PROGRAM CODE ULASENVCH Effective date 8/27/2018 Version number 2188

COLLEGE OF LIBERAL ARTS AND SCIENCES

ENVIRONMENTAL SCIENCE

BACHELOR OF SCIENCE

CHEMISTRY TRACK

STUDENT NAME: :ID NUMBER

MAJOR PROGRAM

Environmental Science Core				
REQUIRED COURSES	CR	GRADE		
ENV 100: INTRODUCTION to ENVIRONMENTAL SCIENCE	3			
ENV 210: ENVIRONMENTAL GEOLOGY	3			
ENV 220: ENVIRONMENTAL ANALYSIS	3			
ENV 222: ENVIRONMENTAL BIOLOGY	3			
ENV 380: SENIOR SEMINAR	2			
TOTAL CREDITS 14				

Chemistry Track				
REQUIRED COURSES	CR	GRADE		
CHM 100: GENERAL CHEMISTRY I	4			
CHM 102: GENERAL CHEMISTRY II	4			
CHM 214: ORGANIC CHEMISTRY I	4			
CHM 216: ORGANIC CHEMISTRY II	4			
CHM 2XX OR 3XX:	4			
CHM 3XX:	4			
CHM 3XX:	3			
CHM 3XX OR ENV 3XX:	3			
TOTAL CREDITS 30				

NOTES:

- 1. A GRADE OF C OR BETTER FOR BIO 104 IS REQUIRED TO BE COUNTED AS A PREREQUISITE.
- 2. PSY 11 IS A PREREQUISITE FOR PSY 200.
- 3. CHOICE OF COURSES MADE WITH ADVISOR FROM A LIST MAINTAINED BY ENVIRONMENTAL SCIENCE COMMITTEE.
- \blacktriangle INDICATES COURSE REQUIRED FOR THE MAJOR, BUT MAY BE USED TO SATISFY REQUIREMENTS OF GENERAL EDUCATION. THESE UNITS ARE ONLY COUNTED UNDER GENERAL EDUCATION.

Check Sheet Last Revised: 1/16/2019

CONCOMITANT COURSES

COURSE	CR	GRADE
Biology		
BIO 104: PRINCIPLES of BIOLOGY ¹ (4 cr) (GE C1)	A	
BIO 106 INTRODUCTION to ZOOLOGY or BIO 108: INTRODUCTION to BOTANY	4	
Geography		
GEG 010: ELEMENTS of PHYSICAL GEOGRAPHY	3	
GEG 274: INTRODUCTION to GIS & LAB	3	
Geology		
GEL 100: PHYSICAL GEOLOGY (4 cr) (GE C2)	A	
Mathematics		
MAT 181: CALCULUS I	4	
MAT 182: CALCULUS II	4	
MAT 140: APPLIED STATISTICS or MAT 150: INTRO to BIOSTATISTICS or PSY 200: STATS for SOCIAL & BEHAV. SCI. ²	3	
Physics		
PHY 100: PHYSICS I (4 cr) (GE C3)	A	
PHY 102: PHYSICS II	4	
Restricted Electives ³		
(3 cr)	A	
(3 cr)	A	
TOTAL CREDITS 25		

FREE ELECTIVES

COURSE	CR	GRADE
TOTAL CREDITS 0-6		

GRADUATION REQUIREMENTS REQUIRED REQUIRED GENERAL EDUCATION CREDITS COMPREHENSIVE EXAM **PASS** 42-45 69 2.0 PROGRAM CREDITS (MINIMUM) MINIMUM QPA OVERALL NIVERSITY 0-6 MINIMUM QPA IN MAJOR FREE ELECTIVES 2.0 120 TOTAL CREDITS

EFFECTIVE DATE FALL 2018 GENERAL EDUCATION VERSION 2188



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.
- 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 attain 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:	CRED.		•	
Discovering College	CRED EARN			
THESE COURSES MEET SLO 5 & 7 COURSE NUMBER COURSE NAME	121101	GR	CI	
FYS 100 First Year Seminar		- GR	0,	
TRANSFER STUDENTS TRANSFERRING 30 CREDITS OR MORE AND NOT TRAN MAY SELECT ANY APPROVED GENERAL EDUCATION COURSE TO MEET THEIR TRANSFER ELECTIVE:		FYE COU	RSE	
Communicating With And About the World	CREL REQU	DITS JIRED	1	
THESE COURSES MEET SLO 1 & 5				
COURSE NUMBER COURSE NAME	l	GR	C	
COMPOSITION 100 LEVEL CMP 1				
COMPOSITION 200 LEVEL				
- Citil 2				
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 THE MAJOR IS DEFINED AS THE PREFIX THAT IDENTIFIES THE MAJOR. CONCOMITANT REQUIREMENTS MAY BE TAKEN TO MEET GENERAL EDUCAT	•			
Understanding	CREL REQU	OITS VIRED		
Self & Others THESE COURSES MEET SLO ③ & ⑥	CREL EARN			

1	Self & Others	REQUIRED CREDITS EARNED:		9
D	THESE COURSES MEET SLO 3 & 6			
COURS	SE NUMBER COURSE NAME		GR	CR
1				
2				
3				
	Understanding	CRED	oits Q	-12

		Understanding Science & Technology		CREDITS 9-12		
	THESE COURSES MEET SLO 2 & 3		REDITS ARNED:			
	COURSE NUMBER COURSE NAME			GR	CR	
1	1 SCIENTIFIC INQUIRY					
2	2 QUANTITATIVE REASONING					
3	ANY CO	URSE APPROVED FOR C1 OR C2				

n	Understanding & Creating Ideas		EDITS QUIRED 9			
	THESE COURSES MEET SLO 4 & 6	EARN				
COURSI	COURSE NUMBER COURSE NAME			CR		

1	
2	
3	

B.S. Environmental Science/Chemistry Example 4-Year Schedule

ULASENVO	CH First Semester Suggested Advising for Connections
CHM 100	
ENV 100	***If ENV 100 is full, enroll in BIO 104
GEG 10	***If GEG 10 is full, enroll in CMP 100 or COM 010
MAT 105,	106, 115, or 181 depending on ALEKS placement score.
FYS 100	

Freshman Year

Fall Semester	Cr	Spring Semester	Cr
CHM 100 - Gen Chem I	4	CHM 102 - Gen Chem II	4
ENV 100 - Intro to Env Sci	3	BIO 104 - Principles of Biology (C1)	4
GEG 010 - Elem Phys Geography	3	MAT 181 - Calculus I*	4
MAT 106 - Trigonometry*	3	Gen Ed (A1 – CMP 1XX)	3
FYS 100 - First Year Seminar	3		
Total	16	Total	15

^{*}Students may be at a different level of math, but should continue within the MAT sequence depending on initial math course taken.

Sophomore Year

Fall Semester	Cr	Spring Semester	Cr
CHM 214 - Organic Chem I	4	CHM 216 - Organic Chem II	4
GEL100 - Physical Geology (C2)	4	PHY 102 - Physics II	4
PHY 100 - Physics I (C3)	4	Gen Ed (A3 – COM 010)	3
MAT 182 - Calculus II*	4	Gen Ed (B1)	3
Total	16	Total	14

Junior Year

Fall Semester	Cr	Spring Semester	Cr
CHM 2XX or 3XX – Chem Elective	4	ENV 220 – Env Analysis	3
ENV 210 – Env Geology	3	ENV 222 – Env Biology	3
BIO 108 - Botany/GEG 274 - GIS	4/3	GEG 274 – GIS/BIO 106 – Zoology	3/4
Gen Ed (A2 – CMP2XX)	3	MAT 140 – Appl Statistics	
Gen Ed (D1)	3	Gen Ed (A4)	
Total	17/16	Total	15/16

Senior Year

Fall Semester	Cr	Spring Semester	Cr
CHM 3XX – Chem Elective	3	CHM 3XX – Chem Elective	4
CHM 3XX or ENV3XX– Chem or Env Sci Elective	3	ENV 380 – Senior Seminar	2
Restricted Elective (Gen Ed B2)	3	Restricted Elective (Gen Ed D2)	3
Gen Ed (B3)	3	Gen Ed (D3)	3
Free Elective	3		
Total	15	Total	12

IMPORTANT NOTES:

- 1. PHY 100, PHY 102, ENV 210 & ENV 222 are all offered MW(F) at 9 AM.
- 2. CHM 216 and ENV 220 are both offered MW(F) at 11 AM.
- 3. PHY 100 and BIO 108 are ONLY offered in the Fall semester.
- 4. PHY 102, ENV 222, ENV 220, and ENV 380 are ONLY offered in the Spring semester.

Chemistry Electives (CHM 2XX or 3XX)

Course	Cr
CHM 230 - Analytical Chem I	4
CHM 310 - Biochemistry I	4
CHM 312 - Biochemistry II	4
CHM 314 - Physical Chem I	4
CHM 316 - Physical Chem II	4
CHM 318 - Adv Biochemistry	3
CHM 320 - Adv Inorganic Chem	4
CHM 326 - Adv Organic Chem	3
CHM 336 - Adv Physical Chem	3
CHM 340 - Analytical Chem II	4
CHM 351 - Selected Topics	1 – 6
CHM 370 - Research in Chem I	1 – 3
CHM 371 - Research in Chem II	1 – 3
CHM 372 - Research in Chem III	1 – 3
CHM 373 - Research in Chem IV	1 – 3
CHM 390 - Internship in Chem	1 – 4