

PROGRAM CODE: UCOESEUPM	COLLEGE OF EDUCATION SECONDARY EDUCATION	
EFFECTIVE DATE: FALL 2018	BACHELOR OF SCIENCE IN EDUCATION	
VERSION NUMBER: 2188	SECONDARY EDU: PHYSICS & MATHEMATICS (GRADES 7-12)	
STUDENT NAME:	STUDENT ID NUMBER:	

PROFESSIONAL COURSES PRE-CANDIDACY		
COURSE	CR	GR
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	
TOTAL CREDITS	15	

PROFESSIONAL COURSES TEACHER CANDIDACY REQUIRED*		
COURSE	CR	GR
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	
TOTAL CREDITS	15	

CLINICAL EXPERIENCE COURSES		
COURSE	CR	GR
SEU 390 CLINICAL EXPERIENCE I	6	
SEU 391 CLINICAL EXPERIENCE II	6	
TOTAL CREDITS	12	

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

REQUIRED PHYSICS COURSES		
COURSE	CR	GR
PHY 100 PHYSICS I ♦	4	
PHY 102 PHYSICS II	4	
PHY 212 MODERN PHYSICS I	3	
PHY 230 OPTICS	3	
PHY 312 CLASSICAL MECHANICS I	4	
PHY 315 ADVANCED PHYSICS LABORATORY	3	
PHY 316 ELECTRICITY AND MAGNETISM I	3	
TOTAL CREDITS	24	

REQUIRED MATHEMATICS COURSES		
COURSE	CR	GR
MAT 181 CALCULUS I ♣ ♦	4	
MAT 182 CALCULUS II ♣	4	
MAT 283 CALCULUS III	4	
MAT 224 FOUNDATIONS OF HIGHER MATHEMATICS	3	
MAT 240 SYNTHETIC GEOMETRY	3	
MAT 260 LINEAR ALGEBRA	3	
MAT 301 PROBABILITY & STATISTICS I	3	
MAT 311 ABSTRACT ALGEBRA I	3	
MAT 340 DIFFERENTIAL EQUATIONS	3	
TOTAL CREDITS	30	

REQUIRED ADDITIONAL SCIENCE COURSES		
COURSE	CR	GR
BIO 104 PRINCIPLES OF BIOLOGY ♦	4	
CHM 100 GENERAL CHEMISTRY I ♦	4	
CHM 102 GENERAL CHEMISTRY II	4	
TOTAL CREDITS	12	

DIRECTED GENERAL EDUCATION REQUIREMENTS									
<i>THESE ARE GEN ED COURSES THAT ARE ALSO REQUIRED BY THE SEC ED PROGRAM.</i>									
COURSE	CR	GE	COURSE	CR	GE	COURSE	CR	GE	
CMP 100 LEVEL	3	A1	SPU 314	3	B	CHM 100	4	C3	
EDU 100	3	B	BIO 104	4	C1	ENG LIT	3	D	
SPU 201	3	B	MAT 181	4	C2				
TOTAL CREDITS								24	

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



GRADUATION REQUIREMENTS		✓
42-45 GENERAL EDUCATION CREDITS		
84 PROGRAM CREDITS		
129 MINIMUM TOTAL CREDITS		

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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.

TOTAL GENERAL EDUCATION CREDITS 42-45

FIND A FULL EXPLANATION OF THE GENERAL EDUCATION PROGRAM AT WWW.KUTZTOWN.EDU

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

COURSE NUMBER	COURSE NAME	CR	GR
FYS 100	First Year Seminar		
TRANSFER STUDENTS TRANSFERRING 15 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:			

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

COURSE NUMBER	COURSE NAME	CR	GR
1	COMPOSITION 100 LEVEL CMP 1__		
2	COMPOSITION 200 LEVEL CMP 2__		
3	SPEAKING		
4	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	Understanding Self & Others	CREDITS REQUIRED	9
THESE COURSES MEET SLO 3 & 6		CREDITS EARNED:	

COURSE NUMBER	COURSE NAME	CR	GR
1			
2			
3			

C	Understanding Science & Technology	CREDITS REQUIRED	9-12
THESE COURSES MEET SLO 2 & 3		CREDITS EARNED:	

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

D	Understanding & Creating Ideas	CREDITS REQUIRED	9
THESE COURSES MEET SLO 4 & 6		CREDITS EARNED:	

COURSE NUMBER	COURSE NAME	CR	GR
1			
2			
3			

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BSED SECONDARY EDUCATION: PHYSICS AND MATHEMATICS 8-SEMESTER PLAN

1st 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 ___	REQUIRED MATH COURSE	3/4
CONTENT	REQUIRED CONTENT COURSE	3/4
TOTAL		15-17

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

2nd YEAR

FALL		
COURSE	TITLE	CR
ENG ___	ENGLISH LITERATURE COURSE	3
GEN ED	GENERAL EDUCATION COURSE	3
CONTENT	REQUIRED CONTENT COURSE	3/4
CONTENT	REQUIRED CONTENT COURSE	3/4
CONTENT	REQUIRED CONTENT COURSE	3/4
TOTAL		15-18

SPRING		
COURSE	TITLE	CR
SPU 314	EFFECTIVE INSTR. STRATEGIES	3
GEN ED	GENERAL EDUCATION COURSE	3
GEN ED	GENERAL EDUCATION COURSE	3
CONTENT	REQUIRED CONTENT COURSE	3/4
CONTENT	REQUIRED CONTENT COURSE	3/4
TOTAL		15-17

3rd YEAR

FALL		
COURSE	TITLE	CR
SEU 312	PRINCIPLES OF LEARNING	3
SEU 313	PRINCIPLES OF LEARNING LAB	3
SEU 410	SCIENCE METHODS	3
CONTENT	REQUIRED CONTENT COURSE	3/4
CONTENT	REQUIRED CONTENT COURSE	3/4
CONTENT	REQUIRED CONTENT COURSE	3/4
TOTAL		18-21

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
TOTAL		15-18

4th YEAR

FALL		
COURSE	TITLE	CR
SEU 430	MATH METHODS	3
CONTENT	REQUIRED SCIENCE COURSE	3/4
CONTENT	REQUIRED SCIENCE COURSE	3/4
CONTENT	REQUIRED SCIENCE COURSE	3/4
CONTENT	REQUIRED SCIENCE COURSE	3/4
TOTAL		15-19

SPRING		
COURSE	TITLE	CR
SEU 390	CLINICAL EXPERIENCE I	6
SEU 391	CLINICAL EXPERIENCE II	6
TOTAL		12