



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

Suggested Curriculum Guide for B.S. in Biomedical Sciences Biomedical Research Concentration

Freshman (1st Semester) 17-18 hrs

GSD 101 Foundations of Learning	3
BIO 111/BIO 111L Cell and Molecular Biology	4
CHE 111 (fulfills Gen. Ed.) General Chemistry I	3
CHE 111L General Chemistry I Lab	1
STA 270 or STA 215 (fulfills Gen. Ed.)	3-4
Gen. Ed. Element	3

Freshman (2nd Semester) 15 hrs

BIO 112/BIO 112L Ecology and Evolution	4
CHE 112 General Chemistry II	3
CHE 112L General Chemistry II Lab	1
MAT 234 Calculus I	4
Gen. Ed. Element	3

Sophomore (1st Semester) 16 hrs

BIO 208/BIO 208L Anatomy & Physiology I	4
CHE 361 Organic Chemistry I	3
CHE 361L Organic Chemistry I Lab	1
PHY 131 College Physics or PHY 201 University Physics I	5
Gen. Ed. Element	3

Sophomore (2nd Semester) 16 hrs

BIO 332 Careers in Biomedical Sciences	1
BIO 320 Principles of Microbiology	4
CHE 362 Organic Chemistry II	3
CHE 362L Organic Chemistry II Lab	1
BIO 308/BIO 308L Anatomy & Physiology II	4
Gen. Ed. Element	3

Junior (1st Semester) 13 hrs

BIO 315 Genetics	4
BIO 331 Cell Biology	3
Free Elective	3
† Restricted Elective	3

Junior (2nd Semester) 14-15 hrs

BIO 348 Vertebrate Physiology	3
CHE 432 Biochemistry Lab	1
PHI 383 Health & Biomedical Ethics	3
Gen. Ed Element	3
Free Elective	3
Free Elective	1-2

Senior (1st Semester) 17 hrs

BIO 531 Principle of Molecular Biology	4
Restricted Elective	3
Gen Ed. Element	3
BIO 527 Immunology	4
Free Elective	3

Senior (2nd Semester) 13 hrs

BIO 495 Evolutionary Application & Theory	1
Restricted Elective	3
Gen Ed. Element	3
Free Elective	3
Gen. Ed. Element	3

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

PREREQUISITES: Consult with your advisor and/or the University catalog regarding prerequisites for upper division BIO courses.

. ♦ Due to variable course hour choices for MAT requirement and concentration requirements, marked free electives may also be variable.

Consult with your advisor to ensure you have a minimum of 120 total credit hours for graduation.

UNIVERSITY GRADUATION REQUIREMENTS33 hours

General Education	30 hours
Foundations in Learning (GSD 101; waived for transfers with 30+ hrs)	3 hours

MAJOR REQUIREMENTS

Core Courses28 hours

BIO 111/111L, BIO 112/112L, BIO 208/208L, BIO 308/308L, BIO 315, BIO 320, BIO 331, BIO 332, BIO 348, BIO 495, BIO 527

Concentration Requirements 25 hours

BIO 531, *CHE 362, *CHE 362L, *CHE 432, *MAT 234

† PLUS NINE (9) HOURS selected from the following (restricted elective):

BIO 319, BIO 342, BIO 528, BIO 533, BIO 535, BIO 546, BIO 547, BIO 549, BIO 598, §* CHE 430, §* CHE 431

§ Cannot be used for credit in both concentration requirement and restricted electives categories above.

Supporting Course Requirements 17-18 hours

†CHE 111, *CHE 111L, CHE 112, CHE 112L, *CHE 361, *CHE 361L, PHI 383, †* PHY 131 or †* PHY 201, †STA 215 Intro to Stats or †* STA 270 Applied Stats

Free Electives 16-17 hours

Total Curriculum Requirements120 hours