

Curriculum – Physiology Concentration (B.S. 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 minimum)

Course #	Course Name	Credits
ENGL 302W	Science Writing	3
HIST 307	History of Science	3
SPRG 105	Career Development Seminar	1
MATH 115	Calculus I	4
MATH 225	Biostatistics I	3
MATH 116 or 335	Calculus II or Biostatistics II	3-4
	General Electives [†]	6

*Service learning is a BSNES requirement. We recommend SPRG108

[†] Suggest BIOL 207 A&P1 with or without Lab BIOL 208 and BIOL 209 A&P2 with or without Lab BIOL 210, but neither is required for pre-med.

Science Co-Requisites - 29 credits

Course #	Course Name	Credits
CHEM 121	Chemistry I	4
CHEM 121L	General Chemistry I Lab	1
CHEM 122	General Chemistry II	4
CHEM 122L	General Chemistry II Lab	1
CHEM 211	Organic Chemistry I	3
CHEM 211L	Organic Chemistry I Lab	1
CHEM 212	Organic Chemistry II	3
CHEM 212L	Organic Chemistry II Lab	1
PHYS 201	Physics for Life Sciences I	4
PHYS 202	Physics for Life Sciences II	4
	General Science or Non-science Elective [‡]	3

[‡] suggest PSYC 101 and SCOC 101, especially for pre-meds

Biology Requirements - 42 credits

Course #	Course Name	Credits
BIOL 111 or 115	Biology I and Lab	4
BIOL 112 or 117	Biology II and Lab	4
BIOL 212	Cell and Molecular Biology	4
BIOL 315 or 316	Human Physiology or Comparative & Environmental Physiology	3
BIOL 424 or 460 or 475	Immunology or Endocrinology or Neurobiology (take 2 of these)	6
BIOL 490	Biology Seminar	1
BIOL 370W	SuperLab: Lab I	4
BIOL 372W, 373W, 376W	SuperLab: Lab III, IV, or VI	4
	Additional Biology Electives	12

Suggested Electives

BIOL 250	Genetics
BIOL 313	Developmental Biology
BIOL 315	Human Physiology
BIOL 316	Comparative & Environmental Physiology
BIOL 335	Vertebrate Anatomy, Development and Evolution- (offered every other Fall)
BIOL 340W	Evolution (offered every other Fall semester)
BIOL 424	Immunology
BIOL 426	Pathogenic Microbiology
BIOL 460	Endocrinology
BIOL 468	Human Genetics
BIOL 475	Neurobiology
CHEM 401	Biochem I*
CHEM 402	Biochem II**

* CHEM 401 (Biochem I) is strongly recommended for pre-meds

** CHEM 401 (Biochem I) and CHEM 402 (Biochem II) together will fulfill a Biochemistry Minor

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)
- » CHEM 301 (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.