

BIOLOGY MAJOR

Requirements for a Major in Biology

Code	Title	Credits
Required Biology courses (38 credits)		
BI-140	Introduction to Organismal Biology	4
BI-141	Intro to Cellular and Molecular Biology	4
BI-200	Human Biology (OR BI-161 AND BI-162 (Human Anatomy & Physiology I & II))	4
BI-202	Principles of Ecology	4
BI-203	Genetics	4
BI-204	Microbiology	4
BI-404	Biology Seminar	2
3 Upper Division Electives (300 or 400 level lab courses)		12
Ancillary Requirements (29 credits)		
MA-150	Statistics I	3
MA-190	Pre-calculus (or Higher)	4
CH-120 & CH-121	General Chemistry I and General Chemistry II	8
CH-201 & CH-202	Organic Chemistry I (lecture) and Organic Chemistry II (lecture)	6
PY-221 & PY-222	General Physics I and General Physics II	8
or PY-241 & PY-242	Physics I (Mechanics) and Physics II (Electricity, Magnetism and Optics)	
Total Credits		67

Students who also complete CH-203 and CH-204, and 3 additional credits in 200-level or higher chemistry courses can earn a chemistry minor.

Biology Upper-Level Electives

Code	Title	Credits
<i>Cellular & Molecular Pathways</i>		
BI-306	Developmental Biology	4
BI-324	Endocrinology	4
BI-341	Mycology	4
BI-371	Advanced Topics in Cell and Molecular Biology	4
BI-372	Immunology	4
BI-375	Virology	4
BI-398	Cancer Biology	4
BT-375	Tissue Culture	4
BT-376	Biotechnology	4
BT-377	Fermentation Technology	4
BT-378	Bioinformatics	4
BI/CH-410	Biochemistry I	4
Organismal & Ecological Systems (48 credits)		
BI-301	Topics in Invertebrate Zoology	4
BI-303	Parasitology	4
BI-304	Comparative Vertebrate Anatomy	4
BI-315	Comparative Neurobiology	4
BI-321	Comparative Physiology	4
BI-331	Marine Biology	4
BI-333	Topics in Vertebrate Zoology	4
BI-334	Wildlife Biology	4
BI-340	Plant Sciences	4

BI-344	Soil Biology	4
BI-360	Animal Behavior	4
BI-380	Biodiversity and Conservation Biology	4

(Note: Pre-med and graduate school candidates should also take CH-203 & CH-204 in addition to CH-201 and CH-202)

A minimum of three upper division laboratory courses (BI 300- or BI 400-level) are to be selected. Students must take at least one course from each category. Additional upper level elective courses or graduate research/internships are strongly encouraged. The courses should be selected with the advice and consent of the faculty advisor. A grade point average of 2.0 must be maintained in biology courses and in the ancillary science and mathematics courses. Students considering graduate and professional work should take, as a recommended minimum, calculus and introduction to computer science.

Sample Timeline for Completion of Degree

Year One		
Semester One		Credits
BI-140	Introduction to Organismal Biology	4
CH-120	General Chemistry I	4
EN-101	College Writing I ¹	3
MA-190	Pre-calculus	4
LASC	First-Year Seminar	3
Credits		18
Semester Two		
BI-141	Intro to Cellular and Molecular Biology	4
CH-121	General Chemistry II	4
EN-102	College Writing II ¹	3
MA-150	Statistics I	3
Credits		14
Year Two		
Semester Three		
BI-204	Microbiology	4
CH-201	Organic Chemistry I (lecture) ⁵	3
LASC	LASC Elective (ICW) ⁴	3
LASC	LASC Elective (CON) ⁴	3
LASC	LASC Elective (USW) ⁴	3
Credits		16
Semester Four		
BI-203	Genetics	4
CH-202	Organic Chemistry II (lecture) ⁵	3
LASC	LASC Elective (GP) ⁴	3
LASC	LASC Elective (CA) ⁴	3
LASC	LASC Elective (ICW)	3
Credits		16
Year Three		
Semester Five		
BI-202	Principles of Ecology	4
PY-221	General Physics I ^{6,7}	4
LASC	Ancillary or LASC Distribution ⁴	3
LASC	LASC Elective (TLC) ⁴	3
Credits		14
Semester Six		
BI-200	Human Biology ⁴	4
BI-3XX+	300 or 400 Major Elective	

PY-222	General Physics II ⁶	4
LASC	LASC Elective (HBS) ⁴	3
Credits		11
Year Four		
Semester Seven		
BI-3XX+	300 or 400 Major Elective Lab	4
BI-3XX+	300 or 400 Major Elective Lab	4
LASC	LASC Elective ⁴	3
SELECT	General Elective	3
Credits		14
Semester Eight		
BI-3XX+	300 or 400 Major Elective Lab	4
BI-404	Biology Seminar ⁸	2
SELECT	Additional Science	4
SELECT	General Elective	3
Credits		13
Total Credits		116

¹ EN-101 and EN-102 satisfy LASC Writing.

² MA-190 requires an Accuplacer score of 6 or higher.

³ MA-150 requires an Accuplacer score of 4 or higher.

⁴ The sequence of LASC courses is a suggestion but serves as a reminder that LASC designated courses must be taken to satisfy the LASC requirements.

⁵ Pre-med and Graduate school candidates should also take CH-203 & CH-204 in addition to CH-201 and CH-202. 200 level Biology courses may be taken in any order.

⁶ Physics Requirements: PY-221 & PY-222 OR PY-241 & PY-242 satisfies LASC NSP.

⁷ All biology core courses must be completed before taking BI-404 (BI-140, BI-141, BI-200 or BI-161 & BI-162, BI-202, BI-203, BI-204).

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/major or major/minor) to qualify for graduation. For more information, please view the MajorPlus section of this catalog.