

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	Biotechnology 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)

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	Biotechnology 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 480). 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	Elective OR	
	Independent Study OR Internship.....	3-6
	Free Elective	3
	Free Elective	3

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.