

# BIOLOGY MAJOR (BS PROGRAM)

Declaration of Major | 2012-2013 Catalogue



EDGEWOOD COLLEGE

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

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

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

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

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

Biology core courses (24 credits):

- BIO 151 ESU General Biology: Cell Biology and Ecology  
OR
- BIO 181 ESU Honors General Biology: Cell Biology and Ecology
- BIO 152 S General Biology: Genetics and Evolution  
OR
- BIO 182 S Honors General Biology: Information Flow in Living Systems
- BIO 251 IX Introduction to Biology Research I
- BIO 351 Organismal Botany
- BIO 352 Organismal Zoology
- BIO 401 Genetics
- BIO 480 3 Biology Seminar

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

Course/Institution:


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:

- BIO 201 Biotechnology
- BIO 312 S Microbiology
- BIO 402 Cell and Molecular Biology
- BIO 406 Medical Microbiology
- BIO 408 Immunology


Ecology and Evolution:

- BIO 206 EV Natural Communities of Wisconsin
- BIO 250 EV Environmental Biology
- BIO 275 Dendrology
- BIO 333 E Ecological History of Civilization


BIO 430 S Animal Behavior

BIO 450 E Ecology

Organismal Biology:

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 Comparative Animal Physiology

Other Elective Courses:

BIO 252 Intro to Bio Research II

BIO 269 Special Topics in Biology (1-4 cr)

BIO 292 Biology Excursions (1-3 cr)

BIO 369 Special Topics in Biology (1-4 cr)

BIO 445 Biological Psychology

BIO 469 Special Topics in Biology (1-4 cr)

BIO 479 Independent Study (1-3 cr)

BIO 489 Field/Laboratory Research (1-3 cr)

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:

MATH 114A M Precalculus A: Algebra,

MATH 114B Precalculus B: Trigonometry

MATH 231 M Calculus I (not required)

Completion of the major includes participation in independent research. Each student will present his or her research project in Biology Seminar (BIO 480). Biology majors should consult with their advisors about this requirement at the time that the major is declared.

### Policies for the Biology major and minor

Students majoring or minoring in Biology should seek assistance in planning their program of study with an advisor in the department.

Transfer students must take a minimum of 12 biology credits at Edgewood College for a major and a minimum of 8 biology credits for a minor.

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.

A student must maintain a cumulative grade point average of 2.5 in biology courses. A biology course in which the student receives a grade below "CD" will not be accepted toward the major or the minor.