SUGGESTED THREE-YEAR GRADUATION PLAN

KENT STATE UNIVERSITY

Integrated Mathematics - Bachelor of Science in Education
[EH-BSE-IMTH]
College of Education, Health, and Human Services
School of Teaching, Learning and Curriculum Studies
Catalog Year: 2013-2014

This roadmap is a recommended semester-by-semester plan of study for this major. However, courses and milestones designated as critical (in boldface and shaded areas) must be completed in the semester listed to ensure a timely graduation.

Course Subject and Title	Credit Hours	Upper Div.	Min. Grade	Major GPA	Important Notes
Post-Secondary Coursework or Credit By Examination Upon Entry as a Freshman: [32 Credit Hours]					
CULT 29535 Education in a Democratic Society	**3**		**C**		
MATH 12002 Analytic Geometry and Calculus I	**5**		**C**	**■**	**Fulfills Kent Core Mathematics and Critical Reasoning; students not placed into course must take MATH 11010 and 11022**
PSYC 11762 General Psychology	3				Fulfills Kent Core Social Sciences and domestic diversity
Kent Core Composition	6		C		See Kent Core summary on page 2
Kent Core Humanities and Fine Arts	9				
Kent Core Social Sciences	3				See list of Kent Core courses that can be earned through AP, CLEP, or CBE exams on page 4
Kent Core Basic Sciences	3				
Semester One: [18 Credit Hours]					
Requirement: pass Praxis I Reading (174 score), Writing (172 score) and Mathematics (174 score); minimum 2.750 cumulative GPA by end of term; minimum 2.600 major GPA					
COMM 15000 Introduction to Human Communication	3				Fulfills Kent Core Additional
ITEC 19525 Educational Technology	3		C		
MATH 12003 Analytic Geometry and Calculus II	5		C	■	Fulfills Kent Core Additional
MATH 34001 Fundamental Concepts of Algebra	3	■	C	■	
PHIL 21002 Introduction to Formal Logic	3				Fulfills Kent Core Additional
US 10097 Destination Kent State: First Year Experience	1				Not required of transfer students with 25 credits
Semester Two: [16 Credit Hours]					
Requirement: minimum 2.750 cumulative GPA; minimum 2.600 major GPA					
Note: apply online for Advanced Study before the second Friday of the term					
EPSY 29525 Educational Psychology	**3**		**C**		
MATH 22005 Analytic Geometry and Calculus III	4		C	■	
MATH 30011 Basic Probability and Statistics	3	■	C	■	
MATH 34002 Fundamental Concepts of Geometry	3	■	C	■	
Kent Core Requirements (including laboratory)	3				See Kent Core Summary on page 2
Semester Three: [16 Credit Hours]					
Requirement: minimum 2.750 cumulative GPA; minimum 2.600 major GPA					
Note: apply for student teaching					
ADED 32142 Principles of Teaching Adolescents	**3**	**■**	**C**		**Fulfills writing-intensive course requirement.**
CS 10051 Introduction to Computer Science	**4**		**C**	**■**	**Fulfills Kent Core Mathematics and Critical**
MATH 21001 Linear Algebra	3		C	■	
MATH 31011 Discrete Mathematics	3	■	C	■	
SPED 23000 Introduction to Exceptionalities	3		C		Fulfills domestic diversity course requirement
Semester Four: [15 Credit Hours]					
Requirement: minimum 2.750 cumulative GPA; minimum 2.600 major GPA					
ADED 32268 The Secondary Mathematics Curriculum	**3**	**■**	**C**		
HED 42575 Health and Learning: Strategies for Students and Teachers	3	■	C		
MATH Electives from Group A	6	■	C	■	See note 1 on page 2; choose 2 courses from Group A
MATH Electives from Group B	3	■	C	■	See note 2 on page 2; choose 1 course from Group B

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Critical requirements are boldface in shaded areas.

Course Subject and Title	Credit Hours	Upper Div.	Min. Grade	Major GPA	Important Notes
Semester Five: [12 Credit Hours]					
Requirement: minimum 2.750 cumulative GPA; minimum 2.600 major GPA					
Note: Apply for graduation.					
ADED 42268 Teaching Mathematics in Secondary Schools	**3**	■	**C**		
ADED 42292 Field Work Practicum	**3**	■	**C**		**Fulfills experiential learning requirement**
MATH 47021 History of Mathematics	3	■	C	■	
MATH Electives from Group B	3	■	C	■	See note 2 below; choose one course from Group B
Semester Six: [12 Credit Hours]					
Requirement: minimum 2.750 cumulative GPA; minimum 2.600 major GPA					
ADED 42357 Secondary Student Teaching	**9**	■	**S**		**Fulfills experiential learning requirement**
ADED 49525 Inquiry into Professional Practice	**3**	■	**C**		

Graduation Requirements Summary

Minimum Total Hours	Minimum Upper-Division Hours	Minimum Kent Core Hours	Global / Domestic Diversity Course	Writing-Intensive	Experiential Learning	Minimum Major GPA	Minimum Overall GPA
121	39	36	Kent Core / SPED 23000	ADED 32142	ADED 42292 and ADED 42357	2.600	2.750

Kent Core Summary

Kent Core Categories	Important Notes	Remaining Credit Hours
Composition (6-8 credit hours) *ENG 11002, 11011, 21011; HONR 10197, 10297*	Enrollment based on placement test; grade of C required in both courses	6-8
Mathematics and Critical Reasoning (3-5 credit hours)	Fulfilled in this major with MATH 12002	0
Humanities and Fine Arts (9 credit hours) *Minimum one course from humanities in Arts and Sciences and minimum one course from fine arts*	May fulfill diversity requirement	9
Social Sciences (6 credit hours) *Must be selected from two curricular areas*	3 credit hours fulfilled in this major with PSYC 11762	3
Basic Sciences (6-7 credit hours) *Must include one laboratory*		6-7
Additional (6 credit hours)	Fulfilled in this major with COMM 15000, MATH 12003 and PHIL 21002	0

Special Notes for Licensure:
1. Pass Praxis II "Principles of Learning and Teaching grades 7-12" and Praxis II specialty test by the end of this semester.
2. Apply for teaching license (pick up licensure packet in 304 White Hall).
3. Semester 4 Study for and take the Praxis II Mathematics test after this semester.

Note 1: Group A: MATH electives (6 credit hours), choose from the following:

MATH 41001 Introduction to Modern Algebra I	3	MATH 47011 Theory of Numbers	3
MATH 41002 Introduction to Modern Algebra II	3	Any 30000-40000 level MATH elective	3
MATH 41021 Theory of Matrices			

Note 2: Group B: MATH electives (6 credit hours), choose from the following:

MATH 42021 Graph Theory and Combinatorics	3	MATH 45022 Linear Geometry	3
MATH 42024 Number and Games	3	MATH 46001 Elementary Topology	3
MATH 45021 Euclidean Geometry	3		

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Kent Core
Students must complete a minimum 36 credit hours of the Kent Core. Certain courses required in programs and in student's major field may also fulfill the Kent Core. Honors equivalents shall satisfy the Kent Core. None of the courses on the Kent Core list may be taken with a pass/fail grade. Visit www.kent.edu/catalog/kent-core for course list.

Diversity Course Requirement
Students must complete a two-course diversity requirement, consisting of one with a domestic (U.S.) focus and one with a global focus. One course must come from the Kent Core. The second course may be taken as a second Kent Core, within a major or minor, or as a general elective; or, with dean's approval, by completing one semester of study in another country. Visit www.kent.edu/catalog/diversity for course list.

Writing-Intensive Course Requirement
Students must complete a one-course writing-intensive requirement in their major and earn minimum C (2.000) grade.
Visit www.kent.edu/catalog/wic for course list.

Experiential Learning Requirement
To provide students with direct engagement in learning experiences that promote academic relevance, meaning and an understanding of real-world issues, students must complete this requirement at Kent State, either as a for-credit course or as a non-credit, non-course experience approved by the appropriate faculty member. Visit www.kent.edu/catalog/elr for course list.

Upper-Division Requirement
Students must complete a minimum 39 upper-division (numbered 30000 to 49999) credit hours of coursework. Programs in the College of Arts and Sciences require a minimum of 42 hours of upper-division coursework.

Kent Core Courses That Can Be Earned Through Exams

LEGEND: G – Global Diversity; **D** – Domestic Diversity; **LAB** – Laboratory

				Minimum **AP** score	Minimum **CLEP** score	Minimum **CBE** score
	COMPOSITION					
	ENG	11011	College Writing I (3)	3	50	C
	ENG	21011	College Writing II (3)			C
	MATHEMATICS AND CRITICAL REASONING					
	CS	10051	Introduction to Computer Science (4)	3		
	MATH	11010	Algebra for Calculus (3)		50	
	MATH	11012	Intuitive Calculus (3)			C
	MATH	12001	Algebra and Trigonometry (5)		50	C
	MATH	12002	Analytic Geometry and Calculus I (5)	3	50	C
	MATH	14001	Basic Mathematical Concepts I (4)			C
	MATH	14002	Basic Mathematical Concepts II (4)			C
	HUMANITIES AND FINE ARTS					
	Humanities in Arts and Sciences					
	ENG	22073	Major Modern Writers: British and United States (3)	3	50	
G	HIST	11050	World History: Ancient and Medieval (3)	3		C
G	HIST	11051	World History: Modern (3)	3		C
D	HIST	12070	History of the United States: The Formative Period (3)	3	50	C
D	HIST	12071	History of the United States: The Modern Period (3)	3	50	C
	HIST	1xxxx	European History (3)	3		
	Fine Arts					
	ARCH	10012	Survey of Architectural History II (3)			C
	ARTH	22006	Art History I: Ancient and Medieval Art (3)	3		
	MUS	22111	The Understanding of Music (3)			C
G	MUS	22121	Music as a World Phenomenon (3)			C
	SOCIAL SCIENCES					
	ECON	22060	Principles of Microeconomics (3)	3	50	C
	ECON	22061	Principles of Macroeconomics (3)	3	50	C
	GEOG	10160	Introduction to Geography (3)			C
G	GEOG	17063	World Geography (3)			C
D	GEOG	17064	Geography of the United States and Canada (3)			C
G	GEOG	22061	Human Geography (3)	3		
G	POL	10004	Comparative Politics (3)	3		
D	POL	10100	American Politics (3)	3	50	
D	PSYC	11762	General Psychology (3)	3	50	
D	PSYC	20651	Child Psychology (3)		50	
D	SOC	12050	Introduction to Sociology (3)		50	
	BASIC SCIENCES					
	BSCI	10001	Human Biology (3)			C
	BSCI	10002	Life on Planet Earth (3)			C
	BSCI	10110	Biological Diversity (4)	3	50	
	BSCI	10120	Biological Foundations (4)	4	50	
LAB	BSCI	11010	Anatomy and Physiology I for Allied Health (3)			C
LAB	BSCI	11020	Anatomy and Physiology II for Allied Health (3)			C
	BSCI	20020	Biological Structure and Function (5)			C
	CHEM	10030	Chemistry in Our World (3)			C
	CHEM	10050	Fundamentals of Chemistry (3)			C
	CHEM	10052	Introduction to Organic Chemistry (2)			C
	CHEM	10054	General and Elementary Organic Chemistry (5)			C
	CHEM	10060	General Chemistry I (4)	3	50	C
	CHEM	10061	General Chemistry II (4)	5	50	C
LAB	CHEM	10062	General Chemistry I Laboratory (1)	4		
	GEOL	11040	Earth Dynamics (3)			C
	GEOL	11042	Earth History (3)			C
	GEOL	21062	Environmental Geology (3)	3		C
	GEOL	21080	Oceanography (3)			C
	PHY	11030	Seven Ideas that Shook the Universe (3)			C
	PHY	12201	Technical Physics I (3)			C
	PHY	12202	Technical Physics II (3)			C
	PHY	13001	General College Physics I (4)	3		C
	PHY	13002	General College Physics II (4)	3		C
	PHY	13011	College Physics I (2)			C
	PHY	13012	College Physics II (2)			C
LAB	PHY	13021	General College Physics Laboratory I (1)	3		
LAB	PHY	13022	General College Physics Laboratory II (1)	3		
	PHY	21040	Physics in Entertainment and the Arts (3)			C
	PHY	21430	Frontiers in Astronomy (3)			C
	PHY	23101	General University Physics I (5)	3		C
	PHY	23102	General University Physics II (5)	3		C