BIOLOGY





Amazing advances in biology are revolutionizing medicine and our understanding of the living world. From the sequencing of the human genome to genomics and personalized medicine to the analysis of whole living systems through computer-assisted approaches, the field of biology is at the forefront of discovery. Whether you are interested in a career in biological research, a health-related profession, teaching, or wish to pursue an advanced degree, our programs will provide you with the necessary skills for success. Our degree programs include a **Bachelor of Arts in Biology**, a **Bachelor of Science in Biology**, and joint degree programs in the health sciences.

Recently, Pace University received a \$7.5 million grant from the Dyson Foundation to build new, state-of-the-art science laboratories in Dyson Hall on the Pleasantville campus. In addition, faculty grants from the National Institutes of Health and the National Science Foundation have allowed for the acquisition of state-of-the-art technology for faculty-student research, including a \$300,000 laser-scanning confocal microscope.

Our students conduct independent laboratory research in collaboration with highly respected faculty members, often at a level typically reserved for graduate students, using scientific resources one would expect to find at a large research institution. Students gain hands-on experience beyond the classroom through fieldwork and internships at some of the most prestigious scientific and pharmaceutical companies and organizations in the world.

BA IN BIOLOGY

This course of study is designed for students seeking a non-scientific career, including science education at the primary or secondary school level, science journalism, scientific marketing and sales, or environmental and patent law. The BA degree provides a broader liberal arts background and the opportunity to take more elective courses than the traditional BS degree program.

BS IN BIOLOGY

Students who wish to pursue scientific graduate school programs for professional schools, such as medicine, osteopathic medicine, dentistry, physical therapy, and veterinary medicine, or are seeking employment in the medical, biotechnological, or environmental fields opt for the BS with a concentration in general biology, environmental biology, or molecular and cellular biology.

PRE-HEALTH JOINT DEGREE PROGRAMS

Students who know they want to enter a professional health sciences program can opt to complete a joint degree program with one of our partner schools.

Note: there are separate admission requirements for the undergraduate and graduate parts of each program.

BS IN BIOLOGY / MS IN OCCUPATIONAL THERAPY

This program consists of three years of study at Pace (undergraduate) and two years at Columbia University's College of Physicians and Surgeons.

BS IN BIOLOGY / DOCTOR OF OPTOMETRY (DO)

This program consists of three years of study at Pace (undergraduate) and four years at the State University of New York (SUNY) College of Optometry. Graduates receive a BS from Pace and a DO from SUNY.

BS IN BIOLOGY / DOCTOR OF PODIATRIC MEDICINE (DPM)

This program consists of three years of study at Pace (undergraduate) and four years at the New York College of Podiatric Medicine. Graduates receive a BS from Pace and a DPM from New York College of Podiatric Medicine.

BS IN BIOLOGY / PHARM. D

This program consists of three years of study at Pace (undergraduate) and four at Albany College of Pharmacy and Health Sciences (ACPHS). Graduates receive a BS from Pace and a Doctor of Pharmacy degree from ACPHS.

BIOLOGY





RESEARCH OPPORTUNITIES

Student-faculty research is a benchmark of the Dyson College of Arts and Sciences experience. Our faculty is actively involved in both basic and applied research in a wide range of areas including cancer research, microbiology, invertebrate biology, developmental neuroscience, genomics, animal communication, and mammalian ecology. These research projects, many of which are funded by federal grants, include both undergraduate and graduate student participation. Our students have presented the results of their research work at national and international scientific meetings and have authored papers in scientific journals. They are also the recipients of international fellowships for continued study in the United States and abroad.

CAREER OPPORTUNITIES

Many of our graduates command starting salaries of \$53,200 or more—on par with the country's most selective lvy League schools. There are several career paths students can follow with an undergraduate degree in Biology. Our students are also well prepared for study at the graduate level. With additional certifications and graduate degrees, students may also become medical doctors, nurses, physician assistants, pharmacists, physical therapists, optometrists, dentists, veterinarians, and teachers.

What can you do with this major?

Our **Bachelor of Science in Biology** prepares students for career paths such as:

- Entry-level laboratory or field research
 - Academic research laboratories
 - -Government research laboratories
 - -Pharmaceutical laboratories
 - Research for private, nonprofit organizations
- Entry-level healthcare or public health work
 - -Hospitals and other medical facilities
 - -Government public health agencies
- Entry-level environmental conservation work
 - Government agencies (EPA, DEC, national parks)
 - Private, nonprofit organizations (zoos, aquariums)
- Entry-level forensic science work
 - -Local, State, or Federal agencies

Our **Bachelor of Arts in Biology** prepares students for career paths such as:

- Entry-level scientific policy work
 - -Local, State, or Federal agencies
- Entry-level pharmaceutical marketing and sales
- Entry-level science writing and communication
 - Newspapers, websites, magazines
 - -Television, radio
- Entry-level scientific illustration
 - -Publishing companies
 - Newspapers, websites, magazines

PROFESSIONAL PREPARATION

The department offers pre-medical, pre-dental, pre-osteopathic medicine, pre-physical therapy, and preveterinary advisement to guide our students through their undergraduate curricula and to aid them with the preprofessional application process. We provide all the resources you need to extend the range of your knowledge and critical insights beyond that obtained from coursework alone, contributing to a highly active and stimulating learning environment.

ACADEMIC SOCIETIES

The department maintains active local chapters of Beta Beta Beta, the national biology honor society, and Sigma Xi, the international scientific research society. Both societies offer scientific-related activities and field trips.



