BIOCHEMISTRY B.S.



ACADEMIC ADVISING

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GENERAL ACADEMIC INFORMATION

Minimum Graduation Requirements

- 120 credit hours
- 45 upper-division credit hours (3000-4999 level)
- 2.0 CU cumulative GPA
- Residency: At least 30 credit hours of the degree must be completed while registered in the College of Letters, Arts, and Sciences at UCCS.

Student Responsibilities

Students are required to know and follow:

- All academic policies set forth by the University, College, and academic department in the UCCS Catalog: <u>catalog.uccs.edu</u>
- All course prerequisites designated by the University. Failure to meet course prerequisites may result in an administrative drop of the course from a student's schedule. See degree audit for course prerequisites within the academic major.

DEGREE REQUIREMENTS

Explore Biochemistry: Degree and Career Information | Department of Chemistry & Biochemistry (uccs.edu)

	Ma	ajor Requirements			
Biochemistry Major	Course/Area	Course Title			
(58 hours)	CHEM 1401/1402	General Chemistry I and Lab I	5		
	CHEM 1511/1513	General Chemistry for Majors II and Lab II	5		
 Requires a minimum of 58 credit hours of CHEM course work, and an 	CHEM 2201	Introduction to Biochemical Principles	3		
additional 17 hours of auxiliary	CHEM 3101	Organic Chemistry I			
coursework.	CHEM 3103	Organic Chemistry Lab for Biochemistry Majors I	1		
	CHEM 3111	Organic Chemistry II	3		
 Requires a minimum of 16 credit 	CHEM 3113	Organic Chemistry Lab for Biochemistry Majors II	1		
hours of upper-division (3000-4999	CHEM 4001/4002	Analytical Chemistry I and Lab	4		
level) CHEM course work.	CHEM 4221	Biochemistry I	3		
a All CUEM and auxilians courses much	CHEM 4222	Biochemistry Laboratory	3		
 All CHEM and auxiliary courses must have a grade of "C" or better. 	CHEM 4231	Biochemistry II	3		
have a grade of C of Setter.	CHEM 4232	Advanced Techniques in Biochemistry			
	OR	OR	3		
	CHEM 4502	Bioanalytical Techniques			
	CHEM 4261	Advanced Biochemistry	3		
	CHEM 4701	Biophysical Chemistry (spring only)	3		
	CHEM 4921	Biochemistry Capstone	3		
	Electives	Complete 12 hours of upper-division (3000+ level) Chemistry Electives. Up	12		
		to 6 hours may be from CHEM 4904 and 4905.			
	Auxiliary Requirements				
	BIOL 1350	General Biology II: Intro to the Cell	3		
	MATH 1330 Calculus for Life Sciences		4		
	PES 1110/1160	General Physics I and Lab - Calculus Based			
	PES 1120/2160	General Physics II and Lab - Calculus Based			

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G	eneral Education and Elective Re	equirements					
Core Writing Requirement (6 hours)	 ENGL 1310, 1308, or 1305 (Students choosing ENGL 1305 must complete ENGL 1300 first.) ENGL 1410 Writing Portfolio – PORT 3000 (0 credits) or PORT 4000 (1 credit) or alternative – See Degree Audit 						
Reasoning Skills	MATH 1330 (included in auxiliary requirements) CHEM 4001 included in major requirements)						
Core Humanities (3 hours) Natural Sciences Lab	 HUM 3990 This course also fulfills Navigate and one Writing Intensive course. PES 1160 (included in auxiliary requirements) 						
Oral Communication	CHEM 4921 (included in major requirements)						
LAS Language other than English Requirement	Complete two semesters of a language other than English equivalent to 1010 & 1020 with high school, transfer, placement exam, or UCCS coursework. Courses taken to fulfill this requirement may also count toward Compass Curriculum Explore - Arts, Humanities and Cultures or general electives. See degree audit for details.						
Compass Curriculum	Component	Course					
(15 hours)	Gateway Program Seminar	GPS 1010					
Explore and Navigate courses must be taken in departments other than the	Explore – Arts, Humanities and Cultures (2 courses) Explore – Society, Behavior and Health (2 courses)	See Degree Audit See Degree Audit					
major. Writing Intensive, Inclusiveness, and	Explore – Physical and Natural World (2 courses)	BIOL 1350 (included in auxiliary requirements) MATH 1330 (included in auxiliary requirements0					
Sustainability courses may count	Navigate	HUM 3990 (included in LAS gen ed requirements)					
toward other requirements within the	Summit	CHEM 4921 (included in major requirements)					
degree.	Writing Intensive Courses (WIC) (2 courses)	HUM 3990 (included in LAS gen ed requirements)See Degree Audit					
	Inclusiveness (2 courses)	See Degree Audit					
	Sustainability	See Degree Audit					
General Electives (21 hours)	Complete additional courses to meet total and upper-co	livision requirements for your degree program.					

FOUR-YEAR DEGREE PLAN

	Piea	ase note that this is an example degree program and your program	ram may vary. S	tuae	nts are responsible for completing all course prerequisites	5.
Year One	J	FALL	Hours	J	SPRING	Hours
		ENGL 1310	3		ENGL 1410	3
		MATH 1330	4		CHEM 1511/1513	5
		CHEM 1401/1402	5		BIOL 1350	3
		GPS 1010	3		Explore – Society, Behavior and Health Course	3
		TOTAL	15		TOTAL	14
	,	Lean	11	,	SPRING	110
_	1	FALL	Hours	V		Hours
Year Two		CHEM 3101/3103	4		CHEM 3111/3113	4
		PES 1110/1160	5		PES 1120/2160	5
		Explore – Arts, Humanities & Cultures Course	3		CHEM 2201	3
		Explore – Society, Behavior and Health Course	3		Explore – Arts, Humanities & Cultures Course	3
		TOTAL	15		TOTAL	15
Year Three	J	FALL	Hours	J	SPRING	Hours
		CHEM 4001/4002	4		CHEM 4222	3
		CHEM 4221	3		CHEM 4231	3
		HUM 3990	3		CHEM 4701	3
		UD (Upper-Division) CHEM Elective	3		UD CHEM Elective	3
		General Elective (Inclusiveness)	3		General Elective (Inclusiveness)	3
		TOTAL	16		TOTAL	15
	,	Levi		,	CODING	1
Year Four	√	FALL	Hours	V	SPRING SUITAN 4254	Hours
		CHEM 4232 or CHEM 4502	3		CHEM 4261	3
	<u> </u>	CHEM 4921 (Oral Communication)	3		UD CHEM Elective	3
		UD CHEM Elective	3		General Elective	3
		General Elective (Sustainability)	3		General Elective	3
_		General Elective (Writing Intensive)	3		General Elective	3
	1	TOTAL	15		TOTAL	15