BIOCHEMISTRY MINOR

Introduction

Please click here (http://catalog.ucdenver.edu/cu-denver/undergraduate/schools-colleges-departments/college-liberal-arts-sciences/chemistry/) to see Chemistry department information.

The objective of the biochemistry minor is to provide broad introductory course work and laboratory experience to science majors without the more technical mathematical and biochemical prerequisites required of the biochemistry major. The biochemistry minor is open to all CLAS students and should prove beneficial for science majors, pre-professional health science majors and students seeking science education certification.

These program requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major, minor and CLAS advisors to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.

Declaring This Minor

- Click here (http://catalog.ucdenver.edu/cu-denver/undergraduate/schools-colleges-departments/college-liberal-arts-sciences/#policiestext) to go to information about declaring a major/minor.
- To register your minor in chemistry, please visit the CLAS advising office in NC 1130. After establishing your minor status, you are encouraged to meet with the chemistry minor advisor, Dr. Jeff Knight. (jefferson.knight@ucdenver.edu)

General Requirements

Students must satisfy all requirements as outlined below and by the department offering the minor

- Click here (http://catalog.ucdenver.edu/cu-denver/undergraduate/academic-policies-procedures/) for information about Academic Policies

Program Requirements

1. Students must complete a minimum of 25 CHEM credit hours.
2. Students must complete a minimum of nine upper division (3000-level and above) CHEM credit hours.
3. Students must earn a minimum grade of C- (1.7) in all courses that apply to the minor and must achieve a minimum cumulative minor GPA of 2.0. All graded attempts in required and elective courses are calculated in the minor GPA. Courses taken using P+/P/F or S/U grading cannot apply to minor requirements.
4. Students must complete a minimum of nine credit hours with CU Denver faculty chosen from the approved courses.

Program Restrictions, Allowances and Recommendations

1. All courses applied to the Biochemistry Minor need to be taken within ten years of the graduation date with the exception of General Chemistry I and II Lecture and Lab: CHEM 2031 General Chemistry I, CHEM 2081 Honors General Chemistry I, CHEM 2038 General Chemistry Laboratory I, CHEM 2039 Majors General Chemistry I Laboratory, CHEM 2088 Honors General Chemistry I Laboratory, CHEM 2061 General Chemistry II, CHEM 2091 Honors General Chemistry II Lecture, CHEM 2068 General Chemistry Laboratory II, CHEM 2069 Majors General Chemistry II Laboratory and CHEM 2098 Honors General Chemistry II Laboratory. In the event that the student would like to apply for expired credit for CHEM 3481 Majors Organic Chemistry I, the student will need to test at the 50th percentile on the ACS Standardized Exam for Organic Chemistry I.

Code	Title	Hours
Complete a minimum of 22 credits from the following required courses:		*22*
CHEM 2031	General Chemistry I	
or CHEM 208	Honors General Chemistry I	
CHEM 2038	General Chemistry Laboratory I	
or CHEM 203	Majors General Chemistry I Laboratory	
or CHEM 208	Honors General Chemistry I Laboratory	
CHEM 2061	General Chemistry II	
or CHEM 209	Honors General Chemistry II Lecture	
CHEM 2068	General Chemistry Laboratory II	
or CHEM 206	Majors General Chemistry II Laboratory	
or CHEM 209	Honors General Chemistry II Laboratory	
CHEM 3411	Organic Chemistry I	
or CHEM 348	Majors Organic Chemistry I	
CHEM 3421	Organic Chemistry II	
or CHEM 349	Majors Organic Chemistry II	
CHEM 4810	General Biochemistry I [1]	
or CHEM 381	Biochemistry	
or CHEM 581	Graduate Biochemistry I	
CHEM 4828	Biochemistry Lab	
Complete 3 credit hours from one the following elective courses:		*3*
CHEM 4110	Advanced Analytical Chemistry	
CHEM 4411	Bioconjugate techniques and Theranostic Nanomedicine	
CHEM 4530	Advanced Physical Chemistry	
CHEM 4640	Artificial Intelligence in Chemistry and Biochemistry	
CHEM 4815	Structural Biology of Neurodegenerative Diseases	
CHEM 4820	General Biochemistry II	
CHEM 4825	Biochemistry of Metabolic Disease	
CHEM 4835	Biochemistry of Gene Regulation and Cancer	
CHEM 4845	Molecular Modeling and Drug Design	
CHEM 4860	Bioinorganic Chemistry: Bioinorganic compounds in medicine	
CHEM 4840	Independent Study: Chem [2]	
CHEM 4880	Directed Research [2]	
Total Hours		**25**

[1] Students may enroll in CHEM 5810 Graduate Biochemistry I with permission from the instructor.
[2] Students may enroll in CHEM 4840 Independent Study: Chem and CHEM 4880 Directed Research with permission from the minor advisor prior to registration for the credit.

To learn more about the Student Learning Outcomes for this program, please visit our website (https://clas.ucdenver.edu/chemistry/students/undergraduate-programs/).