



# Aquatic Biology, B.S. *major*

## Wetlands Ecology Emphasis

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Required Credits: 77

Required GPA: 2.25

### I REQUIRED BIOLOGY CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- BIOL 1211 Introductory Biology I (4 credits)
- BIOL 1212 Introductory Biology II (4 credits)
- BIOL 2360 Genetics (4 credits)
- BIOL 2610 General Ecology (3 credits)
- BIOL 2620 Field and Laboratory Projects in Ecological Research (2 credits)

### II REQUIRED AQUATIC BIOLOGY CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- BIOL 4200 Freshwater Invertebrates (4 credits)
- BIOL 3361 Limnology I (4 credits)
- BIOL 3362 Limnology II (4 credits)
- BIOL 3554 Readings in Aquatic Biology (1 credit)
- BIOL 3830 Aquatic Plants (4 credits)

### III CAPSTONE EXPERIENCE

Complete option A, B or C.

A. COMPLETE THE FOLLOWING COURSES:

- BIOL 4894 Advanced Laboratory Projects in Biology I (2 credits)
- BIOL 4895 Advanced Laboratory Projects in Biology II (2 credits)

B. COMPLETE THE FOLLOWING COURSES

- BIOL 4896 Advanced Field Projects in Biology I (2 credits)
- BIOL 4897 Advanced Field Projects in Biology II (2 credits)

C. COMPLETE SOME OTHER CAPSTONE EXPERIENCE APPROVED BY

YOUR BIOLOGY ACADEMIC ADVISOR AND THE DEPARTMENT

### WETLANDS ECOLOGY EMPHASIS

REQUIRED CORE COURSES:

COMPLETE THE FOLLOWING COURSES:

- BIOL 3840 Wetlands Ecology (3 credits)  
or ENVR 3840 Wetlands Ecology (3 credits)
- BIOL 3844 Wetlands Ecology Lab (1 credit)
- BIOL 4030 Wetland Delineation and Classification (3 credits)

ELECTIVE CORE COURSES

SELECT A MINIMUM OF 8 CREDITS FROM THE FOLLOWING:

- BIOL 3630 Conservation Biology (3 credits)  
or GEOG 3630 Conservation Biology (3 credits)
- BIOL 3723 Ecosystem Ecology (3 credits)
- CHEM 3150 Standard Methods of Water Analysis (3 credits)
- ENVR 4210 Environmental Law and Policy (3 credits)
- GEOG 2231 Geographic Information Systems (3 credits)
- GEOG 2232 Techniques In Geographic Information Systems (3 credits)

- GEOL 3211 Environmental Hydrology (3 credits)
- BIOL 3120 Soils (4 credits)  
or GEOL 3120 Soils (4 credits)
- BIOL 4031 Advanced Wetland Delineation (2 credits)

ADDITIONAL ELECTIVES

SELECT AN ADDITIONAL 4-5 CREDITS OF BIOLOGY ELECTIVES AT THE 3000 LEVEL OR ABOVE.

### V REQUIRED COURSES IN RELATED FIELDS

COMPLETE THE FOLLOWING COURSES:

- CHEM 2211 Principles of Chemistry I (4 credits)
- CHEM 2212 Principles of Chemistry II (4 credits)
- STAT 2610 Applied Statistics (4 credits)  
or PSY 3401 Basic Statistics for Research (4 credits)

SELECT 1 OF THE FOLLOWING COURSES:

- PHYS 1101 General Physics I (4 credits)
- PHYS 2101 Physics I (5 credits)

SELECT 1 OF THE FOLLOWING COURSES:

- PHYS 1102 General Physics II (4 credits)
- PHYS 2102 Physics II (5 credits)

### SUGGESTED SEMESTER SCHEDULE FOR AQUATIC BIOLOGY MAJOR, B.S.

The following is a list of required Aquatic Biology Major, B.S. courses arranged by year. This schedule is intended to assist students in planning their courses. There is some flexibility in this schedule, but graduation within four years will require close adherence to the specified sequence of courses. Always consult your academic advisor in Aquatic Biology as to the proper courses and sequence of courses needed for graduation.

Note: With proper student planning and in consultation with the Aquatic Biology academic advisor a student may complete his or her academic degree in 120 semester credits. It is possible, in some circumstances, that courses in a student's Liberal Education program may be used in his or her academic major. Freshman

- BIOL 1211 Introductory Biology I (4 credits)
- BIOL 1212 Introductory Biology II (4 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)
- CHEM 2212 Principles of Chemistry II (4 credits)
- Liberal Education requirements

Sophomore

- BIOL 2360 Genetics (4 credits)
- BIOL 2610 General Ecology (3 credits)
- BIOL 2620 Field and Laboratory Projects in Ecological Research (2 credits)
- PHYS 1101 General Physics I (4 credits)
- PHYS 1102 General Physics II (4 credits)
- \*STAT 2610 Applied Statistics (4 credits)  
or PSY 3401 Basic Statistics for Research (4 credits)
- Liberal Education requirements

Junior

- BIOL 3361 Limnology I (4 credits)
- BIOL 3362 Limnology II (4 credits)
- BIOL 3554 Readings in Aquatic Biology (1 credit)
- BIOL 3830 Aquatic Plants (4 credits)
- BIOL 4200 Freshwater Invertebrates (4 credits)
- Complete Liberal Education requirements
- Writing course
- Elective courses in field of emphasis

Senior

- Capstone Experience: Option A, B, or C
- Elective courses in field of emphasis