Why Chemistry with Teacher Licensure?
Well-prepared chemistry teachers are essential to helping our society become more scientifically literate. The field of chemistry is vital to modern society. Chemistry is the first step for those students who are interested in careers in the physical sciences, technology, recycling, and many other areas. For other students, chemistry is required as the next step toward careers in natural resources, biotechnology, medicine, large-scale production of chemicals and chemical materials, etc. The job of the high school science teacher is critical to the development of our society.

Major Program of Study
Students combine a study of chemistry, physics, biology, and the Earth and space sciences with a study of teaching foundations and various field and clinical experiences as they complete the major. Successful completion of this program leads toward a Bachelor of Science in Chemistry as well as an Illinois teaching license for grades 9-12 science. Students considering a Chemistry major should take four years of mathematics, four years of English, and at least one year of chemistry in preparation for college. Enriched or advanced courses in chemistry, physics, and/or mathematics are also highly recommended.

Faculty
Courses in the department are taught by faculty holding doctoral degrees from distinguished universities around the world such as the State University of New York, Kansas State University, Texas A&M University, Texas Tech University, University of Illinois, University of Missouri, University of California–Davis, University of Victoria (Canada), and University of Loyola. All faculty are dedicated educators, skilled in fostering active student participation. They are also active researchers and have to their credit many research publications and presentations in the areas of their specialties.

Integrated Baccalaureate and Master’s Degree in Chemistry
The Integrated Baccalaureate and Master of Science in Chemistry provides an opportunity for outstanding undergraduate Chemistry majors to complete both a Bachelor of Science and a Master of Science in Chemistry in a single five-year period.

Scholarships
Detailed information on scholarships is available from the department, (309) 298-1538, the University's Scholarship office, (309) 298-2001, or on the Web at wiu.edu/Scholarship.

Chemistry at Western
The department offers small classes with accessible faculty and personalized advising in Currens Hall. There are three electronic classrooms and numerous teaching/research laboratories as well as a Physical Sciences Library that subscribes to more than 60 journals and online literature searching through the Chemical Abstract Service. Undergraduates have access to the department's state-of-the-art equipment and facilities, which are augmented by the existence of a graduate
program. The modern instrumentation available for teaching and research includes a fluorometer, HPLC, FT-NMR, FT-IR, UV-Vis, and GC-MS spectrometers; a capillary electrophoresis; and a high-speed centrifuge.

**Honors in Chemistry**

To be eligible for the Centennial Honors College, entering freshmen must have an ACT composite score of at least 28 OR have a 26 or 27 composite ACT and be in the top 15% of their graduating class OR have an ACT composite score of at least 24 and be in the top 10% of their high school graduating class. A comparable SAT score is acceptable. Transfer and current WIU students who wish to join the Honors College (including the Quad Cities Honors Program) must have a 3.4 grade point average on a 4.0 scale based on 12 or more semester hours (sh). Honors credit is given for honors coursework completed at other accredited institutions. To find out more, visit wiu.edu/Honors.

General honors seminars in the humanities, sciences, and social sciences provide students with opportunities to explore key academic issues with distinguished faculty members. In the Chemistry department, honors students take courses for honors credits and, as seniors, prepare an honors thesis under the direction of a department faculty member.

**Student Activities**

Chemistry students in the teacher licensure program participate in a number of activities through their program, including judging science fairs, coordinating events for Science Olympiad, and attending the WIU Secondary Science Education Conference and the Chemistry and Physics Demonstration Show. They are also highly encouraged to participate in professional organizations such as the Illinois Science Teachers Association, the National Science Teachers Association, and the American Chemical Society – Education Division. In addition, students can participate in several departmental organizations such as the WIU National Science Teachers Association Student Chapter and the Chemistry Club, Biochemistry Club, and the women in science student organization.

**Undergraduate Research Opportunities**

There are many opportunities for students to work with the Department of Chemistry faculty on research projects that involve inorganic chemistry, organic chemistry, biochemistry, medicinal chemistry, forensic chemistry, analytical chemistry, and environmental chemistry. In addition, there are research opportunities for students in physical and food chemistry as well as with many other projects. Undergraduate students involved in research get to travel to professional conferences, meet professionals from around the country, and serve as coauthors on journal article publications.

**After College**

The vast majority of our students begin their teaching careers upon graduation while a few opt for other related careers. In addition to careers in teaching at public and private schools, graduates are also sought as corporate trainers; education specialists in nontraditional settings such as parks, museums, and labs; tutors; online teachers; as well as other positions needing an individual who possesses excellent people skills, ability to educate others, and a strong content background.

**For Your General Outlook**

Required courses include Organic Chemistry I & II (9 sh); Analytical Techniques (3 sh); Physical Chemistry (4 sh); Environmental Chemistry (4 sh); Inorganic Chemistry (4 sh); General Chemistry I & II (8 sh); Physics (8 sh); Integrated Science I & II (8 sh); Biology (4 sh); Geology (4 sh); Science in Context (3 sh); Calculus I & II (8 sh); Introduction to Science Teaching (1 sh); Techniques in Science Teaching (3 sh); Methods of Teaching Secondary Science (3 sh); Educational Studies courses, Special Education courses, and Reading courses (19 sh); and Student Teaching (12 sh).

**For More Information**

The department welcomes visitors. Call the Department of Chemistry at (309) 298-1538 or e-mail the adviser: LM-Barden@wiu.edu. You can also learn more about the department by visiting wiu.edu/chemistry.