# Career Opportunities

### **INDUSTRY**

Depending on their research experience and electives taken, students may be qualified for entry-level positions in sales, technical service, or research and development in industry.

### **GRADUATE SCHOOL**

This program will prepare students for graduate school in many disciplines of biology including physiology, cell biology, nutrition, and biochemistry.

#### **HEALTH CARE**

The Biomedical Science Concentration curriculum closely fits the prerequisites for many allied health programs and medical school.



# Research Opportunities

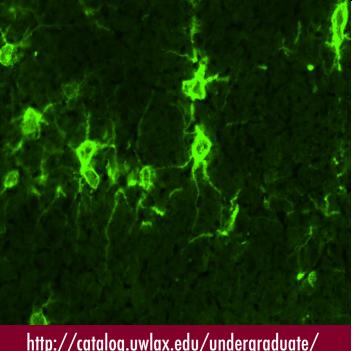
Undergraduate students are encouraged to do research at UWL and elsewhere through summer programs.

### **FACULTY RESEARCH INTERESTS**

Faculty members in the Biology Department conduct biomedical research, especially in the areas of neuroscience, endocrinology, gastrointestinal physiology, reproductive physiology & toxicology, cell & molecular physiology, cancer biology, nutrition, and integrative systems biology and collaborate with others at different universities across the country.

#### INTERNSHIPS/JOB SHADOWING

During the school year there are several internships and job shadowing opportunities available at local labs and hospitals.



http://catalog.uwlax.edu/undergraduate/ biology/biomedical-science-bs



### UNIVERSITY OF WISCONSIN-LA CROSSE

College of Science and Health

Department of Biology (Biomedical Science Concentration)

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UWL Admissions Office: admissions@uwlax.edu

Financial Aid Office: finaid@uwlax.edu

Information in this brochure is subject to change. Visit our website for current information —http://catalog.uwlax.edu/undergraduate/biology/biomedical-science-bs.







COLLEGE OF SCIENCE AND HEALTH

# **BIOLOGY MAJOR**

**Biomedical Science Concentration** 





### WHAT IS THE BIOMEDICAL SCIENCE CONCENTRATION?

The biomedical science concentration (BSC) is designed to allow students to focus on human (mammalian) biology. Courses such as human anatomy & physiology, genetics, and cell biology are required. Additional chemistry classes are also required to improve quantitative skills to make students more competitive in the job market. The BSC is also an excellent choice for pre-med, pre-vet & pre-health professions students as many of the required courses meet admissions requirements of these professional programs.

## THE CURRICULUM

### **Biology Requirements: 39 credits**

(67 credits including MTH/CHM requirements)

BIOMEDICAL SCIENCE CONCENTRATION

### **REQUIRED CREDITS IN BIOLOGY:**

- BIO 105 General Biology (4)
- BIO 203 Organismal Biology (4)
- BIO 306 Genetics (4)
- BIO 307 Ecology (3)
- BIO 312 Human Anatomy & Physiology I (4)
- BIO 313 Human Anatomy & Physiology II (4)
- BIO 315 Cell Biology (4)
- BIO 491 Capstone in Biology (1)

### **ELECTIVES:**

Remaining credits (to achieve 39) from the following:

- BIO 202 Introduction to Biological Data Analysis and Interpretation (2)
- BIO 333 Radiation Biology (3)
- BIO 401 Comparative Vertebrate Anatomy (4)
- BIO 406 Parasitology (4)
- BIO 408 Developmental Biology (4)
- BIO 410 Human Cadaver Dissection (1)
- BIO 413 Medical Mycology (3)
- BIO 415 Neuroethology (3)
- BIO 424 Human Endocrinology (3) or
- BIO 421 Comparative Vertebrate Endocrinology (3)

- BIO 428 Advanced Nutrition for Health Professions (3)
- BIO 429 Evolution (3)
- BIO 432 Biology of Cancer (2)
- BIO 435 Molecular Biology (3)
- BIO 436 Molecular Biology Laboratory (1)
- BIO 440 Bioinformatics (2)
- BIO 443 Molecular Basis Disease & Drugs (3)
- BIO 446 Animal Behavior (3)
- BIO 449 Advanced Microscopy & Biological Imaging (3)
- BIO 450 Internship in Biology\*\*
- BIO 460 Symposium in Biology (requires approval from Chair)
- BIO 465 Neurophysiology (3)
- BIO 466 Human Molecular Genetics (3)
- BIO 467 Neurobiology Lab Techniques (2)
- BIO 468 Human Molecular Genetics Lab (1)
- BIO 479 Biology Laboratory Assistant\*\*
- BIO 488 Mammology (3)
- BIO 489 Independent Study\*\*
- BIO 495 Service Learning in Biology\*\*
- BIO 499 Undergraduate Research\*\*
- MIC 230 Fundamentals of Microbiology (4)
- MIC 310 Immunology (3)
- MIC 407 Pathogenic Bacteriology (4)
- MIC 410 Immunology Laboratory (2)
- MIC 420 Introductory Virology (3)
- MIC 421 Virology Laboratory (2)

\*\* A total of two credits of these courses can count toward the major.

### **CHEMISTRY REQUIREMENTS:**

- CHM 103 General Chemistry I (5)
- CHM 104 General Chemistry II (5)
- CHM 301 Analytical Chemistry (5)
- CHM 300 Survey of Organic Chemistry (5) or CHM 303-305 Organic Chemistry (8)
- CHM 325 Survey of Biochemistry (4) or CHM 417 & 418 Biochemistry (7)

### **MATH REQUIREMENTS:**

• STAT 145 Elem. Statistics (4)