0.0 -5.0

Bachelor of Science in Mathematics and Education with Endorsement in Elementary Education					
MAJOR REQUIREMENTS/MATHEMATICS: 43 Credits		MAJOR REQUIREMENTS/EDUCATION: 36 Credits (a)			
MA120: Intro to Mathematical Reasoning	4.0	EDL201: Educational Psychology	3.0		
MA125: Calculus with Analytic Geometry I	4.0	EDL206: Child and Adolescent Development	3.0		
MA126: Calculus with Analytic Geometry II	4.0	ED250: Foundations of Teaching and Learning	3.0		
MA211: Differential Equations	3.0				
MA221: Linear Algebra	3.0	EDL326: Literacy Instructions in K-5 Educational			
MA225: Calculus with Analytic Geometry II	4.0	Settings I	3.0		
MA314: Number Theory	3.0	ED320: Teaching Students with Diverse Needs	3.0		
MA319: Probability and Statistics I	3.0				
MA320: Probability and Statistics II	3.0	EDL327: Literacy Instruction in K-5 Educational			
MA410: Modern Algebra	3.0	Settings II	3.0		
MA415: Real Analysis	3.0	EDL327N: NCATE Assessment	0.0		
Take 2 courses from among:	1 1	ED360: Methods of Teaching Elementary			
MA317: Geometry		Mathematics	3.0		
or MA411: Abstract Algebra		ED360N: NCATE Assessment	0.0		
or MA413: Complex Analysis	3.0				
or MA419: Introduction to Math Modeling	3.0	ED361: Methods of Teaching Science for			
		Elementary School	3.0		
MA LVL1: Gateway Exam 1	0.0	ED361N: NCATE Assessment	0.0		
MA LVL2: Gateway Exam 2	0.0				
MA LVL3: Gateway Exam 3	0.0	ED362: Teaching Elementary Social Studies	3.0		
		ED362N: NCATE Assessment	0.0		
OUTSIDE MAJOR (MA) REQUIREMENTS: 11 to 14		9 Credits as Follows (b):			
CS175: Introduction to Computer Science I	3.0				
or MA237: Programming & Technology in	4.0	ED416: Student Teaching AND	8.0		
Mathematics		ED416S: Seminar in Student Teaching	1.0		
Complete one of the following groups:	1 1	<u>*OR*</u>			
Group A - (8 credits):					
CE111: General Chemistry I	3.0	ED417: Supervised Student Teaching AND	8.0		
CE111L: General Chemistry I Lab	1.0	ED417S: Seminar - Supervised Student Teaching	1.0		
CE112: General Chemistry II	3.0				
CE112L: General Chemistry II Lab	1.0	OUTSIDE MAJOR (EDE) REQUIREMENTS: 3 to	6 Credits		
OR Group B - (10 credits):					
PH211: General Physics w/Calculus I	4.0				
PH211L: General Physics w/Calculus I Lab	1.0	PY103: Introduction to Psychology	3.0		
PH212: General Physics w/Calculus II	4.0				
PH212L: General Physics w/Calculus II Lab	1.0	MA317: Geometry*	0.0 - 3.0		
OR Group C - (8 credits):		*May be fulfilled in major requirements			
BY109: Intro to Biodiversity and Evolution	4.0				
BY110: Intro to Cell & Molecular Biology	4.0				
 FREE ELECTIVES: 0 to 5 Credits			Credits		

(a) Minimum grade of "C" required for Education Courses

⁽b) Students must complete the appropriate test requirement(s) with a passing score PRIOR to Student Teaching.

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ENERAL EDUCATION REQUIREMENTS: 30 to 33 Credits		
First Year Seminar	FY-101: First Year Seminar	3.0
Reading and Writing	EN101: College Composition I	3.0
	EN102: College Composition II	3.0
Mathematics	Fulfilled in Major Requirements with required MA courses	0.0
Natural Sciences	Fulfilled in Outside Major Req. with BY, CE, PH courses	0.0
Literature	3 Credits from courses designated with Course*Type: LIT	3.0
Aesthetics and Creativity	3 Credits from subject MU, AR, TH, DA	3.0
Technological Literacy	3 Credits from courses designated with Course*Type: TL *May be fulfilled in Major Requirements with MA237	0.0 - 3.0
Reasoned Oral Discourse	Fulfilled in Major Requirements with ED320, and/or MA314	0.0
Historical Perspective	3 Credits from courses designated with Course*Type: HS.SV	3.0
Social Science	Fulfilled in Outside Major Requirements with PY103	0.0
Historical Perspective/Social Sciences	3 Credits from courses designated with Course*Type: HS.SV or 3 Credits from courses designated with Course*Type: SS.SV	3.0
Interdisciplinary Perspectives	3 Credits from courses designated with Course*Type: ISP	3.0
Cultural Diversity and Global Understanding Understanding or	3 Credits from courses designated with Course*Type: CD and 3 Credits from courses designated with Course*Type: GU	6.0
Foreign Language	or 6 Credits from the SAME foreign language	
Experiential Education	One course designated with Course*Type: EX	0.0
Writing Intensive	Two courses from Mathematics (MA) designated with	0.0
	Course*Type: WT Two courses from Education (ED, EDL, EDS) designated with	0.0
	Course*Type: WT	0.0

Minimum Credits for Bachelor of Science in Mathematics and Education with Endorsement in Elementary Education = 128.0

ADDITIONAL ENDORSEMENTS AVAILABLE:

- $\bullet \ \mathsf{TSD} \ \mathsf{-} \ \mathsf{Teacher} \ \mathsf{of} \ \mathsf{Students} \ \mathsf{with} \ \mathsf{Disabilities} \ \mathsf{-} \ \mathsf{Elementary}$
- ESL English as a Second Language Elementary
- MID-MA Middle School Mathematics
- P-3 Early Childhood Endorsement
- Teacher of Supplemental Instruction in Reading/Mathematics K-8

NOTES:

- * 58 credits must be completed at the 200 level or higher.
- ** Education majors are required to have an overall GPA of 2.75 for State Certification.
- ***By state regulation, all Education Majors seeking content area endorsement must complete 12+ credits at the 300+ level in the content major.