



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

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

Freshman (1st Semester) 17 hrs

GSD 101- Foundations in Learning	3
BIO 111/L- Cell and Molecular Biology/Lab	4
⁶ 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. 5B (<i>Soc. & Behav. Sci.</i>) (<i>ANS 200 recommended</i>)	3

Sophomore (1st Semester) 15-16 hrs

BIO 319- Zoology	3
CHE 361- Organic Chemistry I	3
CHE 361L- Organic Chemistry I Lab	1
⁶ PHY 131 <u>or</u> PHY 201 (<i>fulfills Gen. Ed. 4</i>)- College Physics I <u>or</u> University Physics I	5
⁶ STA 215 <u>or</u> STA 270 (<i>fulfills Gen. Ed. 2</i>)- Intro. to Statistical Reasoning <u>or</u> Applied Statistics	3-4

Junior (1st Semester) 14-16 hrs

BIO 331- Cell Biology	3
CHE 430 Biochemistry of Macromolecules	3
<u>or</u> 431 Metabolic Biochemistry (<i>Spring only →</i>)	
PHI 383- Health & Biomedical Ethics	3
Restricted Elective	3-4
Free Elective	1

Senior (1st Semester) 13-17 hrs

AGR 321 (<i>fall only</i>) <u>or</u> † Restricted Elective- Feeds and Feeding	3-4
Gen. Ed. 3A (<i>Arts</i>)	3
Gen. Ed. 3B course 1	3
Free Elective	4
Free Elective	0-3

Freshman (2nd Semester) 14-16 hrs

BIO 112/L- Ecology and Evolution/Lab	4
CHE 112- General Chemistry II	3
CHE 112L- General Chemistry II Lab	1
MAT 120 <i>or higher</i> - Trigonometry	3-5
Gen. Ed. 1B (<i>ENG 102</i>)	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. 1C (<i>CMS 100 or 210</i>)	3
Free Elective	3

Junior (2nd Semester) 13-16 hrs

BIO 315- Genetics	4
BIO 348- Vertebrate Physiology	3
INF 104- Computer Literacy with Software Apps.	3
Gen Ed. 5A (<i>History</i>)	3
Free Elective	0-3

Senior (2nd Semester) 13-16 hrs

AGR 421 (<i>spring only</i>) <u>or</u> † Restricted Elective- Animal Nutrition	3-4
BIO 495- Evolution Theory and Application	1
† Restricted Elective	3-4
Gen Ed. 3B (<i>Humanities</i>) course 2	3
Gen Ed. 5B course 2	3
Free Elective	0-1

⁶ 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, BIO 112, BIO 315, BIO 319, BIO 320, BIO 331, BIO 332, BIO 348, BIO 495

28 hours

Concentration Requirements

AGR 321 or *AGR 421, *CHE 362, *CHE 362L, *CHE 430 or *CHE 431, *MAT 120 (or higher)

22-25 hours

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

BIO 342, BIO 514, BIO 527, BIO 528, BIO 531, BIO 533, BIO 535, BIO 546, BIO 547, BIO 549, BIO 550, BIO 552, BIO 598, §*CHE 430, §*CHE 431, *CHE 432

Supporting Course Requirements

⁶CHE 111, *CHE 111L, CHE 112, CHE 112L, *CHE 361, *CHE 361L, INF 104, PHI 383, ⁶* PHY 131 or ⁶* PHY 201, ⁶STA 215 or ⁶* STA 270

17-18 hours

Free Electives

10-14 hours

Total Curriculum Requirements

120 hours