

Bachelor of Science in Biology—Pre-Medical Professions Emphasis

Curriculum

Required courses and recommended terms during which they should be taken:

Freshman Year Fall

BIO 211	Principles of Biology	4
MATH 111	College Algebra	4
WRI 121	English Composition	3
	Social Science elective	3
Total		14

Freshman Year Winter

BIO 109	Introduction to the Medical Sciences	2
BIO 212	Principles of Biology	4
MATH 112	Trigonometry	4
WRI 122	English Composition	3
	Social Science elective	3
Total		16

Freshman Year Spring

BIO 213	Principles of Biology	4
MATH 361	Statistical Methods I ²	4
	Health Biology elective (lower-division) ³	2
	Humanities elective	3
Total		13

Sophomore Year Fall

BIO 345	Medical Microbiology	5
CHE 221	General Chemistry	5
MATH 251	Differential Calculus	4
SPE 111	Fundamentals of Speech	3
Total		17

Sophomore Year Winter

BIO 209	Current Research Topics in Medical Sciences I	1
CHE 222	General Chemistry	5
MATH 252	Integral Calculus	4
SPE 321	Small Group and Team Communication	3
	Health Biology elective (upper-division) ⁴	3
Total		16

Sophomore Year Spring

CHE 223	General Chemistry	5
WRI 227	Technical Report Writing	3
	Health Biology elective (upper-division) ⁴	4
	Humanities elective	3
Total		15

Junior Year Fall

BIO 331	Human Anatomy and Physiology I	5
CHE 331	Organic Chemistry I	4
PHY 221	General Physics with Calculus ¹	4
Total		13

Junior Year

	Winter	
BIO 332	Human Anatomy and Physiology II	5
CHE 332	Organic Chemistry II	4
PHY 222	General Physics with Calculus ¹	4
	Humanities elective	3
Total		16

Junior Year

	Spring	
BIO 333	Human Anatomy and Physiology III	5
CHE 333	Organic Chemistry III	4
PHY 223	General Physics with Calculus ¹	4
WRI 327	Advanced Technical Writing	3
Total		16

Senior Year

	Fall	
CHE 450	Biochemistry I	4
	Health Biology elective (upper-division) ⁴	3
	Social Science elective	3
	Elective ⁵	3
	Elective ⁵	3
Total		16

Senior Year

	Winter	
BIO 346	Pathophysiology I	3
BIO 409	Current Research Topics in Medical Sciences II	2
CHE 451	Biochemistry II	4
	Social Science elective	3
	Elective ⁵	3
Total		15

Senior Year

	Spring	
	Health Biology elective (upper-division) ⁴	3
	Health Biology elective (upper-division) ⁴	4
	Health Biology elective (upper-division) ⁴	4
	Elective ⁵	3
Total		14

Health Biology electives (lower-division):

BIO 200	Medical Terminology	2
BIO 205	Nutrition	3
BIO 216	Introduction to Veterinary Medicine	4
BIO 226	Introduction to Wildlife Rehabilitation	3
BIO 227	Introduction to Forensic Science	4

Health Biology electives (upper-division):

BIO 341	Medical Genetics	3
BIO 342	Cell Biology	4
BIO 347	Pathophysiology II	3
BIO 352	Developmental Biology	4
BIO 357	Introduction to Neuroscience	3
BIO 426	Evolutionary Biology	3
BIO 436	Immunology	4
BIO 462	Human Cadaver Dissection	1
CHE 360	Clinical Pharmacology for the Health Professions	3
CHE 452	Biochemistry III	4

¹ PHY 201, PHY 202, PHY 203 may be substituted with advisor consent.

² MATH 243 may be substituted with advisor consent.

³ Minimum of 2 credits of lower-division health biology elective must be completed, chosen from the lower-division list above. Alternately, an additional elective from the upper-division list may be taken, in which case a total of at least 23 credits of upper-division health biology electives are required.

⁴ Minimum of 21 credits of upper-division health biology electives must be completed, chosen from the upper-division list above.

⁵ Advisor approval of all elective choices is required. Additional courses from the health biology lists above, and/or suitable courses from BUS, MATH or PHY are recommended.

When choosing electives or substituting courses, students are responsible for completing a minimum of 60 credits of upper-division work before a degree will be awarded. Upper-division work is defined as 300 and 400 level classes at a bachelor's degree granting institution.