



# **Biochemistry**

### **Program Overview**

- 4-year undergraduate program providing a strong foundation in both chemistry and biology
- Includes a 2-year upper division capstone research project providing a unique, hands on research experience in the lab, field, or clinical setting alongside a faculty member of your choice
- Ideal undergraduate degree for pre-professional preparation (pre-medical, pre-dental, pre-pharmacy)

### Why become a Biochemistry Major at Daemen College?

- Small class sizes (10:1 student: faculty ratio)
- Opportunities to participate in innovative research projects on campus with faculty
- Internships in and around Buffalo, N.Y. hospitals, doctors' and dentists' offices, veterinary clinics, animal shelters, and environmental firms
- Strong track record of our graduates finding jobs in their field
- Many graduates successfully apply to medical, dental, veterinary, osteopathic, or other graduate programs across the country. Daemen graduates have a strong track record of being accepted into programs of their interest.

## **Career Opportunities**

- Professional Health (Medical doctor, Dentist, Veterinarian, Pharmacist, Pathologist)
- Research Scientist (academia, industry, government, hospital)
- Law School (Patent Attorney)
- Food Chemist

#### **Course List**

In the first two years, students complete foundational courses in biology (General Biology I & II) and chemistry (General Chemistry I & II; Organic Chemistry I & II). The upper-division years (third and fourth year) require higher level chemistry and biology courses (core courses) as well as the opportunity to take elective courses that will better prepare you for your future career.

#### **CORE COURSES**

Biological Organic Chemistry

Contemporary Chemical Analysis

General Biochemistry

Introduction to Physical Chemistry

Molecular Biology

Natural Science Literature Survey Natural Science Research Seminar Scientific Language and Literacy

#### **ELECTIVE COURSES**

Bioorganic Chemistry

Advanced Topics in Physical Chemistry General Anatomy
Animal Behavior General Microbiology

Biomaterials General Physiology

Biostatistics Global Water Issues

Cell Biology Immunology

Comparative Vertebrate Physiology Inorganic Chemistry
Conservation Biology Invertebrate Biology

Developmental Biology Modern Instrumental Analysis

Genetics

Ecology Neurobiology I

Environmental Toxicology Organic Chemistry III

Environmental Chemistry Plant Biology
Evolutionary Biology Planet Earth

Forensic Chemistry Entomology Population Dynamics

### **Recent Graduates**

#### **CONTINUED EDUCATION**

DO students at NOVA Southeastern University, Davie, FL; Ph D. in Epidemiology at University of Rochester, Rochester, NY; Ph. D. in Biomedical Sciences at Wright State University, Dayton, OH; M.S. in Toxicology from the University of Maryland, Baltimore, MD; M.S. in Chemistry, Portland State University, Portland, OR.

#### **CURRENT EMPLOYMENT**

Postdoctoral Fellow at Wright State University, Dayton, OH; Quality Control Engineer at Genentech, Hillsboro, OR; Bacteriology Supervisor at ZeptoMetrix, Buffalo, NY; Program Manager at University at Nottingham, Nottingham, UK; Program Manager at University at Buffalo, Buffalo, NY; Postdoctoral fellow at National Cancer Institute, Rockville, MD.