

Curriculum - Molecular Biology Concentration (BS Biological Sciences)

University Core Requirements - 28 credits

Course #	Course Name	Credits
UCOR 101	Thinking and Writing Across the Curriculum	3
UCOR 102	Literature and Critical Writing	3
UCOR 132	Basic Philosophical Questions	3
UCOR 14X	Theology	3
COSC 030	Research/Info Skills	1
	Course in Ethics	3
	Course in Creative Arts	3
	Course in Faith and Reason	3
	Course in Global Diversity	3
	Course in Social Justice	3

BSNES Core Requirements - 23 credits (minimum)

Course #	Course Name	Credits
ENGL 302W	Science Writing	3
HIST 307	History of Science	3
SPRG 105	Career Development Seminar	1
MATH115	Calculus I	4
MATH225	Biostatistics I	3
MATH116or335	Calculus II or Biostatistics II	3-4
	General Elective Credits	6

*Service learning is a BSNES requirement. We recommend SPRG108

Science Co-Requisites - 32 credits

Course #	Course Name	Credits
CHEM121	Chemistry I	4
CHEM121L	General Chemistry I Lab	1
CHEM122	General Chemistry II	4
CHEM122L	General Chemistry II Lab	1
CHEM211	Organic Chemistry I	3
CHEM211L	Organic Chemistry I Lab	1
CHEM212	Organic Chemistry II	3
CHEM212L	Organic Chemistry II Lab	1
CHEM401	Biochem I	3

PHYS201	Physics for Life Sciences I	4
PHYS202	Physics for Life Sciences II	4
	General Elective Credits	3

Biology Requirements - 39 credits

Course #	Course Name	Credits
BIOL111 or 115	Biology I and Lab	4
BIOL112 or 117	Biology II and Lab	4
BIOL212	Cell and Molecular Biology	4
BIOL 250 or BIOL468	Genetics or Human Genetics	3
BIOL490	Biology Seminar	1
BIOL370W	SuperLab: Lab I	4
BIOL371W, 373W, or 376W	SuperLab: Lab II, IV, or VI	4
BIOL419	Bioinformatics	3
	Additional Biology Electives	12

Suggested Electives

BIOL250	Genetics
BIOL319	General Microbiology
BIOL405	Microbial Genetics
BIOL424	Immunology
BIOL460	Endocrinology
BIOL468	Human Genetics
BIOL475	Neurobiology
BIOL313	Developmental Biology
BIOL426	Pathogenic Microbiology
CHEM402	Biochem II

Additional Approved Electives

Electives may be chosen from:

- » Courses listed above
- » Other Biology Department majors courses
- » Undergraduate Research (BIOL398/399-strongly recommended*)
- » Biology Research Forum (BIOL394)
- » Honors Thesis (BIOL415H)
- » CHEM301 (Physical Chem for Life Sciences)

»CHEM 510 (Bioanalytical Chemistry)
» BIOL 508 (Elements of Biotechnology)

- Biology Seminar (BIOL 490) and Biotechnology Product Development (BIOL 509) may not be taken for elective credit.
- Students are not permitted to use more than 6 credits of research (398/399) towards their requirement of 12 credits of biology electives.

Requirements for the Minor

A minor in Biological Sciences consists of BIOL 111, 111L, 112, 112L (with co-requisites of CHEM 121, 121L, 122, 122L) and a minimum of 12 credits selected from the Department's courses numbered 212-495. Normally, this will include BIOL 212 and 3 other courses. Individual prerequisites for courses must be satisfied.

REV 2-10-17