

Aims2UNC Curriculum Map*

Chemistry A.S. / B.S. Chemistry-Forensic Science Concentration

2024-2025 Catalog
Degree Requirements – 120 Credits

*Curriculum Map for students transitioning from Aims Community College to the University of Northern Colorado for the purpose of completing a bachelor's degree. An AA/AS degree from Aims will result in a waiver of UNC's Liberal Arts Curriculum (general education) and the transfer of at least 60 credits depending on course grades from Aims. Courses with grades below a C- will not transfer to UNC, which could result in a transfer of fewer than 60 credits. Please note that course offerings are subject to availability and Curriculum Maps are subject to change. Please see Aims2UNC advisor for appropriate sequence of Aims courses and further information.

AIMS COMMUNITY COLLEGE – 65 Credits			
YEAR 1 – FALL: 18 credits		YEAR 1 – SPRING: 18 credits	
ENG 1021 English Composition I (GT-CO1) ** (UNC Equivalent: ENG 122 College Composition)	3 credits	ENG 1022 English Composition II (GT-CO2) ** (UNC Equivalent: ENG 123 College Research Paper)	3 credits
MAT 2410 Calculus I ² (GT-MA1) MATH 131 Calculus I	5 credits	CHE 1112 Gen Coll Chem II w/ Lab (GT-SC1) CHEM 112/112L Principles of Chemistry II	5 credits
CHE 1111 Gen Coll Chem w/ Lab (GT-SC1) CHEM 111/111L Prin of Chemistry (LAC Natural & Physical Sci.))	5 credits	MAT 2420 Calculus II (GT-MA1) MATH 132 Calculus II	5 credits
PHY 2111 Physics: Calculus-based I w/lab (GT-SC1) PHYS 240 General Physics I	5 credits	PHY 2112 Physics: Calculus-based II w/lab (GT-SC1) PHYS 241 General Physics II	5 credits
YEAR 2 – FALL: 15 credits		YEAR 2 – SPRING: 14 credits	
MAT 2430 Calculus III (GT-MA1) MATH 233 Calculus III	4 credits	CHE 2112 Organic Chemistry II w/Lab CHEM 332/332L Organic Chemistry II	5 credits
CHE 2111 Organic Chemistry w/Lab CHEM 331/331L Organic Chemistry I	5 credits	Social & Behavioral Sciences (GT-SS*)	3 credits
Arts & Humanities (GT-AH*)	3 credits	Social & Behavioral Sciences (GT-SS*)	3 credits
History (GT-HI1)	3 credits	Arts & Humanities (GT-AH*)	3 credits
UNIVERSITY OF NORTHERN COLORADO – 60 Credits			
YEAR 3 – FALL: 14 credits		YEAR 3 – SPRING: 15 credits	
CHEM 321 Chemical Analysis	4 credits	CHEM 421 Instrumental Analysis or elective	4 credits
CHEM 381 Principles of Biochemistry	3 credits	CHEM 425 Forensic Chemistry	4 credits
CHEM 381L Principles of Biochemistry Lab	1 credit	Minor Course	3 credits
CHEM 441 Inorganic Chemistry I	3 credits	BIO 110 Biology: Atoms to Cells	4 credits
Minor Course	3 credits		
YEAR 4 – FALL: 15 credits		YEAR 4 – SPRING: 16 credits	
Research and/or Internship (CHEM 422/499) ⁴	2 credits	CHEM 450 Survey of Physical Chemistry	3 credits
PHYS 220 Introductory Physics I	5 credits	CHEM 450L Survey of Physical Chemistry Lab	1 credit
PHYS 221 Introductory Physics II	5 credits	Minor Course	12 credits
SCI 291 Scientific Writing	3 credits	Chemistry Assessment Exam ⁶	0 credits

^{**}For a full listing of approved Guaranteed Transfer (GT) courses in these categories please refer to the current catalog.

Contact Information -

Department: Department of Chemistry & Biochemistry

Website: www.unco.edu/nhs/chemistry

Phone: 970-351-2559 Email: chemistry@unco.edu

Program Admission Requirements -

Academic Good Standing.

For information about admission to the University of Northern Colorado, please visit https://www.unco.edu/admissions/.

Minor Required -

A minor in Criminology & Criminal Justice or Anthropology is required.

Notes -

- 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 (2 courses, minimum 6 credits). 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). Consult your advisor.
- 3. With advisor approval, students can substitute ENG 123 for SCI 291 Scientific Writing (3).
- 4. A minimum of 2 credits in CHEM 422 Directed Studies (internship) or 2 credits in CHEM 499 Seminar and Research in Chemistry must be completed. Consult with your advisor about these options.
- 5. All students must take a chemistry major assessment exam prior to graduation.

This program prepares students to enter the field of forensic science by providing background courses in chemistry, physics, sociology, and criminal justice in addition to lab experiences in research or an internship.

Students completing this degree emphasis and wish to pursue graduate study in one of the areas of chemistry maybe required to complete additional course work depending on the entrance requirements of the specific graduate school. Students interested in obtaining ACS approval for this degree should take CHEM 442 and CHEM 443 to complete those requirements. See your advisor for additional recommended courses.

- 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. Recommended electives include courses in statistics, sociology, criminal justice, anthropology, and additional courses in mathematics. Graduate level CHEM courses are recommended for juniors and seniors.
- D. Students majoring in chemistry must earn a grade of "C" or better (C- is not acceptable) in all courses having CHEM prefix which count toward the major.