MAJOR SEQUENCE AND DEGREE REQUIREMENTS

Major: **BSE BIOLOGY**
Option:
Major Field Requirements: **32.0 credits**
Other Requirements: **58.0 - 61.0 credits**

When applicable, up to six of the **REQUIRED RELATED** courses may be credited toward the Liberal Arts Core subject to normal distribution rules.

REQUIRED BIOLOGY COURSES (28.0 credits)

Course No.		Short Title	C.H.	Grade	Q.P.
BIOL	101	Foundations of BIOL	4.0		
BIOL	211	Concepts of Zoology	4.0		
BIOL	221	Concepts of Botany	4.0		
BIOL	343	Ecology & Evolution	4.0		
BIOL	362	Cell & Development	4.0		
BIOL	364	Genetics & Mole BIOL	4.0		
BIOL	375	Biometry	3.0		
BIOL	473	Methods Teach BIOL	1.0		

BIOL ELECTIVES (4 credits)

In consultation with your advisor, choose additional courses approved for BIOL majors to bring total BIOL credits to 32.

BIOL	___	_____	___	____	____
BIOL	___	_____	___	____	____

PROFESSIONAL EDUCATION (27.0 credits)

EDFN	211	Found Modern Ed	3.0		
EDFN	241	Psyc Found Teach	3.0		
EDSE	321	Issues in Sec. Educ.	3.0		
EDFN	330	Instruct. Techn. Des.	3.0		
EDSE	435	Teaching Science	3.0		
EDSE	461	Student Teaching	12.0		

Admission to Advanced Professional Studies & Certification

All students enrolled in teacher preparation programs must be admitted to Advanced Professional Studies and meet Pennsylvania state requirements and university requirements prior to being enrolled in their initial advanced Professional Studies course. Students must meet additional Pennsylvania State requirements in order to be certified. Listings of Advanced Profesional Studies courses and requirements are available in each department office, the Early Field Experiences office, and on the Early Experiences website.

REQUIRED RELATED (31.0 - 35.0 credits)

Chemistry (16.0 credits)

CHEM	111	Intro to Chem I	4.0		
CHEM	112	Intro to Chem II	4.0		
CHEM	235	Organic Chem	4.0		
CHEM	326	Biochemistry	4.0		

NOTE: Those wishing to complete a Chemistry minor must complete CHEM 265 (Quantitative Analysis) in addition to those Chemistry courses listed above.

Earth Sciences (3.0-4.0 credits)

At the 200 Level or above:

ESCI	____	_____	3.0	____	____

Mathematics (4.0 - 5.0 credits)

Choose one of the following.

MATH	160	Precalculus	4.0		
MATH	161	Calculus I	4.0		
MATH	163	Honors Calculus	5.0		

Physics (8.0 - 10.0 credits)

PHYS	131	Physics I with Algebra	4.0		
PHYS	132	Physics II with Algebra	4.0		
		---- ---- or ---- ----			
PHYS	231	Phys I with Calculus	5.0		
PHYS	232	Phys II with Calculus	5.0		

General Electives (as necessary)

_____	_____	____	____	____
_____	_____	____	____	____
_____	_____	____	____	____
_____	_____	____	____	____
_____	_____	____	____	____
_____	_____	____	____	____
_____	_____	____	____	____
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