

Community College of Aurora/UNC Transfer Guide*

BS Chemistry, Pre-Health Emphasis

2021-2022 Catalog

Degree Requirements – 120 credits

*Guide for students transferring to the University of Northern Colorado for the purpose of completing a bachelor's degree. Courses marked as (***bold**) are UNC equivalent courses (if applicable) upon transfer to UNC. UNC Liberal Arts Curriculum (LAC) is waived with completion of AA/AS degree which is not completed as part of this plan. (Note: The four-year plan below is a recommended schedule and not reflective of every student's individual academic context. We encourage each student to consult with their respective academic advisor for course sequence guidance.)

COMMUNITY COLLEGE OF AURORA – 32 Credits			
YEAR 1 – FALL: 16 credits		YEAR 1 – SPRING: 16 credits	
CHE 111 Gen Coll Chem I w/ Lab CHEM 111/111L Prin of Chemistry I (LAC Natural & Physical Sci.)	5 credits	CHE 112 Gen Coll Chem II w/ Lab CHEM 112/112L Principles of Chemistry II	5 credits
ENG 121 English Composition I ENG 122 College Composition (LAC Written Comm.-Recommended)	3 credits	MAT 201 Calculus I ² MATH 131 Calculus I (LAC Mathematics)	5 credits
BIO 111 Gen Coll Bio I w/ Lab BIO 110 Biology: Atoms to Cells (LAC Natural & Physical Sci.)	5 credits	Liberal Arts Curriculum	6 credits
Liberal Arts Curriculum ¹	3 credits		
UNIVERSITY OF NORTHERN COLORADO – 88 Credits			
YEAR 2 – FALL: 16 credits		YEAR 2 – SPRING: 16 credits	
CHEM 331/331L Organic Chemistry I	4/1 credits	CHEM 332/332L Organic Chemistry II	4/1 credits
PHYS 220 Introductory Physics I (LAC Natural & Physical Sci.)	5 credits	PHYS 221 Introductory Physics II	5 credits
BIO 210 Cell Biology	3 credits	Mathematics (CS/STAT) Elective ³	3 credits
Liberal Arts Curriculum	3 credits	Liberal Arts Curriculum	3 credits
YEAR 3 – FALL: 14 credits		YEAR 3 – SPRING: 14 credits	
CHEM 321 Chemical Analysis (F)	4 credits	CHEM 450/450L Survey of Physical Chemistry (S)	3/1 credits
CHEM 481/481L General Biochemistry I (F)	3/1 credits	CHEM 482/482L General Biochemistry II (S)	3/1 credits
CHEM 441 Inorganic Chemistry I (F)	3 credits	Electives	6 credits
SCI 291 Scientific Writing ⁵ (LAC Written Comm.)	3 credits		
YEAR 4 – FALL: 14 credits		YEAR 4 – SPRING: 14 credits	
Biology Elective ⁴	4 credits	Biology Elective ⁴	4 credits
Electives	10-11 cred	Electives	10 credits
		Chemistry Assessment Exam ⁶	0 credits

This four-year plan is a recommended schedule to complete your bachelor's degree in 4 years. Every UNC student must meet the following requirements in order to graduate with a bachelor's degree: earn a minimum of 120 semester credit hours; possess a minimum of a 2.00 cumulative grade point average; meet all degree requirements in the student's major field of study. Each major and/or emphasis may have additional requirements necessary for graduation. **Students must consult with their major advisor to receive information on any additional graduation requirements.**

Program Admission Requirements –

No separate admission requirement.

Minor Required –

No minor required.

Contact Information –

Department of Chemistry & Biochemistry
Ross Hall Room 3480, 970-351-2559
<http://www.unco.edu/nhs/chemistry-biochemistry/>

Notes –

1. A total of 15 credits are required in Arts & Humanities (2 courses, minimum 3 credits each), History (1 course, minimum 3 credits), Social & Behavioral Sciences (1 course, minimum 3 credits), one additional course (minimum 3 credits) in Arts & Humanities or History or Social & Behavioral Sciences. You must also have U.S. Multicultural Studies (1 course, minimum 3 credits), International Studies (1 course, minimum 3 credits). Six total credits must be double counted.
2. Students who lack sufficient preparation in mathematics may need to start in MATH 124 College Algebra (4), MATH 125 Plane Trigonometry (3), or MATH 127 Elementary Functions (4). MATH 171 may be substituted for MATH 131. Consult your advisor.
3. Students are required to take a CS or STAT course (3 credits). Consult advisor for computer science (CS) or statistics (STAT) courses to fulfill mathematics elective.
4. Students are required to take 7-8 hours of biology electives.

Biology Electives - Select two of the following:

BIO 341 Human Anatomy (4)
BIO 350 Human Physiology (4)
BIO 351 Microbiology (4)
5. It is highly recommended that students substitute ENG 123 for SCI 291 Scientific Writing (3).
6. All students must take a chemistry major assessment exam prior to graduation.

Notes –

Pre-Medical, Pre-Dental, Pre-Optometry, Pre-Veterinary, Pre-Podiatry and Pre-Pharmacy coursework

This program offers training in chemistry, mathematics and physics with a broad base in biological sciences and biochemistry. It provides a solid foundation in chemistry and biological sciences for those students planning to pursue professional studies in dentistry, medicine, optometry, podiatry, pharmacy or veterinary medicine.

Students completing this degree emphasis should verify that the elective courses taken satisfy the requirements or recommendations of the particular professional school they wish to attend. Acceptance into these schools is competitive. All pre-health students should seek assistance from an advisor to confirm their course plans. Students considering graduate study in chemistry or biochemistry may be required to complete additional course work in chemistry and/or mathematics depending on the entrance requirements of the specific graduate school.

- A. The four-year plan described on the other side of this sheet is a suggested track for completing this major. You must meet with your advisor each semester to determine an appropriate plan.
- B. Upper-level courses are generally taught only one semester per year and are marked on the sheet as F (Fall) or S (Spring). In this plan courses are listed in order of required prerequisites first.
- C. Some upper-level courses are separate from laboratory; e.g., CHEM 481/CHEM 481L General Biochemistry I and Experimental Biochemistry I and CHEM 482/CHEM 482L General Biochemistry II and Experimental Biochemistry II. In these cases, CHEM 481/481L are taught in the Fall and CHEM 482/482L are taught in the Spring.
- D. Graduate level CHEM courses are recommended for juniors and seniors. Other recommended electives include MATH 132, MATH 221, MATH 335, STAT 150, PHYS 321, and PHYS 343.
- E. Students majoring in chemistry must earn a grade of “C” or better (C- is not acceptable) in all courses having a CHEM prefix which count toward the major.