



of Biological Sciences

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

Suggested Curriculum Guide for B.S. in Biomedical Sciences, Pre-Dental Concentration

Freshman (1st Semester) 17 hrs

GSD 101 Foundations of Learning	3
BIO 111/BIO 111L Cell & Molecular Biology	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) 15-16 hrs

CHE 361 Organic Chemistry I	3
CHE 361L Organic Chemistry I Lab	1
PHY 131 College Physics <i>or</i> PHY 201 Univ. Physics I	5
STA 215 <i>or</i> STA 270 (<i>fulfills Gen. Ed.</i>)	3-4
Gen. Ed. Element	3

Junior (1st Semester) 18 hrs

BIO 331 Cell Biology	3
BIO 315 Genetics	4
BIO 208/BIO 208L Anatomy & Physiology I	4
CHE 430 Biochemistry <i>or</i> CHE 431 Biochem of Macromolecules	3
BIO 342 Comp. Vertebrate Anatomy <i>or</i> Free Elect.	4

Senior (1st Semester) 17 hrs

Restricted Elective	4
Free Elective	3
Gen. Ed. Element	3
Free Elective	3
BIO 527 Immunology	4

Freshman (2nd Semester) 14-16 hrs

BIO 112/BIO 112L Ecology & Evolution	4
CHE 112 General Chemistry II	3
CHE 112L General Chemistry II Lab	1
MAT 120 <i>or higher</i> (MAT 234 recommended) Trig. <i>or</i> higher	3-5
Gen. Ed. Element	3

Sophomore (2nd Semester) 15 hrs

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

Junior (2nd Semester) 13 hrs

BIO 348 Vertebrate Physiology	3
PHI 383-Health & Biomedical Ethics	3
BIO 308/308L Anatomy & Physiology II	4
Gen. Ed. Element	3

Senior (2nd Semester) 11-15 hrs

BIO 546 (<i>spring only</i>) Histology <i>or</i> Free Elective	4
BIO 495 Evolutionary Applications & Theory	1
Restricted Elective	3-4
Gen. Ed. Element	3
Free Elective	0-3

⁶ 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.

. ⁴ 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 REQUIREMENTS 33 hours

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

MAJOR REQUIREMENTS

Core Courses 28 hours

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

Concentration Requirements23-25 hours

BIO 342 Comparative Vertebrate Anatomy or BIO 546 Histology, *CHE 362, *CHE 362L, *CHE 430 Biochem of Macromolecules or *CHE 431 Metabolic Biochem, *MAT 120 (or higher)

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

§ BIO 319, BIO 342, BIO 527, BIO 528, BIO 531, BIO 535, BIO 546, § BIO 547, BIO 549, BIO 598, §*CHE 430, §*CHE 431, *CHE 432

Supporting Course Requirements 17-18 hours

⁶CHE 111, *CHE 111L, CHE 112, CHE 112L, *CHE 361, *CHE 361L, PHI 383, ⁶*PHY 131 College Physics I or ⁶*PHY 201 University Physics I, ⁶STA 215 Intro to Stats or ⁶*STA 270 Applied Stats

Free Electives 16-19 hours

Total Curriculum Requirements 120 hours