

COLLEGE OF NATURAL AND SOCIAL SCIENCES

CHEMISTRY



PROFESSIONAL CHEMIST'S COMPREHENSIVE

The faculty in the University of Nebraska at Kearney Department of Chemistry believe in a “hands-on” science experience. In the program students are provided with the best laboratory experience possible through access to state-of-the-art equipment and participation in active undergraduate research programs. The program is appropriate for many students planning careers in industry and research as well as students going on to advanced study in chemistry. This degree is certified by the American Chemical Society.

Personal traits for success in a chemistry major

- Digs chemistry
- Asks questions
- Knows fundamental computer skills
- Works independently or on a team
- Pays attention to details
- Uses logical reasoning
- Communicates well
- Solves problems
- Enjoys math
- Perseveres

Potential career positions

- Chemical laboratories
- Environmental monitoring
- Organic synthesis
- Advanced degrees (M.S., Ph.D.) for academic careers

Which element has the symbol “Pu” – though the element really is not a smelly one at all? Answer: Plutonium

Over the last 10 years, over 90 percent of all UNK chemistry majors who applied to medical school were accepted by the University of Nebraska Medical Center.

Alumni profile

Graduate student Thomas Webber felt spoiled when he entered the University of Minnesota on a path to his Ph.D. “At UNK, I was involved in research so I was able to become familiar with and use an incredible variety of instruments.”

The research experience helped Webber feel more comfortable with different lab techniques that he uses commonly in graduate school. “It took me a few months in graduate school to realize this, but UNK really spoils its science majors.”

It is easy to get involved with research early at



THOMAS WEBBER

UNK, which Webber says is a big boost to a resume when applying for a job or graduate school. “The university also pays for the student researchers to attend a large conference every year and present a poster on their work.”

Webber credits his professors for doing a great job of teaching and giving him a solid knowledge base. “The professors are passionate about their classes and really want the students to understand and enjoy what they are teaching.”

Webber graduated from UNK in 2013 with a professional chemist’s degree.

Reasons to study chemistry at UNK

- The 11 chemistry faculty members have expertise in each of the major areas of chemistry (analytical, biochemistry, inorganic, organic and physical).
- Students can establish relationships with faculty members through classes, research and projects.
- Majors are encouraged to work with a faculty member in “hands-on training” doing chemistry research.
- Learning chemistry is fun and useful in modern facilities using advanced equipment and instrumentation.

PROFESSIONAL CHEMIST'S COMPREHENSIVE Bachelor of Science

FOUR YEAR CLASS SCHEDULE

The schedule is a guideline for progress toward a degree. Consult with your academic advisor.

<p>Semester 1 (15 credits)</p> <p>CHEM 160/160L General Chemistry MATH 115 Portal 188 (your choice) ENG 101 English Composition</p>	<p>Semester 2 (15 credits)</p> <p>CHEM 161/161L General Chemistry MATH 202 ENG 102 Writing & Research General Studies Oral Communication</p>
<p>Semester 3 (16 credits)</p> <p>CHEM 360/360L Organic Chemistry CHEM 269 Sophomore Seminar in Chem MATH 260 PHYS 275/275L General Physics I</p>	<p>Semester 4 (17 credits)</p> <p>CHEM 361/361L General Chemistry CHEM 301/301L Analytical Chemistry PHYS 276/276L General Physics II General Studies Democracy</p>
<p>Semester 5 (16 credits)</p> <p>CHEM 351/351L Biochemistry CHEM 480/480L Physical Chemistry CHEM 369 Junior Seminar in Chemistry CHEM 499L General Studies Dist General Studies Dist</p>	<p>Semester 6 (15 credits)</p> <p>CHEM/ 352/352L Biochemistry II CHEM 481/481L Physical Chemistry II CHEM 499 L General Studies Dist General Studies Dist</p>
<p>Semester 7 (13 credits)</p> <p>CHEM 430/430L Inorganic Chemistry CHEM 475/475L Instrumental Analysis CHEM 469 Senior Seminar in Chemistry Electives General Studies Dist</p>	<p>Semester 8 (13 credits)</p> <p>CHEM/PHYS/MATH CHEM/PHYS/MATH Capstone 388 (your choice) Electives</p>

UNK Chemistry Club

Students will be exposed to:

- Different fields in chemistry
- Cutting-edge jobs as they become available
- Visits from world-renowned chemistry educators that include demonstrations
- Plenty of pizza

Research apprentice program

Many faculty in the chemistry department have continuing research projects that involve students. A small stipend is paid to freshman and sophomore chemistry majors when they first join a project.

Scholarships available

- DeeAnna Delaet Endowed Scholarship
- Donald E. Fox Scholarship
- Donald L. Liehs Scholarship Endowment
- Dr. Mary L. Morse Memorial Scholarship

F.Y.I – For your information

High school students thinking about studying chemistry in college should take courses in all science disciplines, like chemistry, physics and biology, as well as math. This will provide a foundation for their college coursework.

UNK chemistry graduates are employed as doctors, dentists, pharmacists, university professors, middle and high school science teachers, research and industrial chemists, environmental scientists, and salespeople, as well as in other science and technology fields.

**YOU CAN BE PART OF
THE UNK EXPERIENCE**

For more information, contact:

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STUDENT PROFILE – Michael Hanrahan



After taking multiple chemistry classes in high school, Michael Hanrahan's enthusiasm for the subject has spilled over into his college learning as he pursues a professional chemist's comprehensive degree.

"The passion I have for chemistry is what has allowed me to keep going during some of the challenging courses."

Hanrahan chose UNK because of the faculty-student ratio. "The smaller classroom size allowed a better opportunity to get to know my chemistry professors which has been one of the best things about UNK."

Hometown: Fort Collins, Colo.

Graduation: spring 2015