
WHAT CAN I DO WITH A MAJOR IN ...

BIOLOGY

OCCUPATIONAL OVERVIEW:

Biology is the study of life in all forms, from single-celled organisms to more complex fungi, plants, and animals. Majors in biology are provided the basic foundation for pursuing a career in biological sciences. The [The University of New Mexico's Department of Biology](#) explains that Majors may go into research, teaching, medicine, veterinary medicine, dentistry, and various applied and technical fields. Introductory courses cover the concepts, theories and processes of biology, and the diversity of life on all levels.

EMPLOYMENT REQUIREMENTS:

A bachelor's degree is the minimum formal education required. A Bachelor's degree qualifies you for laboratory technician or technical assistant positions in education, industry, government, museums, parks, and botanical gardens. However, many employers also require graduate school. For example, they may require a master's degree, and some require a Ph.D., M.D. Consult [O*Net](#) for more information on the specific KSAs (Knowledge, Skill, Ability) that are needed for a career in Biology.

THE UNIVERSITY OF NEW MEXICO:

The University of New Mexico has a very large and diverse Biology department. Members of this department conduct research and teach in a wide variety of areas that include Botany, Evolution, Ecology, Microbiology, Molecular and Cellular Biology, Physiology and Zoology. The Biology department offers a Bachelor of Arts (B.A.) and a Bachelor of Science (B.S.) as well as M.S. and Ph.D. degrees. Students who major with a B.A. often plan to pursue a career outside Biology, but need a foundation in biological principles. Some careers may include: science education, law school, environmental journalism, or community planning. The B.S. track provides students with the skills and information needed to pursue for careers as scientists and health professionals. Advanced courses and individual research courses with faculty are available in several sub-disciplines, go to: <http://biology.unm.edu/faculty-researcharea.shtml> to look up faculty research areas. Further information can be found on the [UNM Department of Biology](#) website.

INDUSTRIES & TARGET EMPLOYERS:

A variety of employers specifically recruit UNM students and alumni. Consult UNM's [Lobo Career Connection](#) for a complete list of employers and current job postings. Speak with a Career Development Facilitator at the [UNM Office of Career Services](#) for help with identifying employers or additional resources for your occupation of choice.

Biomedical

Physiology, Biophysics, Biochemistry, Pharmacology, Nutrition, Immunology, Pathology, Research/Teaching

Biomedical Quality Control

Professional Schools, Pharmaceutical Companies, Federal Laboratories, Industry, Armed Services

Botany, Horticulture, Forestry

Research/Teaching, Agronomy, Biotechnology, Plant Ecology, Food Science and Technology, Natural Resource Management, Plant Pathology, State and federal government: Departments of Agriculture, Interior, and Health

Entomology

Research/Teaching, Biological Control, Toxicology, Agricultural Extension, Inspection

Genetics & Biotechnology

Laboratory Testing, Teaching, Research and Development related to: Animals, Plants, or Humans, Immunology

Law

Agricultural, Environmental, Biotechnological, U.S. Patent Office, Legal Firms

Marine & Aquatic Biology

Food Industry, Research/Teaching, Marine Ecology, Inspection, Analysis

Mycology

Medical Research labs, Pharmaceutical Industry, Chemical Manufacturers, State and Government labs

Technical Sales

Wildlife Conservation

Resource/Range Management, Wildlife/Fisheries, Resource Management at Local, State and Federal Levels

Zoology

Animal Care/Training, Research/Teaching, Animal Ecology, Curator: Wildlife Preserves, Zoos and Aquariums, Museums, Federal and State Agencies

SUGGESTED STRATEGIES

- Gain related professional experience through involvement in internships, student employment, [Co-ops](#), and/or volunteer opportunities.
- Subscribe to the Biology Club (Bioclub-L) email list to receive e-mail about jobs, course announcements, summer internships, special lectures, research opportunities, workshops etc. Check here for directions <http://biology.unm.edu/undergrad/undergrad-guide.shtml>
- Shadow professionals in the field to gain a better understanding of the occupation and to build relationships with professional mentors.
- Conduct undergraduate research with professors. Join related professional organizations.
- Try to get into a lab as a work-study person or a volunteer or as a research assistant.
- Build your network and get involved on campus through student organizations and campus events. Find organizations and events at the [Student Activities Center website](#).
- Attend career related campus events such as career fairs, company information sessions, and or career workshops.
- Students who are interested in graduate school should maintain a high undergraduate GPA and develop relationships with faculty and community leaders. Opportunities for scholarships arise during the year—remember, someone has to know who you are and that you're interested so we can connect you with these opportunities.
- Speak with mentors and faculty about career opportunities.
- The summer after your sophomore or junior year, you should think about going somewhere for a summer research program. Good web sites to begin your search are: <http://www.ams.org/employment/reu.htm>, <http://faculty.juniata.edu/keeney/summer%20research.htm>, <http://www.columbia.edu/cu/biology/ug/intern.html>

STATE & NATIONAL WAGES:

[Adapted from CareerOneStop \(2013\)](#)

BIOLOGICAL SCIENTISTS, ALL OTHER:

Location	2012				
	10%	25%	Median	75%	90%
United States	\$41,900	\$57,300	\$72,700	\$87,300	\$112,400
New Mexico	\$31,300	\$50,700	\$65,100	\$75,700	\$87,200

INFORMATIONAL WEBSITES:

UNM Department of Biology	http://biology.unm.edu/
Sloan Foundation Careers in Science, Technology, & Medicine	http://www.careercornerstone.org/
Professional Science Masters	http://www.sciencemasters.com/
Science Careers	http://recruit.sciencemag.org/
PhDs.org	http://www.phds.org/
Science Jobs	http://www.scijobs.org/
American Society of Cell Biology	http://www.ascb.org/
American Society of Microbiology	http://www.asm.org/
The National Academies	http://www.nas.edu/
Life Sciences World	http://www.lifesciencesworld.com/
National Human Genome Research Institute	http://www.genome.gov/
American Society for Biochemistry & Molecular Biology	http://www.asbmb.org/
Bio.org	http://www.bio.org/speeches/pubs/er/
American Academy of Forensic Sciences	http://www.aafs.org/
National Wildlife Federation	http://www.nwf.org/
National Association of Marine Labs	http://www.mbl.edu/naml/
International Marine Animals Training Association	http://www.imata.org/
Dolphin Research Center	http://www.dolphins.org/
National Biological Information Infrastructure	http://www.nbio.org/portal/server.pt
The American Institute of Biological Sciences: Careers	http://www.aibs.org/careers/index.html
Hire Health	http://www.hirehealth.com/Default.aspx
Careers in Marine Science	http://oceanlink.island.net/career/career2.html
Sea Grant Marine Careers	http://www.marinecareers.net/careerfields.html
N.I.H.: Explore Health and Medical Science Careers	http://science.education.nih.gov/lifeworks.nsf/Interviews

OTHER INFORMATIONAL WEBSITES:<http://online.onetcenter.org><http://www.bls.gov/oco/>**REFERENCES**

State of Minnesota, U. S. Department of Labor, Employment and Training Administration (2013). *CareerOneStop, Occupation Profile, Biological Scientists*. Retrieved from <http://www.careerinfonet.org>

University of New Mexico, Department of Biology (2013). *Degrees*. Retrieved from <http://biology.unm.edu/index.shtml>