## **EXAMPLE FOUR-YEAR PLAN**

# **BIOLOGY** 120 CREDITS

**General Sequence** 

| MAJOR                                   |                | CORE                         | ELECTIVES |            |  |
|---|----------------|------------------------------|-----------|------------|--|
| FRESHMAN YEAR                           |                |                              |           |            |  |
| FALL Courses                            |                | SPRING Courses               |           |            |  |
| Leadership for Social Justice           | 3              | Philosophy                   |           | 3          |  |
| ENG 110 or 120 (depending on placement) | 3              | College Research Writing     |           | 3          |  |
| MAT 111 College Algebra                 | 4              | Search for Meaning           |           | 4          |  |
| Intro to Cell and Molecular Biology     | 4              | Introduction to Ecology      |           | 4          |  |
| TOTAL                                   | 14 credits     |                              | TOTAL     | 14 credits |  |
| SOPHOMORE YEAR                          |                |                              |           |            |  |
| FALL Courses                            |                | SPRING Courses               |           |            |  |
| World Languages                         | 3              | Biology Elective             |           | 4          |  |
| Oral Communications                     | 2              | Biology Elective             |           | 3          |  |
| CHE 113 General Chemistry I             | 4              | Biology Elective             |           | 3          |  |
| Biodiversity                            | 4              | CHE 114 General Chemistry II |           | 4          |  |
| Chemistry Elective                      | 4              |                              |           |            |  |
| TOTAL                                   | 17 credits     |                              | TOTAL     | 14 credits |  |
| JUNIOR YEAR                             |                |                              |           |            |  |
| FALL Courses                            | SPRING Courses |                              |           |            |  |
| Behavioral Science                      | 3              | Humanistics Course           |           | 3          |  |
| Literature                              | 3              | Fine Arts                    |           | 3          |  |
| Chemistry Elective                      | 4              | Biology Elective             |           | 4          |  |
| Genetics                                | 4              | Biology 400 level            |           | 4          |  |
|   |                | Elective Course              |           | 3          |  |
| TOTAL                                   | 14 credits     |                              | TOTAL     | 17 credits |  |
| SENIOR YEAR                             |                |                              |           |            |  |
| FALL Courses                            |                | SPRING Courses               |           |            |  |
| Literature/Fine Arts option             | 3              | Elective Course              |           | 3          |  |
| Biology 400 level                       | 4              | Biology Seminar              |           | 1          |  |
| Biology Seminar                         | 1              | Biology Elective             |           | 4          |  |
| Theology                                | 3              | History                      |           | 3          |  |
| Elective Course                         | 3              | Elective Course              |           | 3          |  |
| TOTAL                                   | 14 credits     |                              | TOTAL     | 14 credits |  |

#### **UPDATED SEPTEMBER 2023**

This example four-year plan is intended to outline the number and types of courses a student might take in order to fulfill the degree, major, core and elective requirements to graduate. Students meet with their academic advisor each semester to review progress toward fulfilling their degree requirements.



# **BIOLOGY** School of Arts & Sciences



### **General Sequence**

A biology degree from Mount Mary University offers a broad choice of career paths. The general sequence prepares students for entry-level positions after graduation, graduate school or professional school. The program emphasizes data analysis and problem solving, along with broad scientific literacy, basic biological laboratory techniques and computer applications.

#### **Additional Biology Major Options**

#### HEALTH SCIENCES SEQUENCE

This sequence prepares students for graduate study in dentistry, medicine, optometry, osteopathic medicine or veterinary science. Graduates are well prepared to take the Medical College Admission Test (MCAT), Dental Admission Test (DAT) and Graduate Record Exam (GRE).

#### EDUCATION SEQUENCE

Students who complete requirements for both the biology and education majors are eligible to teach biology or broadfield science in grades 6 to 12. A student-teaching experience is required.

#### **Student Centered Learning**

Student-centered active learning strategies help students make real-world connections and master scientific content. These methods also allow students to practice their oral and written communication skills. Learning strategies include:

**CASE STUDIES**: By studying real-life scenarios relevant to course content, students can understand how to apply concepts they learn in class to real-world situations. Case studies also allow discussion of ethical issues.

**GUIDED INQUIRY EXERCISES**: Students study and answer a series of questions that build upon one another to understand complex problems and explore controversial issues.

**UNDERGRADUATE RESEARCH**: Upper-level courses provide students the opportunity to engage in undergraduate research. All biology majors conduct an independent research project as part of these upper-level courses, so that students do not have to enroll in an elective independent studies course to gain research experience. This experience prepares graduates for post-baccalaureate professions or to pursue a graduate degree.

**STUDY ABROAD IN COSTA RICA**: A field course in Costa Rica allows students to observe and investigate the ecological systems in the area. The interrelationships of humans and other species is emphasized.

#### CAREER OPPORTUNITIES AND INTERNSHIPS

A biology degree can lead to a career as a microbiologist, zoologist, environmental scientist, biological technician, botanist, forensic scientist, researcher and more. With advanced study, a biology degree can provide great preparation for pursuing a Ph.D. or medical degree.

Students are strongly encouraged to pursue an internship or research opportunity to enhance their learning and improve their opportunities after graduation. Mount Mary biology students have completed internships at:

- Food technology laboratories
- The Milwaukee Public Museum
- Microbiology laboratories
- Research and development laboratories
- The Milwaukee County Zoo
- Veterinary clinics

#### SCHOLARSHIP ASSISTANCE

Did you know? 100% of incoming, full-time undergraduate students receive an academic scholarship or reduced tuition.

In addition, the Ruth Debelack Memorial Scholarship provides financial assistance to biology students. Contact the Financial Aid Office at **mmu-finaid@mtmary.edu** for scholarship details.