BIOLOGICAL SCIENCES

The curriculum in the biological sciences provides a comprehensive understanding of the principles underlying life's processes, from the molecular level through the biosphere. Many of the courses offered have lecture and laboratory components. This ensures that students become scientists capable of making significant contributions to the field. Majors have the opportunity to participate in cutting-edge research under the mentorship of a faculty member in the department. This affords students the opportunity to develop their organizational, technical, and analytical skills while using the most up-to-date techniques and instrumentation. Students conducting original research are expected to communicate their findings to the scientific community through, for example, their participation in Fordham College’s annual Undergraduate Research Symposium. Students doing meritorious research are guided to publish their work in nationally recognized science journals.

The department offers two undergraduate degrees: the bachelor of science (B.S.) and the bachelor of arts (B.A.) in the biological sciences. Both degree tracks ensure the major’s exposure to the broad scope of the discipline while providing the flexibility to choose upper-level courses that focus on one or more of the sub disciplines in greater depth. The curriculum gives students a strong foundation from which they can pursue studies leading to a career in medicine, dentistry, veterinary medicine, research and development, education, industry, forensics, or laboratory analysis.

Early Admission to the Master’s Program

Please read the Early Admission to Graduate School of Arts and Sciences Master’s Programs section for more information. Interested students must apply by the time they register for the fall semester of their senior year but are encouraged to apply earlier. Students opting for early admission to the M.S. program must consult with their adviser and the associate chair for graduate studies before registering for graduate courses. Applications are made online through the Graduate School of Arts and Sciences website and do not need to include GRE scores unless the student is planning to apply for financial aid after completing the bachelor’s degree.

The minimum GPA required for eligibility is 3.5. This policy applies to students registered in FCRH, FCLC, and PCS. Candidates will begin their graduate studies in their senior year and will carry elective credit in the summer between their fourth and fifth years. Courses taken as part of the early admissions option must be approved by the department’s associate chair for graduate studies.

Program Activities

Biology Colloquium

Students are encouraged to attend the weekly Biology Colloquium which features presentations of outstanding research by visiting scientists as well as by the department’s own faculty and graduate students.

Research Opportunities

There are many varied research opportunities available to biology majors. A student interested in a faculty member’s research should meet with that faculty member and discuss a program of independent laboratory or field research under that faculty member’s mentorship. The student may elect to register for two semesters of research (for four credits each semester), including writing and defending a thesis, during the senior year in lieu of two elective biology courses (see BISC 4792 Senior Thesis Research in the course listings). Another alternative is enrollment in a research tutorial for a maximum of four credits in lieu of one biology elective (see BISC 4999 Research Tutorial in the course listings). If neither of the above options is desirable, a student may volunteer on an extracurricular basis to participate in a faculty member’s research. Details may be obtained in the department office. Fordham University has formal affiliations with the New York Botanical Garden, the Wildlife Conservation Society (Bronx Zoo), Albert Einstein College of Medicine, and Montefiore Hospital.

For more information

Visit the Biology department web page.

Contribution to the Core

The Department of Biological Sciences offers courses numbered BISC 1000 Life on the Planet Earth-BISC 1010 Foundations of Biology, which satisfy the core life-science component of the natural science requirement in the Fordham College Core Curriculum. The two course sequence, BISC 1403 Introductory Biology I-BISC 1404 Introductory Biology II or BISC 1401 Introduction to Biology I-BISC 1402 Introduction to Biology II, when taken in sequence will fulfill both natural science requirements (physical science and life-science).

Programs

- Biological Sciences Major
- Biological Sciences Minor