# WHY SHOULD I BE A BIOLOGY MAJOR?



#### **BIOLOGY – MORE THAN CELLS, PLANTS, AND BUGS**

Biology, simply defined, is the study of living organisms and the processes that make life possible. The Department of Biology is host to outstanding research programs in various fields across the spectrum of modern biology. To address the breadth and depth essential to educating biologists, the biology major is structured to include both a broad foundation through core courses and opportunity for specialization within a biological subfield through biology electives.

While the major is designed to prepare the student for a post-baccalaureate profession in biology, for advanced professional training in the health sciences, or for graduate study in basic and applied areas of the biological sciences, biology majors can and do work in a wide variety occupational professions. The Department of Biology offers research opportunities, training, and instruction at all levels, undergraduate, graduate and postdoctoral.

#### WHAT SKILLS DOES STUDYING BIOLOGY DEVELOP?

- generate original ideas and solve problems conduct research and interpret data using laboratory instrumentation
- gather information, conduct research and laboratory experimentation
- analyze and evaluate data, write and present reports
- calculate, compute and apply formulas
- collaborate with fellow biologists and other scientists
- understand the building blocks of the systems of life
- understand the behavior of the environment

#### CAREER OPPORTUNITIES

Biology provides an excellent foundation for careers in a variety of professions and occupations in the areas of molecular and cellular biology, physiology, industrial microbiology and biotechnology, human genetics, forensic science, health education, plant pathology, oceanography, herpetology, animal behavior, ecology, environmental studies, entomology, parasitology, botany, mammalogy and postgraduate education.



## 50 Things to Do With a Biology Degree

#### Health Care

- Physician (MD, DO)
- Veterinarian (DVM)
- Dentist (DDS)
- Podiatrist (DPM)

#### Allied Health

- Physical Therapist
- Occupational Therapist
- Speech Therapist
- Nursing (RN)
- Pharmacy (BS or PharmD)
- Massage Therapy

#### Health Related

- Med/Vet Technician
- Med/Vet Technician
- Bioethicist
- Clinical Lab Sciences
- Dietician
- Pharmacist's Assistant

## Math/Engineering

- Bioinformatics
- Biomechanical Engineering
- Epidemiologist
- Biometrician/Statistician
- Nanotechnology
- Medical Physics

### Industry

- Pharmaceutical Researcher
- Drug Testing/Quality Control
- Food Safety Expert
- Zymurgy(Beer/Winemaking)

#### Animal Care & Research

- Zookeeper
- Gamekeeper
- Marine Mammal Trainer
- Marine Biologist
- Fisheries & Aquaculture

#### Legal

- Forensic Scientist
- Biotechnology Patent Law
- Criminal Investigator
- Environmental Lawyer

#### Arts

- Medical Illustration
- Bio-Animation and Films
- Molecular Visualization

#### Environmental

- Conservation Biologist
- Forest Ranger
- **Environmental Scientist**
- Agricultural Scientist

### Plant Biology

- Botanist
- Ethnobotanist
- Horticulture
- Landscaping

#### Education

- Biology Teacher (Primary or Secondary)
- Professor (2 or 4 year Institution)



#### Government

- National Health (FDA, CDC)
- City/Community Health Official
- Bioterrorism Expert