

# *what can I do with a major in* **Biological Sciences**

The Biological Sciences major is a broad field that provides a basic scientific foundation for individuals to pursue a career in any science related field. Biologists study all living organisms, their function, and their relationships to their environment. The Biological Sciences major offers you the freedom to accomplish either great breadth or a deep focus in an area not represented in the department's other majors. The major combines core biology requirements with electives to allow you to make your own individualized combination of courses to promote and further your special interests.

## **Some Characteristics of Biological Sciences Majors:**

- ♦ Interests in multiple areas of science
- ♦ Conducting research in the laboratory or field
- ♦ Desire to learn about living organisms
- ♦ Desire for intellectual growth
- ♦ Interest in government, academic, or private jobs
- ♦ Precision and attention to details
- ♦ Inquisitive

## **What You Gain From Studying Biological Sciences:**

### Knowledge:

The major provides a solid science foundation with the flexibility of selecting courses that best fit your interest and career goals. The Biological Sciences major prepares students for science related graduate programs and health-profession schools.

### Skills:

- ♦ Critical thinking and problem solving
- ♦ Work independently and on a team
- ♦ Experimental design
- ♦ Understand various biological processes
- ♦ Use of scientific lab equipment
- ♦ Record, analyze, and summarize data
- ♦ Oral and written communication

## **Participate in Student & Professional Organizations:**

### Student (Sponsored by Bio. Sci. Dept):

Biology Club  
Birding & Ornithology Club  
Ecology Club  
Pre-Vet Club  
Tri-Beta Biological Honor Society

### Professional:

American Assoc. for the Advancement of Science  
American Institute of Biological Sciences  
American Society for Microbiology  
Federation of American Societies for Experimental Biology

## **Careers in Biological Sciences:**

### Employment:

Biological Sciences employment opportunities exist in medical, dental, veterinary, ecological, genetic, public health, research, teaching, administration, sales, service, and manufacturing fields in government agencies, educational institutions, private business, and industry. Many entry level bio. sci. jobs accept a Bachelor's degree. You can advance from entry level to higher-level positions with additional education.

### Need Bachelor's Degree

Agriculturist  
Animal scientist, trainer  
Biologist (Environ., fisheries, plant, marine, wildlife)  
Biomedical researcher  
Botanist  
Ecologist  
Food microbiologist  
Lab tech  
Microbiologist  
Park ranger  
Science writer

### Need Further Education

Chiropractor  
Dentist  
Dietician  
Epidemiologist  
Genetic counselor  
Illustrator  
Lawyer  
Museum curator  
Optometrist  
Pharmacist  
Pathologist  
Physician, asst.  
Professor

## Learn More About Biological Sciences Careers:

Biological Sciences Advisors: Langley A258  
[www.biology.pitt.edu/undergraduate/advising](http://www.biology.pitt.edu/undergraduate/advising)

- ♦ Join the Bio. Newsletter for announcements
- ♦ Get advising info. before & after declaring major
- ♦ Learn about useful courses
- ♦ Inquire about research & internship opportunities

Career Development: WPU 2<sup>nd</sup> Floor  
[www.careers.pitt.edu/](http://www.careers.pitt.edu/)

- ♦ Meet with a Career Counselor (in person or virtual)
- ♦ Take interest inventories and self-assessment tests
- ♦ Assistance w/ CVs, resumes, & cover letters
- ♦ Internship placement
- ♦ Employment search – via Future Links & Pitt
- ♦ Job shadowing program
- ♦ Career fairs

### What You Can Do Now:

- ♦ Gain research experience by teaming with a Biology (or related field) professor and conducting research
- ♦ Get an internship at the CDC, NIH, hospital/clinic, research lab, public health dept, forensics lab, medical school, or Bio. Engineering company
- ♦ Get a part-time or summer job in a lab, hospital, or mol. bio. dept.
- ♦ Study abroad to broaden cultural perspective and gain international experience

## Ways To Acquire Skills in Biological Sciences:

### Internships

Internships provide hands-on experience in an area that interests you as a potential career. To find a biology related internship speak with a Bio. Sci. advisor or a Career Development advisor, and visit the links below.

- ♦ [www.biology.pitt.edu/undergraduate/research/outside-pitt](http://www.biology.pitt.edu/undergraduate/research/outside-pitt)
- ♦ [www.biology.pitt.edu/undergraduate/research-internships/starting-intern](http://www.biology.pitt.edu/undergraduate/research-internships/starting-intern)

### Research

Various opportunities exist for students to participate in research experiences outside of the classroom to develop an understanding of inquiry based research. Research can be performed on campus during the term for credit or no

credit, or during the summer as part of an undergraduate research experience program (REU, fellowship, co-op) on or off-campus. Check deadlines early.

- ♦ [www.biology.pitt.edu/undergraduate/research](http://www.biology.pitt.edu/undergraduate/research)
- ♦ [www.asundergrad.pitt.edu/our/research](http://www.asundergrad.pitt.edu/our/research)
- ♦ [www.undergradresearch.pitt.edu/research-opportunities/](http://www.undergradresearch.pitt.edu/research-opportunities/)
- ♦ [www.fws.gov/northeast/youth/college.html](http://www.fws.gov/northeast/youth/college.html)

### Undergraduate Teaching Assistant (UTA)

Being an undergraduate teaching assistant is a terrific way to share your knowledge, gain confidence, and prepare yourself for leadership roles. Many courses utilize UTAs, and you should contact the instructor directly.

<http://www.biology.pitt.edu/undergraduate/uta>

### Places Biological Sciences Majors Have Interned:

Allegheny Cty Corner's Ofc.	Pitt Pharmacology
Carnegie Museum	Safer Center for
Critical Care Medicine	Rehab. Research
GAI Consultants	Starz Transplant Inst.
GSPH – Human Gen., IDM	Teach for America
Hillman Cancer Center	ThermoFisher
Magee Women's Research	Scientific
National Aviary	UPMC
Pittsburgh AIDS Task Force	Wildlife Rehab. Ctr.
Pitt Dental, Ortho, Pathology	

### Tutoring & Study Resources

Academic Resource Center	Math Assistance Ctr.
Calculus & Statistics Labs	Writing Center
Fish Bowl – Chemistry Dept.	
Learning Communities – Various residence halls	

This handout provides a brief sample of skills, jobs, and tips for individuals pursuing a degree in this major. It is not an exhaustive listing, but it gives initial insight into a particular career field that would employ the skills and knowledge gained through this major. Contact the Biological Sciences Advisors if you have any questions.