

# Suggested Four-Year Plan of Study BIOLOGY AND CHEMISTRY



## Biotechnology B.S. (Bachelor of Science)

### FRESHMAN YEAR

#### Fall Semester 14 Credits

ENGL 1100	Writing I.....	3
BIOL 1800	General Biology I* .....	4
CHEM 1300	General Chemistry I* (SI) .....	4
FYE 1015	First Year Experience.....	3

\* General Chemistry requires a 'passing' score on Advanced and Functions Accuplacer exam OR successful completion of MATH 0500 (Algebraic Preparation) prior to enrollment. To continue as a Biology major, students must earn a grade of 2.0 or higher in General Biology I and General Chemistry I.

#### Spring Semester 15 Credits

ENGL 1200	Writing II.....	3
BIOL 1900	General Biology II.....	4
CHEM 1400	General Chemistry II (PL) .....	4
MATH 1300	Precalculus .....	4

### JUNIOR YEAR

#### Fall Semester 17 Credits

BIOL 2250	Cell Biology .....	4
PHYS 2300	General Physics I .....	4
	General Education/Exploration .....	3
	General Education/Exploration .....	3
	Free Elective .....	3

#### Spring Semester 13-14 Credits

BIOL ≥2000	Biology Elective .....	3-4
PHYS 2400	General Physics II .....	4
	General Education/Exploration .....	3
	Free Elective .....	3

#### General Education: Foundation

- 3 credits Reading and Information Literacy (R and IL): First Year Experience
- 3 credits Writing (W): Writing I
- 3 credits Writing and Information Literacy (W and IL): Writing II
- 3 credits Quantitative Reasoning (QR) (MATH)
- 3 credits World Languages, Speaking and Listening (WS)

#### General Education: Exploration

- 3 credits Civic Learning (CV)
- 3 credits Diverse Perspectives (DP)
- 3 credits Ethical Reasoning (ER)
- 3 credits Fine Arts Expression and Analysis (FA)
- 3 credits Historical Inquiry and Analysis (HI)
- 3 credits Literary Inquiry and Analysis (LI)
- 3 credits Personal Wellness (PW)
- 3 credits Procedural and Logical Thinking (PL)
- 3 credits Scientific Inquiry and Analysis (SI)

#### General Education: Integration

- 9 credits AIA (3 of which must be Integrative High Impact Practice - IHIP)
- OR
- Minor (professional majors completing a minor or second major must include at least 9 credits in LA&S disciplines for that minor)

#### General Education: MAJ

- There may be major courses that have been approved to fulfill up to 3 General Education requirements (at least 9 credits). Varies by major and concentration.

Suggested 4-year plan of study. Completion of 120 credits required for graduation.

### SOPHOMORE YEAR

#### Fall Semester 17 Credits

BIOL 2300	Ecology .....	4
CHEM 2000	Organic Chemistry I (AIA).....	4
MATH ≥1300**	Math Elective (QR).....	3
	General Education (WS) .....	3
	General Education/Exploration.....	3

\*\* Applied Statistics (MATH 1700) is recommended to fulfill the QR requirement.

#### Spring Semester 17 Credits

Genetics 2800	Genetics .....	4
CHEM 2100	Organic Chemistry II (AIA).....	4
	General Education/Exploration.....	3
	Free Elective .....	3
	Free Elective .....	3

### SENIOR YEAR

#### Fall Semester 15-17 Credits

BIOL ≥2000	Biology Elective*** .....	3-4
BIOL ≥2000	Biology Elective .....	3-4
	General Education/Exploration .....	3
	General Education/Exploration .....	3
	Free Elective .....	3

\*\*\* Three of the five Biology electives must be selected from the following courses: General Microbiology (BIOL 2150), Biochemical Techniques (BIOL 3060), Molecular Biology (BIOL 4500), Cell Culture Techniques (BIOL 3550), and Immunology (BIOL 4800). Additionally, one of the five must be designated as a Capstone course.

#### Spring Semester 13-16 Credits

BIOL ≥3000	Biology Elective (Capstone) (IHIP) .....	4
BIOL ≥2000	Biology Elective OR	
	Independent Study OR Internship.....	3-6
	Free Elective .....	3
	Free Elective .....	3