BACHELOR OF SCIENCE
PROGRAM LEADING TO DUAL CERTIFICATION IN
MATHEMATICS SECONDARY EDUCATION
AND SPECIAL EDUCATION (Grades 7-12)

FIRST TIME/FULL TIME FRESHMEN
2014-2015

Student’s Name ____________________________________________
Student’s I.D. Number ______________________________________
Entrance Date ______________________________________________
Advisor’s Name _____________________________________________

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 REQUIREMENTS 27

EDUC 222 Assessment & Adaptations 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

SPECIAL EDUCATION REQUIREMENTS 27

SPED 180 Special Education and Inclusive Practices 3
*SPED 220 Instructional/Assistive Technology 3
*SPED 280 Positive Behavioral Interventions 3
and Supports
SPED 281 High Incidence Disabilities 3
SPED 282 Low Incidence Disabilities 3
SPED 380 Differentiated Instructional 3
Practices in the Inclusive Classroom
SPED 381 Secondary Transitions 3
SPED 382 Autism Spectrum Disorders 3
SPED 480 Professional Collaboration & Communication 3
SPED 481 Intensive Reading, Writing, Math 3

*Completed within the CORE

DEPARTMENT GENERAL REQUIREMENTS 11

Natural Sciences
BIOL 101, CHEM 10, PHYS 101 3
BIOL 102, CHEM 102, PHYS 102 3
BIOL 103, CHEM 103, PHYS 103 1
BIOL 104, CHEM 104, PHYS 104 1
NSET 101 Introduction to Natural Science and Engineering Technology 3

TESTS FOR CERTIFICATION:
PECT- PAPA: Reading, Math, Writing (8001, 8002, 8003)
Praxis Mathematics – Content Knowledge (0061/5061)
PECT- Special Education 7- 12 (8015, 8016)
Program Objectives

B.S. Program Leading to Certification in Mathematics Secondary Education and Special Education (Grades 7-12)

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 and Special Education (Grades 7-12) 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
- PSYC 150 Psychological Foundations

**Sophomore Year Semester 1** (17 cr.)

- SOC 150 Sociological Foundations
- MATH 210 Calculus II
- First Science Course and Lab (Biology, Chemistry, or Physics)
- EDUC 228 Educational Psychology
- SPED 281 High Incidence Disabilities

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

- ENGL 151 English Composition II
- MATH 175 Elementary Statistics
- MATH 190 Calculus I
- EDUC 222 Assessment and Adaptations
- SPED 180 Special Education & Inclusive Practices

**Junior Year Semester 1** (18 cr.)

- EDUC 321 Literacy & Learning in Secondary
- ENGL 250 World Literature I
- MATH 340 Modern Applied Algebra
- MATH 230 Linear Algebra I
- SPED 382 Autism Spectrum Disorders
- SPED 380 Differentiated Instructional Practices

**Senior Year Semester 1** (18 cr.)

- MATH 220 Discrete Mathematics
- EDUC 415 Teaching in Secondary Schools
- NSET 101 Introduction to Natural Sciences &
- POLS 250 Introduction to Government Systems
- SPED 481 Intensive Reading, Writing,
- COPA 251 Arts & Human Experiences II

**Junior Year Semester 2** (18 cr.)

- HIST 150 Introduction Study of History
- ENGL 218 Technical Writing
- MATH 310 Differential Equations
- MATH 410 Geometry
- SPED 282 Low Incidence Disabilities
- SPED 480 Professional Collaboration & Comm

**Senior Year Semester 2** (15 cr.)

- EDUC 425 Student Teaching Practicum
- SPED 381 Secondary Transitions