

BIOLOGY, B.S. - MOLECULAR BIOLOGY/BIOTECHNOLOGY OPTION

Designed to prepare students both for careers in the fast-growing industry associated with molecular biology and for admission into graduate and professional schools, this program allows students to concentrate in molecular and cellular biology while obtaining a broad background in biology and in the liberal arts. Students in this program complete advanced courses in biochemistry and in molecular and cellular techniques; many take advantage of opportunities to complete independent research projects in genetics, developmental biology, virology, cell and molecular biology, or endocrinology.

Major in Biology, BS

Code	Title	Hours
CORE COURSES (C- or higher required)		24
Foundations of Biology - See Appendix 1		
BIOL 211	Concepts of Zoology	
BIOL 221	Concepts of Botany	
BIOL 343	Principles of Ecology & Evolution	
BIOL 362	Cell and Developmental Biology	
BIOL 364	Foundations of Genetics & Molecular Biology	
Option in Molecular Biology - See separate block		
Total Hours		24

Appendix 1. Foundations of Biology

Code	Title	Hours
Foundations of Biology C- or Higher		4
BIOL 101	Foundations of Biology	

Concentration in Molecular Biology

Code	Title	Hours
REQUIRED MOLECULAR/BIOTECHNOLOGY COURSES		
BIOL 462	Molecular Biology	4
BIOL 466	Molecular and Cell Techniques	3
Seminar in Molecular Biology		2
BIOL 472	Seminar In Biology	
ELECTIVES		
undefined - Choose 6 hours from:		6
Any 3-level BIOL course(s)		
Any 4-level BIOL course(s)		
Any 5-level BIOL course(s)		
Note: This requirement may not be satisfied with BIOL 340, BIOL 390, or BIOL 324.		
BIOL 463, 465, and 467 are recommended.		
Total Hours		15

Req Related for Biology, BS

Code	Title	Hours
For Biology Majors the G2 block of the Liberal Arts Core will be fulfilled by your required related coursework.		
CHEMISTRY		

A C- or higher in CHEM 111 and 112 is a pre-requisite for CHEM 235.
A C- or higher in CHEM 231 is a pre-requisite for CHEM 232. Students interested in graduate or professional school should take CHEM 231 and 232.

CHEM 111	Introductory Chemistry 1	4
CHEM 112	Introductory Chemistry 2	4
Organic Chemistry I (C- minimum) and II		8
CHEM 231	Organic Chemistry 1	
CHEM 232	Organic Chemistry 2	
CHEM 326	Biochemistry 1	4
Plant Biochemistry or Biochemistry II - Choose 1 of the following:		4
BIOL 324	Plant Biochemistry	
CHEM 324	Plant Biochemistry	
CHEM 327	Biochemistry 2	

MATHEMATICS AND COMPUTER SCIENCE

Calculus I or Honors Calculus - Choose 1 of the following:		4-5
MATH 161	Calculus 1	
MATH 163H	Honors Calculus 1	
Addl Mathematics or Computer Science Electives - Choose 1 class from:		
Any CSCI 140-599 course(s)		
Any MATH 160-599 course(s)		
Note: This requirement may not be satisfied with CSCI 101, CSCI 111, or CSCI 121.		

PHYSICS

undefined - Choose 1 of the following options 1-2:		8-10
Option 1. Physics with Algebra		
PHYS 131	Physics 1 with Algebra	
PHYS 132	Physics 2 with Algebra	
Option 2. Physics with Calculus		
PHYS 231	Physics 1 with Calculus	
PHYS 232	Physics 2 with Calculus	
Total Hours		36-39