

# BIOLOGY MAJOR

(BS PROGRAM)



2017-2018 Catalog  
Information Sheet

EDGEWOOD COLLEGE

*This Information Sheet is for advising purposes only. Do not submit this form as a Major/Minor Declaration Form; a separate form is required to declare your major/minor.*

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

## Major Requirements:

### Required Core Courses (15 credits):

BIO 151	ESU	General Biology: Ecology, Genetics and Evolution*
		OR
BIO 181	ESU	Honors Gen. Bio.: Ecology, Genetics and Evolution*
BIO 152	S	General Biology: Cells and Molecules*
		OR
BIO 182	S	Honors General Biology: Cells and Molecules*
BIO 353		Organismal Biology*
BIO 401		Genetics*

### Required Three Semester Research Sequence (6 Credits):

BIO 251	IX	Introduction to Biology Research I*
BIO 252		Introduction to BIO Research II*+
		OR
BIO 489		Field/Laboratory Research*+
BIO 480	3K	Biology Seminar*

+ Instructor Approval Required

### Biology Electives (18 Credits):

Biology majors must take at least 18 credits of electives. This must include one course from each of the following three areas of emphasis; the remainder of the 18 credits may be satisfied with any biology elective. In addition, at least two of the elective selections 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, and all 3-4 credits BIO 469 courses fulfill the 400-level requirement.

### One of the following Cell and Molecular Biology Courses:

BIO 201	V	Biotechnology AND current enrollment in
BIO 203	V	Molecular Biotechnology
BIO 402		Cell and Molecular Biology*
BIO 406		Medical Microbiology*
BIO 408		Immunology*

One of the following Ecology and Evolutions Courses:

BIO 206	EV	Natural Communities of Wisconsin
BIO 250	EV	Introduction to Environmental Science
BIO 275	E	Dendrology: Trees and Shrubs of Wisconsin
BIO 333	E	Ecological History of Civilization*
BIO 430	S	Animal Behavior*
BIO 450	E	Ecology*

One of the following Organismal Biology:

BIO 208		Nutrition
BIO 210		Anatomy and Physiology I*
BIO 211		Anatomy and Physiology II*
BIO 220	V	Introduction to Human Biomechanics*
BIO 312	S	Microbiology*
BIO 410	K	Pathology
		OR
BIO 412		Pathophysiology
BIO 415		Exercise Physiology*
BIO 425		Animal Physiology*

Other Elective Courses:

BIO 269		Special Topics in Biology
BIO 292		Biology Excursions*
BIO 369		Special Topics in Biology*
BIO 445	V	Bio-Psychology
BIO 479		Independent Study in Biology*
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 of the following Mathematics courses:

MATH 114A	M	Precalculus A: College Algebra*
MATH 114B		Precalculus B: Trigonometry*
MATH 231	M	Calculus I*

*\*course has prerequisites*

**Policies:**

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.

Students majoring 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. 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.