CHEMISTRY B.A.

Secondary Education Option



ACADEMIC ADVISING

Partnering with students to successfully navigate college Location: Main Hall 208

Phone: 719.255.3260 Website: www.uccs.edu/advising

GENERAL ACADEMIC INFORMATION

Minimum Graduation Requirements

- 1. 120 credit hours
- 2. 45 upper-division credit hours (3000-4999 level)
- 3. 2.0 CU cumulative GPA
- 4. Residency: Last 30 credit hours of degree must be completed while registered in the College of Letters, Arts, and Sciences at UCCS

Connect With Your Advisor

Current UCCS Students

Appointments: <u>www.uccs.edu/advising/current-students</u>

• Drop In Advising: Most Wednesdays, 1:00pm - 4:00pm Prospective Students: <u>www.uccs.edu/admissions/contact</u>

Student Responsibilities

Students are required to know and follow:

- 1. All academic policies set forth by the University, College, and academic department in the UCCS Catalog: <u>catalog.uccs.edu</u>
- 2. 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.

MAJOR INFORMATION

Chemistry is the science about substances, their composition, structure, properties, and interactions. Chemistry helps explain the world and its workings and plays an important role in our lives. Chemists have contributed a great deal to technical advances of society and have made many important contributions to modern life. Everything is made from one or more chemical elements that occur in nature. Chemists use different kinds of chemical processes to make the elements found in nature more useful, and they create countless products that make our lives healthier, easier, and more enjoyable. There are as many specialties as there are areas of application of chemical principles.

Major Requirements						
Chemistry Major	Course/Area	Course Title	Credit Hours			
(33 hours)	CHEM 1401/1402	General Chemistry I and Lab I	5			
	CHEM 1511/1513	General Chemistry II for Majors and Lab I	5			
Requires a minimum of 33 credit	CHEM 3201/CHEM 3203	Organic Chemistry I for Majors and Lab I	5			
hours of CHEM course work	CHEM 3211/CHEM 3213	Organic Chemistry II for Majors and Lab I	5			
Requires a minimum of 16 credit	CHEM 4001/CHEM 4002	Analytical Chemistry and Lab	4			
hours of upper-division (3000+ level)	CHEM 4211	Biochemistry	3			
CHEM course work.	CHEM 4701	Biophysical Chemistry	3			
	Electives	Complete 3 hours of Upper Division (3000+ level) CHEM Electives.	3			
 All CHEM courses must have a grade 	-	Auxiliary Requirements				
of "C" or better.	BIOL 1350/1360	General Biology: Introduction to the Cell and Lab	4			
	GEOL 1010	Physical Geology	4			
*Students must contact the department chair in the semester prior to that in	MATH 1330	Calculus for Life Sciences	4			
which they wish to teach to determine an	PES 1110/1160	General Physics I and Lab I	5			
appropriate lab to teach.	PES 1120/2160	General Physics II and Lab II	5			
	PES 1050 OR	General Astronomy I	3			
	PES 1060	General Astronomy II				
UCCS Teach Courses	UTED 1010	Step I: Inquiry Approaches to Teaching	1			
(32 hours)	UTED 1020	Step II: Inquiry-Based Lesson Design	1			
	UTED 2010	Knowing and Learning in Mathematics and Science	3			
 A grade of "B-" or better must be 	UTED 3020	Classroom Interactions	3			
earned in all Education courses.	UTED 4710	Project-Based Instruction	3			
	UTED 4720	Reading in the Content Area	3			
 Courses should be taken in the 	UTED 4730	Apprentice Teaching UCCS Teach and Seminar	12			
appropriate semester. See the four-	UTLS 3030	Perspectives on Science and Math	3			
year plan for details.	UTLS 3040	Science Research Methods	3			

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	General Education and Elective F	Requirements				
Composition (6 hours)	1. ENGL 1310 2. ENGL 1410 3. PORT 3000 (0 Credits) – Writing Portfolio					
Reasoning Skills (4 hours) Area Requirements (27 hours) • Maximum 2 courses from any one	 MATH 1330 CHEM 4001 Humanities – 9 credit hours of which 3 credits must be HUM3990. Social Sciences – 9 credit hours which must include PSY 1000 Natural Sciences – as listed in course requirements PES 1110, PES 1120, PES 1160, PES 2160 					
discipline may be applied to the area requirements • Courses may not be taken pass/fail	NOTE: Cannot select courses from primary major courses for area requirements.					
Oral Communication, Cultural Diversity, and Global Awareness Requirements						
Compass Curriculum (12 hours) Explore and Navigate courses must be outside major and area requirements Writing Intensive, Inclusiveness, and Sustainability courses can count towards other requirements within degree	Component Gateway Explore – Arts, Humanities and Cultures Explore – Society, Behavior and Health Explore – Physical and Natural World Navigate Summit Writing Intensive Courses (WIC) Two courses with one upper-division (3000+ level) Inclusiveness	Course GPS 1010 See Degree Audit See Degree Audit BIOL 1350/1360 HUM 3990 (included in LAS area requirements) UTED 4730 (included in major requirements) 1. HUM 3990 (included in LAS area requirements) 2. CHEM 1513 See Degree Audit				
	Sustainability	See Degree Audit				

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.**

	1	FALL	Hours	\checkmark	SPRING	Hours
		ENGL 1310	3		ENGL 1410	3
Je		CHEM 1401/1402	5		CHEM 1511/1513	5
Year Or		GPS 1010	3		MATH 1330	4
		UTED 1010	1		UTED 1020	1
		Explore – Arts, Humanities & Cultures Course	3		BIOL 1350/1360	4
		TOTAL	15		TOTAL	17

	\checkmark	FALL	Hours	\checkmark	SPRING	Hours
Year Two		CHEM 3201/3203	5		CHEM 3211/3213	5
		PES 1110/1160	5		PES 1120/2160	5
		UTED 2010	3		UTED 3020	3
		Explore – Society, Behavior & Health Course	3		PSY 1000	3
		TOTAL	16		TOTAL	16

ee	\checkmark	FALL	Hours	\checkmark	SPRING	Hours
		CHEM 4001/4002	4		GEOL 1010	4
hre		Upper Division (UD) CHEM Elective	3		UTLS 3030 (Spring Only)	3
Year Th		UTLS 3040 (Fall Only)	3		UTED 4710	3
		HUM 3990	3		Humanities Elective	3
		PES 1050 or 1060	3			
		TOTAL	16		TOTAL	13

	\checkmark	FALL	Hours	1	SPRING	Hours
		CHEM 4211	3		UTED 4730	12
no		CHEM 4701	3		Social Science Elective	3
Year F		UTED 4720	3			
		Social Science Elective	3			
		Humanities Elective	3			
		TOTAL	15		TOTAL	15

NOTE: Students must complete all course requirements other than UTED 4730 before the final semester.