

# BIOLOGY TEACHING 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: \_\_\_\_\_

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

This major requires completion of the requirements listed 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.

## Thirty-six required biology credits to include:

The following required core courses:

- BIO 151 ESU General Biology: Cell Biology and Ecology
- BIO 152 S General Biology: Genetics and Evolution
- 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 2 credits from the following:

- BIO 206 EV Natural Communities of Wisconsin
- BIO 250 EV Environmental Biology
- BIO 430 Animal Behavior
- BIO 450 E Ecology

A minimum of 2 credits from the following:

- BIO 201 Biotechnology
- BIO 312 S Microbiology
- BIO 402 Cell and Molecular Biology

Additional credits from the following:

- BIO 201 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 Dendrology
- BIO 292 Biology Excursions

- BIO 312 S Microbiology
- BIO 402 Cell and Molecular Biology
- BIO 406 Medical Microbiology
- BIO 408 Immunology
- BIO 410 Pathology
- BIO 430 Animal Behavior
- BIO 445 Biological Psychology
- BIO 450 E Ecology
- BIO 469 Special Topics in Biology (1-3 cr)
- BIO 479 Independent Study (1-3 cr)
- BIO 489 Field/Laboratory Research (1-3 cr)

**Additional requirements**

- PHYS 130 S General Physics I  
OR
- PHYS 201 S College Physics I
- GEOS 102 S Introduction to Earth Science I  
OR
- GEOS 206 S Environmental Geology

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 among:

- MATH 114A M Precalculus A: Accelerated 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 459S Teaching Science in Middle/Secondary Schools

Students must be fully admitted to teacher education and have completed their science coursework before being admitted to NATS 459S.

- NATS 250 PV History and Philosophy of Science

Completion of WDPI content exam, PRAXIS Exam 10435, with a passing score.