

Program Guides

Tests for Certification:

PECT- PAPA: Reading, Math, Writing (8001, 8002, 8003) Praxis Mathematics – Content Knowledge (0061/5061) PECT- Special Education 7- 12 (8015, 8016) BACHELOR OF SCIENCE PROGRAM LEADING TO DUAL CERTIFICATION IN

MATHEMATICS SECONDARY EDUCATION AND SPECIAL EDUCATION (Grades 7-12)

2014-2015

| Student's Name | |
|-------------------------|--|
| Student's I.D. Number _ | |
| Entrance Date | |
| Advisor's Name | |

| CORE | | | | 36 |
|-------------------------------|----------------------|-------------|------------------------------------|----|
| | COPA | 250 | Arts and Human Experience I | 3 |
| | COPA | 251 | OR CINE 302 | 3 |
| | 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 | |
| | HIST | 150 | Introduction to Study of History | 3 |
| | MATH | 180 | College Algebra | 3 |
| | POLS | 250 | Intro to Government Systems OR | 3 |
| | POLS | 102 | American National Government | |
| | PSYC | 150 | Psychological Foundations | 3 |
| | SOC | 150 | Sociological Foundations | 3 |
| | SPED | 220 | Instructional/Assistive Technology | 3 |
| DEPAR Natura | TMENT G l Science | GENER s | AL REQUIREMENTS | 11 |
| 3 | | | | |
| (BIOL 101, CHEM 10, PHYS 101) | | | | |
| (BIOL 10 | 02, CHEM | 102, PH | | 1 |
| BIOL 103, CHEM 103, PHYS 103) | | | | |
| (BIOL 10 | 04, CHEM | 104, PH | iys 104) | - |

| NSET | 101 | Introduction to Natural Science |
|----------|-----|---------------------------------|
| | | and Engineering Technology |

| DEPAR | TMENT I | OLAN | R 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 |
| EDUCA | TION RE | QUJR | EMENTS | 27 |
| | EDUC | 222 | Assessment & Adaptations | 3 |
| | EDUC | 228 | Educational Psychology | 3 |
| | EDUC | 250 | Working with English | 3 |
| | | | Language Learners | |
| | EDUC | 321 | Literacy & Learning in | 3 |
| | | | Secondary School | |
| | EDUC | 415 | Teaching in Secondary School | 3 |
| | EDUC | 425 | Student Teaching Practicum | 12 |
| SPECIA | L EDUCA | | 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 & | 3 |
| | | | Communication | |
| | SPED | 481 | Intensive Reading, Writing, Math | 3 |

*Completed within the CORE

3

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

| | Fr | eshman 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 |
| | Sor | phomore Year Semester 1 (17 cr.) |
| SOC | 150 | Sociological Foundations |
| MATH | 210 | Calculus II |
| First Scie | ence C | ourse and Lab |
| (Biology, | , Chem | istry, or Physics) |
| EDUC | 228 | Educational Psychology |
| SPED | 281 | High Incidence Disabilities |
| | | |
| | | |
| | | Junior Year Semester I (18 cr.) |
| EDUC | 321 | Junior Year Semester I (18 cr.) Literacy & Learning in Secondary |
| EDUC ENGL | 321 250 | Junior Year Semester I (18 cr.) Literacy & Learning in Secondary World Literature I |
| EDUC ENGL MATH | 321 250 340 | Junior Year Semester I (18 cr.) Literacy & Learning in Secondary World Literature I Modern Applied Algebra |
| EDUC ENGL MATH MATH | 321 250 340 230 | Junior Year Semester I (18 cr.) Literacy & Learning in Secondary World Literature I Modern Applied Algebra Linear Algebra I |
| EDUC ENGL MATH MATH SPED | 321 250 340 230 382 | Junior Year Semester I (18 cr.) Literacy & Learning in Secondary World Literature I Modern Applied Algebra Linear Algebra I Autism Spectrum Disorders |
| EDUC ENGL MATH MATH SPED SPED | 321 250 340 230 382 380 | Junior Year Semester I (18 cr.) Literacy & Learning in Secondary World Literature I Modern Applied Algebra Linear Algebra I Autism Spectrum Disorders Differentiated Instructional Practices |
| EDUC ENGL MATH MATH SPED SPED | 321 250 340 230 382 380 | Junior Year Semester I (18 cr.) Literacy & Learning in Secondary World Literature I Modern Applied Algebra Linear Algebra I Autism Spectrum Disorders Differentiated Instructional Practices |
| EDUC ENGL MATH MATH SPED SPED | 321 250 340 230 382 380 | Junior Year Semester I (18 cr.) Literacy & Learning in Secondary World Literature I Modern Applied Algebra Linear Algebra I Autism Spectrum Disorders Differentiated Instructional Practices |
| EDUC ENGL MATH MATH SPED SPED MATH | 321 250 340 230 382 380 220 | Junior Year Semester I (18 cr.) Literacy & Learning in Secondary World Literature I Modern Applied Algebra Linear Algebra I Autism Spectrum Disorders Differentiated Instructional Practices Senior Year Semester 1 (18 cr.) Discrete Mathematics |
| EDUC ENGL MATH MATH SPED SPED MATH EDUC | 321 250 340 230 382 380 220 415 | Junior Year Semester I (18 cr.) Literacy & Learning in Secondary World Literature I Modern Applied Algebra Linear Algebra I Autism Spectrum Disorders Differentiated Instructional Practices Senior Year Semester 1 (18 cr.) Discrete Mathematics Teaching in Secondary Schools |
| EDUC ENGL MATH SPED SPED MATH EDUC NSET | 321 250 340 230 382 380 220 415 101 | Junior Year Semester I (18 cr.) Literacy & Learning in Secondary World Literature I Modern Applied Algebra Linear Algebra I Autism Spectrum Disorders Differentiated Instructional Practices Senior Year Semester 1 (18 cr.) Discrete Mathematics Teaching in Secondary Schools Introduction to Natural Sciences & |
| EDUC ENGL MATH SPED SPED MATH EDUC NSET POLS | 321 250 340 230 382 380 220 415 101 250 | Junior Year Semester I (18 cr.) Literacy & Learning in Secondary World Literature I Modern Applied Algebra Linear Algebra I Autism Spectrum Disorders Differentiated Instructional Practices Senior Year Semester 1 (18 cr.) Discrete Mathematics Teaching in Secondary Schools Introduction to Natural Sciences & Introduction to Government Systems |
| EDUC ENGL MATH SPED SPED MATH EDUC NSET POLS SPED | 321 250 340 230 382 380 220 415 101 250 481 | Junior Year Semester I (18 cr.) Literacy & Learning in Secondary World Literature I Modern Applied Algebra Linear Algebra I Autism Spectrum Disorders Differentiated Instructional Practices Senior Year Semester 1 (18 cr.) Discrete Mathematics Teaching in Secondary Schools Introduction to Natural Sciences & Introduction to Government Systems Intensive Reading, Writing, |

| | <u>F</u> | r <u>eshman Year Semester 2</u> (16 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 | | | |
| | ***(| Sophomore Year Semester 2 (17 cr.) | | | |
| MATH | 300 | Calculus III | | | |
| EDUC | 250 | Working with English Language Learners | | | |
| Second | Science | e course and Lab | | | |
| (Biology | , Chem | istry, or Physics) | | | |
| SPED | 220 | Instructional/Assistive Technology | | | |
| SPED | 280 | Positive Behavioral Interventions | | | |
| ***A | APPLIC/ | ATION TO DEPARTMENT TO BE COMPLETED | | | |
| | | 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