## **BIOCHEMISTRY B.S.**



## **ACADEMIC ADVISING**

Partnering with students to successfully navigate college

Location: Main Hall 208

Phone: 719.255.3260

Website: Academic Advising

#### **Connect With Your Advisor**

**Current UCCS Students** 

• Appointments: <a href="www.uccs.edu/advising/current-students">www.uccs.edu/advising/current-students</a> Prospective Students: <a href="www.uccs.edu/admissions/contact">www.uccs.edu/admissions/contact</a>

## **GENERAL ACADEMIC INFORMATION**

#### **Minimum Graduation Requirements**

- 120 credit hours
- 45 upper-division credit hours (3000-4999 level)
- 2.0 CU cumulative GPA
- Residency: Last 30 credit hours of 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)

Major Requirements						
Biochemistry Major	Course/Area	Course Title	Credit Hours			
(58 hours)	CHEM 1401/1402	General Chemistry I and Lab I	5			
	CHEM 1511/1513	General Chemistry for Majors II and Lab II	5			
<ul> <li>Requires a minimum of 58 credit hours of CHEM course work</li> </ul>	CHEM 2201	Introduction to Biochemical Principles	3			
flours of Chelvi course work	CHEM 3101/3102	Organic Chemistry I and Lab I	4			
Requires a minimum of 18 credit	CHEM 3111/3112	Organic Chemistry II and Lab II	4			
hours of upper-division (3000-4999	CHEM 4001/4002	Analytical Chemistry and Lab	4			
level) CHEM course work.	CHEM 4221	Biochemistry I	3			
	CHEM 4222	Biochemistry Laboratory	3			
Must maintain a minimum 2.0 major	CHEM 4231	Biochemistry II	3			
GPA (all CHEM courses) to graduate.	CHEM 4232	Advanced Techniques in Biochemistry				
	OR	OR	3			
All auxiliary requirements must be	CHEM 4502	Bioanalytical Techniques				
completed in addition to the required	CHEM 4261	Advanced Biochemistry	3			
major courses.	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	5			
	PES 1120/2160	General Physics II and Lab	5			

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G	eneral Education and Elective R	equirements				
Core Writing Requirement (6 hours)  Reasoning Skills	<ul> <li>ENGL 1310, 1308, or 1305 (Students choosing ENGL 1305 must complete ENGL 1300 first.)</li> <li>ENGL 1410</li> <li>PORT 3000 (0 Credits) – Writing Portfolio</li> <li>MATH 1330</li> </ul>					
(4 hours)	• CHEM 4001					
Area Requirements (28 hours)  Maximum 2 courses from any one discipline may be applied to the area requirements  Courses may not be taken pass/fail	<ul> <li>Humanities – 9 credit hours of which 3 credits must be HUM 3990.</li> <li>Social Sciences – 9 credit hours</li> <li>Natural Sciences – 10 credit hours as listed in auxiliary requirements - PES 1110, PES 1120, PES 1160, PES 2160</li> <li>NOTE: Cannot select courses from primary major courses for area requirements.</li> </ul>					
Oral Communication, Cultural Diversity, and Global Awareness Requirements						
Compass Curriculum	Component	Course				
<ul> <li>(9 hours)</li> <li>Explore and Navigate courses must be outside major and area requirements</li> <li>Writing Intensive, Inclusiveness, and Sustainability courses can count</li> </ul>	Gateway  Explore – Arts, Humanities and Cultures  Explore – Society, Behavior and Health  Explore – Physical and Natural World  Navigate  Summit	GPS 1010  See Degree Audit  See Degree Audit  BIOL 1350 (included in auxiliary requirements)  HUM 3990 (included in LAS area requirements)  CHEM 4921 (included in major requirements)				
towards other requirements within degree	Writing Intensive Courses (WIC) Two courses with one upper-division (3000+ level) Inclusiveness Sustainability	HUM 3990 (included in Hajor requirements)     CHEM 1513 (included in major requirements)     See Degree Audit See Degree Audit				
General Electives (12 hours)	Complete additional courses to meet total and upper-	Ü				

## **FOUR-YEAR DEGREE PLAN**

Please note that this is an example degree program and your program may vary. Students are responsible for completing all course prerequisites.

	J	FALL	Hours	J	SPRING	Hours
Je .		ENGL 1310	3		ENGL 1410	3
ō		MATH 1330	4		CHEM 1511/1513	5
ar		CHEM 1401/1402	5		BIOL 1350	3
Ye		GPS 1010	3		Explore – Society, Behavior and Health Course	3
		TOTAL	15		TOTAL	14

	1	FALL	Hours	1	SPRING	Hours
9		CHEM 3101/3102	4		CHEM 3111/3112	4
≥		PES 1110/1160	5		PES 1120/2160	5
Year		Explore – Arts, Humanities & Cultures Course	3		CHEM 2201	3
		Social Science Elective (Global Awareness)	3		Humanities Elective	3
		TOTAL	15		TOTAL	15

	1	FALL	Hours	J	SPRING	Hours
ee		CHEM 4001/4002	4		CHEM 4222	3
Jre		CHEM 4221	3		CHEM 4231	3
F		HUM 3990	3		CHEM 4701	3
ear		UD (Upper-Division) CHEM Elective	3		UD CHEM Elective	3
>		Social Science Elective	3		Humanities Elective	3
		TOTAL	16		TOTAL	15

	1	FALL	Hours	1	SPRING	Hours
_		CHEM 4232 or CHEM 4502	3		CHEM 4261	3
8		CHEM 4921	3		UD CHEM Elective	3
T.		UD CHEM Elective	3		General Elective	3
ea		Social Science Elective	3		General Elective (Cultural Diversity)	3
<b>&gt;</b>		General Elective (Inclusiveness)	3		General Elective (Sustainability)	3
		TOTAL	15		TOTAL	15