PROGRAM CODE: UCOESEUPY	COLLEGE OF EDUCATION SECONDARY EDUCATION
EFFECTIVE DATE: FALL 2018	BACHELOR OF SCIENCE IN EDUCATION
VERSION NUMBER: 2188	SECONDARY EDUCATION: PHYSICS (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 #	SEU 313 PRINCIPLES OF LEARNING LAB#			
SEU 342 PRINCIPLES OF TEACHING #	3			
SEU 343 PRINCIPLES OF TEACHING LAB #	3			
SEU 410 SCIENCE METHODS FOR MID. & HIGH SCHOOL #				
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 <u>C</u> OR BETTER
- # REQUIRE A GRADE OF **B** OR BETTER
- ♦ THESE COURSES ALSO FULFILL GEN ED REQUIREMENTS

REQUIRED SCIENCE COURSES				
COURSE		CR	GR	
PHY 100 PHYSICS I ♦	4			
PHY 102 PHYSICS II		4		
PHY 212 MODERN PHYSICS I		3		
PHY 214 MODERN PHYSICS II		3		
PHY 230 OPTICS		3		
PHY 245 MATHEMATICAL PHYSICS I		3		
PHY 312 CLASSICAL MECHANICS I		4		
PHY 315 ADVANCED PHYSICS LABORATORY		3		
PHY 316 ELECTRICITY AND MAGNETISM I		3		
CHOOSE TWO OF THE FOLLOWING:		3		
PHY 220 ELECTRONICS		3		
PHY 327 THERMODYNAMICS & STATISTICAL MECHANI	3			
MAT 340 DIFFERENTIAL EQUATIONS		3		
TOTAL CREDITS	36			

ADDITIONAL SCIENCE COURSES			
COURSE		CR	GR
CHOOSE ONE OF THE FOLLOWING:			
AST 140 PLANETARY SCIENCE		3	
AST 142 STELLAR AND GALACTIC ASTRONOMY			
BIO 104 PRINCIPLES OF BIOLOGY ♦		4	
CHM 100 GENERAL CHEMISTRY I ♦		4	
CHM 102 GENERAL CHEMISTRY II ♦		4	
TOTAL CREDITS	15		

REQUIRED MATHEMATICS COURSES				
COURSE		CR	GR	
MAT 181 CALCULUS I ♣ ♦		4		
MAT 182 CALCULUS II ♣	4			
MAT 283 CALCULUS III	4			
TOTAL CREDITS	12			

DIRECTED GENERAL EDUCATION RE	QUIR	EMEN	ITS					
THESE ARE GEN ED COURSES THAT ARE	ALSO F	REQUIF	RED BY THE SEC ED PROGRAM.					
COURSE	CR	GE	COURSE	CR	GE	COURSE	CR	GE
CMP 100 LEVEL	3	A1	SPU 314	3	В	CHM 100	4	C3
SPU 201	3	В	BIO 104	4	C1	ENG LIT	3	D
EDU 100	3	В	MAT 181	4	C2			
						TOTAL CREDITS	2	4

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



GRADUATION REQUIREMENTS	✓
42/45 GENERAL EDUCATION CREDITS	
78 PROGRAM CREDITS	
123 MINIMUM TOTAL CREDITS	

NAME

EFFECTIVE DATE AUGUST 27, 2018

ID NUMBER

VERSION 2188

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.
- analyze the role of values, ethics, diversity, and multiple perspectives in local and global society.
- 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

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First Year Seminar:		CREDITS REQUIRED	
Discovering College		CREDIT'S EARNED:	
THIS COURSE MEETS SLO 5 & 7 COURSE NUMBER COURSE NAME			G
FYS 100 First Year Seminar		CR	G
TRANSFERSTUDENTS TRANSFERRING 15 CREDITS OR MORE AND NOT TRANSF	EDDING AND	ENE OD ENE	
COURSE MAY SELECT ANY ADDITIONAL COURSE FROM SECTIONS A, B, C, ORD			
REQUIREMENT.		1	T
TRANSFER FLECTIVE		CREDITS	_
Communicating With		REQUIRED	_1
And About the World		CREDITS	
THESE COURSES MEET SLO (1) & (5)		EARNED:	
COURSE NUMBER COURSE NAME COMPOSITION 100 LEVEL		CR	G
CMP 1 composition 200 level			
CMP 2			
SPEAKING			
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 MATTER MAJOR IS DEFINED AS THE PREFIX THAT IDENTIFIES THE MAJOR. CONCOMITANT REQUIREMENTS MAY BE TAKEN TO MEET GENERAL EDUCATION Inderstanding		ENTS.	
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Understanding Self & Others THESE COURSES MEET SLO 3 & 6		CREDITS REQUIRED	
Understanding Self & Others THESE COURSES MEET SLO 3 & 6 COURSE NUMBER COURSE NAME		CREDIT'S REQUIRED CREDIT'S EARNED:	G
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Understanding Self & Others THESE COURSES MEET SLO 3 & 6 COURSE NUMBER COURSE NAME		CREDIT'S REQUIRED CREDIT'S EARNED:	G
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Understanding Self & Others These course name Understanding Science & Technology These courses Meet slo ? & Course number courses Meet slo ? &		CREDITS REQUIRED CREDITS EARNED: CREDITS REQUIRED CREDITS REQUIRED CREDITS	9-1
Understanding Self & Others THESE COURSES MEET SLO 3 & 6 COURSE NUMBER COURSES MEET SLO 2 & 3 COURSE NUMBER COURSE NAME		CREDITS REQUIRED CREDITS EARNED: CR CREDITS REQUIRED CREDITS REQUIRED CREDITS EARNED:	9-1
Understanding Self & Others These course name Understanding Science & Technology These courses Meet slo ? & Course number courses Meet slo ? & Course number courses Meet slo ? & Course number courses Meet slo ? &		CREDITS REQUIRED CREDITS EARNED: CR CREDITS REQUIRED CREDITS REQUIRED CREDITS EARNED:	9-1
Understanding Self & Others THESE COURSES MEET SLO & & 6 COURSE NUMBER COURSES MEET SLO & & 3 COURSE NUMBER COURSE NAME SCIENTIFIC INQUIRY		CREDITS REQUIRED CREDITS EARNED: CR CREDITS REQUIRED CREDITS REQUIRED CREDITS EARNED:	9-1
Understanding Self & Others THESE COURSES MEET SLO & & 6 COURSE NUMBER COURSE MEET SLO & & 6 COURSE NUMBER COURSES MEET SLO & & 6 COURSE NUMBER COURSE MEET SLO & & 6 COURSE NUMBER COURSE NAME SCIENTIFIC INQUIRY ANY COURSE APPROVED FOR C1 OR C2		CREDITS REQUIRED CREDITS EARNED: CR CREDITS REQUIRED CREDITS REQUIRED CREDITS EARNED:	9 -1
Understanding Self & Others THESE COURSES MEET SLO 3 & 6 COURSE NUMBER COURSE MEET SLO 2 & 3 COURSE NUMBER COURSES MEET SLO 2 & 3 COURSE NUMBER COURSE MEET SLO 3 & 6 COURSE NUMBER COURSE MEET SLO 2 & 3 COURSE NUMBER COURSE MEET SLO 2 & 3 COURSE NUMBER COURSE NAME SCIENTIFIC INAULTY ANY COURSE APPROVED FOR C1 OR C2 Understanding &		CREDITS REQUIRED CREDITS EARNED: CREDITS REQUIRED CREDITS REQUIRED CREDITS REQUIRED CREDITS REQUIRED	9 -1
Understanding Self & Others THESE COURSES MEET SLO & & 6 COURSE NUMBER COURSE NAME SCIENTIFIC INQUIRY QUANTITATIVE REASONING ANY COURSE APPROVED FOR C1 OR C2		CREDITS REQUIRED CREDITS EARNED: CR CREDITS REQUIRED CREDITS REQUIRED CREDITS EARNED: CR CREDITS CREDITS CREDITS CREDITS CREDITS CREDITS CREDITS	9 -1

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BSED SECONDARY EDUCATION: PHYSICS 8-SEMESTER PLAN

1st YEAR

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

SPRING		
COURSE	TITLE	CR
CMP 2	CMP 200 LEVEL COURSE	3
A3 GEN ED	ORAL COMMUNICATION COURSE	3
MAT	REQUIRED 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 SCIENCE COURSE	3/4
CONTENT	REQUIRED SCIENCE COURSE	3/4
CONTENT	REQUIRED SCIENCE 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 SCIENCE COURSE		3/4
CONTENT	REQUIRED SCIENCE 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
CONTENT	REQUIRED SCIENCE COURSE	3/4
CONTENT	REQUIRED SCIENCE COURSE	3/4
CONTENT	REQUIRED SCIENCE COURSE	3/4
	TOTAL	13-18

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 410	SCIENCE METHODS		3
CONTENT	REQUIRED SCIENCE COURSE		3/4
CONTENT	REQUIRED SCIENCE COURSE		3/4
CONTENT	REQUIRED SCIENCE COURSE		3/4
		TOTAL	12-15

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