

<b>PROGRAM CODE:</b> UCOESEUBS	<b>COLLEGE OF EDUCATION   SECONDARY EDUCATION</b>	
<b>EFFECTIVE DATE:</b> FALL 2018	<b>BACHELOR OF SCIENCE IN EDUCATION</b>	
<b>VERSION NUMBER:</b> 2188	<b>SECONDARY EDUCATION: BIOLOGY (GRADES 7-12)</b>	
<b>STUDENT NAME:</b>	<b>STUDENT ID NUMBER:</b>	

<b>PROFESSIONAL COURSES   PRE-CANDIDACY</b>		
<b>COURSE</b>	<b>CR</b>	<b>GR</b>
CMP 100 LEVEL COURSE ♣ ♦	3	
ENG LITERATURE ♣ ♦	3	
EDU 100 PERSPECTIVES ON AMERICAN EDUCATION ♦	3	
SPU 201 COGNITIVE DEV. OF DIVERSE LEARNERS ♦	3	
SPU 314 EFFECTIVE INSTRUCTIONAL STRATEGIES ♦	3	
<b>TOTAL CREDITS</b>	<b>15</b>	

<b>PROFESSIONAL COURSES   TEACHER CANDIDACY REQUIRED*</b>		
<b>COURSE</b>	<b>CR</b>	<b>GR</b>
SEU 312 PRINCIPLES OF LEARNING #	3	
SEU 313 PRINCIPLES OF LEARNING LAB #	3	
SEU 342 PRINCIPLES OF TEACHING #	3	
SEU 343 PRINCIPLES OF TEACHING LAB #	3	
SEU 410 SCIENCE METHODS FOR MID. & HIGH SCHOOL #	3	
<b>TOTAL CREDITS</b>	<b>15</b>	

<b>CLINICAL EXPERIENCE COURSES</b>		
<b>COURSE</b>	<b>CR</b>	<b>GR</b>
SEU 390 CLINICAL EXPERIENCE I	6	
SEU 391 CLINICAL EXPERIENCE II	6	
<b>TOTAL CREDITS</b>	<b>12</b>	

<b>ELECTIVE COURSES</b>		
<i>MAY BE SELECTED FROM ANY DEPARTMENT (INCLUDING EDU).</i>		
<b>COURSE</b>	<b>CR</b>	<b>GR</b>
	3	
	3	
<b>TOTAL CREDITS</b>	<b>6</b>	

- ♣ REQUIRE A GRADE OF **C** OR BETTER
- # REQUIRE A GRADE OF **B** OR BETTER
- ♦ THESE COURSES ALSO FULFILL GEN ED REQUIREMENTS

<b>REQUIRED BIOLOGY COURSES</b>		
<b>COURSE</b>	<b>CR</b>	<b>GR</b>
BIO 104 PRINCIPLES OF BIOLOGY ♦	4	
BIO 106 INTRO TO ZOOLOGY	4	
BIO 108 INTRO TO BOTANY	4	
BIO 222 ENVIRONMENTAL BIOLOGY	3	
BIO 224 APPLIED ENVIRONMENTAL MICROBIOLOGY	3	
<b>CHOOSE ONE OF THE FOLLOWING:</b>	3	
BIO 218 VERTEBRATE BIOLOGY		
BIO 302 ENTOMOLOGY		
BIO 314 ANIMAL BEHAVIOR		
<b>CHOOSE ONE OF THE FOLLOWING:</b>	3	
BIO 230 TAXONOMY OF VASCULAR PLANTS		
BIO 232 PLANT PHYSIOLOGY		
BIO 324 PLANT ECOLOGY		
BIO 235 GENERAL PHYSIOLOGY	3	
BIO 216 GENETICS	4	
<b>CHOOSE ONE OF THE FOLLOWING:</b>	3	
BIO 346 MOLECULAR BIOLOGY		
BIO 350 CELL BIOLOGY		
<b>TOTAL CREDITS</b>	<b>34</b>	

<b>REQUIRED PHYSICAL SCIENCE COURSES</b>		
<b>COURSE</b>	<b>CR</b>	<b>GR</b>
CHM 100 GENERAL CHEMISTRY I ♦	4	
CHM 102 GENERAL CHEMISTRY II ♦	4	
CHM 204 FUNDAMENTALS OF ORGANIC CHEMISTRY I	4	
PHY 040 GENERAL PHYSICS I ♦	4	
<b>TOTAL CREDITS</b>	<b>16</b>	

<b>REQUIRED MATHEMATICS COURSES</b>		
<b>COURSE</b>	<b>CR</b>	<b>GR</b>
<b>CHOOSE ONE OF THE FOLLOWING:</b>	3/4	
MAT 106 TRIGONOMETRY		
MAT 115 PRECALCULUS MATHEMATICS		
MAT 181 CALCULUS I ♦		
MAT 140 APPLIED STATISTICAL MATHEMATICS ♣ ♦	3	
<b>TOTAL CREDITS</b>	<b>6/7</b>	

<b>DIRECTED GENERAL EDUCATION REQUIREMENTS</b>									
<i>THESE ARE GEN ED COURSES THAT ARE ALSO REQUIRED BY THE SEC ED PROGRAM.</i>									
<b>COURSE</b>	<b>CR</b>	<b>GE</b>	<b>COURSE</b>	<b>CR</b>	<b>GE</b>	<b>COURSE</b>	<b>CR</b>	<b>GE</b>	
CMP 100 LEVEL	3	A1	SPU 314	3	B	PHY 040	4	C3	
EDU 100	3	B	BIO 104	4	C1	ENG LITERATURE	3	D	
SPU 201	3	B	CHM 100	4	C2				
<b>TOTAL CREDITS</b>								<b>27</b>	

<b>*TEACHER CANDIDACY REQUIREMENTS</b>		✓
PASSING BASIC SKILLS REQUIREMENT		
3.0 MINIMUM GPA		
C OR BETTER IN REQUIRED COURSES ♣		
PRE-CANDIDACY FIELD EXPERIENCE HOURS		



<b>GRADUATION REQUIREMENTS</b>		✓
42-45 GENERAL EDUCATION CREDITS		
72 PROGRAM CREDITS		
6 ELECTIVE CREDITS		
122 MINIMUM TOTAL CREDITS		

NAME	EFFECTIVE DATE AUGUST 27, 2018
ID NUMBER	VERSION 2188

# KUTZTOWN UNIVERSITY

## DEGREE REQUIREMENTS

### GENERAL EDUCATION

#### Student Learning Outcomes (SLO)

Upon completion of the requirements for the General Education Program, students will be able to:

- 1 communicate clearly and effectively orally and in writing.
- 2 apply scientific and quantitative reasoning to solve problems and increase knowledge.
- 3 apply skills in critical analysis and reasoning for the interpretation of data.
- 4 engage critically with creative or artistic works.
- 5 demonstrate the ability to retrieve, interpret, evaluate, and use information.
- 6 analyze the role of values, ethics, diversity, and multiple perspectives in local and global society.
- 7 demonstrate an understanding of various models for the development of the whole person.

Completion of the KU General Education program will give students opportunities to:

- 8 explore concepts, ideas, and methods from a variety of disciplines.

Use this checksheet to plan your degree program. Meet every semester with your academic advisor to be sure that you are taking courses that are required to obtain the degree you are seeking. Discuss your goals and choose courses that will help you to attain them. Get the most out of your education by taking advantage of everything that Kutztown University has to offer.

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TOTAL GENERAL EDUCATION CREDITS 42-45

FIND A FULL EXPLANATION OF THE GENERAL EDUCATION PROGRAM AT [WWW.KUTZTOWN.EDU](http://WWW.KUTZTOWN.EDU)

<b>First Year Seminar: Discovering College</b>	CREDITS REQUIRED	<b>3</b>
THIS COURSE MEETS SLO <b>5</b> & <b>7</b>	CREDITS EARNED:	

COURSE NUMBER	COURSE NAME	CR	GR
FYS 100	First Year Seminar		

TRANSFER STUDENTS TRANSFERRING 30 CREDITS OR MORE AND NOT TRANSFERRING AN FYS OR FYE COURSE MAY SELECT ANY ADDITIONAL COURSE FROM SECTIONS A, B, C, OR D TO MEET THEIR FYS REQUIREMENT.

TRANSFER ELECTIVE:

<b>A</b>	<b>Communicating With And About the World</b>	CREDITS REQUIRED	<b>12</b>
	THESE COURSES MEET SLO <b>1</b> & <b>5</b>	CREDITS EARNED:	

COURSE NUMBER	COURSE NAME	CR	GR
<b>1</b>	COMPOSITION 100 LEVEL CMP 1__		
<b>2</b>	COMPOSITION 200 LEVEL CMP 2__		
<b>3</b>	SPEAKING		
<b>4</b>	ANY WRITING (A2) OR SPEAKING COURSE (A3) OR FROM THE APPROVED LIST		

COURSES IN CATEGORIES B, C & D MUST BE TAKEN OUTSIDE THE STUDENT'S MAJOR. THE MAJOR IS DEFINED AS THE PREFIX THAT IDENTIFIES THE MAJOR. CONCOMITANT REQUIREMENTS MAY BE TAKEN TO MEET GENERAL EDUCATION REQUIREMENTS.

<b>B</b>	<b>Understanding Self &amp; Others</b>	CREDITS REQUIRED	<b>9</b>
	THESE COURSES MEET SLO <b>3</b> & <b>6</b>	CREDITS EARNED:	

COURSE NUMBER	COURSE NAME	CR	GR
<b>1</b>			
<b>2</b>			
<b>3</b>			

<b>C</b>	<b>Understanding Science &amp; Technology</b>	CREDITS REQUIRED	<b>9-12</b>
	THESE COURSES MEET SLO <b>2</b> & <b>3</b>	CREDITS EARNED:	

COURSE NUMBER	COURSE NAME	CR	GR
<b>1</b>	SCIENTIFIC INQUIRY		
<b>2</b>	QUANTITATIVE REASONING		
<b>3</b>	ANY COURSE APPROVED FOR C1 OR C2		

<b>D</b>	<b>Understanding &amp; Creating Ideas</b>	CREDITS REQUIRED	<b>9</b>
	THESE COURSES MEET SLO <b>4</b> & <b>6</b>	CREDITS EARNED:	

COURSE NUMBER	COURSE NAME	CR	GR
<b>1</b>			
<b>2</b>			
<b>3</b>			

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**BSED SECONDARY EDUCATION: BIOLOGY  
 8-SEMESTER PLAN**

**1<sup>st</sup> YEAR**

FALL		
COURSE	TITLE	CR
CMP 1__	CMP 100 LEVEL COURSE	3
EDU 100	PERSPECTIVES ON AMERICAN EDU.	3
FYS 100	FIRST YEAR SEMINAR	3
MAT ___	MATH REQUIREMENT	3/4
CONTENT	REQUIRED SCIENCE COURSE	3/4
<b>TOTAL</b>		<b>15-17</b>

SPRING		
COURSE	TITLE	CR
CMP 2__	CMP 200 LEVEL COURSE	3
A3 GEN ED	ORAL COMMUNICATION COURSE	3
MAT ___	MATH REQUIREMENT	3/4
SPU 201	COG. DEV. OF DIVERSE LEARNERS	3
CONTENT	REQUIRED SCIENCE COURSE	3/4
<b>TOTAL</b>		<b>15-17</b>

**2<sup>nd</sup> YEAR**

FALL		
COURSE	TITLE	CR
ENG ___	ENGLISH LITERATURE COURSE	3
GEN ED	GENERAL EDUCATION COURSE	3
CONTENT	REQUIRED SCIENCE COURSE	3/4
CONTENT	REQUIRED SCIENCE COURSE	3/4
ELECTIVE	ELECTIVE COURSE	3
<b>TOTAL</b>		<b>15-17</b>

SPRING		
COURSE	TITLE	CR
SPU 314	EFFECTIVE INSTR. STRATEGIES	3
GEN ED	GENERAL EDUCATION COURSE	3
MAT ___	MATH REQUIREMENT	3/4
CONTENT	REQUIRED SCIENCE COURSE	3/4
CONTENT	REQUIRED SCIENCE COURSE	3/4
<b>TOTAL</b>		<b>15-17</b>

**3<sup>rd</sup> YEAR**

FALL		
COURSE	TITLE	CR
SEU 312	PRINCIPLES OF LEARNING	3
SEU 313	PRINCIPLES OF LEARNING LAB	3
ELECTIVE	ELECTIVE COURSE	3
CONTENT	REQUIRED SCIENCE COURSE	3/4
CONTENT	REQUIRED SCIENCE COURSE	3/4
<b>TOTAL</b>		<b>15-17</b>

SPRING		
COURSE	TITLE	CR
SEU 342	PRINCIPLES OF TEACHING	3
SEU 343	PRINCIPLES OF TEACHING LAB	3
CONTENT	REQUIRED SCIENCE COURSE	3/4
CONTENT	REQUIRED SCIENCE COURSE	3/4
CONTENT	REQUIRED SCIENCE COURSE	3/4
<b>TOTAL</b>		<b>15-18</b>

**4<sup>th</sup> YEAR**

FALL		
COURSE	TITLE	CR
SEU 410	SCIENCE METHODS	3
CONTENT	REQUIRED SCIENCE COURSE	3/4
CONTENT	REQUIRED SCIENCE COURSE	3/4
CONTENT	REQUIRED SCIENCE COURSE	3/4
<b>TOTAL</b>		<b>12-14</b>

SPRING		
COURSE	TITLE	CR
SEU 390	CLINICAL EXPERIENCE I	6
SEU 391	CLINICAL EXPERIENCE II	6
<b>TOTAL</b>		<b>12</b>