

Biology



School of Arts and Sciences

The Biology program is designed to expose students a broad base of biological knowledge ranging from the events that occur in an individual cell to those that govern entire ecosystems. Our program starts by providing a fundamental understanding of general biology concepts that are essential to comprehend the advance topics that students encounter in the upper level courses as they advance through the program. The Biology program also offers pre-professional tracks in Pre-Medicine, Pre-Physical Therapy, and Pre-Physician Assistant that have focused sets of courses within the major for students.

The small and highly supportive learning environment allows our students to obtain the necessary competence of the disciplines that are essential to all aspects of biology, such as physics, chemistry, and math. Students in our Biology program thrive in our small yet challenging learning environment as the program incorporates real hands-on experiences that serve to reinforce what is covered in the classroom.

The biology major is a stepping stone to prepare students for a career or for additional graduate studies where they may pursue research, various health professions, teaching, business, or service in government or independent agencies.

Program Highlights

- One-on-one advising with departmental faculty in selecting your courses and in pursuing admission to graduate school, professional programs, or other careers
- Small class sizes and laboratory sections that never have more than 24 students
- Opportunity to customize internships to career aspirations. This may include conducting independent research with departmental faculty or taking advantage of a wide variety of internships located in the Greater Philadelphia Area. Students gain hands-on experience in laboratories at local universities and research institutes, including:

Lankenau Institute for Medical Research

GlaxoSmithKline Pharmaceuticals

Temple University School of Medicine

Bristol-Meyers Squibb

University of Pennsylvania

Fox Chase Cancer Center

Major Coursework

The curriculum is based strongly in the sciences of biology, chemistry, and physics that are complemented by the critical and analytic skills embedded in our liberal arts core.

- Biological Principles I, II
- Anatomy and Physiology I, II
- Cell Biology
- Advanced Microbiology
- Immunology
- Principles of Genetics
- Seminar: Scientific Literature
- Evolution
- Molecular Genetics
- Ecology
- Modern Concepts in Biochemistry I, II
- Research/Internship
- Chemistry Principles I, II
- Organic Chemistry I, II
- Elementary Statistics
- Calculus I
- Bioethics
- General Physics I, II

Our Non-Discrimination Statement can be found at holyfamily.edu/ndstatement or call 267-341-3479.

For More Information

visit: www.holyfamily.edu

call: 215-637-3050

email: admissions@holyfamily.edu

The Value of Family



Holy Family
UNIVERSITY

9801 Frankford Avenue
Philadelphia, PA 19114

Biology/ Secondary Education



School of Arts and Sciences

The Secondary Education Program at Holy Family University is designed to impart students with the knowledge, skills, values, and disposition essential for success in teaching. This is an ideal career choice for an individual who not only has a passion for science, but would like to convey to others the fundamental concepts in science through the art of teaching.

This curriculum helps students master the material and allows them to apply their knowledge to meet the Local, Pennsylvania, and National Standards established by the National Science Education Teachers Association, and the PA Academic Standards. Upon graduation from this program, our students qualify for the Pennsylvania Instructional I Certificate which entitles you to teach grades seven through twelve.

Field Experience

Freshman and Sophomore Year—Observations: Holy Family's "Observation" experiences gives you the opportunity to visit public, parochial, private, and charter schools. Through reflective journaling, you will relate what you are learning to the classes you're taking in your first and/or second years.

Junior Year—The Practicum: Practicum deepens your classroom experience. You'll be placed one full day a week in a school working in a classroom under the supervision of a master teacher. You'll do assignments, write lesson plans, teach several classes, and work with technology in the classroom.

Senior Year—Student Teaching

In your final year, as required by the Pennsylvania Department of Education, you'll do your "Student Teaching"—a full-time supervised semester in which you will gradually assume the full classroom responsibilities of your placement.

Partner School Districts

- Archdiocese of Philadelphia
- Bensalem
- Bristol Borough
- Bristol Township
- Centennial
- Central Bucks
- Cinnaminson
- Council Rock
- Mount Laurel
- Neshaminy
- New Hope-Solebury
- Pennsauken
- Pennsbury
- Philadelphia

Coursework

Students participate in a range of courses to establish a firm foundation in biological sciences. Successful completion of a prescribed program and the PRAXIS series examinations are required for eligibility for certification by the Pennsylvania Department of Education. The science and education concentrated courses in this program include:

- Biological Principles I, II
- Anatomy and Physiology I, II
- Cell Biology
- Science of Physics
- Seminar: Scientific Literature
- Evolution
- Molecular Genetics
- Principles of Genetics
- Chemistry Principles I, II
- Collaboration & Assessment
- Gen Methods & Technology
- Classroom Management
- Educational Psychology
- Meeting the Needs of ELL

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