Program Overview

Biology is a dynamic science aimed at gaining a better understanding of living organisms and the ways they interact with our environment. Biological research seeks to answer a broad range of questions, from factors that affect human health to ecological issues.

The biology program offers courses that emphasize concepts over facts and aim to provide a foundation for careers in the life sciences, health professions, K-12 education and advanced post-graduate study in a broad variety of disciplines. There are five B.S. degree concentrations that allow students to focus on specific disciplinary areas. The B.A. degree provides maximum flexibility in selecting upper division courses and is favored by students seeking to have double majors.

The program is enriched by interactions with SLU’s School of Medicine, the Missouri Botanical Garden, the Donald Danforth Plant Science Center and the Saint Louis Zoo, as well as a growing number of St. Louis-based life science companies. Research experiences and internships provide students with opportunities to study biology beyond the classroom.

The department of biology also has a field station for research and teaching, which provides unique opportunities for students to explore ecology and conservation biology through hands-on experimentation. The field station offers students opportunities for course work and for undergraduate research.

Students are encouraged to participate in co-curricular activities. Groups such as Beta Beta Beta (the biology honorary society) and Alpha Epsilon Delta (the pre-professional honor society) are social and academic organizations that further students’ interest in biology while exposing them to its relationship with other scientific disciplines.

About the Faculty

All biology faculty members hold a doctoral degree (Ph.D.). Our faculty are active in research and conduct studies in diverse subdisciplines within biology, including molecular biology, cell biology, physiology, ecology, and evolutionary biology. The department has recently added faculty members with expertise in pedagogical studies, genomic analysis and neuroscience. Faculty are funded by grants from federal and local agencies and many have gained international reputations. They also provide courses that engage and challenge students by promoting active learning and critical thinking skills.

Curriculum

B.S. students may choose one of five concentrations:

- Biological science: This concentration provides students with a strong foundation in biology and prepares students for entry-level employment in the life sciences, health professions, K-12 education and graduate school.

- Biological chemistry and molecular biology: This concentration focuses on the latest advances in biochemistry, genomics, molecular and cell biology. It is designed for students interested in careers involving biomedical research or biotechnology.

- Cell biology and physiology: This concentration provides students with a strong foundation in the structure and function of organ systems and the tissues that comprise them. It is a good choice for students planning careers in medicine, pharmacology or health care.

- Ecology, evolution and conservation: This concentration is designed for students interested in various aspects of organismal biology. It is a good choice for students preparing for graduate study or planning for a career as a research biologist or wildlife specialist.

- Plant science: This concentration is designed for students interested in various aspects of plant biology and prepares students for careers in agricultural industries, botanical research institutes or advanced training in graduate degree programs.

Learn More For course listings and more information about our faculty, visit slu.edu/x14762.xml.
Admission Requirements

Freshman: All applications are thoroughly and carefully reviewed. Solid academic performance in college preparatory course work is a primary criterion in reviewing a freshman applicant’s file. College admission test scores (ACT or SAT) are used as an additional indicator of the student’s ability to meet the University’s academic requirements and to qualify the student for certain University scholarship programs. To be considered for admission to any Saint Louis University undergraduate program, the applicant must be approaching graduation from an accredited high school or have an acceptable score on the General Education Development (GED) test.

Transfer: Applicants must be a graduate of an accredited high school or have an acceptable score on the GED. An official high school transcript and official test scores are required only of those students who have attempted fewer than 24 transferable semester hours (or 30 quarter hours) of college credit. Those having completed 24 hours or more of college credit need only submit a transcript from previously attended college(s). In reviewing a transfer applicant’s file, the office of admission holistically examines the student’s academic performance in college-level coursework as an indicator of the student’s ability to meet the academic rigors of Saint Louis University.

Internships and Careers

Advanced undergraduate students with good academic records are encouraged to apply for positions as teaching and/or learning assistants. In addition to a stipend, students gain teaching experience and the opportunity to help others become interested in the field of biology.

Biology majors can enroll in courses that provide credit for structured internships through collaborations with a variety of local organizations including the Missouri Botanical Garden, Saint Louis Zoo, Sigma Aldrich, Monsanto and firms in the growing biotechnology field.

The biology major develops strong critical thinking and problem solving skills that provide an excellent preparation for professional schools, such as:
+ Medical school
+ Veterinary science
+ Dental school
+ Optometry school
+ Graduate school in a broad range of disciplines

The skills biology majors gain also open the door to a wide variety of career options in areas such as health care, biotechnology, environmental management, conservation, education and the pharmaceutical industry.

Scholarships and Financial Aid

There are two principal ways to help finance a Saint Louis University education:
+ Scholarships: awarded based on academic achievement, service, leadership and financial need.
+ Financial Aid: provided in the form of grants and loans, some of which require repayment.

For priority consideration for merit-based scholarships, applicants should apply for admission by Dec. 1 and complete a Free Application for Federal Student Aid (FAFSA) by March 1.

For information on other scholarships and financial aid, visit the student financial services office online at finaid.slu.edu.

Contact
Department of Biology
314-977-3900
biology@slu.edu

Graduate Programs
+ Master of Science (M.S.) in biology
+ Master of Arts (M.A.) in biology
+ Doctorate (Ph.D.) in biology

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