



Department of Biological Sciences
College of Science, Technology, Engineering,
and Math (2025-26)

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

Freshman (1st Semester) 17 hrs

GSD 101- Foundations in Learning	3
BIO 111/L- Cell and Molecular Biology/Lab	4
^G CHE 111 (<i>fulfills Gen. Ed. 4</i>)- General Chemistry I	3
CHE 111L- General Chemistry I Lab	1
Gen. Ed. 1A (<i>ENG 101</i>)	3
Gen. Ed. 3A (<i>Arts</i>)	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
^G PHY 131 <i>or</i> 201 (<i>fulfills Gen. Ed. 4</i>)- College Physics I or University Physics I	5
Gen. Ed. 5A (<i>History</i>)	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. 3B Course 2	3
Free Elective	3
Free Elective	2-3

Freshman (2nd Semester) 14-15 hrs

BIO 112/L- Ecology and Evolution/Lab	4
CHE 112- General Chemistry II	3
CHE 112L- General Chemistry II Lab	1
^G MAT 234 <i>or</i> 211 (<i>fulfills Gen. Ed. 2</i>)- Calculus I <i>or</i> Applied Calculus	3-4
Gen. Ed. 1B (<i>ENG 102</i>)	3

Sophomore (2nd Semester) 14 hrs

BIO 318- Botany	4
BIO 316- Ecology	4
Gen. Ed. 1C (<i>Oral Comm.</i>)	3
Gen. Ed. 3B (<i>Humanities</i>) Course 1	3

Junior (2nd Semester) 16 hrs

BIO 320 (<i>ACCT</i>)- Principles of Microbiology	4
Gen. Ed. 5B (<i>Soc. & Behav. Sci.</i>) Course 1	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. 5B course 2	3
Free Elective (<i>upper division</i>)	0-2

^G 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)

39 hours
36 hours
3 hours

MAJOR REQUIREMENTS
Core Courses
BIO 111/111L, BIO 112/112L, 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
^G CHE 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 hours

Free Electives

21-23 hours

Total Curriculum Requirements

120 hours