

BIOLOGICAL SCIENCES



Biological Sciences at Drexel

The biological sciences encompass many fields. Biologists study the structure and functions of living organisms from the individual cell to the full organism, and collectively to the community level. At Drexel, hands-on, experientially based instruction is an important part of the major. The program gives students knowledge of biology and the ability to use the tools and skills of the biologist.

Drexel Co-op for Biological Sciences

A key part of the program is Drexel's prestigious co-operative education program, in which students alternate periods of classroom study with periods of professional work experience. Biological Science students can choose from the following:

- Three Co-op Option (Five Years): includes three six-month periods of full-time employment
- One Co-op Option (Four Years): includes one six-month period of full-time employment

A Few Drexel Co-op Position Titles

- Laboratory Technician Assistant
- Medicinal Chemist
- Rehabilitation Technician
- Safety Assessment Analyst

Employers

Here are some of the companies that have hired Drexel students as co-op or full-time employees:

- Children's Hospital of Philadelphia
- GlaxoSmithKline
- Johnson & Johnson
- Philadelphia Water Department
- Susquehanna International Group, LLP
- University of Crete

Potential Careers

Biologist. Studies living organisms, including how they relate to their environment, diseases, and genetics. Many engage in research; others work at zoos or study animals in the wild. Most specialize in a facet of biology, such as zoology, microbiology, or cellular biology.

Medical Scientist. Conducts research into human or animal diseases, including their transmission, prevention, and treatment. May test blood and body tissues to ascertain the causes and progress of a disease. Often works in concert with physicians and other health care professionals.

Microbiologist. Investigates the growth and characteristics of microscopic organisms, such as bacteria and viruses.

Pharmaceutical Development Scientist or Engineer. Typically works for drug companies, designing and formulating experiments to develop pharmaceuticals, refine manufacturing processes, and provide technical support.

Courses You'll Really Enjoy

Animal Behavior. Studies the mechanisms and evolution of behavior of animals in relation to their natural environment, including genetics, physiology, and ecology of behavior. Laboratory exercises consist of films, demonstrations, and observational studies at the Philadelphia Zoo and in natural habitats.

Biology of Aging. Discusses aging at the organismal, organ, cellular, and molecular levels. Discussions include chronological versus biological aging, normal and abnormal human physiology of aging, current theories of aging, the effect of caloric restriction on aging, and the molecular mechanisms that underlie normal and abnormal aging.

Ethnobotany. Explores the relation between ancient/cultural botanical knowledge and its current application in modern pharmacology and alternative forms of medicine. Provides an interdisciplinary approach to the study of plants for food, medicine, stimulation, religious rituals, and death.

Virology. Introduces the nature and structure of viruses, including biochemistry and molecular genetics of viral replication, structure, gene expression, latency, and role in disease. Describes major groups of human viruses and their pathogenesis.

Learn More: University Catalog

Detailed course descriptions can be found online at www.drexel.edu/catalog.

Accelerated Degree Options

Accelerated degree programs, such as the BS/MD, BS/PhD in Engineering, BS/JD, and BS/MBA, enable academically qualified students to earn both a bachelor's and an advanced degree, graduating sooner than they would in traditional programs. Eligible students can be admitted to an accelerated degree program in one of two ways: apply as an incoming freshman through Undergraduate Admissions or apply to the Graduate Studies Office after completing a minimum of 90 credits. To learn more about accelerated degree options, visit www.drexel.edu/em/ug/accelerated.

For More Information

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