Learning and Curriculum Studies

**PEB 12004 - BASIC FIGURE SKATING**

Prerequisite: PEB 11904.

1. 000 Credit hours

1. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Teaching, Learning and Curriculum Studies

**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

Department: Teaching, Learning and Curriculum Studies

**PEB 12324 - WEIGHT TRAINING**

Offers instruction and practice in proper techniques of the development of muscular strength, endurance, and flexibility. Emphasis is placed on the application of scientific principles and methods used to build, improve and maintain proper muscular fitness. Prerequisite: none.

1. 000 Credit hours

1. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Teaching, Learning and Curriculum Studies

**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 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Teaching, Learning and Curriculum Studies

**PEB 12424 - EXERCISE AND WEIGHT CONTROL**

The instruction in and practice of exercises based upon proper food selection for the purpose of weight control. Prerequisite: None.

1. 000 Credit hours

1. 000 Lab hours

Levels: Undergraduate

Schedule Types: Laboratory

Department: Teaching, Learning and Curriculum Studies

**PEB 12425 - NAUTILUS EXERCISES**

Fundamental skills and knowledge involved in the use of the nautilus for fitness development.

Prerequisite: None.

1. 000 Credit hours

2. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Teaching, Learning and Curriculum Studies

**PEB 13003 - DANCE EXERCISE**

An aerobic program concerned with cardiovascular efficiency, flexibility and strength gain which is achieved through dance movement.

Prerequisite: None.

1. 000 Credit hours

2. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Teaching, Learning and Curriculum Studies

**PEB 13008 - INTERMEDIATE VOLLEYBALL**

A continuation of the basic techniques of volleyball, with an emphasis on refinement of skill performance and an introduction to intermediate volleyball techniques and strategies that lead to higher levels of performance. Prerequisite: PEB 10505.

1. 000 Credit hours

1. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Teaching, Learning and Curriculum Studies

**PEB 13010 - JUDO-AKIDO**

Prerequisite: None.

1. 000 Credit hours

2. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Teaching, Learning and Curriculum Studies

**PEB 13012 - BACKPACKING**

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. Prerequisite: Special approval.

2. 000 Credit hours

4. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Teaching, Learning and Curriculum Studies

**PEB 13015 - FIELD HOCKEY-VARSITY**

(Repeatable for credit) Controlled registration.

Prerequisite: none.

1. 000 Credit hours

2. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Teaching, Learning and Curriculum Studies

**PEB 13016 - CYCLING**

Prerequisite: None.

1. 000 Credit hours

2. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Teaching, Learning and Curriculum Studies

**PEB 13017 - VOLLEYBALL-VARSITY**

(Repeatable for credit) Controlled registration.

Prerequisite: none.

1. 000 Credit hours

2. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Teaching, Learning and Curriculum Studies

**PEB 13022 - CAMPING**

Basic camping skills including: tool craft, rope craft, fire building, cooking, campsite management, equipment 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

Department: Teaching, Learning and Curriculum Studies

**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

0. 330 Lecture hours

1. 330 Lab hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Teaching, Learning and Curriculum Studies

**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

0. 330 Lecture hours

1. 330 Lab hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Teaching, Learning and Curriculum Studies

**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

Department: Teaching, Learning and Curriculum Studies

## *Physical Education Professional (PEP)*

**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

Department: Teaching, Learning and Curriculum Studies

#### **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

Department: Teaching, Learning and Curriculum Studies

#### **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

Department: Teaching, Learning and Curriculum Studies

#### **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

Department: Teaching, Learning and Curriculum Studies

#### **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

Department: Teaching, Learning and Curriculum Studies

#### **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

Department: Teaching, Learning and Curriculum Studies

#### **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

Schedule Types: Laboratory, Lecture

Department: Teaching, Learning and Curriculum Studies

#### **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

Department: Teaching, Learning and Curriculum Studies

#### **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: PSYC 11762.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Teaching, Learning and Curriculum Studies

#### **PEP 25059 - 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

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Teaching, Learning and Curriculum Studies

Course Attributes: Diversity Course-Domestic

#### **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

Department: Teaching, Learning and Curriculum Studies

Course Attributes: Writing Intensive Course

#### **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

Department: Teaching, Learning and Curriculum Studies

#### **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

Department: Teaching, Learning and Curriculum Studies

#### **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

Department: Teaching, Learning and Curriculum Studies

#### **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

Department: Teaching, Learning and Curriculum Studies

#### **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.

2. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Teaching, Learning and Curriculum Studies

#### **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

Department: Teaching, Learning and Curriculum Studies

### **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

Department: Teaching, Learning and Curriculum Studies

### **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

Department: Teaching, Learning and Curriculum Studies

### **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

Department: Teaching, Learning and Curriculum Studies

### **PEP 45051 - ELEMENTARY SCHOOL PHYSICAL EDUCATION METHODS**

(Cross-listed with CI 55051) Approaches to teaching in elementary school physical education. Focusing on sequential curriculum development and on learning outcomes in three domains.

Prerequisites: PEP 25033 and PEP 25025 and PEP 15013-15017 and special approval.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Teaching, Learning and Curriculum Studies

### **PEP 45053 - ELEMENTARY SCHOOL PHYSICAL EDUCATION CONTENT**

Physical education content for the elementary school child with emphasis on developmentally appropriate learning in three domains.

Prerequisites: PEP 25033 and PEP 25025 and PEP 15013-15017 and special approval.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Teaching, Learning and Curriculum Studies

### **PEP 45058 - SECONDARY SCHOOL PHYSICAL EDUCATION METHODS**

(Cross-listed with CI 55058) Approaches to teaching in secondary school physical education. Focus on sequential curriculum development and on learning outcomes in three domains.

Prerequisites: PEP 25033 and PEP 25025 and PEP 15013-15017 and special approval.

3. 000 Credit hours

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Teaching, Learning and Curriculum Studies

### **PEP 45059 - SECONDARY SCHOOL PHYSICAL EDUCATION CONTENT**

(Cross-listed with CI 55059) Introduction and development of content, management and organizational skills related to sports and activities utilized in secondary school physical education.

Prerequisites: PEP 25033 and PEP 25025 and PEP 15013-15017 and special approval.

3. 000 Credit hours

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Teaching, Learning and Curriculum Studies

### **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. Fifty (50) work hours per credit hour. Prerequisite: Senior standing and special approval.

2. 000 TO 8. 000 Credit hours

2. 000 TO 8. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture, Practicum or Internship

Department: Teaching, Learning and Curriculum Studies

Course Attributes: Experiential Learning Requirement

### **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

Department: Teaching, Learning and Curriculum Studies

### **PEP 45692 - INTERNSHIP IN ATHLETIC COACHING**

(Repeatable for credit) Supervised experience in organized sport focused upon the duties of a coach; can be at one or more levels (youth, school, college, professional) and sports. 60

contact hours per credit. Prerequisite: PEP 45020 and special approval.

2. 000 TO 4. 000 Credit hours

8. 000 TO 16. 000 Other hours

Levels: Undergraduate

Schedule Types: Practicum or Internship

Department: Teaching, Learning and Curriculum Studies

Course Attributes: Experiential Learning Requirement

### **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

Levels: Undergraduate

Schedule Types: Lecture

Department: Teaching, Learning and Curriculum Studies

### **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. Prerequisite: Special approval and admission to advanced study. Corequisite: PEP 49525.

12. 000 Credit hours

12. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Teaching, Learning and Curriculum Studies

Course Attributes: Experiential Learning Requirement

## **Public Health (PH)**

### **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

Levels: Undergraduate

Schedule Types: Lecture

Department: Public Health





### 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

Department: Public Health

### 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

Department: Public Health

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

Department: Public Health

### 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

Department: Public Health

### 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

Department: Public Health

### PH 20012 - SANITATION AND HAZARDOUS MATERIALS MANAGEMENT

Safety and sanitation practices and regulations pertinent to hazardous materials in the environment. Emphasis is on management of hazardous materials released to the environment and their use to control public health problems.

Prerequisite: none.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Public Health

### 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

Department: Public Health

### 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

Department: Public Health

### 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: ENG 21011 or HONR 10297.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Public Health

### 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

Department: Public Health

### PH 30006 - ENVIRONMENTAL HEALTH SCIENCE

A survey of issues involving water quality; waste management, including hazardous waste; air

quality and management; food protection; and other environmental topics. Prerequisite: none.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Public Health

### 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

Department: Public Health

### 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: none.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Public Health

### PH 30015 - UNITED STATES HEALTH CARE SYSTEM

Provides an overview of the U. S. healthcare delivery system, including operations, stakeholders and the role of government with a particular emphasis on public health's role in health care. Students gain an understanding of inpatient and outpatient services, the various roles of healthcare professionals, private and public financing and the impact of managed care. The primary focus is the public health system. Prerequisite: none.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Public Health

### PH 30033 - PUBLIC HEALTH POLICY AND DECISION-MAKING

An introductory survey of the formulation to implementation of public health policies for various public health issues, and the use of practical administrative tools such as strategic planning, use of economic evaluation tools and decision analysis. Prerequisite: none.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Public Health

**PH 30040 - PUBLIC HEALTH LABORATORY SAFETY, SECURITY AND EMERGENCY PREPAREDNESS**

Safe operations within the public health laboratory require specific knowledge and skills sets. Upon completion of this course, the student will (1) understand the public health laboratory infrastructure; (2) work safely and responsibly with equipment and reagents to investigate laboratory-based public health problems; (3) define the laws, policies and guidance documents related to public health laboratory activities; and (4) respond to simulated laboratory safety and security emergencies. Prerequisites: PH 30006 and 30012.

3. 000 Credit hours

1. 000 Lecture hours

2. 000 Lab hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Public Health

**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

Department: Public Health

**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

Levels: Undergraduate

Schedule Types: Lecture

Department: Public Health

**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

Levels: Undergraduate

Schedule Types: Lecture

Department: Public Health

**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

Levels: Undergraduate

Schedule Types: Field Experience, Lecture

Department: Public Health

**PH 40092 - INTERNATIONAL HEALTH PRACTICUM**

(Repeatable for credit) A supervised internship in global/international health. Prerequisite: PH 10002; and junior or senior standing.

6. 000 Credit hours

6. 000 Other hours

Levels: Undergraduate

Schedule Types: Practicum or Internship

Department: Public Health

Course Attributes: Experiential Learning

Requirement

**PH 40191 - SEMINAR IN PUBLIC HEALTH**

Seminar on current and important topics in public health. Subject matter varies depending on topic.

Prerequisite: none.

1. 000 TO 3. 000 Credit hours

1. 000 TO 3. 000 Other hours

Levels: Undergraduate

Schedule Types: Seminar

Department: Public Health

**PH 40195 - SPECIAL TOPICS IN PUBLIC HEALTH**

(Repeatable for credit) Subject varies depending on the emerging issue. Prerequisite: junior or senior standing.

1. 000 TO 3. 000 Credit hours

1. 000 TO 3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: 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 Other hours

Levels: Undergraduate

Schedule Types: Individual Investigation

Department: Public Health

**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

Department: Public Health

Course Attributes: Experiential Learning Requirement

**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: none.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Public Health

Course Attributes: Diversity Course-Domestic, Writing Intensive Course

**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: PH 20006.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Public Health

**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

Levels: Undergraduate

Schedule Types: Lecture

Department: Public Health

**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

Levels: Undergraduate

Schedule Types: Lecture

Department: Public Health



### 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

Levels: Undergraduate

Schedule Types: Lecture

Department: Public Health

### 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

Department: Public Health

Course Attributes: Experiential Learning Requirement

### 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: public health (PH) majors or minors.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Public Health

### PH 60172 - PRACTICUM SEMINAR IN PUBLIC HEALTH

(Repeatable 6 times for credit) 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

Department: Public Health

### 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

Department: Public Health

### PH 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

Department: Public Health

### 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

Department: Public Health

## Philosophy (PHIL)

### 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

Department: Philosophy

Course Attributes: Diversity Course-Global, Kent Core-Humanities, TAG - Arts/Humanities, Trnfr Module-Humanities

### PHIL 11009 - PRINCIPLES OF THINKING

The place of argument in reasoning and the place of reasoning in thinking are explored through a concentration on argument--its structure, expression, function and limits. Prerequisite: None.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Philosophy

Course Attributes:

Kent Core-Additional, LER-Additional Course

### 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

Department: Philosophy

Course Attributes: Diversity Course-Global, Kent Core-Humanities, TAG - Arts/Humanities, Trnfr Module-Humanities

### PHIL 21002 - INTRODUCTION TO FORMAL LOGIC

Techniques of formal logic, traditional and contemporary. Prerequisite: None.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Philosophy

Course Attributes: Kent Core-Math and Crit Reason, LER-Math and Crit Reasoning

### PHIL 21020 - COMPARATIVE RELIGIOUS THOUGHT I

Philosophic study of the religious impulse as it manifests itself variously in beliefs, practices and institutions ranging over times and cultures.

Prerequisite: None.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Philosophy

Course Attributes: Diversity Course-Global, Kent Core-Humanities, Trnfr Module-Humanities

### PHIL 21021 - COMPARATIVE RELIGIOUS THOUGHT II

Comparative exploration in depth of three religions, selected to represent a Western religion, an Eastern religion and a religion often overlooked in traditional comparative studies.

Prerequisite: PHIL 21020.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Philosophy

Course Attributes: Diversity Course-Global, Kent Core-Humanities, Trnfr Module-Humanities

### 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

Department: Philosophy

### 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 31045; and at least one of PHIL 11001 or PHIL 21001.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Philosophy

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 31045; and at least one of PHIL 11001 or PHIL 21001.

3. 000 Credit hours



3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Philosophy  
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 31045; and at least one of PHIL 11001 or PHIL 21001.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Philosophy  
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 31045; and at least one of PHIL 11001 or PHIL 21001.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Philosophy  
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 31045; and at least one of PHIL 11001 or PHIL 21001.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Philosophy  
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 or PHIL 31045 and at least one of PHIL 11001 or PHIL 21001.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Philosophy  
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 31045; and at least one of PHIL 11001 or PHIL 21001.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Philosophy  
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 31045; and at least one of PHIL 11001 or PHIL 21001.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Philosophy  
Course Attributes: Writing Intensive Course

### **PHIL 31030 - EXISTENTIALISM**

Development and themes of existentialism. Prerequisite: None.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Philosophy

### **PHIL 31035 - PHILOSOPHY AND JUSTICE**

Consideration of topics and issues in the general sphere of justice from different perspectives by classical and contemporary philosophers. Prerequisite: None.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Philosophy  
Course Attributes: Diversity Course-Domestic

### **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. Prerequisites: one course in philosophy and junior standing .  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Philosophy  
Course Attributes: Diversity Course-Domestic

### **PHIL 31045 - FORMAL LOGIC**

(Cross-listed with CS 31045 and MATH 31045)  
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  
Department: Philosophy

### **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. Prerequisite: None.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Philosophy

### **PHIL 31065 - PHILOSOPHIES OF RELIGIOUS EXPERIENCE**

Examination of phenomena of religious experience, its structure, ramifications and expression in myth and ritual. Prerequisite: None.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Philosophy

### **PHIL 31068 - RELIGIOUS THOUGHT IN CONTEMPORARY CONTEXTS**

An inquiry into religious convictions, beliefs, symbolizations and texts in contemporary contexts in which religious considerations influence conception, valuation or interpretation of a contemporary situation and how contemporary contexts influence religious thought. Prerequisite: None.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Philosophy

### **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. Prerequisite: None.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Philosophy  
Course Attributes: Diversity Course-Domestic

### **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. Prerequisites: one course in philosophy and junior standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Philosophy  
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. Prerequisite: None.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Philosophy  
Course Attributes: Diversity Course-Global





**PHIL 32091 - SEMINAR:  
PHILOSOPHICAL REFLECTIONS**

Exploration of philosophic literature for contrasting or developing man. Conceptions of human beings. Prerequisite: None.

3. 000 Credit hours  
3. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Seminar  
Department: Philosophy

**PHIL 40005 - HEALTH CARE ETHICS**

Ethical problems in health care critically assessed, and consideration of how these specific ethical problems illuminate the ethical enterprise.

Prerequisite: None.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Philosophy

**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  
Department: Philosophy

**PHIL 41010 - PROBLEMS IN THE  
PHILOSOPHY OF RELIGION**

Philosophical examination of issues and problems presented by various writers in philosophy of religion. Prerequisite: At least one of PHIL 31001 to PHIL 31020.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Philosophy

**PHIL 41015 - 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: 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  
Department: Philosophy

**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, 3105, 31006, 31010 or 31020.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Philosophy

**PHIL 41025 - PHILOSOPHY OF LAW**

Critical examination of the nature and function of law. Prerequisite: None.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Philosophy

**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  
Department: Philosophy

**PHIL 41035 - PHILOSOPHY OF SCIENCE**

Analysis of methodological problems in scientific disciplines. Prerequisite: one of the following - PHIL 31001, 31002, 31003, 31004, 3105, 31006, 31010 or 31020.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Philosophy

**PHIL 41040 - EPISTEMOLOGY**

Study of various theories of knowledge in the philosophical tradition. Prerequisite: one of the following - PHIL 31001, 31003, 31004, 31005, 31006, 31010 or 31020.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Philosophy

**PHIL 41042 - TOPICS IN METAPHYSICS**

(Repeatable for credit) 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: 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  
Department: Philosophy

**PHIL 41045 - METALOGIC**

(Cross-listed with CS 41045 and CS 51045 and MATH 41045 and MATH 51045 and PHIL 51045) Consideration of various metatheorems including soundness and completeness of propositional and predicate calculus, decidability of predicate calculus, and incompleteness of the theory of arithmetic. Prerequisite: PHIL 31045.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Philosophy

**PHIL 41048 - METAETHICS**

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.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Philosophy

**PHIL 41050 - PHILOSOPHICAL ANALYSIS**

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.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Philosophy

**PHIL 41055 - PHENOMENOLOGY**

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, 3105, 31006, 31010 or 31020.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Philosophy

**PHIL 41060 - PRAGMATISM**

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, 3105, 31006, 31010 or 31020.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Philosophy

**PHIL 41065 - PLATO**

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, 3105, 31006, 31010 or 31020.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Philosophy

**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, 3105, 31006, 31010 or 31020.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Philosophy

**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, 3105, 31006, 31010 or 31020.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Philosophy

**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, 3105, 31006, 31010 or 31020.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Philosophy

**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  
Department: Philosophy  
Course Attributes: Writing Intensive Course

**PHIL 41085 - PHILOSOPHY AND CULTURAL THEORY**

A discussion of the philosophical bases of aspects of cultural theory such as postcolonialism and the negritude movement. Prerequisite: one of the following - PHIL 31001, 31002, 31003, 31004, 3105, 31006, 31010 or 31020.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Philosophy

**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  
Department: Philosophy

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

**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  
Levels: Undergraduate  
Schedule Types: Individual Investigation  
Department: Philosophy

**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  
Levels: Undergraduate  
Schedule Types: Senior Project/Honors Thesis  
Department: Philosophy  
Course Attributes: Experiential Learning Requirement

**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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Philosophy

**PHIL 50093 - VARIABLE TITLE WORKSHOP IN PHILOSOPHY**

(Repeatable for credit) Prerequisite: Graduate standing.

1.000 TO 6.000 Credit hours  
3.000 Other hours  
Levels: Graduate  
Schedule Types: Workshop  
Department: Philosophy

**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  
Department: Philosophy

**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  
Department: Philosophy

**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  
Department: Philosophy

**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  
Department: Philosophy

**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  
Department: Philosophy

**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  
Department: Philosophy

**PHIL 51040 - EPISTEMOLOGY**

Study of various theories of knowledge in the philosophical tradition. Prerequisite: Graduate standing.

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

**PHIL 51042 - TOPICS IN 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  
Department: Philosophy

**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, decidability 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  
Department: Philosophy

**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  
Department: Philosophy

**PHIL 51050 - PHILOSOPHICAL ANALYSIS**

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  
Department: Philosophy

**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  
Department: Philosophy

**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  
Department: Philosophy

**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  
Department: Philosophy

**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  
Department: Philosophy

**PHIL 51076 - CONTINENTAL PHILOSOPHY**

Investigation of some figure, issue or theme in continental philosophy from Descartes to present. Prerequisite: Graduate standing.

3. 000 Credit hours  
3. 000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture  
Department: Philosophy

**PHIL 51077 - BRITISH AND AMERICAN PHILOSOPHY**

Detailed investigation of a figure or issue in British or American philosophy. Prerequisite: Graduate standing.

3. 000 Credit hours  
3. 000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture  
Department: Philosophy

**PHIL 51080 - 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: Graduate standing.

3. 000 Credit hours  
3. 000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture  
Department: Philosophy

**PHIL 51085 - PHILOSOPHY AND CULTURAL THEORY**

A discussion of the philosophical bases of aspects of cultural theory such as post colonialism and the negritude movement. Prerequisite: Graduate standing.

3. 000 Credit hours  
3. 000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture  
Department: Philosophy

**PHIL 51086 - PHILOSOPHY OF EXPRESSION**

Concentrated study of expression through philosophy of literature, of music, of body, of language or of symbols. Prerequisite: Graduate standing.

3. 000 Credit hours  
3. 000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture  
Department: Philosophy

**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  
Department: Philosophy

**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  
Department: Philosophy

**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: Lecture  
Department: Philosophy

**PHIL 60201 - SEMINAR: HISTORY OF PHILOSOPHY**

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.

3. 000 Credit hours  
3. 000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture  
Department: Philosophy

**PHIL 61000 - RESPONSIBLE CONDUCT OF RESEARCH**

(Cross-listed with BMS 61000) 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.

1. 000 Credit hours  
1. 000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture  
Department: Philosophy

**PHIL 61050 - PHILOSOPHY OF LANGUAGE**

(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.

3. 000 Credit hours  
3. 000 Lecture hours

Levels: Graduate  
Schedule Types: Lecture  
Department: Philosophy

**PHIL 61055 - SEMEIOTICS**

(Cross-listed with ENG 65057 + ENG 75057 + MCLS 60020) An introduction to contemporary theories of semeiotics 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  
Department: Philosophy

**PHIL 61056 - HERMENEUTICS**

Critical appreciation of the theories and practices of interpretation comprehended according to certain classical, current and emergent philosophic styles and traditions. Prerequisite: Graduate standing.

3. 000 Credit hours  
3. 000 Lecture hours



Levels: Graduate  
Schedule Types: Lecture  
Department: Philosophy

**PHIL 61085 - METAETHICS**

Examination of the conceptions, presuppositions and value judgments of ethical theories.  
Prerequisite: Graduate standing.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Philosophy

**PHIL 69194 - COLLEGE TEACHING OF PHILOSOPHY**

(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.  
1.000 Credit hours  
1.000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Philosophy

**PHIL 69199 - 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: Departmental special approval before registration and graduate standing.  
2.000 TO 6.000 Credit hours  
2.000 TO 6.000 Other hours  
Levels: Graduate  
Schedule Types: Masters Thesis  
Department: Philosophy

**PHIL 69299 - THESIS II**

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  
Department: Philosophy

**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  
Department: Philosophy

**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 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Philosophy

**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  
Department: Philosophy

## Physics (PHY)

**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 physics major. Prerequisite: None.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Physics  
Course Attributes: Kent Core-Basic Sciences, Trnfr Module-Natural Sciences

**PHY 11660 - PHYSICAL SCIENCE**

A course integrating basic concepts in chemistry, physics and astronomy. Prerequisite: None.  
3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab  
Department: Physics  
Course Attributes: Kent Core-Basic Sciences, Trnfr Module-Natural Sciences

**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  
Department: Physics

**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  
Department: Physics

**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 19001.  
3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate

Schedule Types: Combined Lecture and Lab  
Department: Physics

**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  
Department: Physics

**PHY 13001 - GENERAL COLLEGE PHYSICS I**

Principles of mechanics, heat and sound. Three-hour lecture, one-hour recitation. Pre- or corequisite: MATH 11022 or 12002 or 12021. Corequisite: PHY 13021.  
4.000 Credit hours  
3.000 Lecture hours  
1.000 Other hours  
Levels: Undergraduate  
Schedule Types: Lecture, Recitation  
Department: Physics  
Course Attributes: Kent Core-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.  
4.000 Credit hours  
3.000 Lecture hours  
1.000 Other hours  
Levels: Undergraduate  
Schedule Types: Lecture, Recitation  
Department: Physics  
Course Attributes: Kent Core-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 12002 or 12012 or 12021. Corequisite: PHY 13021.  
2.000 Credit hours  
3.000 Lecture hours  
1.000 Other hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Physics  
Course Attributes: Kent Core-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  
Department: Physics





Course Attributes: Kent Core-Basic Sciences,  
Trnfr Module-Natural Sciences

### **PHY 13021 - GENERAL COLLEGE PHYSICS LABORATORY I**

Introductory lab to accompany PHY 13001 or  
PHY 13011. Corequisite: PHY 13001 or PHY  
13011.

1. 000 Credit hours

1. 000 Lab hours

Levels: Undergraduate

Schedule Types: Laboratory

Department: Physics

Course Attributes: Kent Core-Basic Sciences,  
Kent Core-Basic Sciences Lab, LER-Basic  
Sciences

### **PHY 13022 - GENERAL COLLEGE PHYSICS LABORATORY II**

Introductory lab to accompany PHY 13002 or  
PHY 13012. Corequisite: PHY 13002 or PHY  
13012.

1. 000 Credit hours

1. 000 Lab hours

Levels: Undergraduate

Schedule Types: Laboratory

Department: Physics

Course Attributes: Kent Core-Basic Sciences,  
Kent Core-Basic Sciences Lab, LER-Basic  
Sciences

### **PHY 20095 - SPECIAL TOPICS**

(Repeatable for credit) Topic announced when  
scheduled. Prerequisite: None.

1. 000 TO 3. 000 Credit hours

1. 000 TO 3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Physics

### **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 major in physics. Prerequisite:  
None.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Physics

Course Attributes: Kent Core-Basic Sciences,  
Trnfr Module-Natural Sciences

### **PHY 21041 - PHYSICS IN ENTERTAINMENT AND THE ARTS LABORATORY**

Laboratory component of PHY 21040, two hours  
weekly. Pre- or corequisite: PHY 21040.

1. 000 Credit hours

1. 000 Lab hours

Levels: Undergraduate

Schedule Types: Laboratory

Department: Physics

Course Attributes: Kent Core-Basic Sciences,  
Kent Core-Basic Sciences Lab, 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 major in physics. Prerequisite:  
None.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Physics

Course Attributes: Kent Core-Basic Sciences,  
Trnfr Module-Natural Sciences

### **PHY 21431 - FRONTIERS IN ASTRONOMY LABORATORY**

Laboratory component of PHY 21430 Frontiers  
in Astronomy. Pre- or corequisite: PHY 21430.

1. 000 Credit hours

3. 000 Lab hours

Levels: Undergraduate

Schedule Types: Laboratory

Department: Physics

Course Attributes: Kent Core-Basic Sciences,  
Kent Core-Basic Sciences Lab, Trnfr Module-  
Natural Sciences

### **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

Levels: Undergraduate

Schedule Types: Lecture

Department: Physics

### **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- or corequisite MATH  
12002.

5. 000 Credit hours

4. 000 Lecture hours

3. 000 Lab hours

Levels: Undergraduate

Schedule Types: Laboratory, Lecture

Department: Physics

Course Attributes: Kent Core-Basic Sciences,  
Kent Core-Basic Sciences Lab, TAG - Science

### **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

Levels: Undergraduate

Schedule Types: Laboratory, Lecture

Department: Physics

Course Attributes: Kent Core-Basic Sciences,  
Kent Core-Basic Sciences Lab, TAG - Science

### **PHY 30020 - INTERMEDIATE PHYSICS LABORATORY**

(Repeatable for credit) Experiments in classical  
and modern physics are selected to accompany  
and to supplement junior-level physics courses.  
Prerequisite: 10 hours of physics.

2. 000 Credit hours

3. 000 Lab hours

Levels: Undergraduate

Schedule Types: Laboratory

Department: Physics

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

Department: Physics

### **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

Department: Physics

### **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

Department: Physics

### **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

Department: Physics

### **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

Department: Physics

**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

Department: Physics

**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

Department: Physics

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

Department: Physics

**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

Department: Physics

Course Attributes: Experiential Learning Requirement

**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

Department: Physics

**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

Department: Physics

**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

Department: Physics

Course Attributes: Experiential Learning Requirement, Honors Course

**PHY 40195 - 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

Department: Physics

**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

Department: Physics

**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

Department: Physics

**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

Department: Physics

**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

Department: Physics

**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

Department: Physics

**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

Department: Physics

**PHY 45403 - 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.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Physics

**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

Levels: Undergraduate

Schedule Types: Lecture

Department: Physics

**PHY 46101 - QUANTUM MECHANICS**

Systematic introduction to the principles and solution techniques of quantum mechanics, including the Schrodinger 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.  
4. 000 Credit hours  
4. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Physics

#### **PHY 46301 - INTRODUCTION TO NUCLEAR PHYSICS**

(Cross-listed with PHY 56301) Introduction to the concepts of nuclear physics including basic properties of the atomic nucleus, experimental techniques, nuclear models and reactions, nuclear fission and fusion, and elementary particles. Prerequisite: PHY 36001. Pre- or corequisite: MATH 32052.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Physics

#### **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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Physics

#### **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.  
2. 000 Credit hours  
3. 000 Lab hours  
Levels: Graduate  
Schedule Types: Laboratory  
Department: Physics

#### **PHY 50093 - VARIABLE TITLE WORKSHOP IN PHYSICS**

(Repeatable for credit) Workshops individually designed to provide instruction and training in specific areas of physics. 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  
Department: Physics

#### **PHY 50095 - SPECIAL TOPICS**

(Repeatable for credit) Topic 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  
Department: Physics

#### **PHY 50096 - INDIVIDUAL INVESTIGATION**

(Repeatable for credit) Individual projects for physics graduate students. Prerequisite: Graduate standing.  
1. 000 TO 3. 000 Credit hours  
1. 000 TO 3. 000 Other hours  
Levels: Graduate  
Schedule Types: Individual Investigation  
Department: Physics

#### **PHY 50195 - SPECIAL TOPICS**

(Repeatable for credit) Topic 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  
Department: Physics

#### **PHY 51010 - BIOPHOTONICS**

(Cross-listed with BSCI 41010 and BSCI 51010 and CHEM 41010 and CHEM 51010 and PHY 41010) 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 and graduate standing.  
3. 000 Credit hours  
1. 000 Lecture hours  
6. 000 Lab hours  
Levels: Graduate  
Schedule Types: Combined Lecture and Lab  
Department: Physics

#### **PHY 54291 - PLANETARIUM OPERATION AND PROGRAMMING**

(Repeatable for credit) Planetarium operation, advantages and limitations. Slides, technamation, special effects and programs for K-12 grades, public and special groups. Prerequisite: Special approval and graduate standing.  
1. 000 Credit hours  
1. 000 Other hours  
Levels: Graduate  
Schedule Types: Seminar  
Department: Physics

#### **PHY 54802 - ASTROPHYSICS**

Galactic structure, stellar formation and evolution, origin of the elements (or nucleosynthesis), non optical astronomicals, and a description of various cosmological theories. Prerequisite: MATH 12003. Graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Physics

#### **PHY 55201 - ELECTROMAGNETIC THEORY**

Properties of electric and magnetic fields developed by vector methods. Treatment of static fields in vacuum and matter. Theory of classical

electromagnetic fields with emphasis on dynamic fields. Prerequisite: graduate standing.  
4. 000 Credit hours  
4. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Physics

#### **PHY 55301 - THERMAL PHYSICS**

An introduction to thermodynamics and statistical mechanics, with applications in material science and engineering. Prerequisite: PHY 36001 and graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Physics

#### **PHY 55401 - 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 and graduate standing.  
4. 000 Credit hours  
4. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Physics

#### **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  
Department: Physics

#### **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  
Department: Physics

#### **PHY 56101 - QUANTUM MECHANICS**

Systematic introduction to the principles and solution techniques of quantum mechanics, including the Schrodinger 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

Department: Physics

### **PHY 56301 - INTRODUCTION TO NUCLEAR PHYSICS**

(Cross-listed with PHY 46301) Introduction to the concepts of nuclear physics including basic properties of the atomic nucleus, experimental techniques, nuclear models and reactions, nuclear fission and fusion, and elementary particles.

Prerequisite: PHY 36001 and graduate standing.

Pre- or corequisite: MATH 32052.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Physics

### **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

Department: Physics

### **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

Department: Physics

### **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

Department: Physics

### **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

Department: Physics

### **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

Department: Physics

### **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

Department: Physics

### **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

Department: Physics

### **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

Department: Physics

### **PHY 60395 - 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

1. 000 TO 3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Physics

### **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

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Physics

### **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

Department: Physics

### **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

Department: Physics

### **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

Department: Physics

### **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

Department: Physics

### **PHY 66161 - QUANTUM MECHANICS I**

Fundamental concepts of non-relativistic quantum mechanics. Solution of simple one dimensional problems. Abstract Hilbert-space description. Matrix representations. Quantum dynamics. Extension to three dimensions. Spin and orbital angular momentum. Prerequisite: Special approval and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Physics

### **PHY 66162 - QUANTUM MECHANICS II**

Angular momentum theory. Symmetries and conservation laws. Application of approximation methods to realistic problems. Systems of identical particles. Scattering theory. Relativistic single particle wave equations. Prerequisite: PHY 6/76161 and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Physics



**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

Department: Physics

**PHY 66302 - NUCLEAR PHYSICS**

Theory of nuclear processes including properties of nuclear quantum states, two-body forces, nuclear structure and models, nuclear reactions and nuclear radiation physics. Prerequisite: PHY 56101 and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Physics

**PHY 66303 - ADVANCED NUCLEAR PHYSICS**

Advanced concepts and theories of nuclear interactions. Topics include the nucleon interaction, nuclear structure, reactions, nuclear matter and strong interactions of elementary particles. Prerequisites: PHY 66302 and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Physics

**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

Department: Physics

**PHY 66402 - SOLID STATE PHYSICS II**

Covers several topics including conduction in metals, dielectric and ferroelectric properties, the origin of magnetism, phenomenological and BCS descriptions of superconductivity, elastic theory and semiconductor physics. Prerequisite: PHY 6/76401 and PHY 6/76161; and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Physics

**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

Department: Physics

**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

Department: Physics

**PHY 70093 - VARIABLE TITLE WORKSHOP IN PHYSICS**

(Repeatable for credit) Workshops individually designed to provide instruction and training in specific areas of physics. Prerequisite: Doctoral standing.

1. 000 TO 6. 000 Credit hours

1. 000 TO 6. 000 Other hours

Levels: Graduate

Schedule Types: Workshop

Department: Physics

**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

Department: Physics

**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

Department: Physics

**PHY 70195 - 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

Department: Physics

**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

Department: Physics

**PHY 70395 - 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

1. 000 TO 3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Physics

**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

Department: Physics

**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

Department: Physics

**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

Department: Physics

**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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Physics

**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.

4. 000 Credit hours

4. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Physics

**PHY 76161 - QUANTUM MECHANICS I**

Fundamental concepts of non-relativistic quantum mechanics. Solution of simple one dimensional problems. Abstract Hilbert space description. Matrix representations. Quantum dynamics. Extension to three dimensions. Spin and orbital angular momentum. Prerequisite: Permission and doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Physics

**PHY 76162 - QUANTUM MECHANICS II**

Angular momentum theory. Symmetries and conservation laws. Application of approximation methods to realistic problems. Systems of identical particles. Scattering theory. Relativistic single particle wave equations. Prerequisite: PHY 6 76161 and doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Physics

**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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Physics

**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

Department: Physics

**PHY 76302 - NUCLEAR PHYSICS**

Theory of nuclear processes including properties of nuclear quantum states, two body forces nuclear structure and models nuclear reactions and nuclear radiation physics. Prerequisite: PHY 56101 or equivalent or permission. Doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Physics

**PHY 76303 - ADVANCED NUCLEAR PHYSICS**

Advanced concepts and theories of nuclear interactions. Topics include the nucleon-nucleon interaction, nuclear structure, reactions, nuclear matter and strong interactions of elementary particles. Prerequisite: PHY 6 76302 and PHY 76163. Doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Physics

**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

Department: Physics

**PHY 76402 - SOLID STATE PHYSICS II**

Covers several topics including conduction in metals, dielectric and ferro-electric properties, the origin of magnetism, phenomenological and BCS descriptions of superconductivity, elastic theory and semiconductor physics. Prerequisite: PHY 6 76401 and PHY 6 76161 and doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Physics

**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

Department: Physics

**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

Department: Physics

**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

Department: Physics

**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

Department: Physics

**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

Department: Physics

**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

Schedule Types: Dissertation

Department: Physics

**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

Levels: Graduate

Schedule Types: Dissertation

Department: Physics

**PHY 88191 - CHEMICAL PHYSICS SEMINAR**

(Repeatable for credit) Discussions of current literature or of original research in chemical physics. Participation by students faculty and guests. Prerequisite: Doctoral standing.

1. 000 Credit hours

3. 000 Other hours

Levels: Graduate

Schedule Types: Seminar

Department: Physics

## *Plastics Technology (PLCT)*

**PLCT 12000 - INTRODUCTION TO PLASTICS**

Description of various plastics, outline of polymer chemistry, identification tests, polymerization, molecular growth and molecular weight, extrusion, injection molding, thermoforming, compression molding and related topics.

Prerequisite: None.

4. 000 Credit hours

4. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Regional

**PLCT 12003 - REINFORCED PLASTICS**

Comprehensive review of resin systems and fiber reinforcement for use in production of FRP products. Fabrication procedures. Comparative properties. Prerequisite: PLCT 12000.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Regional

## *Paralegal Studies (PLST)*

**PLST 18000 - INTRODUCTION TO PARALEGAL STUDIES**

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

Levels: Undergraduate

Schedule Types: Lecture

Department: Sociology

**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: PLST 18000.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Sociology

**PLST 28003 - FAMILY LAW AND PROCEDURE**

Designed to acquaint the student with family law substance and practice. Included definitions, terminology, topical areas and the philosophy underlying family law practice. Prerequisite: PLST 18000.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Sociology

**PLST 28004 - PRINCIPLES AND PRACTICE OF LITIGATION**

Introduction to the rules of civil procedure, statutes of limitation and discovery. Includes the role of the legal assistant in preparing for litigation. Prerequisite: PLST 18000.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Sociology

**PLST 28007 - ESTATE AND PROBATE ADMINISTRATION**

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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Sociology

**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

Department: Sociology

Course Attributes: Experiential Learning Requirement

**PLST 38002 - CONTRACT LAW**

This course is intended to provide students with an in-depth analysis of the law pertaining to contract formation, resolution of contract disputes and the impact of the uniform commercial code on traditional contract theory. Prerequisite: PLST 18000 and 28001.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Sociology

**PLST 38003 - ADMINISTRATIVE LAW AND PROCESS**

Substantive and procedural aspects of administrative law. Topics include the regulation of public utility, transportation agencies, employment, food and drugs, and environment. Prerequisite: 9 credit hours of paralegal studies (PLST) coursework, including PLST 18000.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Sociology

**PLST 38004 - LEGAL ETHICS AND PROFESSIONAL RESPONSIBILITY**

This course will introduce students to the types of ethical dilemmas that they will face once in the work force; to the ethical rules developed by the American Bar Association; and to methods for researching the answers to ethical dilemmas. Prerequisite: PLST 18000 and 28001.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Sociology

**PLST 38005 - TORT LAW**

Focuses on tort and personal injury law. Topics include intentional injuries to person and property, negligence, strict liability, product liability, defenses and immunity, and ethics. Prerequisite: PLST 18000 and 28001.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Sociology

**PLST 38006 - APPLIED LEGAL RESEARCH AND LITIGATION**

Case analysis and preparation of argumentative memorandum. Includes writing of factual memoranda, file summaries and advocacy letters. Prerequisite: PLST 18000 and 28001.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Sociology

Course Attributes: Writing Intensive Course

**PLST 47111 - CIVIL LAW AND PROCEDURE**

Substantive and procedural aspects of civil law with particular emphasis on civil actions arising out of breaches of criminal law. Prerequisite: JUS 12000 or PLST 18000; and junior standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Sociology

**PLST 48300 - LAW OF CORPORATIONS AND OTHER ASSOCIATIONS**

This course will cover 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: PLST 18000 and 28001.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Sociology

**PLST 48400 - INTELLECTUAL PROPERTY LAW**

The purpose of this course is to acquaint students with the fundamentals of intellectual property ("IP") law. Students will be introduced to the four primary fields within intellectual property: trademarks, copyrights, patents and trade secrets. At the conclusion of the course students will fully understand how IP rights are acquired, registered (if necessary), protected, transferred and infringed. Moreover, students will be introduced to emerging IP topics and introduced to international developments in the IP fields. Prerequisite: PLST 18000 and 28001.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Sociology

## *Podiatric Medicine (PMD)*

**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  
Department: Podiatric Medicine

### **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  
Department: Podiatric Medicine

### **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  
Department: Podiatric Medicine

### **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  
Department: Podiatric Medicine

### **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

Department: Podiatric Medicine

### **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  
Department: Podiatric Medicine

### **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  
Department: Podiatric Medicine

### **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  
Department: Podiatric Medicine

### **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  
Department: Podiatric Medicine

### **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  
Department: Podiatric Medicine

### **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  
Department: Podiatric Medicine

### **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  
Levels: Professional  
Schedule Types: Lecture  
Department: Podiatric Medicine

### **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

Department: Podiatric Medicine

### **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

Department: Podiatric Medicine

### **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

Department: Podiatric Medicine

### **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

Department: Podiatric Medicine

### **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

Department: Podiatric Medicine

## **Political Science (POL)**

### **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

Department: Political Science

### **POL 10004 - COMPARATIVE POLITICS**

This course 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

Department: Political Science

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

### **POL 10100 - AMERICAN POLITICS**

This course 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

Levels: Undergraduate

Schedule Types: Lecture

Department: Political Science

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

### **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

Levels: Undergraduate

Schedule Types: Lecture

Department: Political Science

### **POL 10301 - DIVERSITY IN AMERICAN PUBLIC POLICY**

This course focuses on the electoral and institutional aspects of sex, race, age and social class as those classifications function as both causes and effects of voting behavior and public law. Prerequisite: None.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Political Science

Course Attributes: Diversity Course-Domestic, Kent Core-Social Sciences, Trnfr Module-Social Sciences

### **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

Levels: Undergraduate

Schedule Types: Lecture

Department: Political Science

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

### **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

Levels: Undergraduate

Schedule Types: Lecture

Department: Political Science

### **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

Levels: Undergraduate

Schedule Types: Lecture

Department: Political Science

### **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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Political Science

### **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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Political Science

### **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  
Department: Political Science

### **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  
Department: Political Science

### **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  
Department: Political Science

### **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  
Department: Political Science

### **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  
Department: Political Science

### **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  
Department: Political Science

### **POL 30350 - ENVIRONMENTAL CONFLICT RESOLUTION**

(Cross-listed with CACM 35050) Examines alternative dispute resolution principles applicable to public sector disputes, especially environmental and land use disputes. Prerequisite: POL 10300.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Political Science

### **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  
Department: Political Science

### **POL 30440 - STATE AND LOCAL GOVERNMENT**

Covers the fundamental aspects of governing at the municipal, county and state levels, including financing and dealings with the federal government. Prerequisite: none.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Political Science

### **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  
Schedule Types: Lecture  
Department: Political Science

### **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  
Department: Political Science

### **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  
Department: Political Science

### **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  
Department: Political Science

### **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  
Department: Political Science

### **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  
Department: Political Science  
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

Department: Political Science

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

Department: Political Science

Course Attributes: Diversity Course-Global

### **POL 30551 - U. S. -LATIN AMERICAN RELATIONS**

Survey of U. S. -Latin American diplomacy, contemporary hemispheric issues and relations between Latin American states themselves.

Prerequisite: POL 10004.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Political Science

### **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 10400.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Political Science

### **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

Department: Political Science

### **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

Department: Political Science

### **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

Department: Political Science

### **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

Department: Political Science

Course Attributes: Experiential Learning Requirement

### **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

Department: Political Science

### **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

Department: Political Science

### **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

Department: Political Science

### **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

Department: Political Science

### **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

Department: Political Science

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 30001 and POL 30002 or POL 30003; and political science (POL) major.

3. 000 Credit hours

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Seminar

Department: Political Science

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

Department: Political Science

### **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 30001 and POL 30002 or 30003; and political science (POL) major.

3. 000 Credit hours

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Seminar

Department: Political Science

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

Department: Political Science

#### **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

Department: Political Science

#### **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

Department: Political Science

#### **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

Department: Political Science

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

Department: Political Science

#### **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

Department: Political Science 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

Department: Political Science 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. Prerequisites: POL 10100 or 10300; and POL 10004 or 10500; and POL 30001 and POL 30002 or 30003; and political science (POL) major.

3. 000 Credit hours

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Seminar

Department: Political Science

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

Levels: Undergraduate

Schedule Types: Lecture

Department: Political Science

#### **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

Department: Political Science

#### **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

Department: Political Science

#### **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

Department: Political Science

#### **POL 40992 - PUBLIC SERVICE**

(Repeatable for credit) Allows academic credit for approved participation in variety of political processes, or as an intern with governmental or private agencies dealing with public affairs. Prerequisite: Political science (POL) majors and special approval.

1. 000 TO 3. 000 Credit hours

1. 000 TO 3. 000 Other hours

Levels: Undergraduate

Schedule Types: Field Experience

Department: Political Science

Course Attributes: Experiential Learning

Requirement

#### **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

Department: Political Science

#### **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

Department: Political Science

#### **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. Prerequisite: Political science (POL) majors and special approval.

1. 000 TO 3. 000 Credit hours

1. 000 TO 3. 000 Other hours

Levels: Undergraduate

Schedule Types: Individual Investigation

Department: Political Science





### **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: Lecture  
Department: Political Science

### **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  
Department: Political Science

### **POL 60002 - APPROACHES TO PUBLIC POLICY**

This course 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 the field of public policy. Prerequisite: Graduate standing.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Political Science

### **POL 60003 - POLICY METHODS I**

This course provides a selective introduction to basic quantitative methods for the analysis of public policy dealing with basic descriptive and inferential statistics and an introduction to qualitative techniques. Prerequisite: Graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Political Science

### **POL 60004 - PUBLIC POLICY METHODS II**

This course introduces students to multivariate quantitative techniques appropriate for the analysis of public policy and incorporates a broad array of advanced qualitative analysis. Prerequisite: Graduate standing.  
3. 000 Credit hours

3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Political Science

### **POL 60006 - FOUNDATIONS OF PUBLIC POLICY**

This course covers the development of policy studies as a field. As a broad survey this course introduces general concepts and debates with applications within each field of specialization. Prerequisite: Graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Political Science

### **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  
Department: Political Science

### **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  
Department: Political Science

### **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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Political Science

### **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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Political Science

### **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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Political Science

### **POL 60107 - CONFLICT AND CONSENSUS IN THE PUBLIC SECTOR**

This course introduces students to public sector conflict resolution processes such as environmental mediation, regulatory-negotiation, collaborative problem solving, and consensus-building. Of particular interest is the utility of these processes in specific arenas of public policy. Prerequisite: POL 60101 or POL 60301 or POL 60701; and graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Political Science

### **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.  
3. 000 Credit hours  
3. 000 Other hours  
Levels: Graduate  
Schedule Types: Seminar  
Department: Political Science

### **POL 60301 - PROSEMINAR IN POLICY ANALYSIS AND ADMINISTRATION**

This course covers the systematic procedures for analysis of policy problems. Special attention is paid to economic concepts such as cost benefit analysis and the role of multiple values in the policy process. Prerequisite: Graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Political Science

### **POL 60302 - BUREAUCRACY AND THE POLICYMAKING PROCESS**

This course provides students with a theoretical and practical understanding of the bureaucracy as a unit of analysis in policy studies. Of particular interest is the interaction of the bureaucracy with other policymaking institutions and non-state actors. Prerequisite: POL 60301 and graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Political Science

**POL 60303 - REGULATORY POLICY**

This course examines the politics of regulatory policy from a variety of theoretical perspectives. These theories are applied to several domains of regulation, primarily those relating to public finance. POL 60301 and graduate standing.

3. 000 Credit hours  
3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Political Science

**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

Department: Political Science

**POL 60307 - ISSUES IN AMERICAN PUBLIC POLICY**

The primary purpose of this course is to apply the conceptual tools of public policy analysis to current issues facing the U. S. government. Students are introduced to the major policy debates regarding these issues with reference to the historical, political-economic, and cultural context in which they occur. Prerequisite: POL 60301 and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Political Science

**POL 60391 - SEMINAR IN POLICY ANALYSIS AND ADMINISTRATION**

(Repeatable for credit) Seminar on current and important topics in policy analysis and administration. Subject matter varies depending on the emerging issue. This course may be repeated for credit with departmental approval. Prerequisite: Graduate standing.

3. 000 Credit hours

3. 000 Other hours

Levels: Graduate

Schedule Types: Seminar

Department: Political Science

**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

Department: Political Science

**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

Department: Political Science

**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

Department: Political Science

**POL 60504 - U. S. FOREIGN POLICY**

This course examines the dilemmas facing the U. S. government as it confronts a rapidly changing international system. Historical patterns are considered along with current issues regarding the formulation and conduct of U. S. foreign policy. Prerequisite: POL 60501 or POL 60101; and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Political Science

**POL 60505 - COMPARATIVE PUBLIC POLICY AND ADMINISTRATION**

This course examines theoretical and substantive issues in comparative public policy and public administration. The various frameworks approaches and schools of thought are reviewed in each area of study. Prerequisite: POL 60501 or POL 60301; and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Political Science

**POL 60506 - INTERNATIONAL POLITICAL ECONOMY AND DEVELOPMENT POLICY**

This course is designed to provide a variety of perspectives with which to make sense of the structure of the international economy and the policy options available to governments seeking to encourage domestic economic development. Prerequisite: POL 60501 and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Political Science

**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

Department: Political Science

**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

Department: Political Science

**POL 60701 - PROSEMINAR IN ISSUES IN CONTEMPORARY JUSTICE**

An analysis of current issues in the legislative, policing, judicial and correctional components of the justice system. Prerequisite: Graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Political Science

**POL 60703 - COMMUNITY AND DOMESTIC VIOLENCE**

This course explores the causes and implications of violence in our homes and communities. Conflict management strategies and techniques are reviewed to see how they have served as policy solutions as agents of change or in maintaining the status quo. Prerequisite: POL 60701 and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Political Science

**POL 60704 - THEORIES OF CRIME AND DELINQUENCY**

Examination of major theoretical concepts in criminology that have been utilized to explain criminal behavior and juvenile delinquency. Includes discussion of social policy implications. Prerequisite: Graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Political Science


**POL 60791 - SEMINAR IN JUSTICE POLITICS AND POLICY**

(Repeatable for credit) Seminar on current and important topics in justice politics and policy. Subject matter varies depending on the emerging issue. This course may be repeated for credit with departmental approval. Prerequisite: Graduate standing.

3. 000 Credit hours

3. 000 Other hours

Levels: Graduate

Schedule Types: Seminar

Department: Political Science

**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

Department: Political Science

**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

Levels: Graduate

Schedule Types: Research

Department: Political Science

**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

Department: Political Science

**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

Department: Political Science

**POL 69091 - SEMINAR: PUBLIC POLICY METHODS**

(Repeatable for credit) Will focus on select topics in public policy methods, including methodology or advanced applied policy analysis. More than one seminar may be offered. Prerequisite: Graduate standing.

3. 000 Credit hours

3. 000 Other hours

Levels: Graduate

Schedule Types: Seminar

Department: Political Science

**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

Department: Political Science

**POL 70002 - APPROACHES TO PUBLIC POLICY**

This course 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 the field of public policy. Prerequisite: Doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Political Science

**POL 70003 - POLICY METHODS I**

This course provides a selective introduction to basic quantitative methods for the analysis of public policy dealing with basic descriptive and inferential statistics and an introduction to qualitative techniques. Prerequisite: Doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Political Science

**POL 70004 - PUBLIC POLICY METHODS II**

This course introduces students to multivariate quantitative techniques appropriate for the analysis of public policy and incorporates a broad array of advanced qualitative analysis. Prerequisite: Doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Political Science

**POL 70006 - FOUNDATIONS OF PUBLIC POLICY**

This course covers the development of policy studies as a field. As a broad survey this course introduces general concepts and debates with applications within each field of specialization. Prerequisite: Doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Political Science

**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

Schedule Types: Lecture

Department: Political Science

**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

Department: Political Science

**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

Department: Political Science

**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

Department: Political Science

**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

Department: Political Science

**POL 70107 - CONFLICT AND CONSENSUS IN THE PUBLIC SECTOR**

This course introduces students to public sector conflict resolution processes such as environmental mediation, regulatory-negotiation, collaborative problem solving, and consensus-building. Of particular interest is the utility of these processes in specific arenas of public policy. Prerequisite: POL 70101 or POL 70301 or POL 70701; and doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate



Schedule Types: Lecture  
Department: Political Science

### **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

Department: Political Science

### **POL 70195 - SPECIAL TOPICS IN PUBLIC ADMINISTRATION**

(Repeatable for credit) 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

Department: Political Science

### **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

Department: Political Science

### **POL 70301 - PROSEMINAR IN POLICY ANALYSIS AND ADMINISTRATION**

This course covers the systematic procedures for analysis of policy problems. Special attention is paid to economic concepts such as cost benefit analysis and the role of multiple values in the policy process. Prerequisite: Doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Political Science

### **POL 70302 - BUREAUCRACY AND THE POLICYMAKING PROCESS**

This course provides students with a theoretical and practical understanding of the bureaucracy as a unit of analysis in policy studies. Of particular interest is the interaction of the bureaucracy with other policymaking institutions and non-state actors. Prerequisite: POL 70301 and doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Political Science

### **POL 70303 - REGULATORY POLICY**

This course examines the politics of regulatory policy from a variety of theoretical perspectives.

These theories are applied to several domains of regulation, primarily those relating to public finance. Prerequisite: POL 70301 and doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Political Science

### **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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Political Science

### **POL 70307 - ISSUES IN AMERICAN PUBLIC POLICY**

The primary purpose of this course is to apply the conceptual tools of public policy analysis to current issues facing the U. S. government. Students are introduced to the major policy debates regarding these issues with reference to the historical, political, economic and cultural context in which they occur. Prerequisite: POL 70301 and doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Political Science

### **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: Undergraduate

Schedule Types: Lecture

Department: Political Science

### **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

Department: Political Science

### **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

Department: Political Science

### **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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Political Science

### **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

Department: Political Science

### **POL 70391 - SEMINAR IN POLICY ANALYSIS AND ADMINISTRATION**

(Repeatable for credit) Seminar on current and important topics in policy analysis and administration. 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

Department: Political Science





### **POL 70392 - 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: 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  
Department: Political Science

### **POL 70492 - CAPSTONE SEMINAR**

(Repeatable for credit) Students complete an approved, written project that is analytical and research based. Prerequisite: political science (POL) major; and doctoral standing; and special approval needed from department.

3. 000 Credit hours  
3. 000 Other hours  
Levels: Graduate  
Schedule Types: Seminar  
Department: Political Science

### **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  
Department: Political Science

### **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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Political Science

### **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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Political Science

### **POL 70504 - U. S. FOREIGN POLICY**

This course examines the dilemmas facing the U. S. government as it confronts a rapidly changing international system. Historical patterns are considered along with current issues regarding the formulation and conduct of U. S. foreign policy.

Prerequisite: POL 70501 or POL 70101; and doctoral standing.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Political Science

### **POL 70505 - COMPARATIVE PUBLIC POLICY AND ADMINISTRATION**

This course examines theoretical and substantive issues in comparative public policy and public administration. The various frameworks approaches and schools of thought are reviewed in each area of study. Prerequisites: POL 70501 or POL 70301; and doctoral standing.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Political Science

### **POL 70506 - INTERNATIONAL POLITICAL ECONOMY AND DEVELOPMENT POLICY**

This course is designed to provide a variety of perspectives with which to make sense of the structure of the international economy and the policy options available to governments seeking to encourage domestic economic development. Prerequisite: POL 70501 and doctoral standing.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Political Science

### **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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Political Science

### **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  
Department: Political Science

### **POL 70701 - PROSEMINAR IN ISSUES IN CONTEMPORARY JUSTICE**

An analysis of current issues in the legislative, policing, judicial and correctional components of the justice system. Prerequisite: Doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Political Science

### **POL 70702 - JUSTICE INSTITUTIONS**

This course introduces students to various institutions related to the U. S. criminal justice system. Students examine techniques for conducting institutional analysis and apply these techniques to law enforcement, judicial and correctional institutions. Prerequisite: POL 70701 and doctoral standing.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Political Science

### **POL 70703 - COMMUNITY AND DOMESTIC VIOLENCE**

This course explores the causes and implications of violence in our homes and communities. Conflict management strategies and techniques are reviewed to see how they have served as policy solutions, as agents of change, or in maintaining the status quo. Prerequisite: POL 70701 and doctoral standing.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Political Science

### **POL 70704 - THEORIES OF CRIME AND DELINQUENCY**

Examination of major theoretical concepts in criminology that have been utilized to explain criminal behavior and juvenile delinquency. Includes discussion of social policy implications. Prerequisite: Doctoral standing.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Political Science

### **POL 70705 - COMPARATIVE JUSTICE INSTITUTIONS AND POLICY**

Cross-cultural analysis of crime and the justice institutions/justice policies of various countries. The developmental backgrounds, structure and functioning of the systems are compared. Important issues in international justice are considered. Prerequisite: Doctoral standing.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Political Science

### **POL 70706 - VICTIMOLOGY**

Patterns of victim-offender relationship. Role of victims in the justice studies process. Problems of adjustment to victimization and compensating the victim. Prerequisite: Doctoral standing.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Political Science

**POL 70707 - LAW, JUSTICE AND SOCIETY**

Course reviews the origins, structure and functioning of law in relation to social context and process. Topics to be covered include theories of law and society, law as a form of social control and the use of law and legal institutions to address societal problems. Prerequisite: Doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Political Science

**POL 70791 - SEMINAR IN JUSTICE POLITICS AND POLICY**

(Repeatable for credit with departmental approval) Seminar on current and important topics in justice politics and policy. Subject matter varies depending on the emerging issue. Prerequisite: Doctoral standing.

3. 000 Credit hours

3. 000 Other hours

Levels: Graduate

Schedule Types: Seminar

Department: Political Science

**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

Department: Political Science

**POL 79091 - SEMINAR: PUBLIC POLICY METHODS**

(Repeatable for credit) Will focus on select topics in public policy methods, including Q methodology or advanced applied policy analysis. More than one seminar may be offered.

Prerequisite: Doctoral standing.

3. 000 Credit hours

3. 000 Other hours

Levels: Graduate

Schedule Types: Seminar

Department: Political Science

**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

Department: Political Science

**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

Department: Political Science

**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

Department: Political Science

**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

Department: Political Science

**Portuguese (PORT)****PORT 17201 - ELEMENTARY PORTUGUESE I**

An introduction to the Portuguese language in the context of Luso-Brazilian cultures. Prerequisite: Special approval.

4. 000 Credit hours

4. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

**PORT 17202 - ELEMENTARY PORTUGUESE II**

A continuation of the introduction to the Portuguese language in the context of Luso-Brazilian cultures. Prerequisite: PORT 17201.

4. 000 Credit hours

4. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

**PORT 27210 - INTENSIVE PORTUGUESE**

Intensive study for students continuing beyond elementary Portuguese and for those with the equivalent of Spanish Composition and Conversation I. Course provides training through intermediate Portuguese II. Prerequisite: PORT 17202 or SPAN 38211.

5. 000 Credit hours

5. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

**PORT 37211 - COMPOSITION AND CONVERSATION**

Study and practice of oral and written Portuguese.

Prerequisite: PORT 27210.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

**PORT 47093 - VARIABLE TITLE WORKSHOP IN PORTUGUESE**

(Repeatable for credit) Workshops individually designed to provide instruction and training in specific areas of Portuguese 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

Department: Modern and Classical Language Studies

**PORT 47095 - SELECTED TOPICS**

(Repeatable for credit) Intensive treatment of a selected aspect of Luso-Brazilian literature or linguistics. Topic announced in the schedule of classes. Prerequisite: 9 hours of 30000-level Portuguese (PORT) courses.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

**PORT 47096 - INDIVIDUAL INVESTIGATION**

(Repeatable for a maximum of 6 credit hours) Allows the advanced, serious student to carry out research study project on Portuguese literature, language or culture. Prior approval of supervising faculty member department required. Prerequisites: PORT 27210 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

Department: Modern and Classical Language Studies

**Psychology (PYSC)****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

Department: Psychology

Course Attributes: Diversity Course-Domestic, Kent Core-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

Department: Psychology

Course Attributes: Diversity Course-Domestic,

Kent Core-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

Levels: Undergraduate

Schedule Types: Lecture

Department: Psychology

Course Attributes: Diversity Course-Domestic, Kent Core-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

Department: Psychology

**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

Department: Psychology

Course Attributes: Diversity Course-Domestic, Kent Core-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

Department: Psychology

**PSYC 30445 - COGNITIVE PSYCHOLOGY**

Covers the mental processes that underlie 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

Department: Psychology

**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

Levels: Undergraduate

Schedule Types: Lecture

Department: Psychology

**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

Levels: Undergraduate

Schedule Types: Lecture

Department: Psychology

**PSYC 30655 - COGNITIVE DEVELOPMENT**

Covers the development of cognitive processes over the lifespan, especially during infancy and childhood. Important theoretical claims empirical results and research methods of relevant areas including memory are, critically evaluated.

Prerequisite: PSYC 11762; and PSYC 20651 or HDFS 24012.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Psychology

**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

Levels: Undergraduate

Schedule Types: Lecture

Department: Psychology

**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

Levels: Undergraduate

Schedule Types: Lecture

Department: Psychology

**PSYC 31043 - 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

Department: Psychology

**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

Department: Psychology

**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

Department: Psychology

Course Attributes: Experiential Learning Requirement

**PSYC 31574 - RESEARCH METHODS IN PSYCHOLOGY**

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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Psychology

**PSYC 31684 - QUANTITATIVE METHODS IN PSYCHOLOGY II**

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.



3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Psychology

### **PSYC 31773 - INDUSTRIAL PSYCHOLOGY**

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.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Psychology

### **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  
Department: Psychology  
Course Attributes: TAG - Social/Behavior Sciences

### **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  
Department: Psychology

### **PSYC 40383 - PSYCHOLOGICAL INTERVENTIONS**

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  
Department: Psychology

### **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 30445.

3. 000 Credit hours

3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Psychology

### **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  
Department: Psychology  
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  
Department: Psychology

### **PSYC 41282 - 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  
Department: Psychology  
Course Attributes: TAG - Social/Behavior Sciences

### **PSYC 41363 - BIOPSYCHOLOGY**

Covers 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. Prerequisite: PSYC 11762.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Psychology

### **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  
Department: Psychology  
Course Attributes: Experiential Learning Requirement

### **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  
Department: Psychology

### **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  
Department: Psychology  
Course Attributes: Experiential Learning Requirement

### **PSYC 41532 - 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  
Department: Psychology  
Course Attributes: TAG - Social/Behavior Sciences

### **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  
Department: Psychology  
Course Attributes: Writing Intensive Course

### **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

Department: Psychology

### **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

Department: Psychology

Course Attributes: Writing Intensive Course

### **PSYC 41991 - SEMINAR IN PSYCHOLOGY**

(Repeatable for credit) Seminar on various content areas of psychology. Specific topics announced. Prerequisite: PSYC 11762 and special approval.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Seminar

Department: Psychology

### **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

Levels: Undergraduate

Schedule Types: Workshop

Department: Psychology

### **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

Department: Psychology

### **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

Department: Psychology

### **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

Department: Psychology

### **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

Department: Psychology

### **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

Department: Psychology

### **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

Department: Psychology

### **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

Department: Psychology

### **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

Department: Psychology

### **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

Department: Psychology

### **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

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Psychology

### **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

Levels: Graduate

Schedule Types: Lecture

Department: Psychology

### **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

Levels: Graduate

Schedule Types: Lecture

Department: Psychology

### **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

Levels: Graduate

Schedule Types: Lecture

Department: Psychology

**PSYC 60373 - FAMILY THERAPY**

Consideration of major theories, approaches and research in family therapy. Practical experience in conducting family therapy through supervision and discussion of ongoing cases. Prerequisite: PSYC 6/70371 and PSYC 6/70792 and graduate standing in psychology.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Psychology

**PSYC 60374 - GROUP PSYCHOTHERAPY**

Introduction to group psychotherapy with emphasis on theories, techniques and research findings. Prerequisite: PSYC 6/70371 and PSYC 6/70792; and graduate standing in psychology.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Psychology

**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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Psychology

**PSYC 60376 - 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 research. Prerequisite: PSYC 6/70371 and PSYC 6/70792; and graduate standing in psychology.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Psychology

**PSYC 60395 - ADVANCED TOPICS-CLINICAL PSYCHOLOGY**

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: Permission and graduate standing.

1. 000 TO 6. 000 Credit hours  
1. 000 TO 6. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Psychology

**PSYC 60453 - 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: Graduate standing in psychology.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Psychology

**PSYC 60792 - 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; concurrent enrollment in PSYC 6/70371; 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  
Department: Psychology

**PSYC 60895 - ADVANCED TOPICS-EXPERIMENTAL PSYCHOLOGY**

(Repeatable for credit) Advanced-level consideration of selected content areas in experimental psychology. 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  
Department: Psychology

**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  
Department: Psychology

**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  
Department: Psychology

**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  
Department: Psychology

**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  
Department: Psychology

**PSYC 61299 - THESIS II**

Thesis students must continue registration each semester until all degree requirements are met.

Prerequisite: PSYC 61199 and graduate standing.  
2. 000 Credit hours  
2. 000 Other hours  
Levels: Graduate  
Schedule Types: Masters Thesis  
Department: Psychology

**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.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Psychology

**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.  
3. 000 Credit hours  
3. 000 Other hours  
Levels: Graduate  
Schedule Types: Individual Investigation  
Department: Psychology

**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.

1. 000 TO 15. 000 Credit hours  
1. 000 TO 15. 000 Other hours  
Levels: Graduate  
Schedule Types: Research  
Department: Psychology

**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  
Department: Psychology

#### **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  
Department: Psychology

#### **PSYC 61651 - QUANTITATIVE STATISTICAL ANALYSIS I**

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  
Department: Psychology

#### **PSYC 61654 - QUANTITATIVE STATISTICAL ANALYSIS II**

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  
Department: Psychology

#### **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  
Department: Psychology

#### **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  
Department: Psychology

#### **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  
Department: Psychology

#### **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  
Department: Psychology

#### **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  
Department: Psychology

#### **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  
Department: Psychology

#### **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  
Department: Psychology

#### **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  
Department: Psychology

#### **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  
Schedule Types: Lecture  
Department: Psychology

#### **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  
Department: Psychology

#### **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  
Department: Psychology

#### **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  
Department: Psychology

#### **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  
Department: Psychology

#### **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  
Department: Psychology

### **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  
Department: Psychology

### **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  
Department: Psychology

### **PSYC 70373 - FAMILY THERAPY**

Consideration of major theories, approaches and research in family therapy. Practical experience in conducting family therapy through supervision and discussion of ongoing cases. Prerequisite: PSYC 6/70371 and PSYC 6/70792; and doctoral standing in psychology.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Psychology

### **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  
Department: Psychology

### **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 research. Prerequisite: PSYC 6/70371 and PSYC 6/70792; and doctoral standing in psychology.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture

Department: Psychology

### **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  
Levels: Graduate  
Schedule Types: Field Experience  
Department: Psychology

### **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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Psychology

### **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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Psychology

### **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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Psychology

### **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  
Department: Psychology

### **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  
Department: Psychology

### **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  
Department: Psychology

### **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  
Department: Psychology

### **PSYC 70895 - ADVANCED TOPICS-EXPERIMENTAL PSYCHOLOGY**

(Repeatable for credit) 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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Psychology

### **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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Psychology

### **PSYC 71004 - ANIMAL MEMORY PROCESSES**

Examination of basic phenomena and principles of memory, as exemplified by research with animals and humans. Consideration of behavioral and biological processes in memory functioning. Prerequisite: Doctoral standing in psychology.

3. 000 Credit hours  
3. 000 Lecture hours





Levels: Graduate  
Schedule Types: Lecture  
Department: Psychology

#### **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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Psychology

#### **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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Psychology

#### **PSYC 71307 - PSYCHOBIOLOGICAL ASPECTS OF HEALTH PSYCHOLOGY**

An introduction to non-neural aspects of psychobiology, with emphasis on psychoendocrinology, psychoimmunology and the psychobiologic aspects of disease. Prerequisite: Doctoral standing in psychology.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Psychology

#### **PSYC 71350 - 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: Doctoral standing in psychology.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Psychology

#### **PSYC 71498 - SELECTED LITERATURE REVIEW**

(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).  
3. 000 Credit hours  
3. 000 Other hours  
Levels: Graduate  
Schedule Types: Research  
Department: Psychology

#### **PSYC 71507 - PSYCHOSOCIAL ASPECTS OF HEALTH PSYCHOLOGY**

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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Psychology

#### **PSYC 71513 - PSYCHOLOGY OF ALCOHOL ABUSE**

Critical review of theories and empirical research on the use and abuse of alcohol. Prerequisite: Doctoral standing in psychology.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Psychology

#### **PSYC 71548 - 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: Doctoral standing in psychology.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Psychology

#### **PSYC 71580 - SOCIAL PSYCHOLOGY**

Introduction to empirical research and theories on the psychological processes related to interpersonal and small group behavior. Prerequisite: Doctoral standing in psychology.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Psychology

#### **PSYC 71651 - QUANTITATIVE STATISTICAL ANALYSIS I**

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  
Department: Psychology

#### **PSYC 71654 - QUANTITATIVE STATISTICAL ANALYSIS II**

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

Department: Psychology

#### **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  
Department: Psychology

#### **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  
Department: Psychology

#### **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  
Department: Psychology

#### **PSYC 72345 - ETHNIC MINORITY ISSUES IN CLINICAL PSYCHOLOGY**

Students increase their multicultural awareness and develop competencies necessary for clinical work with members of ethnic minority groups. Prerequisite: Doctoral standing and psychology major.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Psychology

#### **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  
Department: Psychology

#### **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



Department: Psychology

**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

Department: Psychology

**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

Department: Psychology

**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

Department: Psychology

**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

Department: Psychology

**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

Department: Psychology

**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

Levels: Graduate

Schedule Types: Dissertation

Department: Psychology

**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

Levels: Graduate

Schedule Types: Dissertation

Department: Psychology

**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

Levels: Graduate

Schedule Types: Research

Department: Psychology

**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

Levels: Graduate

Schedule Types: Seminar

Department: Psychology

**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

Levels: Graduate

Schedule Types: Seminar

Department: Psychology

## *Physical Therapist Assistant Technology (PTST)*

**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

Department: Regional

**PTST 10001 - PRINCIPLES OF PATIENT CARE IN PHYSICAL THERAPY**

Underlying principles of physical therapy procedures. Equipment. Fundamentals of patient care relative to the role of the physical therapist assistant. Prerequisite: physical therapist assistant technology (PTST) major.

4. 000 Credit hours

4. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Regional

**PTST 10002 - ANALYSIS OF MOVEMENT**

Function of the human body with emphasis on the musculoskeletal system. Gross body measurements. Prerequisite: BSCI 11001.

Corequisites: PTST 10003 and PTST 10004 and PTST 10005.

4. 000 Credit hours

3. 000 Lecture hours

3. 000 Lab hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Regional

**PTST 10003 - CLINICAL CONDITIONS I**

Introduction to medical conditions commonly encountered in the practice of physical therapy which affect the integumentary, digestive and endocrine systems. Will include general medical testing procedures and psychological disorders. Prerequisite: PTST 10001. Corequisites: PTST 10002 and PTST 10004 and PTST 10005.

2. 000 Credit hours

2. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Regional

**PTST 10004 - PHYSICAL THERAPY PROCEDURES I**

Theory and techniques of treatment procedures with emphasis on modalities. Maintenance of equipment and supplies. Prerequisite: PTST 10001. Corequisites: PTST 10002 and PTST 10003 and PTST 10005.

4. 000 Credit hours

4. 000 Other hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Regional

**PTST 10005 - DIRECTED PRACTICE IN PHYSICAL THERAPY I**

Introduction to the practice of physical therapy procedures in the clinical setting under the supervision of a licensed physical therapist.

Prerequisite: PTST 10001. Corequisites: PTST 10002 and PTST 10003 and PTST 10004.

2. 000 Credit hours

2. 000 Other hours

Levels: Undergraduate

Schedule Types: Practicum or Internship

Department: Regional

**PTST 10009 - MEDICAL TERMINOLOGY**

Terminology utilized by the medical profession. Emphasis is on definition, spelling, pronunciation and correct usage of terms. Prerequisite: none.

1. 000 Credit hours

1. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture



Department: Regional

### **PTST 10010 - TRANSITIONS IN PHYSICAL THERAPY**

Validates prior learning, builds knowledge necessary for the transition to the physical therapist assistant technology (PTST) program and prepares students for advance placement in PTST. Students registering for this course must have successfully completed an approved allied health program and been admitted to PTST. Students successfully completing this course with a grade of C (2.000) or better will receive credit for the following courses: PTST 10002, PTST 10004, PTST 20003, PTST 20004 and PHY 12111. Prerequisite: physical therapist assistant technology (PTST) major and special approval. 8.000 Credit hours  
6.000 Lecture hours  
4.000 Lab hours  
Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab  
Department: Regional

### **PTST 11005 - PHYSICAL THERAPY PRACTICE**

Introduces clinical education and the essential elements of safe, ethical and legal physical therapy practice in a clinical setting. Prerequisite: special approval. 1.000 Credit hours  
1.000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **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 special approval. 1.000 Credit hours  
Levels: Undergraduate  
Schedule Types: Practicum or Internship  
Department: Regional  
Course Attributes: Experiential Learning Requirement

### **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: none. 1.000 Credit hours  
1.000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **PTST 20003 - CLINICAL CONDITIONS II**

Continued study of medical conditions commonly encountered in the practice of physical therapy. Focus on orthopedic and cardiopulmonary pathologies. Prerequisite: PTST 10003. Corequisites: PTST 20004 and PTST 20005. 2.000 Credit hours  
2.000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **PTST 20004 - PHYSICAL THERAPY PROCEDURES II**

Continuation of theory and techniques of treatment procedures. Emphasis on correlating equipment with treatment procedures and correlating application with dysfunction. Prerequisite: PTST 10004. Corequisite: PTST 20003 and PTST 20005. 4.000 Credit hours  
4.000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **PTST 20005 - DIRECTED PRACTICE IN PHYSICAL THERAPY II**

Discussion and practice of physical therapy procedures and techniques in an institutional setting under the supervision of licensed physical therapy personnel. Prerequisite: PTST 10005. Corequisites: PTST 20003 and PTST 20004. 5.000 Credit hours  
5.000 Other hours  
Levels: Undergraduate  
Schedule Types: Practicum or Internship  
Department: Regional

### **PTST 20006 - PHYSICAL REHABILITATION PROCEDURES**

Principles and techniques of therapeutic exercise and rehabilitation in physical therapy. Prerequisite: PTST 20005. 4.000 Credit hours  
4.000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **PTST 20007 - DIRECTED PRACTICE IN PHYSICAL THERAPY III**

Continued discussion and practice of physical therapy procedures and techniques in an institutional setting under the supervision of licensed physical therapy personnel. Prerequisite: PTST 20005. 6.000 Credit hours  
6.000 Other hours  
Levels: Undergraduate  
Schedule Types: Practicum or Internship  
Department: Regional

### **PTST 20008 - CLINICAL CONDITIONS III**

Continued study of medical conditions commonly encountered in the practice of physical therapy. Focus on geriatric disorders, pharmacology, neurological disorders, fetal development, normal development, genetic and pediatric disorders. Prerequisite: PTST 10003 and PTST 20003. 2.000 Credit hours  
2.000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **PTST 20010 - DIRECTED PRACTICE IN PHYSICAL THERAPY TRANSITIONS**

Validates prior learning and builds student knowledge of the clinical practice necessary for a physical therapist assistant. An introduction to physical therapy procedures in the clinical setting under the supervision of a licensed physical therapist, and a discussion of the procedures and techniques used in institutional settings. Students completing this course with a grade of C (2.000)

or better will receive credit for PTST 10005, PTST 20005 and PTST 20007. Prerequisites: PTST 10001 and special approval. Corequisites: PTST 20006 and 20008. 7.000 Credit hours  
2.000 Lecture hours  
10.000 Lab hours  
Levels: Undergraduate  
Schedule Types: Clinic, Lecture  
Department: Regional

### **PTST 21095 - SPECIAL TOPICS IN PHYSICAL THERAPIST ASSISTANT TECHNOLOGY**

(Repeatable 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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **PTST 21096 - INDIVIDUAL INVESTIGATION IN PHYSICAL THERAPIST ASSISTANT TECHNOLOGY**

(Repeatable 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  
Levels: Undergraduate  
Schedule Types: Individual Investigation  
Department: Regional

### **PTST 22005 - PHYSICAL THERAPY SEMINAR**

Explores reimbursement regulations, evidence based practice, and various topics related to physical therapy and the health care system. Prerequisite: special approval. 1.000 Credit hours  
1.000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **PTST 22007 - PHYSICAL THERAPY CAPSTONE**

Current topics in the practice of physical therapy. Preparation for employment and licensure as a physical therapist assistant. Prerequisite: special approval. 1.000 Credit hours  
1.000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **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



Department: Regional

### **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 special approval.

2.000 Credit hours

240.000 Other hours

Levels: Undergraduate

Schedule Types: Practicum or Internship

Department: Regional

Course Attributes: Experiential Learning Requirement

### **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

Department: Regional

Course Attributes: Experiential Learning Requirement

### **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: PTST 22092 and special approval. Corequisite: PTST 22007.

2.000 Credit hours

240.000 Other hours

Levels: Undergraduate

Schedule Types: Practicum or Internship

Department: Regional

Course Attributes: Experiential Learning Requirement

## ***Radiologic Technology (RADT)***

### **RADT 14000 - INTRODUCTION TO RADIOLOGIC TECHNOLOGY**

Introduction to radiologic technology program, general anatomy, introduction to radiologic procedures and positioning, imaging equipment, radiographic exposure, radiation protection, professional organizations and clinical education. Lecture and lab plus clinical hours based on program requirements. Prerequisite: admission to program.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Clinic, Lecture

Department: Regional

### **RADT 14002 - INTRODUCTION TO PATIENT CARE**

Medicolegal aspects of patient care, ethics, nursing procedures for radiographic examinations,

techniques, radiography and taking and recording vital signs. Introduction to venipuncture and clinical pharmacology. Prerequisite: RADT 14000 with a minimum grade of C (2.000) and HED 14020.

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Regional

### **RADT 14004 - RADIOLOGIC PHYSICS**

Introduction to general physics, units and measurement, atomic structure, electricity, magnetism, electromagnetism, x-ray circuitry equipment and x-ray production. Prerequisites: RADT 14019 with a minimum grade of C (2.000) and radiologic technology (RADT) majors.

Corequisite: RADT 24024 with a minimum grade of C (2.000).

4.000 Credit hours

4.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Regional

### **RADT 14010 - CLINICAL EDUCATION I**

Supervised experience and observation with emphasis on clinical practice of basic skills of radiologic technology and the exams covered in Radiographic Procedures I. Competency testing begins. Students assigned to clinical education setting 24 hours per week. Prerequisites: RADT 14020 with a minimum grade of C (2.0) and radiologic technology (RADT) major. Corequisite: RADT 14021 with a minimum grade of C (2.0).

1.000 Credit hours

24.000 Other hours

Levels: Undergraduate

Schedule Types: Clinic

Department: Regional

### **RADT 14011 - CLINICAL EDUCATION II**

Continuation of Clinical Education I, with emphasis on clinical practice of content of previous courses plus digestive and urinary procedures, as well as head positioning. Students assigned to clinical education setting 24 hours per week. Prerequisites: RADT 14010 with a minimum grade of C (2.000); and radiologic technology (RADT) majors; and special approval. Corequisite: RADT 24020 with a minimum grade of C (2.000).

1.000 Credit hours

24.000 Other hours

Levels: Undergraduate

Schedule Types: Clinic

Department: Regional

### **RADT 14012 - CLINICAL EDUCATION III**

Continuation of Clinical Education II, with emphasis on clinical practice of content of previous courses. More emphasis on independent clinical practice of procedures previously mastered. Students assigned to clinical education setting 32 hours per week. Prerequisites: RADT 14011 with a minimum grade of C (2.0); and radiologic technology (RADT) majors and special approval.

1.000 Credit hours

32.000 Other hours

Levels: Undergraduate

Schedule Types: Clinic

Department: Regional

### **RADT 14013 - CLINICAL EDUCATION IV**

continuation of Clinical Education III, with emphasis on clinical practice of content of previous courses. More emphasis on independent clinical practice of procedures previously mastered. Students assigned to clinical education setting 32 hours per week. Prerequisite: RADT 14012 with a minimum grade of C (2.000); and radiologic technology (RADT) major and special approval.

1.000 Credit hours

32.000 Other hours

Levels: Undergraduate

Schedule Types: Clinic

Department: Regional

### **RADT 14019 - RADIOGRAPHIC EXPOSURE AND IMAGING I**

Equipment used in medical imaging, including radiographic x-ray tubes, filtration, beam restrictors, grids, imaging detectors used in intensifying screens and digital imaging, radiographic film and automatic processing. Prerequisites: RADT 14000 with a minimum grade of C (2.000); and radiologic technology (RADT) majors. Corequisite: RADT 14010 with a minimum grade of C (2.000).

3.000 Credit hours

3.000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Regional

### **RADT 14020 - RADIOGRAPHIC PROCEDURES I**

Introduction to radiographic procedures and positioning of the chest, abdomen and hands. Lecture, lab and 16 hours of clinical education per week for five weeks. Prerequisites: RADT 14000 with a minimum grade of C (2.000); and radiologic technology (RADT) major.

2.000 Credit hours

1.000 Lecture hours

1.000 Lab hours

16.000 Other hours

Levels: Undergraduate

Schedule Types: Clinic, Combined Lecture and Lab

Department: Regional

### **RADT 14021 - RADIOGRAPHIC PROCEDURES II**

Radiographic anatomy, positioning and image evaluation of the upper and lower extremities, shoulder and pelvic girdles, bony thorax and vertebral spine. Three hours lecture and two hours lab. Prerequisite: RADT 14020 with a minimum grade of C (2.000); and radiologic technology (RADT) major. Corequisite: RADT 14010 with a minimum grade of C (2.000).

4.000 Credit hours

3.000 Lecture hours

2.000 Lab hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Regional

### **RADT 14022 - RADIOGRAPHIC EXPOSURE AND IMAGING II**

Aspects of radiographic quality, fluoroscopic equipment, X-ray timers, and tomography. Experiments involving the factors that influence radiographic quality. Two hours lecture, two





hours lab weekly. Prerequisite: RADT 14019 with a minimum grade of C (2.000).

3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

#### **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: Radiologic technology (RADT) major.

3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Types: Individual Investigation  
Department: Regional

#### **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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

#### **RADT 24001 - RADIOLOGIC PATHOLOGY**

Introduction to disease and injury states and their application to radiologic technology. Each anatomical system and radiologic imaging modality is discussed. Prerequisite: BSCI 11010; and BSCI 11020 with a minimum grade of C (2.000); and HED 14020; and RADT 24024 with a minimum grade of C (2.000); and radiologic technology (RADT) major. Corequisite: RADT 24011 with a minimum grade of C (2.000).

3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

#### **RADT 24002 - RADIATION PROTECTION**

Overview of the principles of the interaction of radiation with living systems. Factors affecting biological response are presented, including acute and chronic effects of radiation. Overview of radiation protection including responsibilities of the radiographer for patients, personnel and the public. Radiation health and safety requirements of federal and state regulatory and accreditation agencies and health care organizations are incorporated. Prerequisites: BSCI 11020 and RADT 14000 and radiologic technology (RADT) majors.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

#### **RADT 24010 - CLINICAL EDUCATION V**

Continuation of Clinical Education IV, with emphasis on clinical practice of content of

previous courses. More emphasis on independent clinical practice of procedures previously mastered. Students assigned to clinical education setting 24 hours per week and rotate to special medical imaging areas. Prerequisites: RADT 14013 with a minimum grade of C (2.000); and radiologic technology (RADT) majors and special approval.

1.000 Credit hours  
24.000 Other hours  
Levels: Undergraduate  
Schedule Types: Clinic  
Department: Regional

#### **RADT 24011 - CLINICAL EDUCATION VI**

Continuation of Clinical Education V, with emphasis on clinical practice of content of previous courses. More emphasis on critical thinking, problem solving and independent clinical practice of procedures previously mastered. Students assigned to clinical education setting 24 hours per week. Prerequisite: RADT 24010 with a minimum grade of C (2.000); and radiologic technology (RADT) majors and special approval.

1.000 Credit hours  
24.000 Other hours  
Levels: Undergraduate  
Schedule Types: Clinic  
Department: Regional

#### **RADT 24020 - RADIOGRAPHIC PROCEDURES III**

Radiographic anatomy and positioning of the gastrointestinal, biliary and urinary systems and head positioning. Prerequisites: RADT 14021 with a minimum grade of C (2.000) and radiologic technology (RADT) major and special approval. Corequisite: RADT 14011 with a minimum grade of C (2.000).

4.000 Credit hours  
3.000 Lecture hours  
2.000 Lab hours  
Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab  
Department: Regional

#### **RADT 24024 - ADVANCED IMAGING**

The procedures and equipment used in advanced medical imaging including fluoroscopy, mammography, CT, MRI, cardiac, vascular and interventional imaging, nuclear medicine, PET imaging, diagnostic medical sonography and radiation therapy. Quality assurance is also reviewed. Prerequisite: RADT 14013 with a minimum grade of C (2.000); and radiologic technology (RADT) major and special approval. Corequisite: RADT 24010 with a minimum grade of C (2.000).

4.000 Credit hours  
4.000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

#### **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 11020, RADT 14002 and 14004 and 14022 and 24002 and 24002 all

with a minimum grade of C (2.000). Restricted to the Ashtabula and Salem campuses only.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

#### **RADT 24058 - DIVERSIFIED EMPLOYMENT**

Course features multiple topics in medical imaging to prepare graduates for employment in healthcare. Prerequisite: Radiologic technology (RADT) major.

3.000 Credit hours  
3.000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

#### **RADT 24096 - INDIVIDUAL INVESTIGATION IN RADIOLOGIC TECHNOLOGY**

(Repeatable for credit) 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 14000 with a minimum grade of C (2.000).

1.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Types: Individual Investigation  
Department: Regional

#### **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.

3.000 Credit hours  
3.000 Other hours  
Levels: Undergraduate  
Schedule Types: Individual Investigation  
Department: Regional

### ***Real Estate and Related Technologies (RERT)***

#### **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  
Department: Regional

#### **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  
Department: Regional

**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

Department: Regional

**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

2. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Regional

**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

Department: Regional

## *Rehabilitation Counseling (RHAB)*

**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

Department: Lifespan Development and Educational Sciences

**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

Department: Lifespan Development and Educational Sciences

**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

Department: Lifespan Development and Educational Sciences

**RHAB 60199 - THESIS I**

Thesis students must register each semester until all degree requirements are met. Prerequisite:

Graduate standing.

2. 000 TO 6. 000 Credit hours

2. 000 TO 6. 000 Other hours

Levels: Graduate

Schedule Types: Masters Thesis

Department: Lifespan Development and Educational Sciences

**RHAB 60299 - THESIS II**

Thesis students must continue registration each semester until all degree requirements are met.

Prerequisite: RHAB 60199 and graduate standing.

2. 000 Credit hours

2. 000 Other hours

Levels: Graduate

Schedule Types: Masters Thesis

Department: Lifespan Development and Educational Sciences

**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.

3. 000 Credit hours

3. 000 Other hours

Levels: Graduate

Schedule Types: Clerkship

Department: Lifespan Development and Educational Sciences

**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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

**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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

**RHAB 67729 - 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: Graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

**RHAB 67731 - INDIVIDUAL COUNSELING PROCEDURES IN REHABILITATION COUNSELING**

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

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

**RHAB 67732 - 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 graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

**RHAB 67736 - 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

2. 000 TO 4. 000 Other hours

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Lifespan Development and Educational Sciences

**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  
 Department: Lifespan Development and Educational Sciences

#### **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  
 Department: Lifespan Development and Educational Sciences

#### **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. Pre- or corequisite: EDPF 65510 and graduate standing.  
 3. 000 Credit hours  
 3. 000 Other hours  
 Levels: Graduate  
 Schedule Types: Seminar  
 Department: Lifespan Development and Educational Sciences

#### **RHAB 67795 - 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: Graduate standing and special approval.  
 1. 000 TO 3. 000 Credit hours  
 3. 000 Lecture hours  
 Levels: Graduate  
 Schedule Types: Lecture  
 Department: Lifespan Development and Educational Sciences

#### **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  
 Levels: Graduate  
 Schedule Types: Individual Investigation  
 Department: Lifespan Development and Educational Sciences

#### **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  
 Levels: Graduate  
 Schedule Types: Research

Department: Lifespan Development and Educational Sciences

#### **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  
 Levels: Graduate  
 Schedule Types: Workshop  
 Department: Lifespan Development and Educational Sciences

#### **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  
 Levels: Graduate  
 Schedule Types: Lecture  
 Department: Lifespan Development and Educational Sciences

#### **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  
 Department: Lifespan Development and Educational Sciences

#### **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  
 Department: Lifespan Development and Educational Sciences

#### **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  
 Department: Lifespan Development and Educational Sciences

#### **RHAB 77776 - 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. "IP" permissible. Pre- or corequisite: EDPF 66510 and doctoral standing.  
 3. 000 Credit hours  
 3. 000 Other hours  
 Levels: Graduate  
 Schedule Types: Seminar  
 Department: Lifespan Development and Educational Sciences

#### **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  
 6. 000 Other hours  
 Levels: Graduate  
 Schedule Types: Practicum or Internship  
 Department: Lifespan Development and Educational Sciences

#### **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  
 Department: Lifespan Development and Educational Sciences

#### **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  
 Department: Lifespan Development and Educational Sciences

#### **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  
 Department: Lifespan Development and Educational Sciences



## Radiologic and Imaging Sciences (RIS)

### 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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### 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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### 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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### RIS 34030 - RADIATION THERAPY CLINICAL EDUCATION I

Observation and supervised clinical education with emphasis on administering radiation therapy treatments, simulation block formation and patient care. Students are assigned to a clinical education site for approximately 16 hours per week. Prerequisite: radiologic and imaging sciences (RIS) major.  
1. 000 Credit hours  
1. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Clinic  
Department: Regional

### 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: RIS majors.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate

Schedule Types: Lecture  
Department: Regional

### 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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### 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, bio effects, image artifacts and physical principles of doppler. Prerequisite: radiologic and imaging sciences (RIS) major.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### RIS 34045 - ULTRASOUND CLINICAL EDUCATION I

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. Prerequisite: radiologic and imaging sciences (RIS) major.  
2. 000 Credit hours  
2. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Clinic  
Department: Regional

### 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  
Department: Regional

### RIS 34055 - ULTRASOUND CLINICAL EDUCATION II

Provides clinical education and experience in abdominal Sonography 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. Prerequisites: RIS 34045 and radiologic and imaging sciences (RIS) major.  
3. 000 Credit hours  
3. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Clinic

Department: Regional

### 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  
Department: Regional

### 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. Prerequisites: RIS 34055 and radiologic and imaging sciences (RIS) major. Corequisite: RIS 44072.  
2. 000 Credit hours  
2. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Clinic, Laboratory  
Department: Regional

### 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.  
1. 000 Credit hours  
1. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### 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; and special approval.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### 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.  
2. 000 Credit hours  
2. 000 Lecture hours  
Levels: Undergraduate





Schedule Types: Lecture  
Department: Regional

**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.

2. 000 Credit hours  
2. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

**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.

1. 000 TO 3. 000 Credit hours  
1. 000 TO 3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

**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.  
2. 000 Credit hours  
2. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

**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. Corequisites: RIS 44002 and 44005 and 44006 and 44011 and radiologic and imaging science (RIS) majors and special approval.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

**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  
Department: Regional

**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  
16. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Clinic, Laboratory  
Department: Regional

**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  
Department: Regional

**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 44012 and 44014 and 44017.

3. 000 Credit hours  
3. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Clinic, Laboratory  
Department: Regional

**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. Corequisites: RIS 44001 and

44002 and 44005 and 44006 and radiologic and imaging science (RIS) major.

4. 000 Credit hours  
4. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

**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  
Department: Regional

**RIS 44013 - RADIATION THERAPY PRINCIPLES/PRACTICE II**

Examines the multidisciplinary treatment approaches. Consists of advanced topics in therapy, chemotherapy, immunotherapy surgical interventions, for combined modalities, for benign conditions, for managing side effects/emergencies. Prerequisite: RIS 34003.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

**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  
Department: Regional

**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  
Department: Regional

**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.

2. 000 Credit hours

2. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Regional

**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

Department: Regional

**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

Department: Regional

**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

Department: Regional

**RIS 44020 - NUCLEAR MEDICINE CLINICAL EDUCATION IV**

Instructed at both the clinical education sites and Salem Campus. Emphasizes advanced procedures, SPECT and PET scanning, 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

Levels: Undergraduate

Schedule Types: Clinic, Laboratory

Department: Regional

**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.

2. 000 Credit hours

2. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Regional

**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

Levels: Undergraduate

Schedule Types: Lecture

Department: Regional

**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 technologists. Prerequisite: radiologic and imaging sciences (RIS) major.

3. 000 Credit hours

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Clinic

Department: Regional

**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

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Clinic

Department: Regional

**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

Levels: Undergraduate

Schedule Types: Lecture

Department: Regional

**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 and digestive systems. Prerequisites: RIS 34003 and 34004 and 34030 and radiologic and imaging science (RIS) majors. Corequisites: RIS 44013 and 44040.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Regional

**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: special approval.

2. 000 Credit hours

2. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Regional

**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.

2. 000 Credit hours

2. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Regional

**RIS 44033 - COMPUTED TOMOGRAPHY TECHNIQUES**

Integrates concepts of computed tomography including patient care, imaging procedures, physics and instrumentation in preparation for national certification examination. Prerequisites: RIS 44024 and special approval.

1. 000 Credit hours

1. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Regional

**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.

3. 000 Credit hours

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Clinic



Department: Regional

### **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  
3. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Clinic  
Department: Regional

### **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  
3. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Clinic  
Department: Regional

### **RIS 44038 - RADIATION THERAPY PHYSICS III**

Includes determination of radiation intensity, use of high energy beams, linear accelerators, other high energy machines, geometry of photon beams, clinical application in treatment planning and safety. Prerequisite: RIS 44018.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **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  
Department: Regional

### **RIS 44040 - RADIATION THERAPY CLINICAL EDUCATION II**

Continuation of Clinical Education I with emphasis on clinical practice of treatment techniques and planning. Students are assigned to clinical education site for approximately 24 hours per week. Prerequisite: RIS 34030.  
1. 000 Credit hours  
1. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Clinic  
Department: Regional

### **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  
Department: Regional

### **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 reproductive, urinary, endocrine, circulatory, lymphatic, integumentary and musculoskeletal systems as well as pediatric solid malignancies. Prerequisites: RIS 34083 and 44029 and 44040 and radiologic and imaging science (RIS) major and special approval. Corequisites: RIS 44028 and 44050.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **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. Corequisite: RIS 44036 and radiologic and imaging science (RIS) major.  
2. 000 Credit hours  
2. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **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  
Department: Regional

### **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: RIS 44051 and special approval.  
1. 000 Credit hours  
1. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **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: special approval.  
1. 000 Credit hours  
1. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **RIS 44048 - COMPUTED TOMOGRAPHY PROCEDURES II**

(Repeatable for a maximum of 4 credit hours) 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.  
2. 000 Credit hours  
2. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **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: special approval.  
1. 000 Credit hours  
1. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **RIS 44050 - RADIATION THERAPY CLINICAL EDUCATION III**

Continuation of Clinical Education II 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 44040.  
1. 000 Credit hours  
1. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Clinic  
Department: Regional

**RIS 44051 - MAGNETIC RESONANCE EQUIPMENT AND IMAGE ACQUISITION I**

Develops an 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. Corequisites: RIS 44036 and radiologic and imaging science (RIS) major.

2. 000 Credit hours  
2. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

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

**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 44050.

1. 000 Credit hours  
1. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Clinic  
Department: Regional

**RIS 44070 - RADIATION THERAPY CLINICAL EDUCATION V**

Continuation of Clinical Education IV with added emphasis on clinical practice, treatment procedures, simulation and treatment planning. Students are assigned to clinical education site for approximately 24 hours per week. Prerequisite: RIS 44060.

1. 000 Credit hours  
1. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Clinic  
Department: Regional

**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

Department: Regional

**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 44075 and radiologic and imaging sciences (RIS) major.

2. 000 Credit hours  
2. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

**RIS 44075 - ULTRASOUND CLINICAL EDUCATION IV**

Provides clinical education and experiences at clinical sites to allow student the opportunity to practice skills necessary to obtain high quality sonographic images, to alter protocols based on patients and to evaluate image quality.

Prerequisites: RIS 34065 and radiologic and imaging sciences (RIS) major.

3. 000 Credit hours  
3. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Clinic  
Department: Regional

**RIS 44078 - SONOGRAPHIC TECHNIQUES**

Course integrates diagnostic medical sonography concepts in preparation for certification exams.

Prerequisite: Radiologic and imaging sciences (RIS) major.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

**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.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

**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  
Department: Regional

**RIS 44085 - ULTRASOUND CLINICAL EDUCATION V**

Provides clinical education and experience at a clinical site to allow students the opportunity to demonstrate proficiency in obtaining high quality

sonographic images, to alter protocols based on patients and to identify image quality problems.

Prerequisite: RIS 44075 and radiologic and imaging sciences (RIS) major.

3. 000 Credit hours  
3. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Clinic  
Department: Regional

**RIS 44096 - INDIVIDUAL INVESTIGATION IN MEDICAL IMAGING DIRECTED READINGS**

(Repeatable for credit) Student selects prescribed number of medical imaging journal articles, completes questions, paper and presentation. Prerequisite: Radiologic and imaging sciences (RIS) major.

3. 000 Credit hours  
3. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Individual Investigation  
Department: Regional

**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: Radiologic and Imaging Science (RIS) majors only and senior standing.

3. 000 Credit hours  
3. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Research  
Department: Regional  
Course Attributes: Experiential Learning Requirement, Writing Intensive Course

## *Recreation, Park and Tourism Management (RPTM)*

**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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Foundations, Leadership and Administration

**RPTM 26000 - COMPUTER APPLICATIONS IN RECREATION AND SPORT**

Focuses on the personal computer and its general function and uses in a recreation and sport environment. Students learn a wide variety of applications and programs pertinent to the recreation and sport industry. Prerequisite: RPTM 16000 or ATTR 15011.

3. 000 Credit hours  
3. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab





Department: Foundations, Leadership and Administration

**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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Foundations, Leadership and Administration

**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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Foundations, Leadership and Administration

**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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Foundations, Leadership and Administration

**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  
Department: Foundations, Leadership and Administration

**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  
Department: Foundations, Leadership and Administration

**RPTM 26080 - INTRODUCTION TO THERAPEUTIC RECREATION**

Introduction to the profession of therapeutic recreation. Includes history, philosophy, settings and populations served, and an overview of therapeutic recreation process. Prerequisite: RPTM 16000.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Foundations, Leadership and Administration

**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  
Department: Foundations, Leadership and Administration

**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  
Department: Foundations, Leadership and Administration

**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  
Department: Foundations, Leadership and Administration

Course Attributes: Diversity Course-Domestic

**RPTM 36060 - COMMERCIAL RECREATION AND TOURISM**

Principles of commercial recreation and tourism services, including entrepreneurship, economic concepts of the for-profit recreation industries and management skills. Prerequisite: RPTM 26060.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Foundations, Leadership and Administration

**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  
Department: Foundations, Leadership and Administration

**RPTM 36080 - PRINCIPLES OF THERAPEUTIC RECREATION**

Introduction to the empirical basis of therapeutic recreation practice. Includes information on assessment activity, analysis and the systematic documentation of individualized treatment plans from within the context of therapeutic recreation programs. Prerequisites: RPTM 26080 and RPTM 36040.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Foundations, Leadership and Administration

**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  
Department: Foundations, Leadership and Administration

**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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Foundations, Leadership and Administration

**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.



3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Foundations, Leadership and Administration

**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.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Foundations, Leadership and Administration

Course Attributes: Diversity Course-Domestic

**RPTM 36192 - PRACTICUM IN LEISURE SERVICES MANAGEMENT**

(Repeatable for a maximum of 3 credit hours) A 60-hour field experience in a leisure services setting. Must be approved by instructor prior to registration. Prerequisite: RPTM 16000 and recreation, park and tourism management (RPTM) major and special approval.

1. 000 Credit hours  
1. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Practicum or Internship  
Department: Foundations, Leadership and Administration  
Course Attributes: Experiential Learning Requirement

**RPTM 36911 - WILDERNESS AND REMOTE FIRST AID FOR PROFESSIONALS AND EDUCATORS**

Students build first aid knowledge and 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  
Department: Foundations, Leadership and Administration

**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  
Department: Foundations, Leadership and Administration

**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: RPTM 36060.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Foundations, Leadership and Administration

**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  
Department: Foundations, Leadership and Administration

**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  
Department: Foundations, Leadership and Administration  
Course Attributes: Writing Intensive Course

**RPTM 46040 - THERAPEUTIC RECREATION PROGRAM TECHNIQUES**

Intervention/facilitation techniques employed in therapeutic recreation practice. Integration of theory into program plans used in therapeutic recreation for treatment and leisure education services for people with illnesses or disabilities. Prerequisite: RPTM 36080.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Foundations, Leadership and Administration

**RPTM 46041 - ADVANCED THERAPEUTIC RECREATION PROGRAM TECHNIQUES**

Advanced intervention/facilitation techniques employed in therapeutic recreation practice.

Professional issues related to therapeutic recreation practice. Prerequisite: RPTM 46040.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Foundations, Leadership and Administration

**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  
Department: Foundations, Leadership and Administration

**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  
Department: Foundations, Leadership and Administration

**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  
Department: Foundations, Leadership and Administration

**RPTM 46092 - INTERNSHIP IN RECREATION**

(Repeatable for credit) Supervised full-time experience providing knowledge of overall agency operation in approved leisure setting. Fifty (50) contact hours per credit hour. Prerequisites: senior standing and RPTM 46091 and special approval.

6. 000 TO 12. 000 Credit hours  
20. 000 TO 40. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Practicum or Internship  
Department: Foundations, Leadership and Administration  
Course Attributes: Experiential Learning Requirement



### **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  
Department: Foundations, Leadership and Administration

### **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  
Department: Foundations, Leadership and Administration

## ***Respiratory Therapy Technology (RTT)***

### **RTT 11000 - INTRODUCTION TO RESPIRATORY THERAPY**

Establishes a foundation of the respiratory care profession; health promotion, patient education, management of services and disasters; introduction to radiology and pharmacology. Prerequisite: special approval. Corequisite: RTT 11003 and 11006.

2. 000 Credit hours  
2. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **RTT 11001 - RESPIRATORY CARE PHARMACOLOGY**

Basic principles in pharmacology, specific to respiratory care, covering the pharmacokinetic action of drugs, administration, calculations, and effects on the body systems. Prerequisites: RTT 11000 and 11003 and 11006; PTST 10009 or HED 14020; BSCI 11010 and BSCI 11020 or BSCI 20020; and a minimum C grade in all the above courses. Corequisite: RTT 11002 and RTT 11004 and RTT 11008 and BSCI 20021

2. 000 Credit hours  
2. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **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; BSCI 11010 and BSCI 11020 or BSCI 20020, PTST 10009 or HED

14020. Corequisite: RTT 11001 and RTT 11004 and RTT 11008 and BSCI 20021.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **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: special approval. Corequisite: RTT 11000 and RTT 11006; BSCI 20020 or BSCI 11010.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **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; BSCI 11010 and BSCI 11020 or BSCI 20020; CHEM 10050; PHY 12111 or PHY 13001. Corequisite: RTT 11001, 11002, 11008.

6. 000 Credit hours  
4. 000 Lecture hours  
1. 000 Lab hours  
1. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Clinic, Laboratory, Lecture  
Department: Regional

### **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. Prerequisite: special approval. Corequisites: RTT 11000 and 11003 and 11006; BSCI 11010 or 20020.

3. 000 Credit hours  
2. 000 Lecture hours  
1. 000 Lab hours  
Levels: Undergraduate  
Schedule Types: Laboratory, Lecture  
Department: Regional

### **RTT 11008 - BLOOD GAS ANALYSIS**

A study of the methods and procedures for obtaining arterial blood, the principles and standards of analysis and applications of the physiological data. Prerequisites: RTT 11000, 11003, and 11006; BSCI 11010 and BSCI 11020 or BSCI 20020. Corequisite: RTT 11001, 11002 and 11004

2. 000 Credit hours  
2. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab  
Department: Regional

### **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 and 21004; BSCI 20021.

4. 000 Credit hours  
3. 000 Lecture hours  
1. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Clinic, Lecture  
Department: Regional

### **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. Corequisite: RTT 21003 and RTT 21004.

5. 000 Credit hours  
3. 000 Lecture hours  
1. 000 Lab hours  
1. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Clinic, Laboratory, Lecture  
Department: Regional

### **RTT 21003 - PERINATAL AND PEDIATRIC RESPIRATORY THERAPY**

Development of the fetus; assessment, treatment, and evaluation of perinatal and pediatric patients requiring respiratory therapy intervention; perinatal and pediatric cardiopulmonary diseases; management of mechanical ventilation. Prerequisites: RTT 11000, RTT 11001, RTT 11002, RTT 11003, RTT 11004, RTT 11006 and RTT 11008. Corequisites: RTT 21001 and RTT 21004.

2. 000 Credit hours  
2. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Regional

### **RTT 21004 - ADVANCED DIAGNOSTICS**

Provides knowledge and skills necessary to work effectively in a pulmonary function laboratory. Topics include: pulmonary function tests, testing standards and techniques, equipment set up and utilization, analyzing test results and applying them in clinical situations is emphasized. Quality assurance for equipment and testing data. Prerequisites: RTT 11001, RTT 11002, RTT 11004 and RTT 11008. Corequisites: RTT 21001 and 21003.

3. 000 Credit hours  
2. 000 Lecture hours  
1. 000 Lab hours  
Levels: Undergraduate  
Schedule Types: Laboratory, Lecture  
Department: Regional

### **RTT 21005 - PULMONARY REHABILITATION AND CONTINUING CARE**

Roles and functions of respiratory therapists in cardiopulmonary rehabilitation and home care. Prerequisites: RTT 21000. Corequisite: RTT 21010 and 21012.

2. 000 Credit hours  
2. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture



Department: Regional

### **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 21004 and respiratory therapy technology (RTT) major. Corequisite: RTT 21005.

3. 000 Credit hours

1. 000 Lecture hours

1. 000 Lab hours

1. 000 Other hours

Levels: Undergraduate

Schedule Types: Clinic, Laboratory, Lecture

Department: Regional

### **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. Corequisite: RTT 21005 and 21010.

2. 000 Credit hours

2. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Regional

### **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

Department: Regional

### **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

Department: Regional

## ***Russian (RUSS)***

### **RUSS 12201 - ELEMENTARY RUSSIAN I**

An introduction to the Russian language in the context of Russian cultures. Corequisite: RUSS 12211.

4. 000 Credit hours

4. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

### **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

Department: Modern and Classical Language Studies

### **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

Department: Modern and Classical Language Studies

### **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

Department: Modern and Classical Language Studies

### **RUSS 22111 - INTERMED RUSSIAN I RECITATION**

Reinforces material presented in Intermediate Russian II (RUSS 22202) and must be taken with Intermediate Russian II. Prerequisites: RUSS 22201 and 22211. Corequisite: RUSS 22202.

1. 000 Credit hours

1. 000 Other hours

Levels: Undergraduate

Schedule Types: Recitation

Department: Modern and Classical Language Studies

### **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

Schedule Types: Lecture

Department: Modern and Classical Language Studies

### **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

Department: Modern and Classical Language Studies

### **RUSS 22211 - INTERMEDIATE RUSSIAN I RECITATION**

Reinforces material presented in Intermediate Russian I (RUSS 22201). Must be taken together

with Intermediate Russian I. Prerequisite: RUSS 12202 and 12212. Corequisite: RUSS 22201.

1. 000 Credit hours

1. 000 Other hours

Levels: Undergraduate

Schedule Types: Recitation

Department: Modern and Classical Language Studies

### **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

Department: Modern and Classical Language Studies

### **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

Department: Modern and Classical Language Studies

### **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

Levels: Undergraduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

### **RUSS 32215 - RUSSIAN PHONETICS AND DICTION**

Study of the Russian sound system with special emphasis on pronunciation and intonation. Application of the international phonetic alphabet to Russian. Prerequisite: RUSS 22202.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

### **RUSS 32231 - TRANSLATION PRACTICE: RUSSIAN**

Translation practice with Russian 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

Department: Modern and Classical Language Studies

### **RUSS 32240 - CONVERSATION FOR BUSINESS AND SPECIAL PURPOSES: RUSSIAN**





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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

### **RUSS 32303 - MODERN WRITERS**

Reading and analysis of modern Russian plays and stories. Prerequisite: RUSS 22202.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

Course Attributes: Writing Intensive Course

### **RUSS 32325 - RUSSIAN POETRY AND FOLKLORE**

Reading and analysis of major poems and introduction to folklore. Prerequisite: RUSS 32303.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

Course Attributes: Writing Intensive Course

### **RUSS 32421 - RUSSIAN CIVILIZATION**

A survey of Russian history and intellectual life. Prerequisite: RUSS 32303.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

Course Attributes: Writing Intensive Course

### **RUSS 32501 - RUSSIAN LITERATURE IN ENGLISH**

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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

### **RUSS 42093 - VARIABLE TITLE WORKSHOP IN RUSSIAN LANGUAGE AND LITERATURE**

(Repeatable for credit) Workshops individually designed to provide instruction and training in specific areas of Russian studies. Prerequisite: Departmental special approval.

1. 000 TO 6. 000 Credit hours

1. 000 TO 6. 000 Other hours

Levels: Undergraduate

Schedule Types: Workshop

Department: Modern and Classical Language Studies

### **RUSS 42095 - SPECIAL TOPICS IN RUSSIAN LANGUAGE AND LITERATURES**

(Repeatable for credit when topic varies) Topic to be 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

Department: Modern and Classical Language Studies

### **RUSS 42096 - INDIVIDUAL INVESTIGATION**

(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.

1. 000 TO 3. 000 Credit hours

1. 000 TO 3. 000 Other hours

Levels: Undergraduate

Schedule Types: Individual Investigation

Department: Modern and Classical Language Studies

### **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

Department: Modern and Classical Language Studies

### **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

Department: Modern and Classical Language Studies

Course Attributes: 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

Department: Modern and Classical Language Studies

### **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

Department: Modern and Classical Language Studies

### **RUSS 42399 - RESEARCH PROJECT IN RUSSIAN LANGUAGE AND LITERATURE**

Thesis or other independent study. Prerequisites: 6 hours of 4000-level Russian (RUSS) courses and special approval.

3. 000 Credit hours

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Senior Project/Honors Thesis

Department: Modern and Classical Language Studies

Course Attributes: Experiential Learning Requirement

### **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

Department: Modern and Classical Language Studies

### **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

Department: Modern and Classical Language Studies

### **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

Department: Modern and Classical Language Studies

### **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  
Department: Modern and Classical Language  
Studies

### **RUSS 62240 - 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 Russian will also be emphasized. Prerequisite: Graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Modern and Classical Language  
Studies

### **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  
Department: Modern and Classical Language  
Studies

### **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  
Department: Modern and Classical Language  
Studies

### **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  
Department: Modern and Classical Language  
Studies

## ***Social and Behavioral Sciences (SBS)***

### **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  
Department: Social and Behavioral Sciences

### **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  
Department: Social and Behavioral Sciences

### **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  
Department: Social and Behavioral Sciences

### **SBS 50196 - INDIVIDUAL INVESTIGATION IN SOCIAL AND BEHAVIORAL SCIENCES**

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  
Department: Social and Behavioral Sciences

### **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  
Department: Social and Behavioral Sciences

### **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  
Department: Social and Behavioral Sciences

### **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  
Department: Social and Behavioral Sciences

### **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  
Department: Social and Behavioral Sciences

### **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  
Department: Social and Behavioral Sciences

### **SBS 73019 - THEORIES OF PREVENTION SCIENCE II**

Builds on Theories of Prevention Science I by examining methods and application of the theories and approaches to promoting health behaviors including substance use (alcohol, tobacco and other drugs), physical activity, dietary practices, mental health, violence and injury, and



sexual behaviors. Prerequisites: SBS 73018 and doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Social and Behavioral Sciences

#### **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  
Department: Social and Behavioral Sciences

#### **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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Social and Behavioral Sciences

#### **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  
Levels: Graduate  
Schedule Types: Seminar  
Department: Social and Behavioral Sciences

#### **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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Social and Behavioral Sciences

#### **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  
Levels: Graduate  
Schedule Types: Research  
Department: Social and Behavioral Sciences

## **Secondary Education (SEED)**

#### **SEED 42196 - INDIVIDUAL PROJECT IN SECONDARY EDUCATION**

(Repeatable for credit) Prerequisite: Special approval.  
2. 000 TO 4. 000 Credit hours  
2. 000 TO 4. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Individual Investigation  
Department: Teaching, Learning and Curriculum Studies

## **Sociology (SOC)**

#### **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  
Department: Sociology  
Course Attributes: Diversity Course-Domestic, Kent Core-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  
Department: Sociology

#### **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  
Department: Sociology  
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. Prerequisite: None.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Sociology

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

#### **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  
Department: Sociology  
Course Attributes: TAG - Social/Behavior Sciences

#### **SOC 31092 - PRACTICUM IN SOCIOLOGY**

(Repeatable 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  
Department: Sociology  
Course Attributes: Experiential Learning Requirement

#### **SOC 32096 - INDIVIDUAL INVESTIGATION IN SOCIOLOGY**

(Repeatable 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  
Department: Sociology

#### **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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Sociology

#### **SOC 32220 - DATA ANALYSIS**

The use of quantitative methods in the analysis of data from social research. Emphasis on descriptive statistics. Prerequisite: SOC 12050. Corequisite: SOC 32221.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Sociology

#### **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

Levels: Undergraduate

Schedule Types: Laboratory

Department: Sociology

### **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

Levels: Undergraduate

Schedule Types: Lecture

Department: Sociology

### **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

Levels: Undergraduate

Schedule Types: Lecture

Department: Sociology

### **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

Department: Sociology

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

Department: Sociology

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

Department: Sociology

### **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

Department: Sociology

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

Department: Sociology

### **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

Department: Sociology

### **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

Department: Sociology

### **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

Department: Sociology

Course Attributes: Experiential Learning Requirement

### **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

Department: Sociology

### **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

Department: Sociology

### **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

Department: Sociology

Course Attributes: Writing Intensive Course

### **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

Department: Sociology

### **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 standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Sociology

Course Attributes: Diversity Course-Domestic

### **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

Department: Sociology

### **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  
Department: Sociology

### **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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Sociology

### **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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Sociology

### **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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Sociology

### **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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Sociology

### **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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Sociology

### **SOC 42564 - BUREAUCRATIC ORGANIZATIONS**

Analysis of structure and functioning of complex organizations in their cultural context. Prerequisite: SOC 12050 and junior standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Sociology

### **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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Sociology  
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  
Department: Sociology  
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  
Department: Sociology

### **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  
Department: Sociology  
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  
Department: Sociology

### **SOC 52010 - 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: Graduate standing in sociology.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Sociology

### **SOC 52126 - SOCIOLOGICAL THEORIES**

An examination of classical, modern and post-modern approaches to social theory. Prerequisite: Graduate standing in sociology.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Sociology

### **SOC 52315 - 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: Graduate standing in sociology.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Sociology

### **SOC 52421 - 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: Graduate standing in sociology.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Sociology

### **SOC 52478 - 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: Graduate standing in sociology.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Sociology

### **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  
Department: Sociology

**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  
Department: Sociology

**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  
Department: Sociology

**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  
Department: Sociology

**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  
Department: Sociology

**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  
Department: Sociology

**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

Schedule Types: Lecture  
Department: Sociology

**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  
Department: Sociology

**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  
Department: Sociology

**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  
Department: Sociology

**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  
Department: Sociology  
Course Attributes: Joint Program/Consortial Agreement

**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  
Department: Sociology

**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  
Department: Sociology

**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  
Department: Sociology

**SOC 62218 - ADVANCED DATA ANALYSIS**  
Critical examination of data analytic techniques having particular relevance to research problems in sociology, with particular emphasis on multivariate 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  
Department: Sociology

**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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Sociology

**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  
Levels: Graduate  
Schedule Types: Combined Lecture and Lab  
Department: Sociology

**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  
Levels: Graduate



Schedule Types: Masters Thesis  
Department: Sociology

### **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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Sociology

### **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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Sociology

### **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  
Department: Sociology

### **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  
Department: Sociology

### **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  
Department: Sociology

### **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  
Department: Sociology

### **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  
Schedule Types: Lecture  
Department: Sociology

### **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  
Department: Sociology

### **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  
Department: Sociology  
Course Attributes: Joint Program/Consortial Agreement

### **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  
Department: Sociology

### **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  
Department: Sociology

### **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  
Department: Sociology

### **SOC 62885 - INTERNSHIP IN APPLIED SOCIOLOGY**

Student negotiated project in specific human service setting for practitioner; program designing, research in service training, writing a grant proposal. Prerequisite: Graduate standing in sociology and special approval.  
3. 000 TO 8. 000 Credit hours  
3. 000 TO 8. 000 Other hours  
Levels: Graduate  
Schedule Types: Practicum or Internship  
Department: Sociology

### **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  
Department: Sociology

### **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  
Department: Sociology  
Course Attributes: Joint Program/Consortial Agreement

### **SOC 62896 - INDIVIDUAL INVESTIGATION**

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  
Department: Sociology

### **SOC 62898 - RESEARCH**

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  
Levels: Graduate



Schedule Types: Research  
Department: Sociology

### **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

Levels: Graduate

Schedule Types: Lecture

Department: Sociology

Course Attributes: Joint Program/Consortial Agreement

### **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

Levels: Graduate

Schedule Types: Workshop

Department: Sociology

### **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

Levels: Graduate

Schedule Types: Seminar

Department: Sociology

Course Attributes: Joint Program/Consortial Agreement

### **SOC 72105 - CONTEMPORARY SOCIOLOGICAL THOUGHT**

Covers major contemporary theories and theorists. Emphasis on functionalism, conflict, exchange, interactionism 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

Levels: Graduate

Schedule Types: Lecture

Department: Sociology

Course Attributes: Joint Program/Consortial Agreement

### **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.

4. 000 Credit hours

4. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture  
Department: Sociology  
Course Attributes: Joint Program/Consortial Agreement

### **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.

4. 000 Credit hours

4. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Sociology

Course Attributes: Joint Program/Consortial Agreement

### **SOC 72218 - ADVANCED DATA ANALYSIS**

Crucial examination of data analytic techniques having particular relevance to research problems in sociology, with particular emphasis on multivariate inferential statistics. Akron 3850: 709.

Prerequisites: SOC 62217 or 72217; and doctoral standing in sociology.

4. 000 Credit hours

4. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Sociology

Course Attributes: Joint Program/Consortial Agreement

### **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.

4. 000 Credit hours

4. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Sociology

Course Attributes: Joint Program/Consortial Agreement

### **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.

3. 000 Credit hours

3. 000 Other hours

Levels: Graduate

Schedule Types: Combined Lecture and Lab

Department: Sociology

Course Attributes: Joint Program/Consortial Agreement

### **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  
Department: Sociology  
Course Attributes: Joint Program/Consortial Agreement

### **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

Department: Sociology

Course Attributes: Joint Program/Consortial Agreement

### **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

Department: Sociology

Course Attributes: Joint Program/Consortial Agreement

### **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

Department: Sociology

Course Attributes: Joint Program/Consortial Agreement

### **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

Department: Sociology

Course Attributes: Joint Program/Consortial Agreement

### **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  
Department: Sociology  
Course Attributes: Joint Program/Consortial Agreement

### **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  
Department: Sociology  
Course Attributes: Joint Program/Consortial Agreement

### **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  
Department: Sociology  
Course Attributes: Joint Program/Consortial Agreement

### **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  
Department: Sociology  
Course Attributes: Joint Program/Consortial Agreement

### **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  
Department: Sociology  
Course Attributes: Joint Program/Consortial Agreement

### **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  
Department: Sociology  
Course Attributes: Joint Program/Consortial Agreement

### **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  
Department: Sociology  
Course Attributes: Joint Program/Consortial Agreement

### **SOC 72885 - INTERNSHIP IN APPLIED SOCIOLOGY**

Student negotiated project in specific human service setting for practitioner; program designing; research; in-service training; writing a grant proposal. Prerequisite: Doctoral standing in sociology and special approval.  
3. 000 TO 8. 000 Credit hours  
3. 000 TO 8. 000 Other hours  
Levels: Graduate  
Schedule Types: Practicum or Internship  
Department: Sociology  
Course Attributes: Joint Program/Consortial Agreement

### **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  
Department: Sociology  
Course Attributes: Joint Program/Consortial Agreement

### **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  
Department: Sociology  
Course Attributes: Joint Program/Consortial Agreement

### **SOC 72896 - INDIVIDUAL INVESTIGATION**

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  
Department: Sociology  
Course Attributes: Joint Program/Consortial Agreement

### **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  
Department: Sociology  
Course Attributes: Joint Program/Consortial Agreement

### **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  
Department: Sociology  
Course Attributes: Joint Program/Consortial Agreement

### **SOC 82299 - 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: Special approval and doctoral standing.  
15. 000 Credit hours  
15. 000 Other hours  
Levels: Graduate  
Schedule Types: Dissertation  
Department: Sociology  
Course Attributes: Joint Program/Consortial Agreement

## ***Speech Pathology and Audiology (SPA)***

### **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  
Department: Health Sciences

**SPA 33101 - HEARING SCIENCE**

Acoustics, psychoacoustics, bioacoustics, anatomy and physiology of the ear. Prerequisite: None.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Health Sciences

**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

Department: Health Sciences

**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: None.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Health Sciences

**SPA 34104 - SPEECH AND LANGUAGE DEVELOPMENT**

Normal development and linguistic analysis of language systems including phonology, morphology syntax semantics and pragmatics. Prerequisites: SPA 34102 or ENG 31001; and special approval.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Health Sciences

**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 non-majors only. Prerequisite: None.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Health Sciences

**SPA 34106 - ARTICULATORY AND PHONOLOGICAL DISORDERS**

Assessment and remediation of disorders of articulation and phonology. Prerequisites: SPA 34102 and SPA 34104.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Health Sciences

**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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Health Sciences

**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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Health Sciences

**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).

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Health Sciences

**SPA 43492 - CLINICAL PREPARATION IN AUDIOLOGY**

(Repeatable for credit) Lab exercises and practical experiences in audiometric procedures, test interpretation, counseling and management of the hearing impaired. Prerequisite: Special approval. Corequisite: SPA 43402.

2. 000 Credit hours

2. 000 Lab hours

Levels: Undergraduate

Schedule Types: Laboratory

Department: Health Sciences

Course Attributes: Experiential Learning

Requirement

**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

Department: Health Sciences

**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

Department: Health Sciences

**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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Health Sciences

**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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Health Sciences

**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: None.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Health Sciences

**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

Department: Health Sciences

**SPA 44310 - CLINICAL PROCEDURES**

Examination of evaluative and therapeutic procedures used with communicatively-impaired children and adults. Prerequisite: SPA 34103 or 34106.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Health Sciences

**SPA 44492 - CLINICAL PREPARATION IN SPEECH-LANGUAGE PATHOLOGY**

(Repeatable for credit) Fundamental evaluation and management procedures of individuals with communication disorders, including supervised observation. Corequisite: SPA 44310.

2. 000 Credit hours

2. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Health Sciences

Course Attributes: Experiential Learning

Requirement, 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

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences

**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

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences

**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

Levels: Graduate

Schedule Types: Individual Investigation

Department: Health Sciences

**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

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences

**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

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences

**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

Department: Health Sciences

**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

Department: Health Sciences

**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

Department: Health Sciences

**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

Department: Health Sciences

**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

Department: Health Sciences

**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

Department: Health Sciences

**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

Department: Health Sciences

**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

Department: Health Sciences

**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

Department: Health Sciences

**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



Department: Health Sciences

**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

Department: Health Sciences

**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

Department: Health Sciences

**SPA 64301 - APHASIA AND APRAXIA**

Neuro-anatomy, etiologies, symptomatologies, evaluation procedures and treatment techniques relating to aphasia and apraxia of speech in adults. Prerequisite: Graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences

**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

Department: Health Sciences

**SPA 64303 - DISORDERS OF ARTICULATION AND PHONOLOGY**

Diagnosis and remediation of children's articulation and phonological disorders. Prerequisite: Graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences

**SPA 64304 - COGNITIVE-COMMUNICATIVE DISORDERS**

Neuro-anatomy, etiologies, symptomatologies, evaluation procedures and treatment techniques relating to cognitive-communicative disorders in adults subsequent to right brain damage, head trauma and dementia. Prerequisite: Graduate standing.

2. 000 Credit hours

2. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences

**SPA 64305 - FLUENCY DISORDERS**

Nature, theories and their derived therapeutic approaches to the treatment of fluency disorders. Prerequisite: speech language pathology (SLP) major and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences

**SPA 64306 - VOICE DISORDERS**

Normal aspects of voice production, etiology and symptomatology of voice disorders, diagnostic procedures and management techniques.

Prerequisite: Graduate standing.

2. 000 Credit hours

2. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences

**SPA 64307 - DYSARTHRIA**

Neuro-anatomy, etiologies, symptomatologies, evaluation procedures and treatment techniques relating to dysarthria in adults. Prerequisite: Graduate standing.

1. 000 Credit hours

1. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences

**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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences

**SPA 64309 - AUTISM SPECTRUM DISORDERS: THEORY AND DIAGNOSIS**

Provides an examination of the medical, developmental, social, cognitive, and communicative aspects of disorders on the Autism Spectrum. Assessment and intervention models are explored as they relate to various theoretical models for understanding the presentation of ASD. Prerequisite: graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences

**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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences

**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

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences

**SPA 64356 - DYSPHAGIA**

Anatomy, etiologies, symptomatologies, evaluation procedures and treatment techniques relating to swallowing disorders in adults and children. Prerequisite: Graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences

**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

Levels: Graduate

Schedule Types: Seminar

Department: Health Sciences

**SPA 64491 - 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: Graduate standing.

1. 000 TO 3. 000 Credit hours

1. 000 TO 3. 000 Other hours

Levels: Graduate

Schedule Types: Seminar

Department: Health Sciences

**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

Department: Health Sciences

**SPA 64500 - LANGUAGE SCIENCE**

Detailed discussion of current theoretical issues in first language acquisition from the prelinguistic period to the development of complex linguistic





and communicative abilities. Prerequisites: graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Health Sciences

#### **SPA 64504 - EXPERIMENTAL PHONETICS**

Consideration of experimental bases of normal speech production and perception; survey of literature with implications for speech and hearing disorders. Prerequisite: SPA 4/54110. Graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Health Sciences

#### **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. Corequisite: SPA 64528.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Health Sciences

#### **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. Corequisite: SPA 64525.  
4. 000 TO 8. 000 Credit hours  
4. 000 TO 8. 000 Other hours  
Levels: Graduate  
Schedule Types: Practicum or Internship  
Department: Health Sciences

#### **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.  
1. 000 TO 3. 000 Credit hours  
1. 000 TO 3. 000 Other hours  
Levels: Graduate  
Schedule Types: Seminar  
Department: Health Sciences

#### **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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Health Sciences

#### **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  
Levels: Graduate  
Schedule Types: Seminar  
Department: Health Sciences

#### **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  
Levels: Graduate  
Schedule Types: Seminar  
Department: Health Sciences

#### **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  
Levels: Graduate  
Schedule Types: Seminar  
Department: Health Sciences

#### **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  
Levels: Graduate  
Schedule Types: Seminar  
Department: Health Sciences

#### **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  
Department: Health Sciences

#### **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  
2. 000 Other hours  
Levels: Graduate  
Schedule Types: Practicum or Internship  
Department: Health Sciences

#### **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  
Department: Health Sciences

#### **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  
Department: Health Sciences

#### **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  
Department: Health Sciences

#### **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  
Department: Health Sciences

**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  
Department: Health Sciences

**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  
Department: Health Sciences

**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  
Department: Health Sciences

**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  
Department: Health Sciences

**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  
Department: Health Sciences

**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  
Department: Health Sciences

**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  
Department: Health Sciences

**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  
Department: Health Sciences

**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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Health Sciences

**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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Health Sciences

**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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Health Sciences

**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  
Levels: Graduate  
Schedule Types: Combined Lecture and Lab  
Department: Health Sciences

**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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Health Sciences

**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  
Department: Health Sciences

**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  
Department: Health Sciences

**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  
Department: Health Sciences

**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  
Department: Health Sciences



### **SPA 70722 - AUDIOLOGIC MANAGEMENT OF THE SCHOOL-AGE CHILD**

Focus on educational audiology. Features delivery of audiologic 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

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences

### **SPA 70723 - AUDIOLOGIC TREATMENT OF ADULTS**

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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences

### **SPA 70724 - HISTORY OF AUDIOLOGY**

An examination of the history of deafness/hearing impairment and the profession of audiology. Prerequisite: Admission to the AU. D. program and doctoral standing.

1. 000 Credit hours

1. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences

### **SPA 70725 - MEDICAL MANAGEMENT OF AUDITORY DISORDERS**

A study of the multidisciplinary approach to medical/surgical management of patients with auditory and vestibular disorders. Prerequisite: SPA 70712 and doctoral standing.

2. 000 Credit hours

2. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences

### **SPA 70726 - ELECTROPHYSIOLOGICAL TECHNIQUES IN AUDIOLOGY**

Study of evoked responses used in diagnostic audiology, including ABR, MLR, ECHOCHG, ENOG, ALR, P300, VER, and SSER.

Prerequisite: SPA 70706 and doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Health Sciences

### **SPA 70727 - CULTURAL ISSUES IN DEAFNESS**

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

Department: Health Sciences

### **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

Department: Health Sciences

### **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

Department: Health Sciences

### **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

Department: Health Sciences

### **SPA 70743 - CLERKSHIP I**

Clinical practicum in audiology during which students perform discrete tasks under supervision. Corequisite: SPA 70709 and special approval of instructor and doctoral standing.

1. 000 Credit hours

1. 000 Other hours

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Health Sciences

### **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

Department: Health Sciences

### **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

Department: Health Sciences

### **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

Department: Health Sciences

### **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

Department: Health Sciences

### **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

Department: Health Sciences

### **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

Schedule Types: Practicum or Internship

Department: Health Sciences

### **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. Corequisite: SPA 70750 or SPA 70751 or special approval of instructor and doctoral standing.

1. 000 Credit hours

1. 000 Other hours

Levels: Graduate

Schedule Types: Seminar

Department: Health Sciences

### **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  
2. 000 Other hours  
Levels: Graduate  
Schedule Types: Practicum or Internship  
Department: Health Sciences

#### **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  
Department: Health Sciences

#### **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  
Department: Health Sciences

#### **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. 000 TO 3. 000 Credit hours  
1. 000 TO 3. 000 Other hours  
Levels: Graduate  
Schedule Types: Workshop  
Department: Health Sciences

#### **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. 000 TO 3. 000 Credit hours  
1. 000 TO 3. 000 Other hours  
Levels: Graduate  
Schedule Types: Seminar  
Department: Health Sciences

#### **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. 000 TO 3. 000 Credit hours  
1. 000 TO 3. 000 Other hours  
Levels: Graduate  
Schedule Types: Seminar  
Department: Health Sciences

#### **SPA 74301 - APHASIA AND APRAXIA**

Neuro-anatomy, etiologies, symptomatologies, evaluation procedures and treatment techniques relating to aphasia and apraxia of speech in adults. Prerequisite: Doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Health Sciences

#### **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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Health Sciences

#### **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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Health Sciences

#### **SPA 74304 - COGNITIVE-COMMUNICATIVE DISORDERS**

Neuro-anatomy, etiologies, symptomatologies, evaluation procedures and treatment techniques relating to cognitive-communicative disorders in adults subsequent to right-brain damage, head trauma and dementia. Prerequisite: Doctoral standing.  
2. 000 Credit hours  
2. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Health Sciences

#### **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  
Department: Health Sciences

#### **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  
Department: Health Sciences

#### **SPA 74307 - DYSPHAGIA**

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  
Department: Health Sciences

#### **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  
Department: Health Sciences

#### **SPA 74309 - AUTISM SPECTRUM DISORDERS: THEORY AND DIAGNOSIS**

Provides an examination of the medical, developmental, social, cognitive, and communicative aspects of disorders on the Autism Spectrum. Assessment and intervention models are explored as they relate to various theoretical models for understanding the presentation of ASD. Prerequisite: doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Health Sciences

#### **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  
Department: Health Sciences

#### **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  
Department: Health Sciences

#### **SPA 74356 - DYSPHAGIA**

Anatomy, etiologies symptomatologies evaluation procedures and treatment techniques relating to swallowing disorders in adults and children. Prerequisite: Doctoral standing.





3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Health Sciences

**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  
Department: Health Sciences

**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  
Department: Health Sciences

**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  
Department: Health Sciences

**SPA 74500 - LANGUAGE SCIENCE**

Detailed discussion of current theoretical issues in first language acquisition from the prelinguistic period to the development of complex linguistic and communicative abilities. Prerequisites: doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Health Sciences

**SPA 74504 - EXPERIMENTAL PHONETICS**

Consideration of experimental bases of normal speech production and perception; survey of literature with implications for speech and hearing disorders. Prerequisite: SPA 4/54110 and doctoral standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Health Sciences

**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  
Department: Health Sciences

**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  
Department: Health Sciences

**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  
Department: Health Sciences

**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  
Department: Health Sciences

**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  
Levels: Graduate  
Schedule Types: Seminar  
Department: Health Sciences

**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  
Levels: Graduate  
Schedule Types: Seminar  
Department: Health Sciences

**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  
Department: Health Sciences

**SPA 84096 - 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: Doctoral standing.  
1. 000 TO 6. 000 Credit hours  
1. 000 TO 6. 000 Other hours  
Levels: Graduate  
Schedule Types: Individual Investigation  
Department: Health Sciences

**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  
Department: Health Sciences

**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  
Department: Health Sciences

**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  
Department: Health Sciences



## ***Sport Administration (SPAD)***

### **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.

2. 000 Credit hours

2. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Foundations, Leadership and Administration

### **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

1. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Foundations, Leadership and Administration

### **SPAD 25015 - INTRODUCTION TO GOLF PROFESSIONAL TRAINING PROGRAM**

An overview of the Professional Golfers Association of America's golf professional training program (GPTP). An in-depth review of the GPTP standards emphasizing PGA level-one checkpoint requirements is provided and includes portfolio development and self-studies.

Prerequisite: SPAD 15015.

2. 000 Credit hours

2. 000 Lecture hours

1. 000 Lab hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Foundations, Leadership and Administration

### **SPAD 25059 - SPORT IN SOCIETY**

Analysis of how sport relates to the social relations and cultural values of U. S. society. Framed by a critical evaluative perspective, examining how social class, ethnicity, race and gender relations contour sport practices.

Prerequisite: none.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Foundations, Leadership and Administration

### **SPAD 25092 - PRACTICUM I IN SPORT ADMINISTRATION**

(Repeatable for credit) A 105-hour field experience in a sport management setting.

Prerequisite: Sport administration (SPAD) major and special approval from instructor.

1. 000 TO 3. 000 Credit hours

1. 000 TO 3. 000 Other hours

Levels: Undergraduate

Schedule Types: Practicum or Internship

Department: Foundations, Leadership and Administration

Course Attributes: Experiential Learning Requirement

### **SPAD 25192 - PRACTICUM IN PROFESSIONAL GOLF MANAGEMENT I**

(Repeatable for a maximum of 3 credit hours)A cumulative 105-hour on-campus seminar and field experience in a professional golf management setting. Prerequisite: SPAD 15015 and SPAD 25015 and special approval.

1. 000 Credit hours

1. 000 Other hours

Levels: Undergraduate

Schedule Types: Practicum or Internship

Department: Foundations, Leadership and Administration

Course Attributes: Experiential Learning Requirement

### **SPAD 35015 - GOLF MANAGEMENT I**

An in-depth study of the golf swing and teaching methodology. The sciences applied to the golf swing, laws, principles and preferences of a model swing; professional technology for golf teachers; and the importance of directed practice, drills and teaching aids. Prerequisite: SPAD 15015 and SPAD 25015 and SPAD 25192.

2. 000 Credit hours

1. 000 Lecture hours

1. 000 Lab hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **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: PEP 15010.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Foundations, Leadership and Administration

Course Attributes: Writing Intensive Course

### **SPAD 35092 - PRACTICUM II IN SPORT ADMINISTRATION**

(Repeatable for credit) A 105-hour field experience in a sport management setting.

Prerequisite: SPAD 25092 and sport administration (SPAD) major and special approval from instructor.

1. 000 OR 3. 000 Credit hours

1. 000 OR 3. 000 Other hours

Levels: Undergraduate

Schedule Types: Practicum or Internship

Department: Foundations, Leadership and Administration

Course Attributes: Experiential Learning Requirement

### **SPAD 35192 - PRACTICUM IN PROFESSIONAL GOLF MANAGEMENT II**

(Repeatable for a maximum of 3 credit hours)A cumulative 105-hour field and on-campus seminar class experience in a professional golf management setting. Prerequisite: SPAD 15015 and SPAD 25015 and SPAD 25192 and special approval.

1. 000 Credit hours

1. 000 Other hours

Levels: Undergraduate

Schedule Types: Practicum or Internship

Department: Foundations, Leadership and Administration

Course Attributes: Experiential Learning Requirement

### **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

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Foundations, Leadership and Administration

### **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

Levels: Undergraduate

Schedule Types: Lecture

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **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 sociospatial 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

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **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

Levels: Undergraduate

Schedule Types: Lecture

Department: Foundations, Leadership and Administration

### **SPAD 45029 - 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: none.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Foundations, Leadership and Administration

### **SPAD 45030 - SPORT ENTERPRISE**

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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Foundations, Leadership and Administration

Course Attributes: Writing Intensive Course

### **SPAD 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

Department: Foundations, Leadership and Administration

### **SPAD 45032 - SALES MANAGEMENT IN SPORT AND ENTERTAINMENT**

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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Foundations, Leadership and Administration

### **SPAD 45091 - SEMINAR FOR INTERNSHIP PREPARATION**

(Repeatable for credit) This course prepares the students for the internship experience in sport administration. Students successfully complete this course prior to registering for internship. Prerequisite: Senior standing and special approval.

1. 000 Credit hours

1. 000 Other hours

Levels: Undergraduate

Schedule Types: Seminar

Department: Foundations, Leadership and Administration

### **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. Prerequisite: SPAD 45091 and senior standing and special approval.

6. 000 TO 12. 000 Credit hours

6. 000 TO 12. 000 Other hours

Levels: Undergraduate

Schedule Types: Practicum or Internship

Department: Foundations, Leadership and Administration

Course Attributes: Experiential Learning Requirement

### **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

Department: Foundations, Leadership and Administration

### **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 Credit hours

2. 000 Other hours

Levels: Undergraduate

Schedule Types: Practicum or Internship

Department: Foundations, Leadership and Administration

Course Attributes: Experiential Learning Requirement

**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

Department: Foundations, Leadership and Administration

**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

Department: Foundations, Leadership and Administration

**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

Department: Foundations, Leadership and Administration

## *Spanish (SPAN)*

**SPAN 18201 - ELEMENTARY SPANISH I**

An introduction to the Spanish language in the context of Hispanic cultures. Prerequisite: None.

4. 000 Credit hours

4. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

**SPAN 18202 - ELEMENTARY SPANISH II**

A continuation of the introduction to the Spanish language in the context of Hispanic cultures.

Prerequisite: SPAN 18201.

4. 000 Credit hours

4. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

**SPAN 18301 - SPANISH FOR HEALTH CARE I**

Introduction to the Spanish language in the context of health care situations, tasks and terminology and Hispanic cultures. Prerequisite: none.

4. 000 Credit hours

4. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

**SPAN 18302 - SPANISH FOR HEALTH CARE II**

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.

4. 000 Credit hours

4. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

**SPAN 28201 - INTERMEDIATE SPANISH I**

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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

**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

Department: Modern and Classical Language Studies

**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

Department: Modern and Classical Language Studies

**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

Department: Modern and Classical Language Studies

**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

Department: Modern and Classical Language Studies

**SPAN 38215 - SPANISH PHONETICS AND DICTION**

Study of the modern Spanish sound system with special emphasis on pronunciation and intonation. Prerequisite: SPAN 38211.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

**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

Department: Modern and Classical Language Studies

**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

Department: Modern and Classical Language Studies

**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

Department: Modern and Classical Language Studies

Course Attributes: 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  
Department: Modern and Classical Language Studies  
Course Attributes: Writing Intensive Course

### **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  
Department: Modern and Classical Language Studies  
Course Attributes: Writing Intensive Course

### **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  
Department: Modern and Classical Language Studies  
Course Attributes: Writing Intensive Course

### **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  
Department: Modern and Classical Language Studies

### **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  
Department: Modern and Classical Language Studies

### **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

Department: Modern and Classical Language Studies

### **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  
Department: Modern and Classical Language Studies

### **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  
Department: Modern and Classical Language Studies

### **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  
Department: Modern and Classical Language Studies

### **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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Modern and Classical Language Studies

### **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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Modern and Classical Language Studies  
Course Attributes: Writing Intensive Course

### **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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Modern and Classical Language Studies

### **SPAN 48350 - DON QUIXOTE**

A penetrating study of Cervantes' masterpiece. Prerequisite: 6 hours from SPAN 38330 and SPAN 38331 and SPAN 38334 and SPAN 38335.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Modern and Classical Language Studies

### **SPAN 48370 - MODERNISMO IN SPANISH-AMERICA**

Ruben Dario and other writers of the Modernista movement; works include modernist poetry, short story and essay. Prerequisite: 6 hours from SPAN 38330 and SPAN 38331 and SPAN 38334 and SPAN 38335.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Modern and Classical Language Studies

### **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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Modern and Classical Language Studies

### **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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Modern and Classical Language Studies

**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

Department: Modern and Classical Language Studies

**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

Department: Modern and Classical Language Studies

**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

Department: Modern and Classical Language Studies

**SPAN 58350 - DON QUIXOTE**

A detailed study of Cervantes' masterpiece.

Prerequisite: Graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

**SPAN 58370 - MODERNISM IN SPANISH AMERICA**

Ruben Dario and other writers of the Modernista movement; works include modernist poetry, short story and essay. Prerequisite: Graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

**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

Department: Modern and Classical Language Studies

**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

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

**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

Department: Modern and Classical Language Studies

**SPAN 68010 - THE PRACTICE OF SPANISH TRANSLATION**

Students apply linguistic and communication science concepts to case studies of language mediation. Corequisite: MCLS 60010 and graduate standing.

2. 000 Credit hours

2. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Modern and Classical Language Studies

**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

Department: Modern and Classical Language Studies

**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

Department: Modern and Classical Language Studies

**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

Department: Modern and Classical Language Studies

**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

Department: Modern and Classical Language Studies

**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

Department: Modern and Classical Language Studies

**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

Department: Modern and Classical Language Studies

**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

Schedule Types: Lecture

Department: Modern and Classical Language Studies

**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



Department: Modern and Classical Language Studies

### **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  
Department: Modern and Classical Language Studies

### **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  
Department: Modern and Classical Language Studies

### **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  
Department: Modern and Classical Language Studies

### **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  
Department: Modern and Classical Language Studies

### **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  
Department: Modern and Classical Language Studies

### **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  
Department: Modern and Classical Language Studies

## ***Special Education (SPED)***

### **SPED 19201 - AMERICAN SIGN LANGUAGE I**

(Cross-listed with ASL 19201) An introduction to American Sign Language and deaf culture. Development of beginning visual receptive ASL skills and introductory expressive skills. Prerequisite: None. 4. 000 Credit hours  
4. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Lifespan Development and Educational Sciences

### **SPED 19202 - AMERICAN SIGN LANGUAGE II**

(Cross-listed with ASL 19202) A continuation of the introduction to American Sign Language and deaf culture. Continued development of basic visual receptive ASL skills and expressive skills. Prerequisite: ASL 19201 or SPED 19201. 4. 000 Credit hours  
4. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Lifespan Development and Educational Sciences

### **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  
15. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Clinic, Lecture  
Department: Lifespan Development and Educational Sciences

Course Attributes: Diversity Course-Domestic, TAG - Education

### **SPED 29201 - AMERICAN SIGN LANGUAGE III**

(Cross-listed with ALS 29201) Development of ASL fluency in expressive and receptive mode to intermediate level. Continue to increase awareness of deaf cultural values, customs and conversational habits. Prerequisite: ASL 19202 or SPED 19202. 3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Lifespan Development and Educational Sciences

### **SPED 29202 - AMERICAN SIGN LANGUAGE IV**

(Cross-listed with ASL 29202) Development of ASL fluency in expressive and receptive mode to

beginning advanced. Continue to increase awareness of deaf cultural values, customs and conversational habits. Prerequisite: ASL 29201 or SPED 29201. 3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Lifespan Development and Educational Sciences

### **SPED 39201 - AMERICAN SIGN LANGUAGE V**

(Cross-listed with ASL 39201) Development of ASL fluency in expressive/receptive modes to advanced levels to enable communication at conversational speed with unfamiliar deaf individuals. Focus on differences in sign according to gender and age. Increased awareness of deaf cultural, values, customs, conversational habits. Prerequisites: ASL 29202 or SPED 29202; and admission to advanced study. 3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Lifespan Development and Educational Sciences

### **SPED 39202 - AMERICAN SIGN LANGUAGE VI**

(Cross-listed with ASL 39202) ASL fluency expressive and receptive modes to advanced levels; enable fluent communication with unfamiliar deaf individuals using culturally, situationally, gender and register-specific conversational repair strategies when needed. Increased awareness of deaf cultural values. Prerequisite: ASL 39201 or SPED 39201; and admission to advanced standing. 3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Lifespan Development and Educational Sciences

### **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  
1. 000 TO 5. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Workshop  
Department: Lifespan Development and Educational Sciences

### **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  
Department: Lifespan Development and Educational Sciences

### **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 students 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

Department: Lifespan Development and Educational Sciences

Course Attributes: Writing Intensive Course

### **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

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences

### **SPED 43063 - CURRICULUM METHODS MODERATE/INTENSIVE INTERVENTION**

Meeting academic, socialization, health, motor skills, communication needs in inclusive setting. Working with paraprofessionals to provide community-based instruction assessment observation record-keeping, IEPs and ITPS, lesson plans. Prerequisite: SPED 43060 and admission to advanced study.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences

### **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 29202 or SPED 29202 with a minimum grade of B- (2. 700); and SPED 43309 with a minimum grade of B- (2. 700); and admission to advanced study.

1. 000 TO 3. 000 Credit hours

1. 000 TO 3. 000 Other hours

Levels: Undergraduate

Schedule Types: Practicum or Internship

Department: Lifespan Development and Educational Sciences

Course Attributes: Experiential Learning Requirement





### **SPED 43100 - SURVEY OF THE INTERPRETING PROFESSION**

Issues and concerns facing educational interpreters; legal mandates and constraints; ethical guidelines and their application to educational environments; roles/responsibilities, including sign interpreting/transliterating, team membership, classroom and building roles and negotiating the educational environment. Prerequisite: None. 3.000 Credit hours 3.000 Lecture hours Levels: Undergraduate Schedule Types: Lecture Department: Lifespan Development and Educational Sciences

### **SPED 43101 - DEAF CULTURE AND COMMUNITY**

(Cross-listed with ASL 49101) 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: None. 3.000 Credit hours 3.000 Lecture hours Levels: Undergraduate Schedule Types: Lecture Department: Lifespan Development and Educational Sciences

### **SPED 43102 - INTERPRETING PROCESSES DEAF/HARD-OF-HEARING I**

Beginning level interpreting course addressing voice-to-sign and sign-to-voice processes using simultaneous and consecutive strategies: ASL, SEE, signed English, total communication signing. Preschool, primary, elementary students developmentally delayed through gifted academic levels. Requires 20 hours of field experience. Prerequisites: ASL 29202 or SPED 29202; and admission to advanced study. 3.000 Credit hours 3.000 Lecture hours Levels: Undergraduate Schedule Types: Field Experience, Lecture Department: Lifespan Development and Educational Sciences

### **SPED 43103 - INTERPRETING PROCESSES DEAF/HARD-OF-HEARING II**

Intermediate/advanced level interpreting course voice-to-sign and sign-to-voice processes using simultaneous and consecutive strategies: ASL, SEE, Signed English, Total Communication. Focus on middle school/high school/postsecondary students developmentally delayed through gifted academic levels. Requires 30 hours of field experience. Prerequisite: ASL39201 or SPED 39201; and SPED 43102 and SPED 43105 and admission to advanced study. 3.000 Credit hours 3.000 Lecture hours Levels: Undergraduate Schedule Types: Lecture Department: Lifespan Development and Educational Sciences

### **SPED 43104 - ADVANCED VOICE-TO-SIGN INTERPRETING**

Continued advanced-level skill development in voice-to-sign processes using simultaneous and consecutive strategies: advanced ASL, SEE, Signed English, Total Communication. Dialect idiom, idiosyncratic language usage and patterns, regional/local variations; age, gender, register variations. Requires 30 hours field experience. Prerequisite: ASL39202 or SPED 39202; and SPED 43103 and admission to advanced study. 3.000 Credit hours 3.000 Lecture hours Levels: Undergraduate Schedule Types: Field Experience, Lecture Department: Lifespan Development and Educational Sciences

### **SPED 43105 - SIGNED ENGLISH AND OTHER SYSTEMS**

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 or SPED 29202; and SPED 43100; and admission to advanced study. 3.000 Credit hours 3.000 Lecture hours Levels: Undergraduate Schedule Types: Lecture Department: Lifespan Development and Educational Sciences

### **SPED 43106 - CLASSROOM SETTING INTERPRETING**

Issues and challenges of classroom-based educational interpreting. Mainstreaming, inclusion, resource room, and self-contained academic and nonacademic class preparation and interpreting environments. Off-campus practicum four hours each week to observe and assist with classroom interpreting. Prerequisites: ASL 19202 or SPED 19202; and SPED 43100. 3.000 Credit hours 3.000 Lecture hours Levels: Undergraduate Schedule Types: Lecture Department: Lifespan Development and Educational Sciences

### **SPED 43107 - NONCLASSROOM SETTING INTERPRETING**

Issues and challenges of non-classroom based educational interpreting. Student participation with IEP-designated related services; professional consultations; assessment interpreting; miscellaneous interpreting. Off-campus practicum four hours a week to observe and assist with classroom interpreting. Prerequisites: ASL 29201 or SPED 29201; and SPED 43100. 3.000 Credit hours 3.000 Lecture hours Levels: Undergraduate Schedule Types: Lecture Department: Lifespan Development and Educational Sciences

### **SPED 43108 - 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. Prerequisites: ASL 29202 or SPED 29202; and SPED 43100; and admission to advanced study. 3.000 Credit hours 3.000 Lecture hours Levels: Undergraduate Schedule Types: Lecture Department: Lifespan Development and Educational Sciences

### **SPED 43110 - DISCOURSE ANALYSIS FOR INTERPRETERS**

Spoken English and American Sign Language usage are studied as they appear in conversational, situational and interpreted contexts. Analysis of discourse and self-analysis of classroom discourse are targeted. Prerequisite: SPED 43100 and SPED 43102 and SPED 43106 and SPED 43107. Corequisite: SPED 43101. 3.000 Credit hours 3.000 Lecture hours Levels: Undergraduate Schedule Types: Lecture Department: Lifespan Development and Educational Sciences

### **SPED 43111 - THE PROFESSIONAL INTERPRETER**

Covers current trends in the field regarding situational and ethical issues. Demand/ control schema and ethics are the focus to prepare students for the national certification test. Prerequisite: SPED 43100 and SPED 43106. 3.000 Credit hours 3.000 Lecture hours Levels: Undergraduate Schedule Types: Lecture Department: Lifespan Development and Educational Sciences

### **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 Department: Lifespan Development and Educational Sciences Course Attributes: Writing Intensive Course

### **SPED 43310 - LANGUAGE DEVELOPMENT FOR DEAF AND HARD-OF-HEARING STUDENTS**

(Repeatable up to 3 times for credit) 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 an 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 work. Prerequisites: SPED 43309 with a minimum grade of B- (2. 700); and SPED 29202 or ASL 29202 with a minimum grade of B- (2. 700); and SPA 34104; and admission to advanced study.

Corequisite: SPED 43392.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

### **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: PED 43313 with a minimum grade of B (3. 0); 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

Department: Lifespan Development and Educational Sciences

### **SPED 43313 - LITERACY ASSESSMENT AND INTERVENTION FOR DEAF/HARD-OF-HEARING STUDENTS**

Theoretical overview integrated linguistics curriculum. Reading theories; difficulties for students with significant hearing loss and auditory processing difficulties; instructional planning; materials design; ongoing assessment strategies. Course includes a practicum placement.

Prerequisites: SPED 43310 with a minimum grade of B- (2. 700); SPED 29202 or ASL 29202 with a minimum grade of B- (2. 700); and CI 47504 or ECED 40126; and admission to advanced study. Corequisite: 2 credit hours of SPED 43392.

6. 000 Credit hours

6. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

### **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- (2. 700); 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

Department: Lifespan Development and Educational Sciences

### **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 students (D/HH) students. Students/pre-service teachers gain experience in working with D/HH students with diverse needs, disabilities and ethnic/cultural backgrounds. In addition, students/pre-service teachers become familiar with the variety of educational settings available for D/HH students. The class meets five times during the semester and the faculty make 1-2 observations of the student/pre-service deaf educator as s/he implements instructional activities. Prerequisite: SPED 29202.

1. 000 TO 3. 000 Credit hours

10. 000 TO 60. 000 Other hours

Levels: Undergraduate

Schedule Types: Practicum or Internship

Department: Lifespan Development and Educational Sciences

Course Attributes: Experiential Learning Requirement

### **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 200 clock hours under the supervision of the school-based mentor teacher and the university supervisor. Prerequisite: Admission to advanced study. Corequisite: SPED 49525.

4. 000 TO 9. 000 Credit hours

4. 000 TO 9. 000 Other hours

Levels: Undergraduate

Schedule Types: Practicum or Internship

Department: Lifespan Development and Educational Sciences

Course Attributes: Experiential Learning Requirement

### **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

Department: Lifespan Development and Educational Sciences

### **SPED 43992 - FIELD EXPERIENCE IN SPECIAL EDUCATION**

(Repeatable for credit) 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. Five seminar

meetings. Prerequisite: Admission to advanced study. .

2. 000 TO 4. 000 Credit hours

2. 000 TO 4. 000 Other hours

Levels: Undergraduate

Schedule Types: Field Experience

Department: Lifespan Development and Educational Sciences

Course Attributes: Experiential Learning Requirement

### **SPED 43996 - INDIVIDUAL INVESTIGATION IN SPECIAL EDUCATION**

(Repeatable for credit) (Cross-listed with ASL 49096)

1. 000 TO 10. 000 Credit hours

1. 000 TO 10. 000 Other hours

Levels: Undergraduate

Schedule Types: Individual Investigation

Department: Lifespan Development and Educational Sciences

### **SPED 44092 - FIELD EXPERIENCE FOR MILD/MODERATE INTERVENTION SPECIALIST**

(Repeatable for credit) 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.

2. 000 OR 3. 000 Credit hours

2. 000 OR 3. 000 Other hours

Levels: Undergraduate

Schedule Types: Field Experience

Department: Lifespan Development and Educational Sciences

Course Attributes: Experiential Learning Requirement

### **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.

2. 000 OR 3. 000 Credit hours

2. 000 OR 3. 000 Other hours

Levels: Undergraduate

Schedule Types: Field Experience

Department: Lifespan Development and Educational Sciences

Course Attributes: Experiential Learning Requirement

### **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.

3. 000 Credit hours

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Seminar



Department: Lifespan Development and Educational Sciences

**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.

1. 000 TO 5. 000 Credit hours

1. 000 TO 5. 000 Other hours

Levels: Graduate

Schedule Types: Workshop

Department: Lifespan Development and Educational Sciences

**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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

**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

Department: Lifespan Development and Educational Sciences

**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

Department: Lifespan Development and Educational Sciences

**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.

3. 000 Credit hours

1. 000 Lecture hours

2. 000 Other hours

Levels: Graduate

Schedule Types: Field Experience, Lecture

Department: Lifespan Development and Educational Sciences

**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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Clinic, Field Experience, Lecture

Department: Lifespan Development and Educational Sciences

**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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

**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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

**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.

3. 000 Credit hours

3. 000 Lecture hours

33. 000 Other hours

Levels: Graduate

Schedule Types: Field Experience, Lecture

Department: Lifespan Development and Educational Sciences

**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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

**SPED 53063 - CURRICULUM METHODS MODERATE/INTENSIVE INTERVENTION**

Meeting academic, socialization, health, motor skills, communication needs in inclusive setting. Working with paraprofessionals to provide community-based instruction, assessment, observation, record-keeping IEPs and ITPS lesson plans. Prerequisite: SPED 53060.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

**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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

**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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

**SPED 53092 - DEAF RESIDENTIAL SCHOOL INTERNSHIP**

(Repeatable for credit) Week-long practicum at a residential school for the deaf; 24-hour interaction with deaf students and adults. Student stay on campus. Conduct, interaction, sign language skills, maturity, responsibility and performance are evaluated by staff at the school. Prerequisite: ASL or SPED 29202 with a minimum grade of B- (2.700); and SPED 53309 with a minimum grade of B- (2.700); and graduate standing.

1. 000 TO 3. 000 Credit hours

1. 000 TO 3. 000 Other hours

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Lifespan Development and Educational Sciences

**SPED 53100 - SURVEY OF INTERPRETING PROFESSION**

Issues and concerns facing educational interpreters: legal mandates and constraints, ethical guidelines and their application to educational environments, roles/responsibilities including sign interpreting/transliterating, team membership, classroom and building roles, and negotiating the educational environment. Prerequisite: Graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

**SPED 53101 - DEAF CULTURE AND COMMUNITY**

(Cross-listed with ASL 49101) 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

Department: Lifespan Development and Educational Sciences

**SPED 53102 - INTERPRETING PROCESSES DEAF/HARD OF HEARING I**

Beginning level interpreting course addressing voice-to-sign and sign-to-voice processes using simultaneous and consecutive strategies: ASL, SEE, signed English, total communication signing. Preschool, primary, elementary students developmentally delayed through gifted academic levels. Requires 20 hours of field experience. Prerequisite: Graduate standing.

3. 000 Credit hours

2. 000 Lecture hours

1. 000 Other hours

Levels: Graduate

Schedule Types: Field Experience, Lecture

Department: Lifespan Development and Educational Sciences

**SPED 53103 - INTERPRETING PROCESSES DEAF/HARD OF HEARING II**

Intermediate/advanced level interpreting course voice-to-sign and sign-to-voice processes using simultaneous and consecutive strategies: ASL, SEE, Signed English, Total Communication. Focus on middle school/high school/postsecondary students developmentally delayed through gifted academic levels. Requires 30 hours of field experience. Prerequisite: SPED 39201 and SPED 4/53105 and SPED 4/53102 and graduate standing.

3. 000 Credit hours

2. 000 Lecture hours

1. 000 Other hours

Levels: Graduate

Schedule Types: Field Experience, Lecture

Department: Lifespan Development and Educational Sciences

**SPED 53104 - INTERPRETING PROCESS III**

Continued advanced-level skill development in voice-to-sign processes using simultaneous and consecutive strategies: advanced ASL, SEE, Signed English, Total Communication. Dialect idiom, idiosyncratic language usage and patterns, regional/local variations; age, gender, register variations. Requires 30 hours field experience. Prerequisite: SPED 39201 and 4/53103 and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Field Experience, Lecture

Department: Lifespan Development and Educational Sciences

**SPED 53105 - SIGNED ENGLISH AND OTHER SYSTEMS**

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. Prerequisite: SPED 4/53100 and ASL or SPED 29202 and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

**SPED 53106 - CLASSROOM-SETTING INTERPRETING**

Issues and challenges of classroom-based educational interpreting. Mainstreaming, inclusion, resource room, and self-contained academic and nonacademic class preparation and interpreting environments. Off-campus practicum four hours each week to observe and assist with classroom interpreting. Prerequisite: SPED 4/53100 and SPED 19201 or ASL 19201 and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

**SPED 53107 - NONCLASSROOM-SETTING INTERPRETING**

Issues and challenges of nonclassroom-based educational interpreting. Student participation with IEP-designated related services professional consultations assessment interpreting miscellaneous interpreting. Off-campus practicum four hours a week to observe and assist with classroom interpreting. Prerequisite: SPED 4/53100 and SPED 29201 and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

**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

Department: Lifespan Development and Educational Sciences

**SPED 53110 - DISCOURSE ANALYSIS FOR INTERPRETERS**

Spoken English and ASL usage is studied as they appear in conversational, situational and interpreted contexts. Analysis of discourse and self-analysis of classroom discourse are targeted. Prerequisite: SPED 43100 and SPED 43102 and SPED 43106 and SPED 43107. Corequisite SPED 43101.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

**SPED 53111 - THE PROFESSIONAL INTERPRETER**

Covers current trends in the field regarding situational and ethical issues. Demand/Control schema and Ethics are the focus to prepare students for the national certification test. Prerequisite: SPED 43100 and SPED 43106; or SPED 53100 and SPED 53106.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

**SPED 53192 - PRACTICUM: INTERPRETING PROCESS**

(Repeatable for credit) Field-based practicum experience provides preservice educational interpreters with opportunity to participate with currently practicing master educational interpreters. Students placed in education based settings. University supervisor and teacher mentor





observe and assess student skill. Prerequisite: SPED 29202 and graduate standing.

1. 000 TO 3. 000 Credit hours

1. 000 TO 3. 000 Other hours

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences

### **SPED 53310 - LANGUAGE DEVELOPMENT FOR DEAF AND HARD-OF-HEARING STUDENTS**

(Repeatable 3 times for credit) 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 work. Course may be repeated up to 3 times.

Prerequisite: SPED 53309 with a minimum grade of B- (2. 700); and SPED 29202 or ASL 29202 with a minimum grade of B- (2. 700); and SPA 34104; and graduate standing. Corequisite: SPED 63392.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

### **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- (2. 700) and graduate standing. Corequisite: 2 credit hours of SPED 63392.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

### **SPED 53313 - LITERACY ASSESSMENT AND INTERVENTION FOR DEAF/HARD-OF-HEARING STUDENTS**

Theoretical overview integrated linguistics curriculum. Reading theories: difficulties for students with significant hearing loss and auditory processing difficulties; instructional planning; materials design; ongoing assessment strategies. Course includes a practicum placement.

Prerequisite: SPED 53310 with a minimum grade of B- (2. 700); and SPED 29202 or ASL 29202 with a minimum grade of B- (2. 700); and CI 67310; and graduate standing.

6. 000 Credit hours

6. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

### **SPED 53317 - FAMILY-FOCUSED APPROACHES TO COCHLEAR IMPLANT USE**

Examines effective support and utilization of cochlear implants from a family perspective. Includes the initial decision making and issues, through the child's and family's adjustment to the activation, use and maintenance of the device. Also focuses on the need long-term and sometimes unexpected outcomes of device usage and ultimately, adolescent and young-adult issues. Prerequisites: SPED 29202 or ASL 29202; and SPED 53310; and SPED 53010 or 63952; and SPA 43600; and graduate standing.

3. 000 Credit hours

1. 000 Lecture hours

2. 000 Lab hours

Levels: Graduate

Schedule Types: Combined Lecture and Lab

Department: Lifespan Development and Educational Sciences

### **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 43313 with a minimum grade of B- (2. 700); 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

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences

### **SPED 53530 - INSTRUCTIONAL PROCESSES FOR GIFTED CHILDREN**

Discovery and guidance of mentally superior children. Provision for school attention and accommodations. Case studies of gifted children. Selecting appropriate instructional strategies. Prerequisite: SPED 53529 and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences

**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

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

**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

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

**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; and SPSY 67920 or 77920; and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

**SPED 63092 - FIELD EXPERIENCE IN SPECIAL EDUCATION**

(Repeatable for credit) Prerequisite: graduate standing.

1. 000 TO 9. 000 Credit hours

1. 000 TO 9. 000 Other hours

Levels: Graduate

Schedule Types: Field Experience

Department: Lifespan Development and Educational Sciences

**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

Department: Lifespan Development and Educational Sciences

**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

Department: Lifespan Development and Educational Sciences

**SPED 63201 - ISSUES IN SPECIAL EDUCATION**

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

Department: Lifespan Development and Educational Sciences

**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

Department: Lifespan Development and Educational Sciences

**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

Department: Lifespan Development and Educational Sciences

**SPED 63392 - ADVANCED PRACTICUM IN HEARING IMPAIRED**

(Repeatable for credit) 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 students (D/HH) students. Students/pre-service teachers gain experience in working with D/HH students with diverse needs, disabilities and ethnic/cultural backgrounds. In addition, students/pre-service teachers become familiar with the variety of educational settings available for D/HH students. The class meets five times during the semester and the faculty make 1-2 observations of the student/pre-service deaf educator as s/he implements instructional activities. Prerequisite: graduate standing.

1. 000 TO 3. 000 Credit hours

12. 000 Lecture hours

60. 000 Other hours

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Lifespan Development and Educational Sciences

**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

Department: Lifespan Development and Educational Sciences

**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

Department: Lifespan Development and Educational Sciences

**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

Department: Lifespan Development and Educational Sciences



**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

Department: Lifespan Development and Educational Sciences

**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

Department: Lifespan Development and Educational Sciences

**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

Department: Lifespan Development and Educational Sciences

**SPED 63954 - PRACTICAL APPLICATIONS: FIVE TO EIGHT**

Application of recommended practices for children five to eight. Observation of children in natural environment; plan, evaluate, intervention collaboratively. Sixty field hours. Prerequisite: Graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

**SPED 63955 - TYPICAL AND ATYPICAL DEVELOPMENT IN YOUNG CHILDREN**

(Cross-listed with ECED 60160) Overview of typical/atypical development pathways age 3 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

Department: Lifespan Development and Educational Sciences

**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

Department: Lifespan Development and Educational Sciences

**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

Department: Lifespan Development and Educational Sciences

**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

Department: Lifespan Development and Educational Sciences

**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

Department: Lifespan Development and Educational Sciences

**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

Department: Lifespan Development and Educational Sciences

**SPED 63992 - ADVANCED PRACTICUM IN SPECIAL EDUCATION**

(Repeatable for credit) Recreational, therapeutic and academic experience with exceptional children in camp, school or residential facility. Prerequisite: Graduate standing and special approval.

2. 000 TO 8. 000 Credit hours

2. 000 TO 8. 000 Other hours

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Lifespan Development and Educational Sciences

**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

Department: Lifespan Development and Educational Sciences

**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

Department: Lifespan Development and Educational Sciences

**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

Department: Lifespan Development and Educational Sciences

**SPED 64309 - AUTISM SPECTRUM DISORDERS: THEORY AND DIAGNOSIS**

Provides an examination of the medical, developmental, social, cognitive, and communicative aspects of disorders on the Autism Spectrum. Assessment and intervention models are explored as they relate to various theoretical models for understanding the presentation of ASD. Prerequisite: graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

**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

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

**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

Schedule Types: Workshop

Department: Lifespan Development and Educational Sciences

**SPED 70094 - COLLEGE TEACHING**

(Repeatable for credit) (Cross-listed with EDPF 70094 and EDPF 70094 and SPED 60094 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

Department: Lifespan Development and Educational Sciences

**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

Department: Lifespan Development and Educational Sciences

**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

Department: Lifespan Development and Educational Sciences

**SPED 73956 - FOUNDATIONS IN EARLY CHILDHOOD SERVICES**

(Cross-listed with ECED 60156 and SPED 63956) 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

Department: Lifespan Development and Educational Sciences

**SPED 73957 - 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: Doctoral standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

**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

Department: Lifespan Development and Educational Sciences

**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

Department: Lifespan Development and Educational Sciences

**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

Department: Lifespan Development and Educational Sciences

**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

Department: Lifespan Development and Educational Sciences

**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

Department: Lifespan Development and Educational Sciences

**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

Department: Lifespan Development and Educational Sciences

**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

Department: Lifespan Development and Educational Sciences

**SPED 83301 - SINGLE SUBJECT RESEARCH METHODS**

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: doctoral standing.

3. 000 Credit hours  
3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

### **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

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

### **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

Levels: Graduate

Schedule Types: Seminar

Department: Lifespan Development and Educational Sciences

### **SPED 83992 - INTERNSHIP IN SPECIAL EDUCATION**

(Repeatable for credit) Prerequisite: Doctoral standing and permission.

2. 000 TO 8. 000 Credit hours

2. 000 TO 8. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture, Practicum or Internship

Department: Lifespan Development and Educational Sciences

### **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

Levels: Graduate

Schedule Types: Research

Department: Lifespan Development and Educational Sciences

## ***School Psychology (SPSY)***

### **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

Levels: Graduate

Schedule Types: Workshop

Department: Lifespan Development and Educational Sciences

### **SPSY 60094 - COLLEGE TEACHING**

(Repeatable for credit) (Cross-listed with EDPF 60094 and EDPF 70094 and SPED 60094 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

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences

### **SPSY 67692 - PRACTICUM I IN SCHOOL PSYCHOLOGY**

(Repeatable for credit) Provides students with supervised experience in applied settings to practice introductory skills in assessment, intervention and professional development. 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 Other hours

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Lifespan Development and Educational Sciences

### **SPSY 67792 - PRACTICUM II IN SCHOOL PSYCHOLOGY**

(Repeatable for credit) Supervised experience in educational settings to practice assessment, intervention, consultation procedures, professional development. Two consecutive semesters same academic year required. 75 clinical/field hrs. 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: SPSY 67692 and graduate standing.

3. 000 Credit hours

3. 000 Other hours

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Lifespan Development and Educational Sciences

### **SPSY 67892 - ADVANCED PRACTICUM IN SCHOOL PSYCHOLOGY**

(Repeatable for credit) Provides students with advanced supervised experience in educational or mental health settings. 60 clock hours per credit hour. Students register for minimum 6 hours (360 clock hours) across successive semesters. 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: SPSY 67792 and special approval and graduate standing.

3. 000 TO 6. 000 Credit hours

6. 000 Other hours

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences

### **SPSY 67914 - FIELD EXPERIENCE IN EDUCATION FOR SCHOOL PSYCHOLOGISTS**

Involves minimum of 120 clock hours of observation in public school. 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. Prerequisite: Graduate standing.

2. 000 Credit hours

2. 000 Other hours

Levels: Graduate

Schedule Types: Field Experience

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences

### **SPSY 67929 - INDIVIDUAL COUNSELING TECHNIQUES FOR REHABILITATION COUNSELORS AND SCHOOL PSYCHOLOGISTS**

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

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

### **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

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

### **SPSY 67951 - 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: Graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

### **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

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

### **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

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

### **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

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

### **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

Levels: Graduate

Schedule Types: Lecture

Department: Lifespan Development and Educational Sciences

### **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

Levels: Graduate

Schedule Types: Combined Lecture and Lab

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences



### **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 Department: Lifespan Development and Educational Sciences

### **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 Department: Lifespan Development and Educational Sciences

### **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 Department: Lifespan Development and Educational Sciences

### **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 Department: Lifespan Development and Educational Sciences

### **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 Department: Lifespan Development and Educational Sciences

### **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 Department: Lifespan Development and Educational Sciences

### **SPSY 70094 - COLLEGE TEACHING**

(Repeatable for credit) (Cross-listed with EDPF 70094 and EDPF 70094 and SPED 60094 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 Department: Lifespan Development and Educational Sciences

### **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 Schedule Types: Lecture Department: Lifespan Development and Educational Sciences

### **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 Department: Lifespan Development and Educational Sciences

### **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 Department: Lifespan Development and Educational Sciences

### **SPSY 77692 - PRACTICUM I IN SCHOOL PSYCHOLOGY**

(Repeatable for credit) Provides students with supervised experience in applied settings to practice introductory skills in assessment, intervention and professional development. 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 Other hours Levels: Graduate Schedule Types: Practicum or Internship Department: Lifespan Development and Educational Sciences

### **SPSY 77792 - PRACTICUM II IN SCHOOL PSYCHOLOGY**

(Repeatable for credit) Supervised experience in educational settings to practice assessment, intervention, consultation procedures, professional development. Two consecutive semesters same academic year required. 75 clinical/field hrs. 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: SPSY 77692 and doctoral standing. 3. 000 Credit hours 3. 000 Other hours Levels: Graduate Schedule Types: Practicum or Internship Department: Lifespan Development and Educational Sciences

### **SPSY 77892 - ADVANCED PRACTICUM IN SCHOOL PSYCHOLOGY**

(Repeatable for credit) Provides students with advanced supervised experience in educational or mental health settings. 60 clock hours or hr. Students register for minimum 6 hours (360 clock hours) across successive semesters. 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: SPSY 77792 and special approval and doctoral standing. 3. 000 TO 6. 000 Credit hours 3. 000 TO 6. 000 Other hours Levels: Graduate Schedule Types: Practicum or Internship Department: Lifespan Development and Educational Sciences

### **SPSY 77914 - FIELD EXPERIENCE IN EDUCATION FOR SCHOOL PSYCHOLOGISTS**

Involves minimum of 120 clock hours of observation in public school. 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. Prerequisite: Doctoral standing.

2. 000 Credit hours

2. 000 Other hours

Levels: Graduate

Schedule Types: Field Experience

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences

### **SPSY 77929 - INDIVIDUAL COUNSELING TECHNIQUES FOR REHABILITATION COUNSELORS AND SCHOOL PSYCHOLOGISTS**

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

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences

### **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

Department: Lifespan Development and Educational Sciences





#### **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  
Department: Lifespan Development and Educational Sciences

#### **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  
Department: Lifespan Development and Educational Sciences

#### **SPSY 77992 - SPECIALIST INTERNSHIP IN SCHOOL PSYCHOLOGY**

(Repeatable for credit) One academic year of field experience in schools under supervision of university supervisor and certified school psychologist who is employed by school system. Restricted to Ed. S. Students in SPSY program. 100 clinical field hours per semester hour of 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: Doctoral standing and special approval.  
1.000 TO 6.000 Credit hours  
1.000 TO 6.000 Other hours  
Levels: Graduate  
Schedule Types: Practicum or Internship  
Department: Lifespan Development and Educational Sciences

#### **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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Lifespan Development and Educational Sciences

#### **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  
Levels: Graduate  
Schedule Types: Individual Investigation  
Department: Lifespan Development and Educational Sciences

#### **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  
Levels: Graduate  
Schedule Types: Research  
Department: Lifespan Development and Educational Sciences

#### **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  
Levels: Graduate  
Schedule Types: Seminar  
Department: Lifespan Development and Educational Sciences

#### **SPSY 80192 - CLINICAL SUPERVISION PRACTICUM**

(Repeatable for credit) Provides for supervised experience in clinical supervision of graduate students in school psychology. Experiences include coordinating case intake and assessment planning, and providing feedback to graduate students on clinical reports and communication of results to clients/parents. 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.  
3.000 Credit hours  
3.000 Other hours  
Levels: Graduate  
Schedule Types: Practicum or Internship  
Department: Lifespan Development and Educational Sciences

#### **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  
Levels: Graduate  
Schedule Types: Dissertation  
Department: Lifespan Development and Educational Sciences

#### **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  
Department: Lifespan Development and Educational Sciences

#### **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  
Department: Lifespan Development and Educational Sciences

#### **SPSY 87992 - DOCTORAL INTERNSHIP IN SCHOOL PSYCHOLOGY**

(Repeatable for credit) Professional service and field experience under the supervision of a licensed psychologist. Emphasis determined by setting. 150 clinical field hours per semester hour of 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: Doctoral standing and special approval.  
1.000 TO 6.000 Credit hours  
1.000 TO 6.000 Other hours  
Levels: Graduate  
Schedule Types: Practicum or Internship  
Department: Lifespan Development and Educational Sciences

#### **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  
Levels: Graduate  
Schedule Types: Research  
Department: Lifespan Development and Educational Sciences



## ***Sport, Recreation Management (SRM)***

### **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

Levels: Graduate

Schedule Types: Workshop

Department: Foundations, Leadership and Administration

### **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

Levels: Graduate

Schedule Types: Lecture

Department: Foundations, Leadership and Administration

### **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

Levels: Graduate

Schedule Types: Lecture

Department: Foundations, Leadership and Administration

### **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

Levels: Graduate

Schedule Types: Lecture

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Foundations, Leadership and Administration

### **SRM 56040 - THERAPEUTIC RECREATION PROGRAM TECHNIQUES**

Intervention/facilitation techniques employed in therapeutic recreation practice. Integration of theory into program plans used in TR for treatment and leisure education services for people with illnesses or disabilities. . Prerequisite: RPTM 36080. Graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Foundations, Leadership and Administration

### **SRM 56041 - ADVANCED THERAPEUTIC RECREATION PROGRAM TECHNIQUES**

Advanced intervention/facilitation techniques employed in therapeutic recreation practice. Professional issues related to therapeutic recreation practice. Prerequisite: SRM 56040. Graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Foundations, Leadership and Administration



### 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

Department: Foundations, Leadership and Administration

### 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

Department: Foundations, Leadership and Administration

### 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

Department: Foundations, Leadership and Administration

### 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

Department: Foundations, Leadership and Administration

### 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

Department: Foundations, Leadership and Administration

### 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

Department: Foundations, Leadership and Administration

### 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

Department: Foundations, Leadership and Administration

### 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

Department: Foundations, Leadership and Administration

### 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

Department: Foundations, Leadership and Administration

### 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

Department: Foundations, Leadership and Administration

### 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

Department: Foundations, Leadership and Administration

### 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

Department: Foundations, Leadership and Administration

### 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

Department: Foundations, Leadership and Administration

### 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

Department: Foundations, Leadership and Administration

### 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

Department: Foundations, Leadership and Administration

### 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

Department: Foundations, Leadership and Administration

### 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

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **SRM 65064 - CONCEPTS AND TECHNIQUES IN THERAPEUTIC RECREATION**

Issues in the application of concepts in therapeutic recreation from a multidisciplinary perspective; study of evaluation and research.

Prerequisite: RPTM 46041 or SRM 56041.

Graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Foundations, Leadership and Administration

### **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

2. 000 TO 4. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture, Practicum or Internship

Department: Foundations, Leadership and Administration

### **SRM 65292 - INTERNSHIP IN LEISURE STUDIES**

(Repeatable for credit) Field experience involving supervised contact with recreation and leisure professionals. Involves experience in all phases of agency administration. Prerequisite: Special approval and graduate standing.

1. 000 TO 4. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture, Practicum or Internship

Department: Foundations, Leadership and Administration

### **SRM 65792 - INTERNSHIP: SPORT STUDIES**

(Repeatable for credit) Supervised field experience in a sport or physical education setting. 60 hours of involvement 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: Special approval and graduate standing.

1. 000 TO 4. 000 Credit hours

4. 000 TO 16. 000 Other hours

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

### **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

Department: Foundations, Leadership and Administration

## **Podiatric Surgery (SUR)**

### **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

Department: Podiatric Medicine

### **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

Department: Podiatric Medicine

### **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

Department: Podiatric Medicine

### **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

Department: Podiatric Medicine

## **Summer Visual Communication Design (SVCD)**

### **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

Schedule Types: Lecture, Studio

Department: Visual Communication Design

### **SVCD 55011 - 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: 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

Department: Visual Communication Design

### **SVCD 65011 - 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: 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

Department: Visual Communication Design

## **Technical and Applied Studies (TAS)**

### **TAS 37900 - TECHNICAL AND APPLIED STUDIES CORNERSTONE**

Cornerstone course is for the major in technical and applied studies. 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) major.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Regional

### **TAS 47900 - TECHNICAL AND APPLIED STUDIES CAPSTONE**

Designed to help students articulate and integrate the competencies that are part of the bachelor's degree in technical and applied studies. In part, an electronic portfolio is used to help describe familiarity with the competencies. Prerequisites: Technical and Applied Studies (TAS) major.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Regional

## **Technology (TECH)**

### **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

Department: Applied Engineering, Sustainability and Technology

### **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

Department: Applied Engineering, Sustainability and Technology

### **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

Department: Applied Engineering, Sustainability and Technology

### **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

Department: Applied Engineering, Sustainability and Technology

### **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

Department: Applied Engineering, Sustainability and Technology

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

Department: Applied Engineering, Sustainability and Technology

Course Attributes:

TAG - Engineering Technology

### **TECH 21021 - SURVEY OF ELECTRICITY AND ELECTRONICS**

Survey of DC and AC circuits, electronic devices, amplifiers, sensors and transducers, digital circuits, motors generators and controls. Includes laboratory. Not intended for Applied Engineering-Computer and Electronics (AENG) majors. Corequisite: MATH 11022.

4. 000 Credit hours

3. 000 Lecture hours

2. 000 Lab hours

Levels: Undergraduate

Schedule Types: Laboratory, Lecture

Department: Applied Engineering, Sustainability and Technology

### **TECH 21046 - GRAPHIC COMMUNICATIONS TECHNOLOGY I**

An orientation to layout, composition and press operations as applied to the graphic communications processes of lithography screen and relief printing. Prerequisite: None.

3. 000 Credit hours

5. 000 Other hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Applied Engineering, Sustainability and Technology

### **TECH 21071 - CONSTRUCTION MATERIALS METHODS AND TECHNIQUES**

Covers current construction materials and their applications in commercial and residential construction buildings. Prerequisite: None.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Applied Engineering, Sustainability and Technology

### **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

Department: Applied Engineering, Sustainability and Technology

### **TECH 22200 - CONSTRUCTION DOCUMENT READING**

An introductory course to construction document reading. Provides a basic working knowledge of construction mathematics, specifications, material submittal process, building codes and material take off. Prerequisite: None.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Applied Engineering, Sustainability and Technology

### **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

Department: Applied Engineering, Sustainability and Technology

### **TECH 23200 - ELECTRONIC CIRCUIT FABRICATION LABORATORY**

Covers the common methods and items used in electronics to fabricate, repair and test electronic component connections and circuits. Topics include electrical safety, printed circuit board design and fabrication, soldering, wiring characteristics, cabling, wire connectors, splices, wire wrapping, crimping, network cable fabrication, fabrication and repair of fiber optic cables and connectors, and integrated circuit fabrication. Prerequisite: TECH 20004 or 21021.

1. 000 Credit hours



2. 000 Lab hours  
 Levels: Undergraduate  
 Schedule Types: Laboratory  
 Department: Applied Engineering, Sustainability and Technology

#### **TECH 23224 - ELECTRICAL CIRCUITS II**

Intermediate electric circuit analysis. Reactance, impedance, network theorems and analysis. Resonance in series and parallel circuits. Applications. Includes laboratory. Prerequisite: TECH 20004.

3. 000 Credit hours  
 2. 000 Lecture hours  
 2. 000 Lab hours  
 Levels: Undergraduate  
 Schedule Types: Laboratory, Lecture  
 Department: Applied Engineering, Sustainability and Technology

#### **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  
 Department: Applied Engineering, Sustainability and Technology

#### **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 21021 or DSCI 16010.

3. 000 Credit hours  
 2. 000 Lecture hours  
 2. 000 Lab hours  
 Levels: Undergraduate  
 Schedule Types: Combined Lecture and Lab  
 Department: Applied Engineering, Sustainability and Technology

#### **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

Department: Applied Engineering, Sustainability and Technology

#### **TECH 31000 - CULTURAL DYNAMICS OF TECHNOLOGY**

Study of technology and the forces it exerts upon society. Prerequisite: None.

3. 000 Credit hours  
 3. 000 Lecture hours  
 Levels: Undergraduate  
 Schedule Types: Lecture  
 Department: Applied Engineering, Sustainability and Technology

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  
 Department: Applied Engineering, Sustainability and Technology

#### **TECH 31015 - CONSTRUCTION TECHNOLOGY**

Laboratory, lecture and field experience which relate to the construction industry and its relationship to our society. Prerequisite: ID 14512 or TECH 13580 or TECH 11083.

3. 000 Credit hours  
 5. 000 Other hours  
 Levels: Undergraduate  
 Schedule Types: Combined Lecture and Lab  
 Department: Applied Engineering, Sustainability and Technology

#### **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  
 Department: Applied Engineering, Sustainability and Technology

#### **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  
 Department: Applied Engineering, Sustainability and Technology

#### **TECH 31023 - CONSTRUCTION SURVEYING**

Covers the study of surveying including field work with equipment such as transit, level and tape. Prerequisite: TECH 22200.

3. 000 Credit hours  
 3. 000 Lecture hours  
 2. 000 Lab hours  
 Levels: Undergraduate  
 Schedule Types: Combined Lecture and Lab  
 Department: Applied Engineering, Sustainability and Technology

#### **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  
 Department: Applied Engineering, Sustainability and Technology

#### **TECH 31033 - MECHANICAL SYSTEMS**

Provides a comprehensive overview of mechanical systems as required by general contractors, construction managers, and supervisors. Prerequisite: none.

3. 000 Credit hours  
 3. 000 Lecture hours  
 Levels: Undergraduate  
 Schedule Types: Lecture  
 Department: Applied Engineering, Sustainability and Technology

#### **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  
 Department: Applied Engineering, Sustainability and Technology

#### **TECH 31044 - CONSTRUCTION OCCUPATIONAL SAFETY AND HEALTH**

Focuses on making the theories and principles of construction safety and health practical and useful in a real world setting. Prerequisite: None.

3. 000 Credit hours  
 3. 000 Lecture hours  
 Levels: Undergraduate  
 Schedule Types: Lecture  
 Department: Applied Engineering, Sustainability and Technology

#### **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



Department: Applied Engineering, Sustainability and Technology

### **TECH 31067 - MACHINING TECHNOLOGY I**

Lecture and laboratory experiences in basic machine tool principles and processes.

Prerequisite: None.

3. 000 Credit hours

5. 000 Other hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Applied Engineering, Sustainability and Technology

### **TECH 31087 - DESIGN FOR TECHNOLOGY**

Design as creative process. Individual and group experiences in problem solving. Relevance to art industry and education. Prerequisite: none.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Applied Engineering, Sustainability and Technology

### **TECH 32002 - MATERIALS AND PROCESSES II**

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.

3. 000 Credit hours

7. 000 Other hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Applied Engineering, Sustainability and Technology

### **TECH 32101 - POLYMERS I**

Description of various polymers, thermoplastics and thermosets. Processes used to produce products. Outline of polymer chemistry including methods of testing and identification.

Prerequisite: None.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Applied Engineering, Sustainability and Technology

### **TECH 32102 - POLYMERS II**

Comprehensive review of resin systems and fiber reinforcement for use in production of FRP products; fabrication procedures; comparative properties. Prerequisite: TECH 32101.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Applied Engineering, Sustainability and Technology

### **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

Department: Applied Engineering, Sustainability and Technology

### **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

Department: Applied Engineering, Sustainability and Technology

### **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

Department: Applied Engineering, Sustainability and Technology

### **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

Schedule Types: Combined Lecture and Lab

Department: Applied Engineering, Sustainability and Technology

### **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

Department: Applied Engineering, Sustainability and Technology

### **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

Department: Applied Engineering, Sustainability and Technology

### **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

Department: Applied Engineering, Sustainability and Technology

### **TECH 33056 - COOPERATIVE EDUCATION-PROFESSIONAL DEVELOPMENT**

(Repeatable for a maximum of 4 hours)

Supervised work-study experience in approved business or industrial environment relative to the student's major. 1 credit hour part-time (20-30 hrs/wk); 2 credit hours full-time work (more than 30 hrs/wk) for the duration of the semester. Prerequisites: sophomore standing and 2. 250 GPA and special approval.

1. 000 OR 2. 000 Credit hours

1. 000 OR 2. 000 Other hours

Levels: Undergraduate

Schedule Types: Field Experience

Department: Applied Engineering, Sustainability and Technology

Course Attributes: Writing Intensive Course

### **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

Department: Applied Engineering, Sustainability and Technology

### **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  
 Department: Applied Engineering, Sustainability and Technology

#### **TECH 33220 - ELECTRONIC DEVICES**

Introduction to electronic non-linear devices including, diodes, transistors, optoelectronic 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  
 Department: Applied Engineering, Sustainability and Technology

#### **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  
 Department: Applied Engineering, Sustainability and Technology

#### **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  
 3. 000 Other hours  
 Levels: Undergraduate

Schedule Types: Combined Lecture and Lab  
 Department: Applied Engineering, Sustainability and Technology

#### **TECH 33225 - INDUSTRIAL CONTROL SYSTEMS**

The application of electronics to the control of industrial machines and processes. Includes laboratory. Prerequisite: TECH 33220.

3. 000 Credit hours  
 2. 000 Lecture hours  
 2. 000 Lab hours

Levels: Undergraduate  
 Schedule Types: Laboratory, Lecture  
 Department: Applied Engineering, Sustainability and Technology

#### **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  
 Department: Applied Engineering, Sustainability and Technology

#### **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  
 Department: Applied Engineering, Sustainability and Technology

#### **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  
 Department: Applied Engineering, Sustainability and Technology

#### **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  
 Department: Applied Engineering, Sustainability and Technology

#### **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

Department: Applied Engineering, Sustainability and Technology

#### **TECH 36411 - 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. Prerequisite: DSCI 15310 with a minimum grade of C (2. 000).

3. 000 Credit hours  
 3. 000 Lecture hours

Levels: Undergraduate  
 Schedule Types: Lecture  
 Department: Applied Engineering, Sustainability and Technology

#### **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  
 Department: Applied Engineering, Sustainability and Technology

#### **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  
 Department: Applied Engineering, Sustainability and Technology  
 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  
 Department: Applied Engineering, Sustainability and Technology

#### **TECH 41040 - CONSTRUCTION ESTIMATING I**

Introduction to estimating and the quantity takeoff process needed to complete accurate



estimates for all types of construction projects.

Prerequisite: TECH 22200.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Applied Engineering, Sustainability and Technology

### **TECH 41041 - CONSTRUCTION ESTIMATING II**

Examines 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: TECH 41040.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Applied Engineering, Sustainability and Technology

### **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

Department: Applied Engineering, Sustainability and Technology

### **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

Department: Applied Engineering, Sustainability and Technology

### **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

Department: Applied Engineering, Sustainability and Technology

### **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

Department: Applied Engineering, Sustainability and Technology

### **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

Department: Applied Engineering, Sustainability and Technology

### **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

Department: Applied Engineering, Sustainability and Technology

### **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

Department: Applied Engineering, Sustainability and Technology

### **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

Department: Applied Engineering, Sustainability and Technology

### **TECH 42105 - CONSTRUCTION CONTRACTS**

An introductory course on construction contracts and how they are used in the construction industry. Prerequisite: Junior or senior standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Applied Engineering, Sustainability and Technology

### **TECH 42107 - CONSTRUCTION SCHEDULING**

Covers the traditional theory on planning, scheduling and controlling construction projects. Current industry computer applications for scheduling will be utilized. Prerequisite: TECH 32105.

3. 000 Credit hours

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Applied Engineering, Sustainability and Technology

### **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

Department: Applied Engineering, Sustainability and Technology

### **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.

4. 000 Credit hours

3. 000 Lecture hours

2. 000 Lab hours

Levels: Undergraduate

Schedule Types: Laboratory, Lecture

Department: Applied Engineering, Sustainability and Technology

### **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 bachelors degree. Assists students in utilizing material learned in earlier courses to solve many real world problems in multiple disciplines.

Prerequisite: junior or senior standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Applied Engineering, Sustainability and Technology

### **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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Applied Engineering, Sustainability and Technology

#### **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  
Department: Applied Engineering, Sustainability and Technology

#### **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  
Department: Applied Engineering, Sustainability and Technology

#### **TECH 43132 - MANUFACTURING ENGINEERING PROJECT**

Problem selected by students and instructors to develop students in desired specialty, or strengthen students in lesser field or prepare students for specific employment. Prerequisite: Permission of instructor.  
2. 000 Credit hours  
4. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Individual Investigation  
Department: Applied Engineering, Sustainability and Technology

#### **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  
Department: Applied Engineering, Sustainability and Technology

#### **TECH 43221 - 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. 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  
Department: Applied Engineering, Sustainability and Technology

#### **TECH 43222 - COMPUTER HARDWARE ENGINEERING AND ARCHITECTURE**

Internal architecture and operation of digital computers. Topics include computer processor data paths and control, computer memory data paths 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 33222.  
3. 000 Credit hours  
2. 000 Lecture hours  
2. 000 Lab hours  
Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab  
Department: Applied Engineering, Sustainability and Technology

#### **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  
Department: Applied Engineering, Sustainability and Technology

#### **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  
Department: Applied Engineering, Sustainability and Technology

#### **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  
Department: Applied Engineering, Sustainability and Technology

#### **TECH 43800 - APPLIED ENGINEERING TECHNOLOGY SEMINAR**

An individual or group project involving the solution of a problem through the application of technology. Prerequisite: Technology (TECH) major and senior standing.  
2. 000 Credit hours

1. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Individual Investigation  
Department: Applied Engineering, Sustainability and Technology

#### **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. Corequisite: TECH 49525.  
9. 000 Credit hours  
9. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Practicum or Internship  
Department: Applied Engineering, Sustainability and Technology  
Course Attributes: Experiential Learning Requirement

#### **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  
Department: Applied Engineering, Sustainability and Technology

#### **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  
Schedule Types: Lecture  
Department: Applied Engineering, Sustainability and Technology

#### **TECH 46330 - VISUAL BASIC PROGRAMMING IN ENGINEERING TECHNOLOGY**

This course will cover the concepts of object-oriented, event-driven programming with hands-on application of those concepts to solve engineering-related problems utilizing the current version of visual basic. Prerequisite: TECH 10001 and junior standing.  
3. 000 Credit hours  
3. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab  
Department: Applied Engineering, Sustainability and Technology

**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

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Applied Engineering, Sustainability and Technology

**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

Department: Applied Engineering, Sustainability and Technology

**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

Department: Applied Engineering, Sustainability and Technology

**TECH 50000 - QUALITY STANDARDS**

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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Applied Engineering, Sustainability and Technology

**TECH 51001 - METHODS IN TECHNOLOGY EDUCATION**

Methods of teaching curriculum development and evaluation which are unique to the profession of technology education. Prerequisite: Graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Applied Engineering, Sustainability and Technology

**TECH 51002 - ORGANIZATION IN TECHNOLOGY EDUCATION**

Principles and practices involved in curriculum and facility design appropriate for technology education including equipment maintenance. Prerequisite: Graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Applied Engineering, Sustainability and Technology

**TECH 51051 - 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: Graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Applied Engineering, Sustainability and Technology

**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

Department: Applied Engineering, Sustainability and Technology

**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

Department: Applied Engineering, Sustainability and Technology

**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

Department: Applied Engineering, Sustainability and Technology

**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

Department: Applied Engineering, Sustainability and Technology

**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

Department: Applied Engineering, Sustainability and Technology

**TECH 53222 - COMPUTER HARDWARE ENGINEERING AND ARCHITECTURE**

Internal architecture and operation of digital computers. Topics include computer processor data paths and control, computer memory data paths 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

Department: Applied Engineering, Sustainability and Technology

**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

Department: Applied Engineering, Sustainability and Technology





### **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  
Department: Applied Engineering, Sustainability and Technology

### **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  
Department: Applied Engineering, Sustainability and Technology

### **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  
Department: Applied Engineering, Sustainability and Technology

### **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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Applied Engineering, Sustainability and Technology

### **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  
Department: Applied Engineering, Sustainability and Technology

### **TECH 56330 - VISUAL BASIC PROGRAMMING IN ENGINEERING TECHNOLOGY**

Concepts of object-oriented, event-driven programming with hands-on application of those concepts to solve engineering-related problems utilizing the current version of visual basic. 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  
Department: Applied Engineering, Sustainability and Technology

### **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  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Applied Engineering, Sustainability and Technology

### **TECH 57000 - SUSTAINABLE SYSTEMS AND TECHNOLOGY**

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 "meeting humanity's current needs." Also stresses the ethics and importance of sustainability and the use of sustainable systems. Prerequisite: graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Applied Engineering, Sustainability and Technology

### **TECH 57010 - ETHICS, TECHNOLOGY AND THE ENVIRONMENT**

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. Prerequisites: graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Applied Engineering, Sustainability and Technology

### **TECH 57200 - 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 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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Applied Engineering, Sustainability and Technology

### **TECH 57210 - 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 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  
Department: Applied Engineering, Sustainability and Technology

### **TECH 57211 - 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. Prerequisites: graduate standing and TECH 57210.  
3. 000 Credit hours



3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Applied Engineering, Sustainability and Technology

### **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

Department: Applied Engineering, Sustainability and Technology

### **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

Department: Applied Engineering, Sustainability and Technology

### **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

Department: Applied Engineering, Sustainability and Technology

### **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

Department: Applied Engineering, Sustainability and Technology

### **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

Department: Applied Engineering, Sustainability and Technology

### **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

Department: Applied Engineering, Sustainability and Technology

### **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

Department: Applied Engineering, Sustainability and Technology

### **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

Department: Applied Engineering, Sustainability and Technology

### **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

Department: Applied Engineering, Sustainability and Technology

### **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

Department: Applied Engineering, Sustainability and Technology

### **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 busses 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

Department: Applied Engineering, Sustainability and Technology

### **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

Department: Applied Engineering, Sustainability and Technology

### **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

Department: Applied Engineering, Sustainability and Technology

### **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 masters degree. Students utilize material learned in earlier courses to solve real world problems in multiple disciplines. Prerequisite: graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Applied Engineering, Sustainability and Technology

### **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

Levels: Graduate

Schedule Types: Lecture

Department: Applied Engineering, Sustainability and Technology

#### **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

Levels: Graduate

Schedule Types: Combined Lecture and Lab

Department: Applied Engineering, Sustainability and Technology

#### **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

Levels: Graduate

Schedule Types: Laboratory, Lecture

Department: Applied Engineering, Sustainability and Technology

#### **TECH 63411 - 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 36411) concepts is recommended. Prerequisite: graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Applied Engineering, Sustainability and Technology

#### **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

Levels: Graduate

Schedule Types: Individual Investigation

Department: Applied Engineering, Sustainability and Technology

#### **TECH 63870 - FACILITY DESIGN AND MATERIAL HANDLING**

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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Applied Engineering, Sustainability and Technology

#### **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.

3. 000 Credit hours

3. 000 Other hours

Levels: Graduate

Schedule Types: Combined Lecture and Lab

Department: Applied Engineering, Sustainability and Technology

#### **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.

3. 000 Credit hours

3. 000 Other hours

Levels: Graduate

Schedule Types: Combined Lecture and Lab

Department: Applied Engineering, Sustainability and Technology

#### **TECH 64095 - SPECIAL TOPICS IN COMPUTER TECHNOLOGY**

(Repeatable for credit) Study of various topics that focus on current computer technologies. Prerequisite: Graduate standing.

1. 000 TO 4. 000 Credit hours

1. 000 TO 4. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Applied Engineering, Sustainability and Technology

#### **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

Department: Applied Engineering, Sustainability and Technology

#### **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

Department: Applied Engineering, Sustainability and Technology

#### **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

Department: Applied Engineering, Sustainability and Technology

#### **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

Department: Applied Engineering, Sustainability and Technology

**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

Department: Applied Engineering, Sustainability and Technology

**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

Department: Applied Engineering, Sustainability and Technology

**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

Department: Applied Engineering, Sustainability and Technology

**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

Department: Applied Engineering, Sustainability and Technology

**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

Department: Applied Engineering, Sustainability and Technology

**TECH 66382 - NETWORK SECURITY**

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

Department: Applied Engineering, Sustainability and Technology

**TECH 66384 - COMPUTER FORENSICS**

Provides students with experience in proper computer forensic techniques including incident response, forensic preparation, and data recovery and analysis. Prerequisite: graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Applied Engineering, Sustainability and Technology

**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

Department: Applied Engineering, Sustainability and Technology

**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.

2. 000 Credit hours

3. 000 Other hours

Levels: Graduate

Schedule Types: Individual Investigation

Department: Applied Engineering, Sustainability and Technology

**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

Department: Applied Engineering, Sustainability and Technology

**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

Department: Applied Engineering, Sustainability and Technology

**TECH 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

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Applied Engineering, Sustainability and Technology

**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

Department: Applied Engineering, Sustainability and Technology

#### **TECH 67596 - INDIVIDUAL INVESTIGATION IN MANUFACTURING TECHNOLOGY**

(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

Levels: Graduate

Schedule Types: Individual Investigation

Department: Applied Engineering, Sustainability and Technology

#### **TECH 68196 - INDIVIDUAL INVESTIGATION IN ENGINEERING GRAPHICS**

(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

Levels: Graduate

Schedule Types: Individual Investigation

Department: Applied Engineering, Sustainability and Technology

#### **TECH 68796 - INDIVIDUAL INVESTIGATION IN INDUSTRIAL TECHNOLOGY SYSTEMS DESIGN**

(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

Levels: Graduate

Schedule Types: Individual Investigation

Department: Applied Engineering, Sustainability and Technology

### **Theatre (THEA)**

#### **THEA 11000 - THE ART OF THE THEATRE**

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

Levels: Undergraduate

Schedule Types: Lecture

Department: Theatre and Dance

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

#### **THEA 11100 - MAKING THEATRE: CULTURE AND PRACTICE**

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

Department: Theatre and Dance

#### **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

Department: Theatre and Dance

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

Department: Theatre and Dance

#### **THEA 11522 - INTRODUCTORY LIGHTING**

An introduction to the art of lighting design, historical and technical perspectives. Emphasis on principles of design within a collaborative process. Two lecture hours plus two lab hours per week.

Prerequisite: special approval.

3. 000 Credit hours

2. 000 Lecture hours

2. 000 Lab hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Theatre and Dance

#### **THEA 11524 - INTRODUCTORY COSTUMING**

Principles, theories and basic skills of costume design and technology. Emphasis on aesthetics, the design process, fabric, construction techniques and craft materials. Two lecture hours plus two lab hours per week. Prerequisite: special approval.

3. 000 Credit hours

2. 000 Lecture hours

2. 000 Lab hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Theatre and Dance

#### **THEA 11622 - INTRODUCTORY SCENERY**

Principles, theories and basic skills of scenic design and technology. Emphasis on design elements, process of applied construction skills. Two lecture hours plus two lab hours per week. Prerequisite: special approval.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Theatre and Dance

Course Attributes: TAG - Arts/Humanities

#### **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

Department: Theatre and Dance

#### **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

Department: Theatre and Dance

#### **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

Department: Theatre and Dance

#### **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

Department: Theatre and Dance

#### **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



Department: Theatre and Dance

**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.

1. 000 Credit hours

2. 000 Lab hours

Levels: Undergraduate

Schedule Types: Laboratory

Department: Theatre and Dance

**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

Department: Theatre and Dance

Course Attributes: Experiential Learning Requirement

**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

Department: Theatre and Dance

**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

Department: Theatre and Dance

**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

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Theatre and Dance

**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

Department: Theatre and Dance

**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

Department: Theatre and Dance

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

Department: Theatre and Dance

**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

Department: Theatre and Dance

**THEA 21306 - MUSICAL THEATRE PERFORMANCE I**

(Repeatable for a maximum of 12 credit hours) 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.

3. 000 Credit hours

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Studio

Department: Theatre and Dance

**THEA 21501 - SOPHOMORE PORTFOLIO REVIEW**

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.

1. 000 Credit hours

1. 000 Other hours

Levels: Undergraduate

Schedule Types: Studio

Department: Theatre and Dance

**THEA 21521 - THEATRICAL DRAFTING**

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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Theatre and Dance

**THEA 21522 - LIGHTING DESIGN**

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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Theatre and Dance

**THEA 21523 - COSTUME TECHNOLOGY**

Class will cover the skills necessary for a production costume assistant in theatre, film and television. Emphasis on organization and paperwork; research and script analysis; shopping, pulling and rental requirements; budgeting; researching specific construction projects; wardrobe and organization. Prerequisite: special approval; and THEA 11732.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Theatre and Dance

**THEA 21524 - COSTUME DESIGN**

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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Theatre and Dance

**THEA 21621 - SCENE PAINTING**

Techniques of scene painting; emphasis on a variety of techniques through practical projects. Prerequisite: THEA 11622 and special approval.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Theatre and Dance

**THEA 21622 - SCENE DESIGN**

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.



3. 000 Credit hours  
 3. 000 Lecture hours  
 Levels: Undergraduate  
 Schedule Types: Lecture  
 Department: Theatre and Dance

#### **THEA 21700 - MOVEMENT I**

Beginning exploration of technical skills emphasizing the physical components of expressive action through integration of breath, text and body conditioning. Prerequisite: special approval.  
 3. 000 Credit hours  
 3. 000 Other hours  
 Levels: Undergraduate  
 Schedule Types: Studio  
 Department: Theatre and Dance

#### **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.  
 3. 000 Credit hours  
 3. 000 Lecture hours  
 Levels: Undergraduate  
 Schedule Types: Lecture  
 Department: Theatre and Dance

#### **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.  
 3. 000 Credit hours  
 3. 000 Other hours  
 Levels: Undergraduate  
 Schedule Types: Studio  
 Department: Theatre and Dance

#### **THEA 22092 - PRACTICUM I: DESIGN/TECH**

(Repeatable for credit) Practical experience in theatre production under faculty supervision. Available for lower-division students only. Required of all theatre majors. Prerequisite: Freshmen or sophomores only and special approval.  
 3. 000 Credit hours  
 3. 000 Lecture hours  
 Levels: Undergraduate  
 Schedule Types: Practicum or Internship  
 Department: Theatre and Dance  
 Course Attributes: Experiential Learning Requirement, 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. Required of all theatre majors. Prerequisite: Freshmen or sophomores only and special approval.  
 3. 000 Credit hours  
 3. 000 Lecture hours  
 Levels: Undergraduate  
 Schedule Types: Practicum or Internship  
 Department: Theatre and Dance  
 Course Attributes: Experiential Learning Requirement, TAG - Arts/Humanities

#### **THEA 22292 - 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  
 Department: Theatre and Dance  
 Course Attributes: Experiential Learning Requirement

#### **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  
 Department: Theatre and Dance  
 Course Attributes: Experiential Learning Requirement

#### **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  
 Department: Theatre and Dance

#### **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  
 Department: Theatre and Dance

#### **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  
 Department: Theatre and Dance

#### **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  
 Department: Theatre and Dance

#### **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  
 Department: Theatre and Dance

#### **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  
 Department: Theatre and Dance

#### **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  
 Department: Theatre and Dance

#### **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: THEA 11303 and THEA 21111 and special approval.  
 3. 000 Credit hours  
 3. 000 Lecture hours  
 Levels: Undergraduate  
 Schedule Types: Lecture  
 Department: Theatre and Dance

#### **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  
 Department: Theatre and Dance

#### **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  
Department: Theatre and Dance

### **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  
Department: Theatre and Dance

### **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  
6. 666 Other hours  
Levels: Undergraduate  
Schedule Types: Practicum or Internship  
Department: Theatre and Dance  
Course Attributes: Experiential Learning Requirement

### **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  
Levels: Graduate  
Schedule Types: Seminar  
Department: Theatre and Dance

### **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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Theatre and Dance

### **THEA 41026 - PLAYWRITING**

(Repeatable for a total of 6 credit hours) Principles underlying playwriting for the contemporary theatre; analysis of short play form. Prerequisite: THEA 21111 and special approval.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Theatre and Dance

Course Attributes: Writing Intensive Course

### **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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Theatre and Dance

### **THEA 41093 - VARIABLE TITLE WORKSHOP IN THEATRE**

(Repeatable for credit) Prerequisite: Special approval.  
1. 000 TO 6. 000 Credit hours  
1. 000 TO 6. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Workshop  
Department: Theatre and Dance

### **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  
Department: Theatre and Dance

### **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  
Department: Theatre and Dance

### **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  
Department: Theatre and Dance

Course Attributes: Diversity Course-Domestic

### **THEA 41114 - GAY AND LESBIAN THEATRE**

Studies of how the gay and lesbian community has been represented in theatre. Frameworks will include the history of the community, political issues, identity questions and gender theory. Prerequisite: Junior standing.  
3. 000 Credit hours  
3. 000 Lecture hours

Levels: Undergraduate  
Schedule Types: Lecture  
Department: Theatre and Dance

Course Attributes: Diversity Course-Domestic

### **THEA 41133 - THEATRE AND DRAMA IN AMERICA I**

History of theatre and drama in America from the beginning to c. 1900. Prerequisite: special approval of instructor required.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Theatre and Dance

### **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  
Department: Theatre and Dance  
Course Attributes: Writing Intensive Course

### **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/screen. Prerequisite: THEA 31112.  
3. 000 Credit hours  
3. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Seminar  
Department: Theatre and Dance

### **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  
Department: Theatre and Dance

### **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  
Department: Theatre and Dance





### **THEA 41303 - ACTING FOUNDATIONS I/STANISLAVSKI AND MICHAEL CHEKHOV**

The Stanislavski and Michael Chekhov Techniques: A thorough exploration of Stanislavski's Method of Physical Action, and the internalization of Michael Chekhov's technique including atmosphere, psychological gesture, qualities of movement. Taught in the same semester as THEA 41304. Prerequisite: THEA 31303.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Studio  
Department: Theatre and Dance

### **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  
Department: Theatre and Dance

### **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  
Department: Theatre and Dance

### **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  
Department: Theatre and Dance

### **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 special approval.

3. 000 Credit hours  
3. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Studio  
Department: Theatre and Dance

### **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  
Department: Theatre and Dance

### **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  
Department: Theatre and Dance

### **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  
Levels: Undergraduate  
Schedule Types: Senior Project/Honors Thesis  
Department: Theatre and Dance  
Course Attributes: Experiential Learning Requirement

### **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  
Levels: Undergraduate  
Schedule Types: Studio  
Department: Theatre and Dance

### **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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Theatre and Dance

### **THEA 41522 - DESIGN STUDIO: LIGHTING**

Advanced study of lighting design, emphasizing artistic style and concept through a variety of design problems. Prerequisite: THEA 31522 and special approval.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Theatre and Dance

### **THEA 41523 - 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: Permission.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Theatre and Dance

### **THEA 41524 - 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: THEA 31525 and special approval.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Theatre and Dance

### **THEA 41525 - PROPS AND CRAFTS**

Examination of the processes related to the creation and procurement of scenic and costume props. Prerequisite: THEA 31525 and THEA 31622.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Theatre and Dance

### **THEA 41526 - ADVANCED LIGHTING TECHNOLOGY II**

This class will focus on the practice of intelligent lighting programming and the technology of intelligent lighting fixtures. Prerequisite: special approval.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Theatre and Dance

### **THEA 41527 - SOUND DESIGN AND TECHNOLOGY II**

Studies in sound design, sound production and reinforcement for live performance. Advanced software applications will be explored.

Prerequisite: THEA 41523 and special approval.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Theatre and Dance

**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

Department: Theatre and Dance

**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

Department: Theatre and Dance

**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

Department: Theatre and Dance

**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

Department: Theatre and Dance

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: junior standing and THEA 11522 and THEA 11524 and THEA 11622 and THEA 21521.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Theatre and Dance

**THEA 41622 - DESIGN STUDIO: SCENERY**

Advanced study in scenic design. Explores genres styles performance spaces including practical considerations. Prerequisite: THEA 31622 and special approval.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Theatre and Dance

**THEA 41701 - 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. Prerequisites: THEA 31701 and special approval.

3. 000 Credit hours

4. 000 Other hours

Levels: Undergraduate

Schedule Types: Studio

Department: Theatre and Dance

**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

Department: Theatre and Dance

**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

Department: Theatre and Dance

**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

Department: Theatre and Dance

**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

Department: Theatre and Dance

**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

Department: Theatre and Dance

**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

Department: Theatre and Dance

**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

Department: Theatre and Dance

Course Attributes: Experiential Learning Requirement

**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

Department: Theatre and Dance

Course Attributes: Experiential Learning Requirement

**THEA 42092 - PRACTICUM II: DESIGN/TECH**

(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

Department: Theatre and Dance

Course Attributes: Experiential Learning Requirement


**THEA 42192 - PRACTICUM II: PERFORMANCE**

(Repeatable for credit) Advanced practical experience in theatre performance under faculty supervision. Available for upper division students only. Required of all theatre majors. Prerequisite: Junior or senior standing and special approval.

3. 000 Credit hours  
3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Practicum or Internship

Department: Theatre and Dance

Course Attributes: Experiential Learning Requirement

**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

Department: Theatre and Dance

Course Attributes: Experiential Learning Requirement

**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

Department: Theatre and Dance

Course Attributes: Experiential Learning Requirement

**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

Department: Theatre and Dance

**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

Department: Theatre and Dance

**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

Department: Theatre and Dance

**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

Department: Theatre and Dance

**THEA 51093 - VARIABLE TITLE WORKSHOP IN THEATRE**

(Repeatable for credit) Variable topic offered as need arises to train in particular area of field. Specific topics will be announced in schedule of classes. Prerequisite: Graduate standing.

1. 000 TO 6. 000 Credit hours  
1. 000 TO 6. 000 Other hours

Levels: Graduate

Schedule Types: Workshop

Department: Theatre and Dance

**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

Department: Theatre and Dance

**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

Department: Theatre and Dance

**THEA 51114 - GAY AND LESBIAN THEATRE**

Studies in how the gay and lesbian community has been represented in theatre. Frameworks will include the history of the community, political issues, identity questions and gender theory. Prerequisite: special approval of instructor and graduate standing.

3. 000 Credit hours  
3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Theatre and Dance

**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

Department: Theatre and Dance

**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

Department: Theatre and Dance

**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

Department: Theatre and Dance

**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

Department: Theatre and Dance

**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

Department: Theatre and Dance

**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  
Department: Theatre and Dance

**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  
Department: Theatre and Dance

**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: Undergraduate  
Schedule Types: Lecture  
Department: Theatre and Dance

**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  
Department: Theatre and Dance

**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  
Department: Theatre and Dance

**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  
Levels: Graduate  
Schedule Types: Master's Project  
Department: Theatre and Dance

**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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Theatre and Dance

**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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Theatre and Dance

**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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Theatre and Dance

**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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Theatre and Dance

**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  
Department: Theatre and Dance

**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  
Department: Theatre and Dance

**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  
Department: Theatre and Dance

**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  
Department: Theatre and Dance

**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  
Department: Theatre and Dance

**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  
Department: Theatre and Dance

**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

Department: Theatre and Dance

#### **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

Department: Theatre and Dance

#### **THEA 51622 - DESIGN STUDIO: SCENERY**

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

Department: Theatre and Dance

#### **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

Department: Theatre and Dance

#### **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

Department: Theatre and Dance

#### **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

Department: Theatre and Dance

#### **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

Department: Theatre and Dance

#### **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

Department: Theatre and Dance

#### **THEA 51808 - ACTING STYLES I-SHAKEPEARE**

The application of acting, movement, and voice and speech techniques to sonnets, monologues, soliloquies, and scenes from Shakespeare.

Prerequisite: graduate standing and special approval.

3. 000 Credit hours  
4. 000 Other hours

Levels: Graduate

Schedule Types: Studio

Department: Theatre and Dance

#### **THEA 60096 - INDIVIDUAL INVESTIGATION-COSTUME HISTORY**

(Repeatable for credit) The study of 20th-century costume and international dress. Prerequisite: Special approval and graduate standing.

2. 000 Credit hours  
3. 000 Other hours

Levels: Graduate

Schedule Types: Individual Investigation

Department: Theatre and Dance

#### **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

Department: Theatre and Dance

#### **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

Department: Theatre and Dance

#### **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

Department: Theatre and Dance

#### **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

Department: Theatre and Dance

#### **THEA 61094 - COLLEGE TEACHING IN THEATRE**

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

Department: Theatre and Dance

#### **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

Department: Theatre and Dance

#### **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

Department: Theatre and Dance

#### **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  
Department: Theatre and Dance

### **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  
Department: Theatre and Dance

### **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  
Department: Theatre and Dance

### **THEA 61191 - SEMINAR: THEATRE HISTORY AND THEORY**

(Repeatable for credit) An investigation of a period, historical/theoretical development, playwright/ practitioner/theorist (variable topics).  
Prerequisite: Graduate standing and special approval of instructor.  
3. 000 Credit hours  
3. 000 Other hours  
Levels: Graduate  
Schedule Types: Seminar  
Department: Theatre and Dance

### **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  
Department: Theatre and Dance

### **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  
Department: Theatre and Dance

### **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  
Department: Theatre and Dance

### **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  
Department: Theatre and Dance

### **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  
Department: Theatre and Dance

### **THEA 61391 - SEMINAR: PLAYWRITING**

(Repeatable for credit) Intensive analysis of dramaturgical theory. Scope of the inquiry dependent upon individual interests of those enrolled. Prerequisite: Special approval and graduate standing.  
3. 000 Credit hours  
3. 000 Other hours  
Levels: Graduate  
Schedule Types: Seminar  
Department: Theatre and Dance

### **THEA 61521 - ADVANCED THEATRE DRAFTING**

Advanced drafting techniques for the technical director, scenic designer and lighting designer. Includes film, television, industrial and engineering graphic techniques. Prerequisite: Special approval and graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Theatre and Dance

### **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  
Department: Theatre and Dance

### **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  
Department: Theatre and Dance

### **THEA 61561 - ADVANCED CONSTRUCTION THEORY**

The theory and practice of structural and mechanical design for theatre production. Related issues in resource management for the professional shop. Prerequisite: Special approval and graduate standing.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Theatre and Dance

### **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  
Department: Theatre and Dance

### **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  
Department: Theatre and Dance

### **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  
Department: Theatre and Dance



### **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

Department: Theatre and Dance

### **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

Department: Theatre and Dance

### **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

Department: Theatre and Dance

### **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

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Theatre and Dance

### **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

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Theatre and Dance

### **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

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Theatre and Dance

### **THEA 62792 - PRODUCTION DRAMATURGY**

(Repeatable for credit) Under faculty supervision, a student will serve as dramaturgy to a School of Theatre and Dance production. Prerequisite: special approval of instructor and graduate standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Theatre and Dance

### **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

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Theatre and Dance

### **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

Levels: Graduate

Schedule Types: Practicum or Internship

Department: Theatre and Dance

### **THEA 63192 - MENTORSHIP IN PERFORMANCE**

(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 and performance of main stage productions or assisting in THEA 451305 Professional Aspects. 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

Department: Theatre and Dance

### **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

Department: Theatre and Dance

### **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

Department: Theatre and Dance

### **THEA 72892 - THEATRE PRACTICUM**

(Repeatable twice for credit) Practical experience for the graduate student in cocurricular theatre activities, under faculty supervision. Prerequisite: Special approval and doctoral standing.

1. 000 Credit hours

1. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture, Practicum or Internship

Department: Theatre and Dance

### **THEA 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

Department: Theatre and Dance

## **Translation Studies (TRST)**

### **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

Department: Modern and Classical Language Studies

### **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  
Department: Modern and Classical Language Studies

### **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  
Department: Modern and Classical Language Studies

### **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  
Department: Modern and Classical Language Studies

### **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  
Department: Modern and Classical Language Studies

### **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  
Department: Modern and Classical Language Studies

### **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

Department: Modern and Classical Language Studies

### **TRST 60011 - TERMINOLOGY AND COMPUTER APPLICATIONS IN TRANSLATION**

Practice-oriented introduction to terminology management and translation tools, such as term extraction, translation memory and machine translation. Prerequisite: TRST 60009 and graduate standing.

3. 000 Credit hours  
3. 000 Other hours  
Levels: Graduate  
Schedule Types: Combined Lecture and Lab  
Department: Modern and Classical Language Studies

### **TRST 60012 - SOFTWARE LOCALIZATION**

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.

3. 000 Credit hours  
3. 000 Other hours  
Levels: Graduate  
Schedule Types: Combined Lecture and Lab  
Department: Modern and Classical Language Studies

### **TRST 60013 - LANGUAGE PROJECT MANAGEMENT**

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.

3. 000 Credit hours  
3. 000 Other hours  
Levels: Graduate  
Schedule Types: Combined Lecture and Lab  
Department: Modern and Classical Language Studies

### **TRST 60098 - RESEARCH IN TRANSLATION STUDIES**

(Repeatable for a maximum of 15 credit hours) 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  
Department: Modern and Classical Language Studies

### **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  
Department: Modern and Classical Language Studies

### **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  
Department: Modern and Classical Language Studies

### **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  
Department: Modern and Classical Language Studies

### **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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Modern and Classical Language Studies

### **TRST 70004 - TRANSLATION PEDAGOGY**

Teaching methods and curriculum design for translation programs. Prerequisite: Doctoral standing.

3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Graduate  
Schedule Types: Lecture  
Department: Modern and Classical Language Studies

### **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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Modern and Classical Language Studies





### 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  
Levels: Graduate  
Schedule Types: Seminar  
Department: Modern and Classical Language Studies

### 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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Modern and Classical Language Studies

### 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  
Department: Modern and Classical Language Studies

### 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  
Department: Modern and Classical Language Studies

### 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  
Department: Modern and Classical Language Studies

### 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  
Department: Modern and Classical Language Studies

### 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.  
15. 000 Credit hours  
15. 000 Other hours  
Levels: Graduate  
Schedule Types: Dissertation  
Department: Modern and Classical Language Studies

### 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  
Levels: Graduate  
Schedule Types: Dissertation  
Department: Modern and Classical Language Studies

## Urban Design (UD)

### UD 55705 - FORCES THAT SHAPE CITIES

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  
Levels: Graduate  
Schedule Types: Seminar  
Department: Architecture

### UD 55710 - DESIGN METHODOLOGY AND METHODS

Seminar on procedural theory in urban design, the nature of the design process and how its manipulation affects the quality and character of design products. Prerequisite: graduate standing.  
1. 000 TO 3. 000 Credit hours  
1. 000 TO 3. 000 Other hours  
Levels: Graduate  
Schedule Types: Seminar  
Department: Architecture

### UD 55711 - CASE STUDIES IN URBAN DESIGN

An in-depth evaluation of important example of completed urban design projects presented by key project participants. Prerequisite: graduate standing.  
1. 000 TO 3. 000 Credit hours  
1. 000 TO 3. 000 Other hours  
Levels: Graduate  
Schedule Types: Seminar  
Department: Architecture

### 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  
Levels: Graduate  
Schedule Types: Studio  
Department: Architecture

### UD 60702 - URBAN DESIGN STUDIO II

Urban design explorations of the formal relationships between buildings, open spaces and street sin 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  
Levels: Graduate  
Schedule Types: Studio  
Department: Architecture

### 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  
Department: Architecture

### UD 60704 - URBAN DESIGN STUDIO IV

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: Studio  
Department: Architecture

### UD 60705 - CAPSTONE PROJECT PREPARATION

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  
Department: Architecture

**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

Department: Architecture

**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 standing.

1. 000 TO 3. 000 Credit hours

1. 000 TO 3. 000 Other hours

Levels: Graduate

Schedule Types: Seminar

Department: Architecture

**UD 65632 - URBAN ECOLOGY**

Study of urban habitats and ecosystems. Relationships between natural systems and community design, planning, development and redevelopment. Prerequisites: UD 65102 and graduate standing.

1. 000 TO 3. 000 Credit hours

Levels: Graduate

Schedule Types: Seminar

Department: Architecture

**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

Department: Architecture

## *Undergraduate Studies* (US)

**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

Levels: Undergraduate

Schedule Types: Lecture

Department: Undergraduate Studies

**US 10003 - READING STRATEGIES FOR COLLEGE SUCCESS**

Development of reading strategies necessary for successful completion of college coursework. Emphasis on improving reading comprehension. Course does not count toward graduation. Prerequisite: Compass Reading score 0-55.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Undergraduate Studies

**US 10006 - 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. Course does not count toward graduation. Prerequisite: special approval.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Undergraduate Studies

**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

Levels: Undergraduate

Schedule Types: Lecture

Department: Undergraduate Studies

**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

Levels: Undergraduate

Schedule Types: Individual Investigation

Department: Undergraduate Studies

**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

Department: Undergraduate Studies

**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 standalone 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

Department: Undergraduate Studies

Course Attributes: Experiential Learning Requirement

**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

Department: Undergraduate Studies

**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

Schedule Types: Lecture

Department: Undergraduate Studies

**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

Department: Undergraduate Studies

**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  
Department: Undergraduate Studies

### 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  
Levels: Undergraduate  
Schedule Types: Workshop  
Department: Undergraduate Studies

### US 20201 - DESTINATION KENT STATE STUDENT LEADER TRAINING

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.  
2. 000 Credit hours  
2. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Undergraduate Studies

### US 20203 - THEORY AND PRACTICE OF PEER TUTORING

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.  
1. 000 Credit hours  
1. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Undergraduate Studies

### US 20277 - 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: The Plus-1 Credit is not a standalone 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  
Department: Undergraduate Studies  
Course Attributes: Experiential Learning Requirement

### US 30202 - DESTINATION KENT STATE STUDENT SUCCESS LEADER SEMINAR

(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.  
2. 000 Credit hours  
2. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Seminar  
Department: Undergraduate Studies

### US 30377 - EXPERIENTIAL LEARNING PLUS-1 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  
Department: Undergraduate Studies  
Course Attributes: Experiential Learning Requirement

### 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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Undergraduate Studies

### 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.  
3. 000 Credit hours  
3. 000 Lecture hours  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Undergraduate Studies

### US 40477 - EXPERIENTIAL LEARNING PLUS-1 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  
Department: Undergraduate Studies  
Course Attributes: Experiential Learning Requirement

## Visual Communication Design (VCD)

### 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  
Department: Visual Communication Design

### 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  
Department: Visual Communication Design

### 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  
Department: Visual Communication Design

### 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

Department: Visual Communication Design

#### **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

Department: Visual Communication Design

#### **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) majors.

3. 000 Credit hours

2. 000 Lecture hours

2. 000 Lab hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Visual Communication Design

#### **VCD 20001 - 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: special approval; and VCD 28002 and photo illustration (PHOI) major. Corequisites: VCD 20010 and 38003.

1. 000 Credit hours

1. 000 Other hours

Levels: Undergraduate

Schedule Types: Studio

Department: Visual Communication Design

#### **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

Department: Visual Communication Design

#### **VCD 20009 - 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 13000, 13001, 22000 and 23001; and special approval. Corequisites: VCD 33000 and 22001.

1. 000 Credit hours

1. 000 Other hours

Levels: Undergraduate

Schedule Types: Studio

Department: Visual Communication Design

#### **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) major.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Visual Communication Design

#### **VCD 22000 - DESIGN/ILLUSTRATION TECHNIQUES I**

Introductory course in design/illustration. Object drawing with emphasis toward rendering materials and techniques used in reproduction, perspective, spatial organization and use of reference material. Prerequisite: VCD 13001.

3. 000 Credit hours

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Studio

Department: Visual Communication Design

#### **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: special approval; and VCD 13000, VCD 13001, VCD 22000, VCD 23001, VCD 28000. Corequisites: VCD 33000, VCD 20009.

3. 000 Credit hours

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Studio

Department: Visual Communication Design

#### **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.

3. 000 Credit hours

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Studio

Department: Visual Communication Design

#### **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.

3. 000 Credit hours

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Studio

Department: Visual Communication Design

#### **VCD 28000 - PHOTOGRAPHY**

Basic camera techniques to provide a better understanding of photography as a creative skill in visual communication. Prerequisites: special approval; and visual communication design (VCD) major; or photo illustration (PHOI) major; or design (DSGN) minor; or photo illustration (PHOI) minor.

3. 000 Credit hours

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Studio

Department: Visual Communication Design

#### **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.

3. 000 Credit hours

5. 000 Other hours

Levels: Undergraduate

Schedule Types: Studio

Department: Visual Communication Design

#### **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

Department: Visual Communication Design

#### **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  
Department: Visual Communication Design

### **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: special approval; and visual communication design (VCD) major; and VCD 13000, VCD 13001, VCD 20009, VCD 20010, VCD 22000, VCD 22001, VCD 23001, VCD 28000, VCD 33000.

3. 000 Credit hours  
5. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Studio  
Department: Visual Communication Design

### **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  
Levels: Undergraduate  
Schedule Types: Studio  
Department: Visual Communication Design

### **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: special approval; and VCD 13000, VCD 13001, VCD 22000, VCD 23001 and VCD 28000.

3. 000 Credit hours  
5. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Studio  
Department: Visual Communication Design

### **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: special approval; and visual communication design (VCD) major; and VCD 13000, VCD 13001, VCD 20009, VCD 20010, VCD 22000, VCD 23001, VCD 28000, VCD 33000.

3. 000 Credit hours  
5. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Studio  
Department: Visual Communication Design

### **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  
Levels: Undergraduate  
Schedule Types: Lecture  
Department: Visual Communication Design

### **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: special approval; and visual communication design (VCD) major; and VCD 13000, VCD 13001, VCD 20009, VCD 20010, VCD 22000, VCD 22001, VCD 23001, VCD 28000, VCD 33000.

3. 000 Credit hours  
3. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Studio  
Department: Visual Communication Design

### **VCD 34006 - KINETIC AND SEQUENTIAL GRAPHIC DESIGN**

A technical, studio course designed to teach the fundamentals of newly emerging technologies including Web design in the visual communication design profession. Material will be presented through series of demos and hands-on exercises. Prerequisite: visual communication design (VCD) major; and VCD 13000, VCD 13001, VCD 20009, VCD 22000, VCD 22001, VCD 23001, VCD 28000, VCD 32000, VCD 33000, VCD 33001, VCD 34005.

3. 000 Credit hours  
5. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Studio  
Department: Visual Communication Design

### **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  
3. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Combined Lecture and Lab  
Department: Visual Communication Design

### **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  
Department: Visual Communication Design

### **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 13001 and VCD 28000 and photo illustration (PHOI) or visual communication design (VCD) major.

3. 000 Credit hours  
3. 000 Other hours  
Levels: Undergraduate  
Schedule Types: Studio  
Department: Visual Communication Design

### **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  
Department: Visual Communication Design

### **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  
Department: Visual Communication Design

### **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  
Department: Visual Communication Design

### **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  
Department: Visual Communication Design

### **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

Department: Visual Communication Design

### **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

Department: Visual Communication Design

Course Attributes: Experiential Learning

Requirement

### **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

Department: Visual Communication Design

### **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

Department: Visual Communication Design

### **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

Department: Visual Communication Design

Course Attributes: Experiential Learning

Requirement

### **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

Department: Visual Communication Design

### **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

Department: Visual Communication Design

### **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

Department: Visual Communication Design

### **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

Department: Visual Communication Design

### **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

Department: Visual Communication Design

### **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

Department: Visual Communication Design

### **VCD 43001 - ADVANCED KINETIC AND SEQUENTIAL GRAPHIC DESIGN**

The exploration of the use of the computer in kinetic and sequential graphic design, sound, mobile applications and interactive design.

Prerequisite: special approval; and VCD 20006 and visual communication design (VCD) major.

3. 000 Credit hours

5. 000 Other hours

Levels: Undergraduate

Schedule Types: Studio

Department: Visual Communication Design

### **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

Department: Visual Communication Design

### **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

Department: Visual Communication Design

### **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

Department: Visual Communication Design

### **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

Department: Visual Communication Design



### **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

Department: Visual Communication Design

### **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

Department: Visual Communication Design

### **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

Department: Visual Communication Design

### **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: junior standing.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Visual Communication Design

Course Attributes: Writing Intensive Course

### **VCD 46000 - WEB DESIGN AND PROGRAMMING I**

(Cross-listed with CS 47105 and CS 57105 and 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

Department: Visual Communication Design

### **VCD 46001 - WEB DESIGN AND PROGRAMMING II**

(Cross-listed with CS 47106 and CS 57106 and 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

Department: Visual Communication Design

### **VCD 46053 - WEB DESIGN AND PROGRAMMING STUDIO**

(Cross-listed with CS 47107 and CS 56053 and 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

Department: Visual Communication Design

### **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

Department: Visual Communication Design

### **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

Department: Visual Communication Design

### **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

Department: Visual Communication Design

Course Attributes: Experiential Learning

Requirement

### **VCD 49098 - SENIOR RESEARCH PROPOSAL: GRAPHIC DESIGN AND ILLUSTRATION**

(Repeatable for credit) Research proposal must be approved by a faculty committee before project is

started. Research paper or project must meet the educational and professional criteria of the program. Prerequisite: Senior standing.

1. 000 Credit hours

1. 000 Other hours

Levels: Undergraduate

Schedule Types: Research

Department: Visual Communication Design

Course Attributes: Experiential Learning

Requirement

### **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

Department: Visual Communication Design

Course Attributes: Experiential Learning

Requirement, Writing Intensive Course

### **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

Department: Visual Communication Design

Course Attributes: Experiential Learning

Requirement

### **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 today's designers illustrators. Prerequisite: Graduate standing.

2. 000 Credit hours

2. 000 Other hours

Levels: Graduate

Schedule Types: Combined Lecture and Lab

Department: Visual Communication Design

### **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

Department: Visual Communication Design

**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

Department: Visual Communication Design

**VCD 50052 - 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. 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

Department: Visual Communication Design

**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

Levels: Graduate

Schedule Types: Studio

Department: Visual Communication Design

**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

Department: Visual Communication Design

**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

Department: Visual Communication Design

**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

Department: Visual Communication Design

**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

Department: Visual Communication Design

**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

Department: Visual Communication Design

**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

Department: Visual Communication Design

**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

Department: Visual Communication Design

**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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Visual Communication Design

**VCD 53001 - ADVANCED KINETIC AND SEQUENTIAL GRAPHIC DESIGN**

The exploration of the use of the computer in kinetic and sequential graphic design, sound, mobile applications and interactive design. Prerequisite: special approval and graduate standing.

3. 000 Credit hours

5. 000 Other hours

Levels: Graduate

Schedule Types: Studio

Department: Visual Communication Design

**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.

3. 000 Credit hours

5. 000 Other hours

Levels: Graduate

Schedule Types: Studio

Department: Visual Communication Design

**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.

3. 000 Credit hours

5. 000 Other hours

Levels: Graduate

Schedule Types: Studio

Department: Visual Communication Design

**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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Graduate

Schedule Types: Lecture

Department: Visual Communication Design

**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

Department: Visual Communication Design

**VCD 53006 - ENVIRONMENTAL GRAPHIC DESIGN**

Aims at coordinating architectural planning, interior design systems analysis and graphic communications. Also includes and individually





directed research component. Prerequisite:  
Graduate standing.  
3. 000 Credit hours  
3. 000 Other hours  
Levels: Graduate  
Schedule Types: Studio  
Department: Visual Communication Design

#### **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  
Department: Visual Communication Design

#### **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  
Department: Visual Communication Design

#### **VCD 56000 - WEB DESIGN AND PROGRAMMING I**

(Cross-listed with CS 47105 and CS 57105 and 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  
Department: Visual Communication Design

#### **VCD 56001 - WEB DESIGN AND PROGRAMMING II**

(Cross-listed with CS 47106 and CS 57106 and 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  
Department: Visual Communication Design

#### **VCD 60009 - 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  
Levels: Graduate  
Schedule Types: Individual Investigation  
Department: Visual Communication Design

#### **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  
Levels: Graduate  
Schedule Types: Studio  
Department: Visual Communication Design

#### **VCD 60053 - GRAPHIC DESIGN STUDIO MANAGEMENT-GLYPHIX**

(Repeatable for a maximum of 12 credit hours)  
Professional studio management experience through internal design studio-glyphix. Involves responsibilities for coordinating undergraduate student designers, clients and vendors. Oversight of scheduling production and quality control. Prerequisite: Graduate standing.  
1. 000 TO 6. 000 Credit hours  
1. 000 TO 6. 000 Other hours  
Levels: Graduate  
Schedule Types: Studio  
Department: Visual Communication Design

#### **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  
Levels: Graduate  
Schedule Types: Seminar  
Department: Visual Communication Design

#### **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  
Levels: Graduate  
Schedule Types: Lecture  
Department: Visual Communication Design

#### **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  
Department: Visual Communication Design

#### **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  
Department: Visual Communication Design

#### **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  
Department: Visual Communication Design

#### **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  
Department: Visual Communication Design

#### **VCD 60120 - USER EXPERIENCE DESIGN PRINCIPLES AND CONCEPTS**

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  
Department: Visual Communication Design

#### **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

Department: Visual Communication Design

### **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

Department: Visual Communication Design

### **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

2. 000 Other hours

Levels: Graduate

Schedule Types: Masters Thesis

Department: Visual Communication Design

### **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

Levels: Graduate

Schedule Types: Masters Thesis

Department: Visual Communication Design

### **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

Levels: Graduate

Schedule Types: Masters Thesis

Department: Visual Communication Design

## ***Viticulture (VIN)***

### **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

Levels: Undergraduate

Schedule Types: Lecture

Department: Regional

### **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 practicum 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

Department: Regional

### **VIN 11392 - WINTER VITICULTURE PRACTICUM**

(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 field experience portion of the course, which serves as work experience for those seeking employment in commercial viticulture. Prerequisite: VIN 11100.

2. 000 Credit hours

1. 000 Lecture hours

2. 000 Other hours

Levels: Undergraduate

Schedule Types: Lecture, Practicum or Internship

Department: Regional

Course Attributes: Experiential Learning

Requirement

### **VIN 11492 - SPRING VITICULTURE PRACTICUM**

(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 field experience portion of the course. Prerequisite: VIN 11100.

2. 000 Credit hours

1. 000 Lecture hours

2. 000 Other hours

Levels: Undergraduate

Schedule Types: Lecture, Practicum or Internship

Department: Regional

Course Attributes: Experiential Learning

Requirement

### **VIN 11592 - SUMMER/FALL VITICULTURE PRACTICUM**

(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 field experience portion of the course, which serves as work experience for those seeking employment in commercial viticulture. Prerequisite: VIN 11100.

2. 000 Credit hours

1. 000 Lecture hours

2. 000 Other hours

Levels: Undergraduate

Schedule Types: Lecture, Practicum or Internship

Department: Regional

Course Attributes: Experiential Learning

Requirement

### **VIN 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: special approval.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Regional

### **VIN 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: VIN 14600.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Regional

### **VIN 16000 - WINERY EQUIPMENT OPERATION**

Covers process technologies and process systems used in modern commercial wineries. Includes lectures, demonstrations and a two-day workshop. 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: VIN 14600.

2. 000 Credit hours

2. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Regional

### **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

Department: Regional

### **VIN 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: VIN 14600.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture



Department: Regional

### **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

Department: Regional

### **VIN 21300 - REGIONAL VINEYARD MANAGEMENT**

A general study of vineyard management applicable to the Mid-America region. Covers management of the mature vineyard and builds on the topics. Prerequisite: VIN 11100.

2. 000 Credit hours

2. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Regional

### **VIN 24600 - INTERMEDIATE ENOLOGY**

Built on the fundamentals of science and technology of winemaking practices taught in VIN 14600. Students understand how the winemaking process works and learn the scientific background for major decisions made during the process of winemaking. At course completion, students understand winemaking calculations necessary for accurate, precise and safe additions to the wine. Prerequisite: VIN 14600.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Regional

### **VIN 25792 - FALL WINE PRODUCTION INTERNSHIP**

(Repeatable for credit) 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. Prerequisites: VIN 14600 and 14800 and 16000 and 24600.

3. 000 Credit hours

8. 530 Other hours

Levels: Undergraduate

Schedule Types: Practicum or Internship

Department: Regional

Course Attributes: Experiential Learning Requirement

### **VIN 25992 - CELLAR OPERATIONS INTERNSHIP**

(Repeatable for credit) 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. 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: VIN 25792.

2. 000 Credit hours

4. 260 Other hours

Levels: Undergraduate

Schedule Types: Practicum or Internship

Department: Regional

Course Attributes: Experiential Learning Requirement

### **VIN 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: VIN 14600.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Regional

### **VIN 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: VIN 14600.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Regional

### **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

Department: Regional

## ***Veterinary Technology (VTEC)***

### **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

Department: Regional

### **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.

3. 000 Credit hours

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Regional

### **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

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Regional

### **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

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Regional

### **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

Department: Regional

### **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

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Regional

### **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

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Regional

### **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

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Regional

### **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

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Regional

### **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

Department: Regional

### **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.

3. 000 Credit hours

3. 000 Other hours

Levels: Undergraduate

Schedule Types: Combined Lecture and Lab

Department: Regional

### **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

Department: Regional

Course Attributes: Experiential Learning Requirement

## ***Women's Studies (WMST)***

### **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

Department: Arts and Sciences

### **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

6. 000 Other hours

Levels: Undergraduate

Schedule Types: Workshop

Department: Arts and Sciences

### **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.

3. 000 Credit hours

3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Arts and Sciences

Course Attributes: Diversity Course-Domestic

### **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 JUS 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

Department: Arts and Sciences

### **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

Department: Arts and Sciences

### **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

Department: Arts and Sciences

### **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

1. 000 TO 3. 000 Lecture hours

Levels: Undergraduate

Schedule Types: Lecture

Department: Arts and Sciences

### **WMST 40095 - SPECIAL TOPICS IN WOMEN'S STUDIES III**

Repeated registration permitted 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  
Department: Arts and Sciences

**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

Department: Arts and Sciences

**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

3.000 Other hours

Levels: Undergraduate

Schedule Types: Practicum or Internship

Department: Arts and Sciences

Course Attributes: Experiential Learning

Requirement