Contemporary biological science covers a range of diverse and overlapping sub-specialties. You might study organisms interacting in and with their environment, or study life processes at the molecular level. The rapidly growing biotechnology field includes recent advances in cellular and molecular biology.

Wichita State University’s Department of Biological Sciences offers courses in most aspects of contemporary biological science. Our required core courses will expose you to the breadth of the discipline. After completion of the core, each student, in consultation with a departmental adviser, chooses electives from the departmental course offerings to complete his or her degree requirements.

This program allows each student to expand his or her own interest area with choices in molecular biology, ecology, and physiology as well as advanced courses in the core areas. In addition, each student must complete courses in general inorganic and organic chemistry and physics as part of the degree program. Students also may consider a field major in biochemistry. Our department has modern, well-equipped research laboratories that include core facilities for protein analysis, molecular biology, microscopic imaging, and cell culture work.

Major instrumentation is available for protein sequencing, amino acid analysis, peptide synthesis, PCR and carbohydrate analysis as well as state-of-the-art cell culture, chromatography and electrophoresis systems. Additional facilities include isolated animal rooms, climate-controlled greenhouse, cell structure laboratory, environmental growth chambers, herbarium, and vertebrate study collections. You will find that our nearby biological field station sites (Ninnescah, Sellers and Gerber Reserves) and access to large areas of prairie habitats at the Youngmeyer Ranch provide excellent opportunities for aquatic and field research.

Admission
When you choose to study biological sciences, you will be admitted to the Fairmount College of Liberal Arts and Sciences. All students intending to pursue one of the programs within the Department of Biological Sciences should contact the department as early in their educational careers as possible for assignment to an academic advisor.

Related Opportunities
We offer attractive scholarships and credit-earning opportunities for student participation in faculty research programs. You may also participate in departmental seminars. Each year you will have the opportunity to interact with internationally renowned scientists brought to campus through the Watkins Visiting Professorship program.

If eligible, you may be selected for University academic honor societies such as Phi Kappa Phi and Mortar Board.

Related Programs
The Department of Biological Sciences offers a broad and flexible curriculum leading to the bachelor of arts, the bachelor of science, the field major in biochemistry (BS), and the bachelor degree programs (BA and BS). Students interested in an interdisciplinary program with a biological focus are encouraged to consider the Fairmount College of Liberal Arts and Sciences field major (BA) or the bachelor of general studies (BGS) programs. We also offer coursework in the bachelor of science in the forensic science and the bioengineering programs.

General Education Program
Well-Rounded Learning
Wichita State strives to offer the most complete college experience possible to produce well-rounded, successful Shocker graduates. Through general education courses, students explore subjects outside of their major, expanding their knowledge, perspective and skills and making a positive impact on their career and life.

Benefits of general education courses:
• Improved critical thinking skills
• Better communication, written and spoken
• Increased analytical reasoning and problem solving
• An acquired knowledge of natural and social science, the arts and humanities

For more information
If you have further questions or would like to schedule a campus visit, please contact the Office of Admissions.

Marcus Welcome Center
Office of Admissions
1845 Fairmount
Wichita, KS 67260-0124

wichita.edu/visit
wichita.edu/admissions
(316) 978-3085
**Major Requirements**

**Major in Biological Sciences with Biological/Biomedical Emphasis**

A major in biological sciences leading to the BA with a biological/biomedical emphasis requires a minimum of 30 semester hours of biological sciences coursework; up to 40 semester hours may be taken for credit. A major in biological sciences leading to the BS with a biological/biomedical emphasis requires a minimum of 40 semester hours of biological sciences coursework; up to 50 semester hours may be taken for credit. Candidates for either degree must complete BIOL 210, 211, 418, 419, 420; either BIOL 497 or 499; and one course chosen from the following: BIOL 330, 502, 503, 523, 524, or 528. Candidates for either degree must also complete CHEM 211, 212, 531, and 532. Candidates for the BS degree must also complete PHYS 213 and 214. Candidates will also be required to participate in the departmental assessment program by completing the ETS Major Field Assessment Test in biology prior to graduation.

**Biochemistry Field Major**

The departments of biological sciences and chemistry participate jointly in this program. Required courses are BIOL 210, 211, 419, and 420; CHEM 211, 212, 523, 531, 532, 662, 663, and 664; PHYS 213 and 214; and MATH 112 (or 111 and 123). Also required are BIOL or CHEM 666 and 669 (two enrollments); and 21 elective hours chosen in consultation with a biochemistry academic advisor.

**Major in Biological Sciences with Ecological/Environmental/Organismal Emphasis**

A major in biological sciences leading to the BA with an ecological/environmental/organismal emphasis requires 35 semester hours of biological sciences coursework. A major in biological sciences leading to the BS with an ecological/environmental/organismal emphasis requires 50 semester hours of biological sciences coursework. Candidates for either degree must complete BIOL 210, 211, 418, 419, 420; either BIOL 497 or 499; and one course chosen from the following: BIOL 330, 502, 503, 523, 524, or 528. Candidates for the BA degree must also complete a minimum of 5 additional hours of courses chosen from among those approved for the ecological/environmental/organismal emphasis (see academic advisor or departmental offices for approved courses); CHEM 211, 212, and 531. Candidates for the BS degree must also complete 15 additional elective hours from biological sciences chosen in consultation with a departmental advisor; CHEM 211, 212, and 531; and PHYS 213. Candidates will also be required to participate in the departmental assessment program by completing the ETS Major Field Assessment Test in biology prior to graduation.

**For more information on Biological Sciences at WSU visit wichita.edu/biology or call (316) 978-3111.**