

Major Program Guide For: B.S. in Biology¹ Concentration: Molecular Biology Suggested Course Sequence

Freshman Year

Fall				Spring			
Course Prefix or LS Requirement	Course Number	Course Title	Hours	Course Prefix or LS Requirement	Course Number	Course Title	Hours
BIOL	140	Principles of Biology I	4	BIOL	141	Principles of Biology II	4
CHEM	139	General Chemistry I	4	CHEM	140	Advanced General Chemistry	4
ENGL	101	Composition I	3	P4		Humanities	3
HEAL or HSCC ²		Wellness	3	COMM	201	Introduction to Speech Communication	3
First Year Seminar	190		3	P1		Social Sciences	3
			17				17

Sophomore Year

Fall				Spring			
Course Prefix or LS Requirement	Course Number	Course Title	Hours	Course Prefix or LS Requirement	Course Number	Course Title	Hours
BIOL	240	Genetics	4	BIOL	241	Ecology & Evolution	4
CHEM	241	Organic Chemistry I	3	CHEM	242	Organic Chemistry II	3
MATH	146 ³	Precalculus	4	CHEM	272	Organic Chemistry Lab	2
P1		Social Science	3	P3		History	3
ENGL	102	Composition II	3	MATH	153	Calculus I	4
			17				16

Junior Year

Fall				Spring			
Course Prefix or LS Requirement	Course Number	Course Title	Hours	Course Prefix or LS Requirement	Course Number	Course Title	Hours
BIOL	311	Animal Physiology	3	BIOL	333	Cell and Molecular Biology	4
BIOL	413	Principles of General Microbiology	3	BIOL		Jr-Sr Elective	4
PHYS	130	Physics I	4	PHYS	131	Physics II	4
P5		Fine & Performing Arts	3	P6		Jr-Sr World Cultures (ULP ⁴)	3
			13				15

Senior Year

Fall				Spring			
Course Prefix or LS Requirement	Course Number	Course Title	Hours	Course Prefix or LS Requirement	Course Number	Course Title	Hours
BIOL	480 ⁵	Research in Biology	3	BIOL		Jr-Sr Elective	3-4
BIOL		Jr-Sr Elective	4	BIOL		Jr-Sr Elective	3-4
BIOL		Jr-Sr Elective	3-4	General Elective			3-4
General Elective ⁶			3-4	General Elective			3-4
			13-15				12-16

Notes:

- Total number of credit hours for the program: 120.
- There is great flexibility in scheduling Liberal Studies (LS) courses, but most other freshman/sophomore courses must be taken in numerical sequence to satisfy prerequisites (for example, BIOL 140 is a prerequisite for BIOL 141 which is a prerequisite for BIOL 240, MATH 146 is a prerequisite for MATH 153, and CHEM 140 is a prerequisite for CHEM 241 which is a prerequisite for CHEM 242 and 272).
- MATH 146 is not required by the Biology BS degree, but is a prerequisite for Calculus I. This four-credit course is the only prerequisite course in the Biology BS program that is not also required for the major.
- All students are required to take one upper-level perspectives (ULP), LS course. Any junior/senior level LS course will satisfy this requirement.
- The senior research requirement may also be satisfied by the senior thesis sequence: BIOL 495, 498-499.
- All biology majors are strongly advised to take at least one semester of statistics. We recommend MATH 270, Statistical Methods I and MATH 375, Statistical Methods II or BIOL 467, Biostatistics.