What Can I Do With a Major In…

Biology

http://www.unt.edu/pais/insert/ubiol.htm

Your Future in Biology

Do you want to increase your knowledge of the natural world? Are you interested in understanding and treating diseases? Are you concerned about the environment? You may want to pursue a bachelor's degree in Biology at the University of North Texas. UNT has a nationally recognized biology program. As a biology major, you may study the structure and function of cells, organ systems and tissues in animals and humans; the structure and function of plants; aquatic toxicology; ecology; evolution; forensic biology; genetics and heredity; microscopic organisms such as bacteria; and parasites. You also may learn laboratory techniques that biologists use in their research. As a Biology major, you may qualify for a career in:

- Environmental management and conservation
- Government
- Higher education
- Industry (biotechnology, pharmaceutical sales or laboratory technician)
- Research
- Secondary school education

The major can also prepare you to enter dental, medical or veterinary school or a training program to become a health care professional.

- A bachelor’s degree will qualify one for 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 degrees allow for greater specialization in a field and more opportunities in research and administration. Some community colleges will hire Master’s level teachers.
- Doctoral degrees are necessary for advanced research and administrative positions, university teaching, and independent research. Temporary postdoctoral research positions are common.
**Majoring in Biology at UNT**

UNT offers both Bachelors of Arts and Bachelors of Science degree plans available, as well as an option to earn teacher certification. The Bachelor of Arts with a major in Biology is a four-year degree designed to prepare students for careers in biological sciences and professional programs, including medical school. The Bachelor of Science with a major in Biology is a four-year degree designed to prepare students for careers in biological sciences and graduate and professional programs, including medical school. UNT’s investment in cross-disciplinary research clusters and our participation in the Howard Hughes Medical Institute’s Science Education Alliance allow qualified students to participate in field and/or laboratory research. Academic credit can also be earned for a research project.

Additional research and learning opportunities are provided through our student chapters of the Beta Beta Beta honor society or the Alpha Epsilon Delta pre-professional honor society. We also sponsor a seminar series where researchers from around the nation offer their perspectives on related subjects.

*For more information about specific classes and requirements for students beginning in 2016-2017 follow the links provided below.*

**BA Biology**  
**BS Biology**  
**Biology with Teacher Certification**  
**BS in Biology with a Certification in Forensics**

**Related Career Titles**  
**Entry-Level (Bachelor’s Degree):**

- Research or Laboratory Assistant/Tech  
- Food Scientist or Technologist  
- Clinical Research Associate  
- Quality Assurance Tech/Analyst/Inspector  
- Quality Control Technician  
- Brand Inspector  
- Consumer Safety Inspector  
- Analytical Lab Analyst  
- Food Inspector  
- Food Sanitarian  
- Food Safety and Inspection Service  
- Seed and Fertilizer Specialist  
- Product Development and Testing  
- Regulatory Affairs Specialist  
- Medical Device/Pharmaceutical Salesperson  
- Biological Entrepreneur  
- Brew Master  
- Park Naturalist  
- Community Health Worker  
- Animal Trainer  
- Animal Nutritionist  
- Animal Scientist  
- Dairy Consultant  
- Animal Management Systems Specialist  
- Animal Breeder  
- Fish and Game Warden  
- Centers, Museums, etc.  
- Forest Technician/resource Manager,  
- Environmental Scientist  
- Sustainability Specialist
Conservationist
Environmental Technician
Environmental Health Specialist
Environmental Compliance Inspector
Environmental Policy Officer
*Environmental Impact Assessment Specialist
Scientific or Nature Writer
Wildlife Rehabilitator
Educator at Zoos, Aquariums, Nature

Jobs Requiring Additional Experience (Master’s, Doctorate, Certifications)

Zoologist and Wildlife Biologist
Forensic Scientist
Wildlife Forensic Scientist
Animal Behaviorist
Zookeeper/Curator
Animal Scientist (Entomologist, Ornithologist, Ichthyologist etc.)
Marine Biologist
Environmental Restoration Planner
Environmental Engineer
Environmental Economist
Environmental Consultant
Environmental Auditor
Soil and Plant Scientist
Hydrologist
Microbiologist
Geneticist
Genetic Counselor
Clinical Pathologist
Bio-technician
Industrial Ecologist
Immunologist
Molecular and Cellular Biologist
University or College Professor
Medical and Health Services Manager
Epidemiologist
Bioinformatician/Bioinformaticist
Biostatistician
Health Educator
Lawyer (Patent, Environmental etc.)
Scientific Policy Analyst/Lobbyist

Health Professions requiring additional schooling and/or certifications

Dietician/Nutritionist
Athletic Trainer
Physician/Surgeon (M.D or D.O)
Preventive Medicine Physician
Physician Assistant
Registered Nurse
Medical Assistant
EMT
Medical Laboratory Scientist
Cytotechnologist
Orthotist/Prosthetist
Genetic Counselor
Histotechnologist
Respiratory Technician
Perfusionist
Phlebotomist
In vitro fertilization technician
Sperm Bank Technician
Radiation Therapy Technician
Veterinarian
Dentist
Prosthodontist
Orthodontist
Dental Hygienist
**Dental Assistant**  
**Pharmacist**  
**Pharmacy Technician**  
**Pharmacy Aides**  
**Podiatrist**  
**Optometrist**  
**Optician**  
**Orthopist**  

**Physical Therapist**  
**Occupational Therapist**  
**Speech Pathologist/Audiologist**  
**Health Sociologist**  
**Child Life Specialist**  
**Healthcare/Medical Social Worker**  
**Healthcare Administrator/Manager**  
**Health Information Manager**

**Work Environments**

State and Federal Government  
Health Departments  
Center for Disease Control  
Food and Drug Administration  
National Institutes of Health  
Environmental Protection Agency  
Department of Agriculture  
Colleges and Universities  
Private Industry  
Pharmaceutical Companies  
Biotechnology Companies  
Scientific Journals  
Text Book Companies  
Documentary Production Companies  
Agricultural Companies  
Agricultural Chemical Companies  
Biotechnology Firms

Non-profit Organizations  
Hospitals  
Clinics  
Conservation Agencies  
Museums  
Wildlife Preserves, Zoos, Botanical Gardens, Parks and Arboretums  
Marine Mammal Commission  
Texas Parks and Wildlife  
National Park Service  
Forestry Centers  
Private and Government Fisheries  
Inspection agencies and Control Boards  
Private Research Foundations  
National and International Advocacy Organizations/Non-Profit Groups

**Examples of Employers Hiring This Major:**

Aerotek Professional Services  
Alcon Pharmaceuticals  
Frank Buck Zoo  
Weston Solutions, Inc.  
Texas Parks & Wildlife Department  
Accu-Chem Laboratories  
Allied Waste Industries  
Artist Boat  
Benchmark Environmental Consultants  
Bio-Synthesis, Inc.  
Dallas Internal Medicine Group  
Dallas Zoo  

Department of Veterans Affairs  
Double Oak Veterinary Medical Center  
Dr. M. A. Emick and Associates  
EA Engineering  
Ecology and Environment, Inc.  
Empirical Applications  
Exponent  
Family Medical Center  
Fort Worth Nature Center and Refuge  
Fort Worth Zoo  
Food Safety Net Services  
Gradalis, Inc  
Hendricks & Partners  
JPS Health Network
Skills Used and Developed

- Science
- Time Management
- Judgment and Decision Making
- Critical Thinking
- Analytical & quantitative abilities
- Complex Problem Solving
- Equipment Selection
- Information Handling & Organization
- Curiosity and Creativity
- Oral Expression
- Inductive Reasoning
- Written Comprehension & Expression
- Category Flexibility
- Problem Sensitivity

Websites for Exploring Biology Careers

*101+ Things to do with a Biology Degree
http://advan.physiology.org/content/31/4/323

*Research Health Professions; job duties, education requirements and salaries
www.explorehealthcareers.org

Sloan Foundation Careers in Science Technology and Medicine-
http://www.careercornerstone.org/

The Student Doctor Network
http://www.studentdoctor.net/

Cell & Molecular Biology Career Resources
http://www.cellbio.com/careers.html

USDA Food, Agriculture and Natural Resource Careers-
http://www.agriculture.purdue.edu/usda/careers/

Life Sciences World Careers Page-
http://www.lifesciencesworld.com/

Explore Health Careers
http://explorehealthcareers.org/en/home

Biology Careers: Emporia State University-

Careers in Marine Science
http://oceanlink.island.net/career/career2.html

International Marine Animal Trainer’s Association
http://www.imata.org/

National Wildlife Federation
http://www.nwf.org/

American Physiological Society: Careers
http://www.the-aps.org/mm/Career

Association of Zoos and Aquariums: Career Page
https://www.aza.org/careers-zoos-aquariums/

**Student Organizations at UNT- (Learn more at UNT ORGSYNC)**

- Beta Beta Beta Biological Honor Society
- SACNAS: Society of Scientists for the success of Hispanic/Chicano and Native American Scientists
- Forensic Science Club
- Society for Microbiology
- UNT Botanical Society
- The Triple Helix
- Eagles Pre-Pharmacy Association
- Alpha Delta: The Minority Pre-Health Organization
- Alpha Epsilon Delta: Health Pre-Professional Honor Society
- American Red Cross Club
- Medically Dedicated Students Organization
- Pre-Dental Association
- Pre-Physical Therapy Club
- Pre-Physician Assistant Club
- Pre-Veterinary Club
- Be the Match
- Students for Aqua Aid
- Conversation Peer Education group-Peer health Educators
- Mean Green for Animals
- North Texas Animal Club
- Organization for Reinforcement Contingencies with Animals

*Biology Job Search Sites*
http://www.Biologyjobs.com
http://www.newscientistjobs.com/jobs/default.aspx
http://www.bioplanet.com/
http://sciencecareers.sciencemag.org/
http://www.careersinfood.com/
http://www.nature.com/naturejobs/index.html
http://www.ecoemploy.com/jobs/
http://www.eco.org/
http://www.phds.org/
US Department of the Interior internship site: YouthGo.gov
http://www.healthjobsnationwide.com/
http://www.hospitaljobsonline.com/

Professional Organizations

Association for Biology Laboratory Education, http://ableweb.org/
American Association for Higher Education and Accreditation, http://aahea.org/
American Association of State Colleges and Universities, http://aascu.org/
Association for Childhood Education International, http://www.acei.org/
National Association for the Education of Young Children, http://naeyc.org/
American Cetacean Society, http://www.acsonline.org/
American Geophysical Union, http://www.agu.org/
American Society of Limnology and Oceanography, http://aslo.org/lo/
Society of Wetland Scientists, http://www.sws.org/
Women’s Aquatic Network, http://www.womensaquatic.net
American Association of Zoo Keepers, http://www.aazk.org/
American of Zoo and Aquarium Docents, http://www.azadocents.org
Additional Resources

O*NET OnLine: http://www.onetonline.org/
Eagle Careers: http://studentaffairs.unt.edu/eagle-careers
LinkedIn: http://university.linkedin.com/linkedin-for-students.html
mySkills myFuture: http://www.myskillsmyfuture.org/
USAjobs: https://www.usajobs.gov/StudentsAndGrads
CareerOneStop: http://www.careeronestop.org/
CareerRookie: http://www.careerrookie.com/

Need help figuring all this out? Call the Career Center and make an appointment with your Career Advisor! You can also get help with resume and cover letter writing and interview skills preparation.

*Information for this handout compiled from the following Career Services Departments:
Central Washington University: http://www.cwu.edu/career/
Indiana University-Purdue University Fort Wayne: http://www.ipfw.edu/offices/career/
Texas State University: http://www.careerservices.txstate.edu/
University of North Carolina Wilmington: http://www.uncw.edu/career/index.html
University of North Texas: http://careercenter.unt.edu/
University of Tennessee-Knoxville: http://career.utk.edu/
University of Wisconsin-Eau Claire: http://www.uwec.edu/Career/index.htm