

Career Options

- Agricultural & Food Scientist
- Animal Behaviorist
- Animal Health Technologist
- Arborist
- Aquarist
- Aquarium Exhibit Coordinator
- Bioacoustics
- Biological Scientist
- Biomedical Engineer
- Biotechnology
- Botanist
- Carbon Trader
- Consumer Products Research Scientist
- Entomologist
- Fish & Game Warden
- Food Scientist
- Forensic Scientist
- Forester & Conservation Scientist
- Ecologist
- Energy Conservationist
- Environmental Sustainability Officer
- Hospital Medical Assistants
- Laboratory Technician
- Marine Mammal Scientist
- Medical Consultant
- Medical Geneticist
- Medical Illustrator
- Medical Transcriptionist
- Microbiologist
- Natural Resource Manager
- Oceanographer
- Paleontologist
- Plant Breeding Technologist
- Science and Law Career
- Science Technician
- Toxicology
- Veterinary Technologist
- Water Conservation Specialist
- Water Quality Specialist
- Wildlife Rehabilitation

What is Biological Sciences?

The Biological Sciences Major offers a rich variety of courses in biology, chemistry, and environmental studies. The major provides students with an understanding of the tenets of modern biology; skills to develop/critique hypotheses and to design experiments to address these hypotheses; and, the ability to use appropriate instrumentation to collect, analyze, and interpret scientific data. Some students may gain a unique learning experience by participating in faculty research or conducting independent research/study under faculty supervision. Biological Sciences prepares students for careers or advanced studies in many science and health-related fields.

Occupational Opportunities

Pursuing a career in biological sciences can be immensely rewarding and exciting. The field teaches us to ask questions, make observations, evaluate evidence, and solve problems. Biological Sciences will provide you with the skills and knowledge to pursue careers in basic and applied biological research, medicine, dentistry, veterinary medicine, nursing, pharmacy and other health-related fields. You will also be prepared for positions in the biotechnology and pharmaceutical industries, health care and conservation management, as well as in law, journalism, and policy and business, which increasingly involve the biological sciences.

Skills & Abilities

Working in Biological Sciences requires strong research, organizational, and communication skills. A biological scientist should be able to confidently handle masses of diverse data and to draw conclusions. They should be self-reliant but also able to work in a team setting. A high standard of scientific ethics is imperative.

Analytical & Communication Skills

- Problem-solving skills
- Project and time management skills
- Excellent verbal skills
- Writing and data presentation skills

Organizational Skills

- Work in teams & coordinate tasks
- Integrate different approaches
- Take leadership role in advocating a course of action

Research Skills

- Implement the scientific method
- Design and carry out experiments, and generate reproducible results; use experimental apparatus
- Collect, process, and interpret scientific data
- Self-reliant and show initiative

Career Snapshots:

Physician

Physicians diagnose and treat injuries or illnesses. Physicians examine patients; take medical histories; prescribe medications; and order, perform, and interpret diagnostic tests. They counsel patients on diet, hygiene, and preventive healthcare. Physicians have demanding education and training requirements. Almost all physicians complete at least 4 years of undergraduate school, 4 years of medical school, and, depending on their specialty, 3 to 8 years in internship and residency programs. In 2012, physicians practicing primary care received total median annual compensation of \$220,942 and physicians practicing in medical specialties received total median annual compensation of \$396,233. Employment of physicians is projected to grow 18% from 2012 to 2022.

Dentist

Dentists diagnose and treat problems with a patient's teeth, gums, and related parts of the mouth. They provide advice and instruction on taking care of teeth and gums and on diet choices that affect oral health. They also perform corrective surgery, make models for dentures, and prescribe antibiotics. Dentists must be licensed in all states; requirements vary by state. To qualify for a license in most states, applicants must graduate from an accredited dental school and pass written and practical exams. The median annual wage for dentists was \$149,310 in May 2012. Employment of dentists is projected to grow 16% from 2012 to 2022.

Additional Resources

ASSOCIATION OF AMERICAN MEDICAL COLLEGES

<https://www.aamc.org/>

AMERICAN MEDICAL ASSOCIATION

<http://www.ama-assn.org/ama>

SOCIETY OF GENERAL INTERNAL MEDICINE

<http://www.sgim.org/>

AMERICAN DENTAL ASSOCIATION

<http://www.ada.org/en/>

CAREER CORNERSTONE CENTER

<http://www.careercornerstone.org/>

HEALTH CAREERS

<http://explorehealthcareers.org/en/home>

FEDERAL GOVERNMENT SCIENCE JOBS

http://gogovernment.org/government_101/index.php

NATIONAL SCIENCE FOUNDATION

<http://www.nsf.gov/>

NATIONAL INSTITUTE OF HEALTH

<http://www.nih.gov/>

Updated by AA 2016. Information was obtained from the following sources:

Baruch College, http://www.baruch.cuny.edu/wsas/areas_of_study/Natural_Sciences.htm; Bureau of Labor Statistics, <http://www.bls.gov/ooh/healthcare/dentists.htm>; Enhanced Occupational Outlook Handbook, 5th Ed.; conversations with John H. Wahlert, Department Chair, Natural Sciences