

Mathematics

Bachelor of Science in Education: Secondary Education

Program Code: **UCOESEUMA**
 Version Number: **2118-Fall 2011**
 Program Effective: **August 29, 2011**
 Credit Total: **120**

GENERAL EDUCATION		
I. University Core: 12 S.H.	GR.	S.H.
a. Oral Communication: COM 010 or above		3
b. Written Communication: ENG 023, 024 or 025 ♦		3
c. Mathematics: MAT 017 or above ♦		3
d. Wellness: Any 3 credit HEA course		3

II. University Distribution: 15 S.H.	GR.	S.H.
a. Natural Sciences: Any lab or non-lab course with prefix AST, BIO, CHM, ENV, GEL, MAR, NSE or PHY ; or certain GEG courses with advisement		#
b. Social Sciences: Any course with prefix ANT, CRJ, ECO, HIS, MCS, POL, PSY, SOC, SSE or SWK ; or certain GEG courses with advisement		3
c. Humanities: Any course with prefix ENG, HUM, PAG, PHI, WGS, WRI, or Modern Language ENG 010 or higher (English Literature) (suggested) ♦		3
d. Arts: Any course prefix ARC, ARH, ART, CDE, CDH, CFT, DAN, FAR, FAS, MUP, MUS, or THE		3
e. Free Elective: Any course carrying university credit		3

IV. College Distribution: 21 S.H.	GR.	S.H.
a. Math: MAT 017 or above ♦		#
b. Special Education: SPU 201 Cognitive Development		3
c. Technology: ITC 321 Instructional Technology in Education		3
d. 12 credits required by major but fulfilling General Education requirements		
COURSE: MAT 220 (suggested)		#
COURSE: MAT 240 (suggested)		#
COURSE: MAT 301 (suggested)		#
COURSE: MAT 302 (suggested)		#

III. Competencies Across the Curriculum	S.H.
A. Writing Intensive (WI) (9 credits/3 three credit courses) COURSE: SEU 312 COURSE: SEU 342 COURSE: SEU 321-325, 410	9
B. Quantitative Literacy (QL) (3 credits) OR Computer Intensive (CP) (3 credits) COURSE: ITC 321	3
C. Visual Literacy (VL) (3 credits) OR Communication Intensive (CM) (3 credits) COURSE: SEU 342	3
D. Cultural Diversity (CD) (3 credits) COURSE: SEU 312	3
E. Critical Thinking (CT) (3 credits) COURSE: EDU 100	3

VI. Clinical Component: 39 S.H.	GR.	S.H.
EDU 100 Perspectives on American Education		3
SPU 201 Cognitive Development of Diverse Learners in a Standards Aligned System #		3
SPU 314 Effective Instructional Strategies for Students with Disabilities in Inclusive Settings		3
¹ SEU 312 Principles of Learning		3
¹ SEU 313 Principles of Learning Clinical Lab (must be taken with accompanying lecture-SEU 312)		3
¹ SEU 342 Principles of Teaching		3
¹ SEU 343 Principles of Teaching Clinical Lab (must be taken with accompanying lecture-SEU 342)		3
EDU 326 Introduction to Middle Level Education		3
¹ SEU 323 Methods of Teaching Secondary School Subject: Mathematics		3
SEU 390/391 Clinical Experience and Practicum I and II		12
Total		

¹Teacher Candidacy must be achieved for these courses and a minimum grade of B- is required.

TEACHER CANDIDACY REQUIREMENTS

Requirements must be met upon reaching 48 credit hours

- Required Basic Skills Assessment
 - Required Grade Point Average
 - C or better in ENG 023 or 025
 - C or better in ENG literature course
 - C or better in two mathematics courses
 - Completion of Education Exploration hours
- ♦ These courses require a grade of "C" or better

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V. SPECIALIZATION: 51 S.H.		
1. Required Courses: 36 S.H.	GR.	S.H.
CSC 135 Computer Science I		3
MAT 181 Calculus I	#	4
MAT 182 Calculus II	#	4
MAT 220 History of Mathematics	#	3
MAT 224 Foundations of Higher Mathematics		3
MAT 240 Synthetic Geometry	#	3
MAT 260 Linear Algebra		3
MAT 283 Calculus III		4
MAT 301 Probability and Statistics I	#	3
MAT 302 Probability and Statistics II	#	3
MAT 311 Abstract Algebra I		3
Total		
2. Electives: 3 S.H. (selected from below)		
MAT 312 Abstract Algebra II		3
MAT 351 Advanced Calculus I		3
Total		
4. Mathematics: 12 S. H.		
Select either four MAT courses (303 or higher) OR one CSC course (136 or higher) and three MAT courses (303 or higher):		
		3
		3
		3
		3
Total		

Courses cross-list with General Education

Program:		BSED SEU/MATHEMATICS			
FIRST YEAR					
<i>Fall Semester</i>			<i>Spring Semester</i>		
<i>Course</i>	<i>Title</i>	<i>C.H.</i>	<i>Course</i>	<i>Title</i>	<i>C.H.</i>
EDU 100CT	Perspectives on American Education	3	SPU 201	Cognitive Development of Diverse Learners in a Standards Aligned System	3
COM 010	Fundamentals of Oral Communication	3	MAT 017 or above	Mathematics General Education Requirement	3 or 4
ENG 23, 24 or 25	College Composition	3		ENG Literature Course (Humanities General Education Requirement)	3
MAT 017 or above	Mathematics General Education Requirement	3 or 4		MAT Required Course	3 or 4
	MAT Required Course	3 or 4		MAT Required Course	3 or 4
Total		15 or 17	Total		15 or 18
SECOND YEAR					
<i>Fall Semester</i>			<i>Spring Semester</i>		
<i>Course</i>	<i>Title</i>	<i>C.H.</i>	<i>Course</i>	<i>Title</i>	<i>C.H.</i>
ITC 321CPVL	Instructional Technology in Education	3	SPU 314	Effective Instructional Strategies for Students with Disabilities in Inclusive Settings	3
	General Education Requirement (Wellness, Social Sciences, Natural Sciences, or Arts)	3 or 4		General Education Requirement (Wellness, Social Sciences, Natural Sciences, or Arts)	3 or 4
	General Education Requirement (Wellness, Social Sciences, Natural Sciences, or Arts)	3 or 4		General Education Requirement (Wellness, Social Sciences, Natural Sciences, or Arts)	3 or 4
	MAT Required Course	3 or 4		MAT Required Course	3 or 4
	MAT Required Course	3 or 4		MAT Required Course	3 or 4
Total		15 or 19	Total		15 or 19
THIRD YEAR					
<i>Fall Semester</i>			<i>Spring Semester</i>		
<i>Course</i>	<i>Title</i>	<i>C.H.</i>	<i>Course</i>	<i>Title</i>	<i>C.H.</i>
SEU 312WICD	Principles of Learning	3	SEU 342WIVL	Principles of Teaching	3
SEU 313	Principles of Learning Clinical Component	3	SEU 343	Principles of Teaching Clinical Component	3
	General Education Requirement (Free Elective)	3 or 4		MAT Required Course	3 or 4
	MAT Required Course	3 or 4		MAT Required Course	3 or 4
	MAT Required Course	3 or 4		MAT Required Course	3 or 4
Total		15 or 18	Total		15 or 18
FOURTH YEAR					
<i>Fall Semester</i>			<i>Spring Semester</i>		
<i>Course</i>	<i>Title</i>	<i>C.H.</i>	<i>Course</i>	<i>Title</i>	<i>C.H.</i>
SEU 323WI	Methods of Teaching Secondary School Subject: Mathematics	3	SEU 390	Clinical Experience & Practicum I	6
	MAT Required Course	3 or 4	SEU 391	Clinical Experience & Practicum II	6
	MAT Required Course	3 or 4			
	MAT Required Course	3 or 4			
EDU 326	Introduction to Middle Level Education	3			
Total		15 or 18	Total		12