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 MA125: Calculus with Analytic Geometry I 4.0 EDL201: Educational Psychology 3.0 4.0 MA126: Calculus with Analytic Geometry II MA211: Differential Equations 3.0 MA221: Linear Algebra 3.0 EDL206: Child and Adolescent Development 3.0 MA225: Calculus with Analytic Geometry III 4.0 MA314: Number Theory 3.0 MA319: Probability and Statistics I 3.0 ED250: Foundations of Teaching and Learning 3.0 MA320: Probability and Statistics II 3.0 MA410: Modern Algebra 3.0 MA415: Real Analysis 3.0 EDL326: Literacy Instructions in K-6 3.0 Educational Settings I Take 2 courses from among: MA317: Geometry or MA411: Abstract Algebra ED320: Teaching Students with Diverse Needs 3.0 or MA413: Complex Analysis 3.0 or MA419: Introduction to Math Modeling 3.0 EDL327: Literacy Instruction in K-6 3.0 MA LVL1: Gateway Exam 1 0.0 Educational Settings II MA LVL2: Gateway Exam 2 0.0 MA LVL3: Gateway Exam 3 0.0 ED360: Methods of Teaching Elementary 3.0 OUTSIDE MAJOR (MA) REQUIREMENTS: 11 to 14 Credits Mathematics CS175: Introduction to Computer Science I 3.0 or MA237: Programming & Technology in 4.0 ED361: Methods of Teaching Science for 3.0 Mathematics Elementary School Complete one of the following groups: Group A - (8 credits): 3.0 ED362: Teaching Elementary Social Studies 3.0 CE111: General Chemistry I CE111L: General Chemistry I Lab 1.0 CE112: General Chemistry II 3.0 9 Credits as Follows (b): CE112L: General Chemistry II Lab ED416: Student Teaching AND 1.0 8.0 ED416S: Seminar in Student Teaching 1.0 *OR* Group B - (10 credits): **ED. OUTSIDE MAJOR REQUIREMENTS: 0 to 3 Credits** PH211: General Physics w/Calculus I 4.0 PH211L: General Physics w/Calculus I Lab 1.0 4.0 PH212: General Physics w/Calculus II PH212L: General Physics w/Calculus II Lab 1.0 0.0 - 3.0MA317: Geometry* *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 2 Credits **Credits** 0 - 2.0

(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: 3	3 to 36 Credits	Credits
First Year Seminar	FY-101: First Year Seminar	3.0
Reading and Writing	EN101: College Composition I EN102: College Composition II	3.0 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	3 Credits from courses designated with Course*Type: SS.SV	3.0
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 Foreign Language	3 Credits from courses designated with Course*Type: CD and 3 Credits from courses designated with Course*Type: GU or 6 Credits from the SAME foreign language	6.0
Experiential Education	One course designated with Course*Type: EX	0.0
Writing Intensive	Two courses from Mathematics (MA) designated with Course*Type: WT	0.0 0.0
	Two courses from Education (ED, EDL, EDS) designated with Course*Type: WT	0.0 0.0

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

ADDITIONAL ENDORSEMENTS AVAILABLE:

- TSD Teacher of Students with Disabilities Elementary
 - MID-MA Middle School Mathematics
- ESL English as a Second Language Elementary
 - P-3 Early Childhood Endorsement

NOTES:

- * 58 credits must be completed at the 200 level or higher.
- ** Education majors are required to have an overall GPA of 3.00 for State Certification.
- ***By state regulation, all Education Majors seeking content area endorsement must complete 30 content credits (12+ credits at the 300+ level).