

BIOLOGY

Biology is the science of living matter. It involves the study of the structure, evolutionary development, and functions of plants, animals, and microorganisms, especially the ways in which they relate to our environment.

Careers in biological sciences may relate more to your personal career interests, work values and transferable skills than any specific academic major.

TYPICAL SKILLS and CHARACTERISTICS

Ability to memorize	Independent worker
Ability maintain records	Make decisions based on individual judgment
Analyzing/dissecting	Make decisions based on quantitative information
Ability to understand complex information	Inspecting/examining
Ability to express complex information	Organizing/classifying details
Ability to operate scientific equipment	Plan and develop research models
Biology theory & practical knowledge	Presenting proposals/reports
Commitment	Problem solving
Computer skills	Prolonged concentration
Curiosity and creativity	Recognize textures, colors, shapes and sizes
Designing projects	Reviewing/evaluating
Developing/generating ideas	Statistical knowledge
Diagnosing	Teamwork
Experimenting with ideas/procedures	Testing ideas/hypothesis
Gather, summarize, tabulate data & draw conclusions	Use logic or scientific thinking to problem solve problems
Good vision/manual dexterity	Use non-verbal symbols to express ideas or solve
Work well with people	Writing reports & grant proposals

CAREER/ JOB DESCRIPTIONS

The following are actual job titles of persons graduating with a degree in Biology although some listed require either a Masters or PhD.

AGRONOMIST

Improves the yield and quality of crops for human consumption. Develops new growing methods and new varieties of plants.

ANIMAL SHELTER ADMINISTRATOR

Coordinates all programs for animal shelter and hires and supervises personnel. Upholds animal control laws of individual communities. Creates strategies for fund raising, marketing, and community relations. Works for public or private animal Shelter.

ANIMAL SCIENTIST

Conducts research to develop improved methods for feeding, housing and breeding farm livestock and domestic pets. May work in laboratories, government agencies, or on farms or ranches.

ANIMAL TRAINER

Teaches animals to perform certain feats upon command, using knowledge of animals' habits and learning abilities. Major employers include zoos, film and TV studios, dog obedience schools, U.S. Custom Service, guide dog schools, and law enforcement agencies.

BIOLOGICAL PHOTOGRAPHER

Produces still and motion pictures of subjects for the health professions and the natural sciences. Uses photography to record such events as a patient's condition, surgical procedures, or magnified tissue specimens. Requires knowledge of both photography and biological sciences, as well as completion of a certification process.

BIOLOGICAL RESEARCHER

Makes detailed observations, analyzes data, and interprets results. Prepares technical reports, summaries, and quantitative analyses. Maintains familiarity with current scientific literature and identifies patentable inventions. Positions beyond entry-level require an advanced degree. Works for universities, research laboratories, or technical companies.

BIOLOGY TEACHER

Instructs high school and junior high school students in specialized subject areas. Public schools require certification, while private schools typically do not.

BIOMEDICAL ENGINEER

Develops concepts and converts the ideas of physicians, rehabilitation therapists, and biologists into usable devices, instruments, materials, procedures, treatments, and techniques that improve the quality of patients' lives. Requires a bachelor's degree in biomedical engineering.

BIOMEDICAL EQUIPMENT TECHNICIAN

Installs, calibrates, inspects, and maintains biomedical and related technical equipment. Teaches hospital personnel how to use equipment, and assists medical professionals in conducting experiments and procedures. Requires a bachelor's degree in the biological sciences.

BIOTECHNOLOGY ASSISTANT

Assists biotechnologists in using modern molecular techniques to make or modify products, to improve plants or animals, or to develop microorganisms for specific uses. Works for variety of biotechnology companies in areas such as plants, animals, pharmaceuticals, or cosmetics.

BOTANIST

Studies plants and their environment. There are many specialty areas, such as classification of plants, structure and function of plant parts, and causes/cures of plant diseases. Entry-level positions are usually called laboratory technician or technical assistant. Works in educational institutions, government agencies, or industry.

BUSINESS-TO-BUSINESS SALESPERSON

Conducts purchases and sales among corporations. Deals with products such as factory machines, raw materials, or business services. Analyzes cost, reliability, technical characteristics, and deliverability of each business transaction. Sells technical products to purchasing managers at other companies. Provides rigorous analyses of cost, reliability, technical characteristics, and deliverability. Works for a variety of technical companies.

BUYER

Obtains materials, scientific equipment, and services. Examines bids and award contracts and develops new supply sources. Works for a variety of technical companies.

CLINICAL DATA SPECIALIST

Collaborates among departments on the design, testing, and implementation of clinical data studies. Develops systems for organizing data to identify trends. Works for a variety of technical companies.

CLINICAL RESEARCH ASSOCIATE

Responsible for the overall direction of clinical research projects. May travel to field sites to supervise clinical studies. Works for a variety of technical companies.

CONSUMER SAFETY INSPECTOR

Checks firms that produce, store, and market food, drugs, and cosmetics. Looks for inaccurate product labeling or product contamination and compiles evidence to be used in court. Most work for the U.S. Food and Drug Administration or for state governments.

CUSTOMER SERVICE REPRESENTATIVE

Handles customer relations, usually through direct contact with customers. Researches and responds to complaints and informational inquiries, seeking both to meet the customers' needs and promote the image and reputation of the employer. Works for manufacturers and retailers.

DEMONSTRATOR/EXHIBITOR

Exhibits and demonstrates scientific merchandise and products, usually to promote sales. Displays product and explains features to customers. May travel extensively. Works for variety of technical companies and vendors.

DEVELOPER OF EDUCATIONAL TOOLS

Creates materials to explain scientific concepts to a variety of audiences. Materials may require background research, writing, editing, computer programming, and/or illustration. Works for variety of employers such as publishing companies or school districts.

DOCUMENTATION SPECIALIST

Coordinates all activities related to proving required documentation of a product. Works for a variety of technical companies.

ENERGY COMMUNICATIONS SPECIALIST

Handles community relations for organizations involved with six types of energy (oil and gas, coal, hydroelectric, nuclear, and alternatives such as wind, tide and geothermal). Works for producers, government agencies, consulting firms, and lobbying groups.

ENVIRONMENTAL COMMUNICATIONS SPECIALIST

Handles community relations regarding environmental issues in fields such as earth science, mining, forestry, public works, and parks, wildlife, and water management. Works for government agencies, consulting firms, citizen groups, research laboratories, scientific associations, and corporations.

ENVIRONMENTAL EDUCATOR

Plans and conducts outreach presentations to the public on various issues related to the environment. Researches materials and provides visual aids to supplement speech. Works for non-profit organizations or special interest groups.

ENVIRONMENTAL CONSULTANT

Assists government, business, legal, and other interests in preventing or solving problems related to the environment. Conveys scientific ideas in a way understandable to scientists and non-scientists. Researches relevant issues and presents findings to the public. May serve as expert witness in court cases. Works for consulting firms.

EXECUTIVE SEARCH CONSULTANT

Acts as liaison between executives and possible employers. Arranges job placements and provides information on the compensation and responsibilities of various positions. Maintains contacts and references within the professional community. Works for executive search firms.

EXHIBIT COORDINATOR

Creates educational exhibits and assists in the design of graphics. Works in a museum, zoo, or aquarium

FIELD BIOLOGIST

Conducts biological research outside the laboratory in a natural setting. Positions beyond entry-level require an advanced degree. Works for universities, research laboratories, or technical companies.

FOOD INSPECTOR

Inspects meat and poultry to ensure they are safe for public consumption. Checks for correct product labeling and proper sanitation. Works for the U.S. Department of Agriculture.

FOOD TECHNOLOGIST

Uses knowledge of science to develop new or better ways of preserving, processing, packaging, storing, and delivering foods. Some engage in research, discovering new food sources, analyzing food content for nutritional value, or searching for substitutes for harmful additives. Many also work in product development. Works for government agencies or companies in the food industry.

FORENSIC BIOTECHNOLOGIST

Collects and analyzes DNA specimens for use by law enforcement officials in solving crimes. Requires bachelor's degree plus experience in molecular biology. Works for crime laboratory or research lab.

FORESTER

Plans and supervises the growing, protection, and harvesting of trees. Plants, maps, and inventories forests and fights fire, pests, and disease. Also promotes wildlife protection, watershed management, and the development of camps, parks, and grazing lands.

FUND RAISER (NON-PROFIT SCIENTIFIC ORGANIZATION)

Establishes and maintains fund raising efforts for organization. Reports results to board of directors. May supervise volunteers or support staff. Acts as liaison between organization and donors.

FUNERAL DIRECTOR

Provides support to the bereaved, arranges and directs funeral ceremonies, secures information for legal documents, and assists survivors with details for filing claims for death benefits.

GRANT WRITER (NON-PROFIT SCIENTIFIC ORGANIZATION)

Researches possible funding sources. Writes grant applications for funding and prepares necessary documentation. May meet with potential grantors to discuss organization goals.

HEALTH PHYSICIST

Detects, monitors, and protects plant and laboratory workers who come in contact with nuclear reactors, high energy accelerators, and radioisotopes. Requires some course work in math and chemistry. Works for government agencies and technological companies.

HORTICULTURIST

Improves the yield and quality of orchards and garden plants by developing new ways to grow them or through pest control in reference to landscaping.

HOSPITAL ADMINISTRATOR

Oversees the business and practice of hospital medicine.

INDUSTRIAL HYGIENIST (SAFETY ENGINEER)

Monitors work environments for occupational hazards and diseases. suggests changes to prevent accidents or illness. works in a variety of settings, such as government agencies, companies, insurance firms, or consulting firms.

INSPECTOR, AGRICULTURE COMMODITIES

Applies quality standards to aid the buying and selling of commodities and to ensure retailers and consumers know the quality of the products they purchase. Issues official grading certificates. Works for state and federal government agencies.

JOURNALIST (BIOLOGY-RELATED PUBLICATION)

Gathers information and writes stories about scientific events and issues. Works for newspapers, magazines, or television/radio stations.

LANDSCAPE ARCHITECT

Designs landscaping plans for diverse building sites, presents proposals and cost estimates to clients, and supervises the installation of their designs. May require some specialized course work. Works for organizations such as real estate development firms, architectural firms, and municipalities.

LOBBYING ORGANIZER

Presents the views of the scientific community to congressional representatives at federal, state, and local levels. Distributes materials and disseminates information. Recruits volunteers, solicits funds, and organizes such efforts as rallies, letter-writing campaigns, and voter registration drives. Works for special and public interest groups or professional lobbyists.

LOBBYING RESEARCHER

Identifies information that can be used to support the positions and efforts of lobbyists. Conducts library research, attends conference and committee meetings, and writes reports. Works for special and public interest groups or professional lobbyists.

MANUFACTURING RESEARCH ASSOCIATE

Implements production procedures to optimize manufacturing processes. Works for a variety of technical companies.

MARINE BIOLOGIST

Explores the world of ocean plants and animals by observing, measuring, collecting, and identifying specimens. Many focus on the protection of endangered marine life, working both outdoors and in laboratories. Positions beyond entry-level require a graduate degree. Works for government agencies, universities, private research labs, or environmental organizations.

MARKET RESEARCH ANALYST

Researches and analyses a company's markets, competition, and product mix. Studies future marketing trends and makes appropriate recommendations.

MEDICAL ILLUSTRATOR

Creates graphic representations of medical or biological subjects for such media as medical textbooks, professional journals, pamphlets, instructional films, magazines, and television. Requires specialized training. Works for medical schools, hospitals, publishing companies, and advertising agencies.

MEDICAL PROFESSIONS

Includes general and family practice as well as specialties requiring extensive academic and experiential training and experiences.

MORTICIAN

Prepares bodies for funerals or cremations.

OCEANOGRAPHER

Explores and scientifically studies the ocean and all things related to it.

OSTEOPATH

Medical practitioner who emphasizes manipulation of the bones to treat diseases.

PATENT ADMINISTRATOR

Prepares all procedural documentation for patent filings and application Tracks all in-house research studies and suggests timing of patent filings. Assists attorneys with the drafting of patent applications and collect supporting data. Works for a variety of technical companies.

PATENT AGENT

Processes patent applications, negotiates and drafts patent licenses, and assists with appeal and interference proceedings. Works for a variety of technical companies.

PARALEGAL

Performs preparatory work required to research a case and develops documentation required to write a brief, especially cases involving technical or scientific issues. May interview prospective witnesses. Requires some training beyond the bachelor's degree. Works for private law offices, law firms, prosecutors, and public defenders.

PARK RANGER

Enforces laws and regulations in state and national parks. Registers visitors, collects fees, provides information, patrols park area, and provides first aid and rescue activities.

PET STORE MANAGER

Coordinates all business operations of pet store. buys and sells animals, stocks supplies, conducts inventory, hires and supervises employees, and maintains high quality customer service. Acts as liaison between trainers, veterinarians, and breeders.

PLANT BREEDER

Designs, develops, and implements plant breeding research projects. Works for plant breeding department of a biotechnology company.

PUBLIC HEALTH MICROBIOLOGIST

Conducts laboratory tests on bacteria and viruses and recommends measures to control pollution and prevent the spread of diseases. Works for government agencies or consulting firms.

QUALITY CONTROL ANALYST

Conducts analyses of raw materials, materials in process, and finished formulations. Compiles documentation for test procedures and reports abnormalities. Works for variety of biotechnology companies

QUALITY ASSURANCE AUDITOR

Performs audits of production and quality control. Works for variety of technical companies or federal, state, or local government.

QUALITY CONTROL ENGINEER

Develops and maintains quality standards for processing materials into finished products. Designs procedures for assessing the precision and accuracy of products. Works for variety of biotechnology companies.

REGULATORY AFFAIRS SPECIALIST

Coordinates document packages for submission to regulatory agencies, internal audits, and inspections. Compiles all material required for license renewals and annual registrations. Works for a variety of technical companies.

SAFETY SPECIALIST

Monitors industrial safety programs, ensures compliance with Occupational Safety and Health

Administration (OSHA) regulations, and conducts training programs on safety. Works for variety of technical companies.

SALES REPRESENTATIVE

Sells scientific products or services to customers, which may include discussing customers' needs, showing samples, answering questions, and ensuring quality service. May assist with technical support. Works for variety of companies in industries such as chemicals or pharmaceuticals.

SOIL CONSERVATIONIST

Assists farmers and other land managers in using their land as productively as possible without damaging it. Recommends best uses of land and cultivation methods that will prevent erosion and maintain or improve fertility, monitors water supplies, and develops water conservation measures.

SURVEY DESIGNER

Designs survey interviews and questionnaires for research related to the biological sciences. May interview subjects, collect and analyze data, or present findings. Works for government agencies, private surveying and market research organizations, or research laboratories.

TAXONOMIST

Describes and catalogs plants and animals, seeks new crops or plants to produce drugs for the pharmaceutical industry. Some study the impact of planned commercial development on ecological habitats. Positions beyond entry-level require a graduate degree. Most work for universities, government agencies, zoos, or botanical gardens.

TECHNICAL RECRUITER

Interviews job applicants on college campuses, at employment fairs, and at trade and professional meetings. Promotes effective relations with colleges, universities, and other institutions that supply prospective employees. Works for variety of technical companies or search firms.

TECHNICAL TRAINER

Designs and presents training sessions for employees about technical issues or equipment, such as computer systems, programming languages, laboratory procedures, or product specifications. Works for a variety of technical companies.

TECHNICAL WRITER

Writes and edits standard operating procedures, laboratory procedure manuals, and other related documents. Researches and writes publications that communicate scientific technical information to readers with no technical background. Employers include corporations, professional associations, and government agencies.

TEXTBOOK EDITOR

Plans the content of scientific textbooks, assigns topics to writers, and oversees production. Entry-level editorial assistants review copy for errors and for readability, style, and agreement with editorial policy. Works for publishing companies.

VALIDATION ENGINEER

Calibrates technical equipment and systems, and assists in the negotiation of competitive pricing for equipment. Maintains equipment documentation and serves as information resource for contractors and vendors. Works for variety of technical companies.

VETERINARIAN

Treats animals for diseases and medical conditions. Requires advanced degree.

VETERINARY TECHNICIAN

Assists veterinarians by keeping records, taking specimens, performing lab tests, preparing animals for surgery, dressing wounds, and helping with examinations and surgery. Requires licensure and some specialized courses. Works for veterinary hospitals or clinics.

VOLUNTEER COORDINATOR

Recruits, trains, and directs volunteers to provide services. Coordinates volunteer assignments, organizes training programs, and provides ongoing supervision and feedback. Works for non-profit organizations, such as environmental groups, zoos, or museums.

ZOO CURATOR

Collects animals and coordinates special exhibits. Provides educational programs to the public. Some administer research programs and work closely with local universities.

ZOO DIRECTOR

Coordinates all zoo operations, such as personnel, training, educational programs, animal acquisition, fund raising, community relations, and long-term planning.

HIRING ORGANIZATIONS

Aquariums National and state parks
Arboretums Nurseries
Chemical industries
Colleges/schools
Cosmetic companies
Environmental Protection
Environmental Scientist
Government agencies
Hospitals
Intern-Wildlife Biology
Medical supply companies
Interpretive Guide

Mining companies
Laboratories
Petroleum manufacturers
Pharmaceutical companies
Research firms
Specialist National Park Service
Geotech Computer Systems
Technical journals
Technical/medical libraries
Textile/leather manufacturers
Utility companies
Zoos
US Forest Service

PROFESSIONAL ASSOCIATIONS/ORGANIZATIONS

American Dental Association
211 East Chicago Avenue
Chicago, IL 60611
(312) 440-2500 fax: (312) 440-2800
www.ada.org
email: publicinfo@ada.org

American Medical Association
Headquarters
515 North State Street
Chicago, IL 60610
(312) 464-5000
www.ama-assn.org/

Biotechnology Industry Organization
1625 K Street NW, Suite 1100
Washington, DC 20006
(202) 857-0244 fax: (202) 857-0237
www.bio.org/welcome.html
email: info@bio.org

National Association of Biology Teachers
12030 Sunrise Valley Drive, Suite 110
Reston, VA 20191
(703) 264-9696 fax: (703)- 264-7778
(800) 406-0775
www.nabt.org
email: office@habt.org

American Institute of Biological Sciences
1444 I Street NW, Suite 200
Washington, DC 20005
(202) 628-1500 fax: (202) 628-1509
www.aibs.org
email: info@aibs.org

American Osteopathic Association
142 East Ontario Street
Chicago, IL 60611
(800) 621-1773 fax: (312) 202-8200
www.aoa-net.org/
email: info@aoa-net.org

Botanical Society of America
1735 Neil Avenue
Columbus, OH 43210
(614) 292-3519 fax: (614) 247-6444
www.botany.org/bsa
email: bsa-manager@botany.org

BIOLOGY WEBSITES

Agronomy links: <http://www.agry.purdue.edu/links/>

Aquatic Sciences website: <http://aslo.org/career/aquaticcareer.html>

Biology Careers and job websites: <http://nsm1.nsm.iup.edu/rwinstea/jobs.shtm>

Biotechnology advocacy, information and business support website <http://www.bio.org/>

Career in Biology - answers to common questions and quotes from biologists.
http://www.dbs.nus.edu.sg/outreach/career_in_biology.htm

Careers & Jobs in Marine Biology & Oceanography - lists web pages providing advice for those interested in a career in the marine or aquatic sciences. <http://www-marine.stanford.edu/HMSweb/careers.html>

Careers in Biology - general career information for a variety of interests and careers in biology. <http://www.sicb.org/careers/>

Careers in Oceanography, Marine Science & Marine Biology - career directory divided into three sections: general guides for oceanography and marine science; guides for marine biology, marine mammals, zoos, and aquariums; and other guides covering all of science. <http://scilib.ucsd.edu/sio/guide/career.html>

Lifesience Educator information <http://www.nabt.org/>

Marine Careers - guide to marine science career possibilities. Also provides profiles of scientists in related fields. <http://www.marinecareers.net/>

The **Occupational Outlook Handbook** is a nationally recognized source of career information, designed to provide valuable assistance to individuals making decisions about their future work lives. Revised every two years, the *Handbook* describes what workers do on the job, working conditions, the training and education needed, earnings, and expected job prospects in a wide range of occupations <http://www.bls.gov/oco/>

University of Louisville Department of Biology

<http://www.louisville.edu/a-s/biology/>

UNIVERSITY OF LOUISVILLE BIOLOGY FACULTY AND RESEARCHERS

James E. Alexander, Visiting Assistant Professor, Ph.D., University of Oklahoma, 1987. Population ecology and physiological ecology of aquatic invertebrates; zebra mussel (*Dreissena*) biology. jealex01@gwise.louisville.edu

Ronald M. Atlas, Professor, Dean of the Graduate School; Ph.D., Rutgers, 1972. Microbial ecology and physiology; hydrocarbon metabolism; microbial abatement of pollution; polar microbiology. r.atlas@louisville.edu

Margaret M. Carreiro, Associate Professor, Ph.D., 1989. University of Rhode Island. Nutrient cycling, ecosystem ecology of terrestrial habitats, particularly those in urban and suburban landscapes. M.Carreiro@louisville.edu

Gary A. Cobbs, Professor; Ph.D., California, Riverside, 1974. Population genetics; protein polymorphism; evolutionary theory; *Drosophila* genetics. gacobb01@gwise.louisville.edu

Cindy Corbitt, Assistant Professor, Ph.D., University of Alaska Fairbanks, 1997. Behavioral neuroendocrinology, environmental signaling and the central nervous system. cynthia.corbitt@louisville.edu

Lee Dugatkin, Associate Professor, Ph.D., State University of New York, Binghamton, 1991. Behavioral and evolutionary ecology; Evolution of cooperative and altruistic behavior; cultural transmission and female mate choice; evolutionary psychology. laduga01@gwise.louisville.edu

Perri Eason, Associate Professor, Ph.D., University of California, Davis, 1991. Behavioral ecology and conservation biology of terrestrial vertebrates and insects. pkeaso01@gwise.louisville.edu

Paul Ewald, Professor, Ph.D., University of Washington, 1980. Evolutionary ecology of parasitism, evolutionary medicine, agonistic behavior, pollination biology. p0ewal01@gwise.louisville.edu

Ronald D. Fell, Professor and Chair of the Department, Ph.D., Iowa State, 1977. Applied physiology, nutrition, muscle metabolism and exercise physiology. rfell@louisville.edu

Jay Gulledge, Assistant Professor, Ph.D., University of Alaska Fairbanks, 1996. Microbial ecology and physiology, biogeochemistry, soil trace gas and nutrient cycling, global change biology, molecular community analysis. jay.gulledge@louisville.edu

Jeff Jack, Associate Professor, Ph.D., Dartmouth 1993. Invertebrate community ecology in large rivers, streams and temporary lake communities. jeff.jack@louisville.edu

Awdhesh Kalia, Assistant Professor, Ph.D., All India Institute of Medical Sciences, New Delhi, 2000. Bacterial pathogenesis integrating the fields of genomics, epidemiology, evolution and molecular cellular biology. a0kali02@gwise.louisville.edu

Arnold J. Karpoff, Associate Professor; Ph.D., Oregon, 1969. Morphology and Physiology of Plant Growth and Development; plant ultrastructure. ajkarp01@gwise.louisville.edu

Martin G. Klotz, Associate Professor; Ph.D., Friedrich Schiller Univ. Jena, Germany, 1986. Molecular genetics and evolution of metabolic modules in bacteria. Current focus is on autotrophic nitrification and tolerance to oxidative stress. Martin.Klotz@louisville.edu

William D. Pearson, Professor, Curator, Clay Fish Collection, Ph.D., Utah State, 1970. Fisheries biology; ichthyology; aquatic ecology; stream drift, biospeleology. wdpear01@gwise.louisville.edu

Michael Perlin, Professor; Ph.D., Chicago, 1983. Molecular genetics; structure and function of the gene; molecular biology of drug action; gene mapping and splicing, fungal phytopathogens, host/pathogen interaction. mhperl01@gwise.louisville.edu

Jennifer Mansfield-Jones, Ph.D., Michigan, 1995. Digestive energetics as related to parasitic infections. j0mans02@louisville.edu

David J. Schultz, Assistant Professor, Ph.D., The Pennsylvania State University, 1996. Molecular genetics, biotechnology, and biochemistry; production of unusual lipids and secondary metabolites in plants; trichome mediated pest resistance in *Pelargonium xhortorum* (geranium). david.schultz@louisville.edu

Joseph M. Steffen, Associate Professor & Graduate Advisor; Ph.D., New Mexico, 1980. Cellular and molecular physiology; environmental physiology, endocrine and growth factor effects on muscle. joe.steffen@louisville.edu

Eric V. Wong, Assistant Professor, Ph.D., Case Western Reserve University, 1996. Developmental neurobiology, axon guidance in visual system development, inhibitory proteins in central nervous system regeneration. evwong@louisville.edu

Advisor, Office	Advising Student Group	Contact by:	Advising Hours
Dr. William Pearson , Life Sciences 324	Organismal Biology	drop in	appointment
Dr. Arnold Karpoff , Life Sciences 324A	Botany, Education	email	appointment
Dr. Margaret Carreiro , Life Sciences 323A	Urban & Microbial Ecology	email	appointment
Dr. Gary Cobbs , Life Sciences 218	Genetics/SubcellularCell/Biology	email	appointment
Dr. Lee Dugatkin , Life Sciences 320	Evolution, Animal Behavior		appointment
Dr. Perri Eason , Life Sciences 333	Animal Behavior, Ecology	email	appointment
Dr. Jeff Jack , Life Sciences 327	Ecology, Aquatic Biology	email	appointment
Dr. Martin Klotz , Life Sciences 204	Microbiology	email	appointment
Dr. Mike Perlin , Life Sciences 330	Genetics/Subcellular	email	appointment
Dr. Ronald D. Fell , Life Sciences 139	Transfer Students	852-6771	Friday Mornings

If your advisor doesn't get back to you in a reasonable period of time, please contact the Biology office at 852-6771.

U of L Biology Degree Programs

There are two undergraduate degree programs offered in the Biology Department, a Bachelor of Arts in Biology and a Bachelor of Science in Biology. In the latter degree program there are four options or tracks from which to choose:

- *Cellular/Physiology (Pre-health Biology)*
- *Subcellular/Genetics (Biotechnology)*
- *Ecology/Environmental*
- *Organismal (General Biology).*

Bachelor of Arts in Biology

The B.A. Biology degree is a liberal arts degree designed for those students who desire a broad education in a variety of disciplines. This degree requires foreign language and more social science and/or humanities than the B.S. degree. There are also more hours of free electives that can be used to tailor a program to fit individual needs, desires, and interests. The total number of credit hours required for the B.A. degree is 121 of which a minimum of 38 hours are biology major courses. (No more than 40 hours in Biology may be included in this major.)

Bachelor of Science in Biology

The B.S. Biology degree is an intense scientific degree program with four different specialty tracks available. This program requires no foreign language and has fewer hours in social science and/or humanities than the B.A. degree and there are fewer free electives available within the 121 hour program. The B.S. degree is strongly recommended for those students planning to apply for post-baccalaureate professional study.

Tips for Students

If the class you wanted was closed when you tried to register, see if the instructor keeps a waiting list. It never hurts to check. You might just get into that closed class. All Biology students should maintain and use a U of L EMAIL account. Faculty advisors are online constantly in their offices and many logon at home as well. Most times we can answer your questions with a quick note. If your question requires a more detailed answer or you just need to talk about a problem, your advisor can reply back to you with an advising time.

Registration Information

Drop/Add for Registered Students: Last day to drop a course without going through appeals process is mid-semester. Do not miss this date! Most post-graduate programs don't try and interpret a withdraw (W) on your transcript, but they can certainly interpret a low grade. Be smart, if you aren't prepared for a particular class you are better to back up and take the appropriate prerequisites than take that class again without adequate preparation.

Early Registration begins around mid semester so check the Schedule of Courses for your exact time and day. If you haven't talked to your advisor about what you're going to take next semester, gather your program of study (any and all forms you've received) and set up an appointment with your advisor.

Last day to apply for a degree is at the start of your last semester. If you haven't done this you should see the A&S advising office immediately.

Last day to change from credit to audit is the same as last day to register for that term or semester.

Last day to change from credit to Pass/Fail is the same as the last day to withdraw for the term or semester.