**BACHELOR OF SCIENCE PROGRAM LEADING TO CERTIFICATION IN BIOLOGICAL SCIENCES SECONDARY EDUCATION**

**2022-2023 Degree Requirements**

**TOTAL CREDITS FOR DEGREE: 127**

**UNIVERSITY CORE CURRICULUM: 42 credits**

**Required Fundamental Courses:**
- COMM 101 Oral Comm. & Pres. 3 credits
- ENGL 101 College Composition 3 credits
- UNIV 101 City-University Life 3 credits
- Senior Capstone EDUC 432 3 credits

**Choose Thematic Core courses in the following:**
- Explore the World - Choice 1 3 credits
- Explore the World - Choice 2 3 credits
- Investigate Science CHEM 101 3 credits
- Investigate Mathematics MATH 180 3 credits
- *Interpret Creative Works 3 credits
- Understand People - Choice 1 EDUC 220 3 credits
- Understand People - Choice 2 EDUC 228 3 credits
- Succeed in Business 3 credits
- Appreciate & Apply the Arts 3 credits
- Discover Technology EDUC 101 3 credits

* *Interpret Creative Works class must be a literature course.

**MAJOR REQUIREMENTS: 85 cr.**

- MATH 175 Elementary Statistics (3)
- CHEM 102 General Chemistry II (3)
- CHEM 103 General Chemistry Lab I (1)
- CHEM 104 General Chemistry Lab II (1)
- CHEM 221 Organic Chemistry (3)
- PHYS 101 Physics I (3)
- PHYS 103 Physics Lab I (1)
- BIOL 101 General Biology I (3)
- BIOL 102 General Biology II (3)
- BIOL 103 General Biology Lab I (1)
- BIOL 104 General Biology Lab II (1)
- BIOL 205 Botany (3)
- BIOL 206 Zoology (3)
- BIOL 211 Human Biology (3)
- BIOL 216 Intro to Microbiology (4)
- BIOL 222 Intro to Genetics (4)
- BIOL 235 Intro to Ecology (3)
- BIOL 341 Environmental Health (3)
- EDUC 150 Intro to Teaching Profession (3)
- EDUC 222 Assessment & Adaptation (3)
- EDUC 250 Working w/ English Lang Learners (3)
- EDUC 321 Lit & Learn in Midd/Sec (3)
- EDUC 415 Teaching in Midd/Sec (3)
- EDUC 422 Data Driven Instruction (3)
- EDUC 425 Student Teaching Pract (12)
- SPED 180 Special Ed&Inclusive Prac (3)
- SPED 280 Positive Behav Inter&Sup (3)
- SPED 380 Diff Inst Pract Incl Clsrm (3)

**TESTS FOR CERTIFICATION:**

PECT-PAPA: Reading, Math, Writing (8001, 8002, 8003) OR
ETS-CORE: Reading, Writing, Math (5713, 5733, 5723)
ETS-Biology-Content Knowledge (5235)
PROGRAM OBJECTIVES
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.