COLLEGE OF ARTS AND SCIENCES

CHEMISTRY

Academics

As a chemistry major you will gain a broad knowledge in the six major areas of chemistry: chemical education, organic, inorganic, physical, analytical and biochemistry.

Your core curriculum includes fundamental courses in chemistry, math and physics. Beyond that, dive deep and explore your particular interests while you discover the process for scientific inquiry, become proficient in modern laboratory procedures, understand the practical and ethical applications of chemical principles in society, and take part in cutting-edge research projects.

Experience

In the College of Arts and Sciences, we know experience is valuable and goes beyond the classroom. We strive to help you connect your academics with research, internships, education abroad, service learning and leadership experiences. Take advantage of opportunities in chemistry such as:

- Studying abroad in Peru with The GREEN Program water resource management
- Serving as the UNL Chemistry Club president
- Interning with Novartis, a global healthcare company
- Researching the "Development of Organic Radical Contrast Agents for Magnetic Resonance Imaging of Cancer"
- Volunteering with JDRF International

Opportunities

A major in chemistry opens the door to many careers. Some may be obvious, including pharmaceutical development, chemical research and manufacturing, analysis, and science education. Environmental science, medicine, pharmacy, forensics, plant science, and law are not as obvious. Here are examples of recent graduates' employment:

- Associate Scientist I / ***TEVA PHARMACEUTICAL***
- Chemical Analyst / ***PURAC AMERICA***
- Chemical Contractor / ***ZOETIS***
- Chemistry Lab Technician / ***ARKANSAS STATE UNIVERSITY***
- Civilian Scientist / ***UNITED STATES NAVY***
- Laboratory Technician / ***ENTHONE***
- Principle Scientist 1 / ***NOVARTIS***
- Product Associate / ***LI-COR BIOSCIENCES***
- Scientist / ***CELERION***
- Quality Management Chemist / ***CARGILL***

Kaitlin Ferris | Academic Advisor
107 Oldfather Hall | 402-472-4190 | kaitlin.ferris@unl.edu

chemistry.unl.edu | cas.unl.edu

COLLEGE OF ARTS AND SCIENCES

CHEM—SAMPLE 4-YEAR PLAN (BS)*

ACE = Achievement-Centered Education **CDR** = College Distribution Requirements

FIRST SEMESTER	
CHEM 101: Career Opportunities in Chemistry	1
CHEM 113: Fundamental Chemistry I (ACE 4)	4
MATH 106: Calculus I (ACE 3)	5
Written Texts / Research & Knowledge Skills (ACE 1)	3
CDR: Language	3
Total Hours	**16**

SECOND SEMESTER	
CHEM 114: Fundamental Chemistry II	3
CHEM 221: Elementary Quantitative Analysis	4
MATH 107: Calculus II	4
CDR: Language	3
Total Hours	**14**

THIRD SEMESTER	
CHEM 261, 263: Organic Chemistry with Lab (CDR)	5
PHYS 211: General Physics I	4
MATH 208: Calculus III	4
CDR: Written Communication	3
Total Hours	**16**

FOURTH SEMESTER	
CHEM 262, 264: Organic Chemistry II with Lab	5
PHYS 212: General Physics II	4
Communication Skills (ACE 2)	3
Elective / Minor / Secondary Major / Science / Pre-Professional	3
Total Hours	**15**

FIFTH SEMESTER	
CHEM 481: Physical Chemistry I	4
CHEM 399: Undergraduate Research in Chemistry	1
Humanities (ACE 5)	3
Social Sciences (ACE 6)	3
Biochem / ChemBio Sequence Courses	5
Total Hours	**16**

SIXTH SEMESTER	
CHEM 482: Physical Chemistry II	4
CHEM 484: Physical Chemical Measurements	3
CDR: Human Diversity in U.S. Communities	3
Elective / Minor / Secondary Major / Science / Pre-Professional	3
Total Hours	**13**

SEVENTH SEMESTER	
Chemistry Capstone (ACE 10)	5
CHEM 399: Undergraduate Research in Chemistry	1
Ethics / Civics / Stewardship (ACE 8)	3
Elective / Minor / Secondary Major / Science / Pre-Professional (ACE 7)	3
Elective / Minor / Secondary Major / Science / Pre-Professional	3
Total Hours	**15**

EIGHTH SEMESTER	
Fine Arts (ACE 7)	3
Global Awareness & Human Diversity (ACE 9)	3
CDR: Social Science	3
Elective / Minor / Secondary Major / Science / Pre-Professional	3
Elective / Minor / Secondary Major / Science / Pre-Professional	3
Total Hours	**15**

*__DISCLAIMER:__ This document represents a sample 4-year plan for degree completion with a major of interest in the College of Arts and Sciences. Actual course selection and sequence may vary and should be discussed individually with an academic advisor at the college and department level.

UNIVERSITY *of* NEBRASKA–LINCOLN