

**DEGREE WORKSHEET FOR:**

**BS Chemistry, Forensic Science Emphasis**

**2022-2023 Catalog**

**Degree Requirements – 120 credits**

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| **YEAR 1 - FALL (16 credits)** | **YEAR 1 - SPRING (14 credits)** |
| CHEM 111/111L Principles of Chemistry I (LAS1; LASL\*)  | 4/1 credits | CHEM 112/112L Principles of Chemistry II  | 4/1 credits |
| ENG 122 College Composition-Recommended (LAW1\*) | 3 credits | Minor Course | 3 credits |
| MATH 1312 Calculus I (LAX1\*) | 4 credits | Liberal Arts Curriculum1 (choose one LAB1, LAB2 or LAB3 that is also a LAMS or LAIS\*) | 3 credits |
| BIO 110 Biology: Atoms to Cells (LAS1; LASL\*) | 4 credits | Elective Course | 3 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 l (LAS1; LASL\*) | 5 credits | PHYS 221 Introductory Physics II  | 5 credits |
| Minor Course | 3 credits | SCI 2913 Scientific Writing (LAW2\*) | 3 credits |
| Liberal Arts Curriculum1 (choose one LAA1, LAA2, LAA3, LAA4 that is also a LAMS or LAIS\*) | 3 credits | Minor Course | 3 credits |
| **YEAR 3 - FALL (14 credits)** | **YEAR 3 - SPRING (14 credits)** |
| CHEM 321 Chemical Analysis (F) | 4 credits | CHEM 421 Instrumental Analysis (S) | 4 credits |
| CHEM 381/381L Principles of Biochemistry (F) | 3/1 credits | CHEM 425 Forensic Chemistry (S) | 3/1 credits |
| CHEM 441 Inorganic Chemistry I (F) | 3 credits | Minor Course | 3 credits |
| Minor Course | 3 credits | Liberal Arts Curriculum1 (LAA1, LAA2, LAA3, LAA4 or LAH1\*) | 3 credits |
| **YEAR 4 - FALL (14 credits)** | **YEAR 4 - SPRING (16 credits)** |
| Minor Course | 3 credits | CHEM 450/450L Survey of Physical Chemistry (S) | 3/1 credits |
| Research and/or Internship4 | 2 credits | Liberal Arts Curriculum1 (choose one additional LAA, LAH or LAB\*) | 3 credits |
| Elective Courses  | 6 credits | Elective Courses | 9 credits |
| Liberal Arts Curriculum1 (LAA1, LAA2, LAA3, LAA4 or LAH1\*) | 3 credits | Chemistry Assessment Exam5 | 0 credits |

**\*See the** [**Liberal Arts Curriculum**](https://www.unco.edu/registrar/current-students/lac.aspx) **webpage for more information**

This worksheet 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; have at least 31 credit hours in courses designated as Liberal Arts Curriculum; 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.**

**Admission Requirement –** No separate admission requirement.

**Minor Required –** Criminology and Criminal Justice or Anthropology

**Contact Information –** Department of Chemistry & Biochemistry

 Ross Hall Room 3480, 970-351-2559

 Department Web Page: <http://www.unco.edu/nhs/chemistry-biochemistry/>

**Notes -** See page 2

**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). Consult your advisor.
3. With advisor approval, students can substitute ENG 123 (3) 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 may be 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 a CHEM prefix which count toward the major.

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| **\*Liberal Arts Curriculum Course Indicators** |
| LAA1 | Arts & Humanities: Arts & Expression | LAIS | International Studies |
| LAA2 | Arts & Humanities: Literature & Humanities | LAMS | U.S. Multicultural Studies |
| LAA3 | Arts & Humanities: Ways of Thinking | LAS1 | Natural & Physical Sciences |
| LAA4 | Arts & Humanities: World Languages | LASL | Natural & Physical Sciences LAB |
| LAB1 | Social & Behavior Sciences: Economic or Political Systems | LAW1 | Introductory Written Communication |
| LAB2 | Social & Behavior Sciences: Geography | LAW2 | Intermediate Written Communication |
| LAB3 | Social & Behavior Sciences: Human Behavior, Culture or Social Frameworks | LAW3 | Advanced Written Communication |
| LAH1 | History | LAX1 | Mathematics |