

BIOLOGICAL SCIENCES



The biological sciences discipline is diverse and features many professional opportunities in a variety of settings including industry and research.

Someone who obtains a bachelor's degree in biological sciences can work as a laboratory assistant, technician, technologist, or research assistant in education, industry, government, museums, parks, and gardens. An undergraduate degree can also be used for nontechnical work in writing, illustration, sales, photography, and legislation. A master's degree allows for greater specialization in a field and more opportunities in research. Doctoral degrees are necessary for advanced research and administrative positions, university teaching, and independent research.

The biological sciences are a good preparation for a career in healthcare that generally requires a professional degree and license such as medicine, dentistry, and veterinary science. You will develop strong analytical, computer, mathematics, scientific, and interpersonal communication skills. Join professional associations and community organizations to stay abreast of current issues in the field and to develop network contacts.

Maintain a high grade point average to improve chances of graduate and professional school admission. Become familiar with the specific entrance exam for graduate or professional schools in your area of interest and secure strong relationships and personal recommendations from professors and/or employers and consider completing a post-doctoral experience after graduate school. Learn federal, state, and local government job application processes and gain experience with grant writing and fundraising techniques, research is often grant-funded.

AREAS OF OPPORTUNITY

- Research & Development
- Healthcare
- Biomedical Sciences
- Organismal/Ecological Biology
- Biotechnology
- Business & Industry
- Bioinformatics
- Education
- Communication
- Legislation
- Pharmacy
- Marine biology
- Genetics

COMMON EMPLOYERS



Private Industry
Laboratories
Private Research Institutions
Public Health Departments
Group or Private Practice
Hospitals & Clinics
Health Networks
Nursing Homes
Rehabilitation Centers
Mental Health Institutions
Federal, State, and Local Health Departments
Government Agencies
Colleges and Universities
Pharmaceutical Companies
Environmental Protection and Regulation Agencies

PROFESSIONAL ORGANIZATIONS



- AAFS - American Academy of Forensic Science
- AIBS - American Institute of Biological Sciences
- ASM - American Society for Microbiology
- ASCB - American Society of Cell Biology
- ASHG - American Society of Human Genetics
- ALSO - American Society of Limnology and Oceanography
- BIO - Biotechnology Innovation Organization
- Biotechnology Institute
- CASW - Council for the Advancement of Science Writing
- ISCB - International Society for Computational Biology
- SIMB - Society for Industrial Microbiology and Biotechnology



STRATEGIES ON ENTERING THE FIELD

- Learn to set up, operate, and maintain laboratory instruments and equipment; also monitor experiments and report findings.
- Select courses with laboratory components and seek research experience with professors that specialize in your areas of interest.
- Gain related experience through part-time jobs, internships, or volunteering.
- Join related student organizations and demonstrate leadership abilities.
- Seek experience in healthcare settings through volunteering, shadowing, part-time jobs, or internships. Also, pursue job shadow and informational interview opportunities.
- Research various fields within medicine to determine career goals and develop a back-up plan in case medical/graduate school admission is denied.
- Utilize your campus career center for assistance securing government internships.
- Gain practical experience conducting research, collecting and analyzing data, and using laboratory/field techniques in collaboration with professors and through internships.
- Build relationships with faculty and secure strong recommendations.
- Join relevant professional associations to learn of challenges and opportunities in your field(s) of interest.