

**BACHELOR OF SCIENCE
PROGRAM LEADING TO CERTIFICATION IN
MATHEMATICS SECONDARY EDUCATION**

2011-2012

Student's Name: _____

Student's I.D. Number: _____

Entrance Date: _____

Advisor's Name: _____

CORE			36
___ ENGL	150	English Composition I	3
___ ENGL	151	English Composition II	3
___ ENGL	218	Technical Writing	3
___ ENGL	250	World Literature I OR	3
___ ENGL	251	World Literature II	
___ COPA	250	Arts & Human Experience I	3
___ COPA	251	OR CINE 302	3
___ HIST	150	Intro Study History	3
___ MATH	180	College Algebra	3
___ NSET	101	Intro to Natural Sciences and Engineering Technology	3
___ POLS	250	Into Government Systems OR POLS 102	3
___ PSYC	150	Psychological Foundations	3
___ SOC	150	Sociological Foundations	3

DEPARTMENT GENERAL REQUIREMENTS 11-12

Natural Sciences			
___	___	___	3
(BIOL 101, CHEM 101 or PHYS 101)			
___	___	___	3
(BIOL 102, CHEM 102 or PHYS 102)			
___	___	___	1
(BIOL 103, CHEM 103 or PHYS 103)			
___	___	___	1
(BIOL 104, CHEM 104 or PHYS 104)			
___	CMPS	___	3-4
(computer programming language - 200 level or above)			

DEPARTMENT MAJOR REQUIREMENTS			32
___ MATH	175	Elementary Statistics	3
___ MATH	185	Trigonometry	2
___ MATH	190	Calculus I	4
___ MATH	210	Calculus II	4
___ MATH	220	Discrete Mathematics	3
___ MATH	230	Linear Algebra I	3
___ MATH	300	Calculus III	4
___ MATH	310	Differential Equations	3
___ MATH	340	Modern Applied Algebra	3
___ MATH	410	Geometry	3

EDUCATION DEPARTMENT REQUIREMENTS 39

___ SPED	180	Special Education and Inclusive Practices	3
___ SPED	280	Positive Behavioral Interventions and Supports	3
___ SPED	380	Differentiated Instructional Practices in the Inclusive Classroom	3
___ EDUC	220	Family & Community Diversity	3
___ EDUC	222	Assessment & Adaptation	3
___ EDUC	228	Educational Psychology	3
___ EDUC	250	Working with English Language Learners	3
___ EDUC	321	Literacy & Learning in Secondary School	3
___ EDUC	415	Teaching in Secondary School	3
___ EDUC	425	Student Teaching Practicum	12

GENERAL COLLEGE ELECTIVES 6

___	___	___	3
___	___	___	3

Program Objectives

B.S. Program Leading to Certification in Mathematics Secondary Education

Upon successful completion of this program, a student will be able to:

1. Utilize a variety of instructional strategies.
2. Develop instructional plans and set goals based on the content to be taught/learned, knowledge of assigned students, and the instructional context.
3. Establish and maintain purposeful and equitable classroom environments.
4. Demonstrate integrity, ethical behavior and professional conduct as stated in the *Pennsylvania Code of Professional Practice and Conduct for Educators*.

Mathematics Secondary Education Course Sequence

Freshman Year Semester 1 (14 cr.)

ENGL	150	English Composition I
MATH	180	College Algebra
MATH	185	Trigonometry
COPA	250	Arts & Human Experiences I
XXXX	XXX	General College Elective

Sophomore Year Semester 1 (17 cr.)

SPED	180	Special Education & Inclusion
SOC	150	Sociological Foundations
MATH	210	Calculus II
SCIEN	101	First Science Course & the Lab
SCIEN	103	(Biology, Chemistry, or Physics)
PSYC	150	Psychological Foundations

Junior Year Semester I (15 cr.)

EDUC	321	Literacy & Learn in Sec. School
ENGL	250	World Literature I
MATH	340	Modern Applied Algebra
MATH	230	Linear Algebra I
EDUC	220	Family & Community Diversity

Senior Year Semester 1 (18 cr.)

MATH	220	Discrete Mathematics
NSET	101	Intro to Nat. Science & Eng. Tech
SPED	380	Differentiated Instructional Practices
EDUC	415	Teaching in Secondary Schools
CMPS	200+	Programming Course 200 level or above
POLS	250	Intro to Governmental Systems

Freshman Year Semester 2 (16 cr.)

ENGL	151	English Composition II
MATH	175	Elementary Statistics
MATH	190	Calculus I
COPA	251	Arts & Human Experiences II
EDUC	222	Assessment and Adaptations

*** APPLICATION TO DEPARTMENT TO BE COMPLETED

***Sophomore Year Semester 2 (17 cr.)

EDUC	228	Education Psych
EDUC	250	Working with English Language Learners
MATH	300	Calculus III
SCIENCE	102	Second Science Course & the Lab
SCIENCE	104	(Biology, Chemistry or Physics)
XXXX	XXX	General College Elective

Junior Year Semester 2 (15 cr.)

SPED	280	Positive Behavioral Interventions
ENGL	218	Technical Writing
MATH	310	Differential Equations
MATH	410	Geometry
HIST	150	Intro Study of History

Senior Year Semester 2 (12 cr.)

EDUC	425	Student Teaching Practicum
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