

# BIOLOGY MAJOR (BS PROGRAM)

Declaration of Major | 2014-2015 Catalog



EDGEWOOD COLLEGE

Name: \_\_\_\_\_ ID: \_\_\_\_\_

Major Advisor Approval: \_\_\_\_\_ Date: \_\_\_\_\_

Department Chair Approval: \_\_\_\_\_ Date: \_\_\_\_\_

Intended Graduation Month:  January  August  May Intended Graduation Year: \_\_\_\_\_

THIS FORM IS TO ADD/DECLARE A MAJOR. IF YOU WISH TO DROP/REMOVE A PREVIOUSLY DECLARED MAJOR, YOU MUST SUBMIT A SEPARATE MAJOR DECLARATION DROP FORM. THIS FORM IS AVAILABLE AT REGISTRAR.EDGEWOOD.EDU.

**Requirements for the Biology major include 38 credits in Biology, 8 credits in Chemistry, a Mathematics course, and completion of an independent research project:**

**Transfer credit applied (including AP/CLEP/etc):**

Biology core courses (24 credits):

Course/Institution:

- |                          |         |     |   |
|--------------------------|---------|-----|---|
| <input type="checkbox"/> | BIO 151 | ESU | General Biology: Cell Biology and Ecology<br>OR               |
| <input type="checkbox"/> | BIO 181 | ESU | Honors General Biology: Cell Biology and Ecology              |
| <input type="checkbox"/> | BIO 152 | S   | General Biology: Genetics and Evolution<br>OR                 |
| <input type="checkbox"/> | BIO 182 | S   | Honors General Biology: Information Flow in Living<br>Systems |
| <input type="checkbox"/> | BIO 251 | IX  | Introduction to Biology Research I                            |
| <input type="checkbox"/> | BIO 351 |     | Organismal Botany   |
| <input type="checkbox"/> | BIO 352 |     | Organismal Zoology  |
| <input type="checkbox"/> | BIO 401 |     | Genetics  |
| <input type="checkbox"/> | BIO 480 | 3   | Biology Seminar   |

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A minimum of 14 credits of elective biology courses to include at least one course in each of the following areas of emphasis: Cell and Molecular Biology, Ecology and Evolution, and Organismal Biology (see list below). At least one of these courses must be a 400 level course. "Special Topics" courses are occasionally offered (BIO 269, 369, 469). These may be considered by the department as fulfilling the requirement for one area of emphasis; all 3-4 credit BIO 469 courses fulfill the 400-level requirement. The remainder of the 14 credits may be satisfied with any elective biology course:

### Cell and Molecular Biology

Select at least one:

- |                          |         |   |                            |
|--------------------------|---------|---|----------------------------|
| <input type="checkbox"/> | BIO 201 |   | Biotechnology              |
| <input type="checkbox"/> | BIO 312 | S | Microbiology               |
| <input type="checkbox"/> | BIO 402 |   | Cell and Molecular Biology |
| <input type="checkbox"/> | BIO 406 |   | Medical Microbiology       |
| <input type="checkbox"/> | BIO 408 |   | Immunology                 |

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### Ecology and Evolution

Select at least one:

- |                          |         |    |                                       |
|--------------------------|---------|----|---------------------------------------|
| <input type="checkbox"/> | BIO 206 | EV | Natural Communities of Wisconsin      |
| <input type="checkbox"/> | BIO 250 | EV | Introduction to Environmental Biology |

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- BIO 275 E Dendrology
- BIO 333 E Ecological History of Civilization
- BIO 430 S Animal Behavior
- BIO 450 E Ecology

**Organismal Biology**

Select at least one:

- BIO 208 Nutrition
- BIO 210 Anatomy and Physiology I
- BIO 211 Anatomy and Physiology II
- BIO 220 V Biomechanics
- BIO 410 Pathology
- BIO 415 Exercise Physiology
- BIO 425 Animal Physiology

Other elective courses:

- BIO 252 Intro to Bio Research II
- BIO 269 Special Topics in Biology
- BIO 292 Biology Excursions
- BIO 369 Special Topics in Biology
- BIO 445 Biological Psychology
- BIO 469 Special Topics in Biology
- BIO 479 Independent Study
- BIO 489 Field/Laboratory Research

One of the following chemistry sequences:

- CHEM 110 & 111 S Introductory Chemistry Introductory Organic Chemistry and Biochemistry
- CHEM 120 & 121 S General Chemistry I & General Chemistry II

One mathematics course from:

- MATH 114A M Precalculus A: Algebra
- MATH 114B Precalculus B: Accelerated Trigonometry
- MATH 231 M Calculus I (not required)

Biology majors should consult with their advisors about this requirement at the time that the major is declared.

Students with specific goals for careers or post-graduate study may be advised to take some courses at the University of Wisconsin-Madison through Edgewood College's Collaborative Program.

**Policies:**

At least 12 Biology credits at Edgewood College.

2.5 GPA or better in Biology courses.

CD or better in Biology courses.

Completion of the major includes participation in independent research. Each student will present his or her research project in Biology Seminar (BIO 480).