

BIOLOGY TEACHING MAJOR

(BS PROGRAM)



EDGEWOOD COLLEGE

2017-2018 Catalog

Information Sheet

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.

This major is designed for individuals who wish to be certified to teach biology at the secondary level (Wisconsin Department of Instruction [WDPI] category Early Adolescence through Adolescence, Ages 10-21; WDPI 605).

This major requires completion of the requirements below, the Education Professional Requirements and the licensing requirements for teacher education (see EDUCATION).

Biology Teaching majors seeking Wisconsin certification will be required to pass PRAXIS II Exam 10435 to be eligible for certification. It is recommended that Biology Teaching majors complete the Natural Science Teaching minor to strengthen their understanding of physics and the geosciences as defined in the "WDPI Content Guidelines for Life and Environmental Science Including Biology and Environmental Studies" and prepare for their WDPI content exam.

Major Requirements:

Thirty-six (36) required Biology credits to include the following core courses:

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 251	IX	Introduction to Biology Research I*
BIO 353		Organismal Biology*
BIO 401		Genetics*
BIO 480	3K	Biology Seminar*

A minimum of 2 credits from the following:

BIO 206	EV	Natural Communities in Wisconsin
BIO 250	EV	Introduction to Environmental Science
BIO 430	S	Animal Behavior*
BIO 450	E	Ecology*

A minimum of 2 credits from the following:

BIO 201	V	Biotechnology
BIO 312	S	Microbiology*
BIO 402		Cell and Molecular Biology*

Additional credits from the following:

BIO 201	V	Biotechnology
BIO 203		Molecular Biotechnology
BIO 206	EV	Natural Communities of Wisconsin
BIO 208		Nutrition
BIO 210		Anatomy and Physiology I*

BIO 211		Anatomy and Physiology II*
BIO 275	E	Dendrology: Trees and Shrubs of Wisconsin
BIO 292		Biology Excursions*
BIO 312	S	Microbiology*
BIO 402		Cell and Molecular Biology*
BIO 406		Medical Microbiology*
BIO 408		Immunology*
BIO 410	K	Pathology*
		OR
BIO 412		Pathophysiology*
BIO 425	S	Animal Physiology
BIO 445	V	Biology Psychology*
BIO 450	E	Ecology*
BIO 469		Special Topics in Biology*
BIO 479		Independent Study in Biology*
BIO 489		Field/Laboratory Research*
BIO 499		Biology Assessment*

Additional Requirements

ENVS 216/ GEOS 206	EV	Environmental Geology
		OR
GEOS 102	S	Introduction to Earth Science*
PHYS 130	S	General Physics I*
		OR
PHYS 201	SU	College Physics I*

A two semester sequence of Chemistry:

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

One Mathematics course from the following:

MATH 114A	M	Precalculus A: College Algebra*
MATH 231	M	Calculus I*
MATH 232	M	Calculus II*
MATH 233	M	Calculus III*

One semester of the methods of teaching science and accompanying practicum:

NATS 459		Teaching Science in Middle/Secondary Schools*
NATS 250	PV	History and Philosophy of Science*

**course has prerequisites*

Students must be fully admitted to the teacher education program and have completed their science coursework before enrolling in NATS 459.

Students will also complete the WDPI content exam, PRAXIS Exam 10435, with a passing score.