



Department of Biological Sciences
College of Science, Technology, Engineering,
and Math (2026-27)

Suggested Curriculum Guide for B.S. in Biology, Aquatic Biology Concentration

Freshman (1st Semester) 17 hrs

GSD 101- Foundations in Learning	3
BIO 111/111L- Cell and Molecular Biology/Lab	4
CHE 111 (<i>fulfills Gen. Ed.</i>)- General Chemistry I	3
CHE 111L- General Chemistry I Lab	1
Gen. Ed. Element	3
Gen. Ed. Element	3

Sophomore (1st Semester) 14-15 hrs

BIO 319- Zoology	4
CHE 361- Organic Chemistry I	3
CHE 361L- Organic Chemistry I Lab	1
STA 215 <i>or</i> 270- Intro. to Statistical Reasoning or Applied Statistics	3-4
Free Elective	3

Junior (1st Semester) 15 hrs

BIO 315- Genetics	4
PHY 131 College Physics I <i>or</i> 201 University Physics I	5
Flex/Elective	3
Free Elective	3

Senior (1st Semester) 15-16 hrs

BIO 495- Evolution Theory and Application	1
BIO 542- Freshwater Invertebrates	3
BIO 557- Ichthyology	3
Gen. Ed. Element	3
Free Elective	3
Free Elective	2-3

Freshman (2nd Semester) 14-15 hrs

BIO 112/BIO 112L- Ecology and Evolution/Lab	4
CHE 112- General Chemistry II	3
CHE 112L- General Chemistry II Lab	1
MAT 234 <i>or</i> MAT 211 (<i>fulfills Gen. Ed.</i>)- Calculus I <i>or</i> Applied Calculus	3-4
Gen. Ed. Element	3

Sophomore (2nd Semester) 14 hrs

BIO 318- Botany	4
BIO 316- Ecology	4
Gen. Ed. Element	3
Gen. Ed. Element	3

Junior (2nd Semester) 16 hrs

BIO 320 - Principles of Microbiology	4
Gen. Ed. Element	3
Free Elective	3
Free Elective	3
Free Elective	3

Senior (2nd Semester) 12-14 hrs

BIO 525- Aquatic and Wetland Plants	3
BIO 558- Freshwater Ecology	3
BIO 556, 561, <i>or</i> GLY 315- Herpetology, Fisheries Biology, or Hydrology	3
Gen. Ed. Element	3
Free Elective (<i>upper division</i>)	0-2

^a Denotes that 3 credit hours from this course are/can be applied to fulfill a Gen. Ed. requirement.

UNIVERSITY GRADUATION REQUIREMENTS

General Education
Foundations in Learning (GSD 101; waived for transfers with 30+ hrs)

33 hours
30 hours
3 hours

MAJOR REQUIREMENTS

Core Courses

BIO 111, BIO 111L, BIO 112, BIO 112L BIO 315, BIO 316, BIO 318, BIO 319, BIO 320, BIO 495

29 hours

Concentration Requirements

BIO 525, BIO 542, BIO 557, BIO 558
† PLUS, THREE (3) HOURS selected from: BIO 556, BIO 561, GLY 315

15 hours

Supporting Course Requirements

^GCHE 111, CHE 111L, CHE 112, CHE 112L, CHE 361, CHE 361L, ^G*MAT 234 or ^G* MAT 211, ^G* PHY 131 or PHY 201, STA 215 or STA 270

14-16 Courses

Free Electives

27-29 hours

Total Curriculum Requirements

120 hours