



Biology – Pre-Professional Pathways

Pre-Medical/Dental; Pre-Veterinary Medicine; Pre-Physician Assistant

Degree Awarded: Bachelor of Science

Requirements for the Major: 53-68 credits, plus 3 prerequisite credits

The B.S. in Biology is designed for students seeking entry into a post-baccalaureate program focused on allied health including medicine, dentistry, physician assistant, podiatry, and veterinary medicine. Admission to these programs requires a broad foundation in the biological sciences and specialization in upper-level courses. Students complete courses that satisfy the requirements for the B.S. in Biology, satisfy the minimum requirements for entry to graduate schools and provide background to prepare for the Medical College Admission Test (MCAT), Dental Admission Test (DAT), or the Graduate Record Examination (GRE).

Students are prepared for their advanced degree program applications with course-based informational sessions and one-on-one mentoring. The goal is to help the student prepare application materials, reflect upon their own individual vocation pathway in allied health, and practice interview skills. In addition, students will master advanced concepts and abilities to improve performance upon entry into such programs. To tailor a program of study that meets an individual student's choice in post-baccalaureate program, the student is expected to work closely with a faculty advisor.

Graduates with a B.S. in Biology can also seek employment in various biology-related fields, such as technical, clinical and laboratory-based environments as a research technician or technologist, including within the field of medicine. Students in this program select from one of three pathways, but no more than one pathway.

Transfer credit for Biology courses must be taken within the last 10 years.

Prerequisite courses for the major:

Essential Competencies-Outcome Skills

****Transfer courses do not receive outcome skills****

				IL	W	O	Q	IC	V
	MATH 121	College Algebra	3				x		

Requirements for the Major:

Essential Competencies-Outcome Skills

****Transfer courses do not receive outcome skills****

				IL	W	O	Q	IC	V
	BIOL 101	General Biology I	4		x				
	BIOL 102	General Biology II	4	x	x				
	BIOL 150	Careers in Biology	1						x
	BIOL 250	Journal Club	1						
	BIOL 251	Pre-Medical/Dental Seminar	1						
	BIOL 252	Pre-Medical/Dental Seminar	1						x
	BIOL 256	Microbiology	4						
	BIOL 335	Physiology	4						
	BIOL 360	Genetics	4				x	x	
	BIOL 420	Gross Anatomy	4						
	BIOL 450	Senior Seminar	2	x	x	x			x
	CHEM 111	General Chemistry I	4				x		
	CHEM 112	General Chemistry II	4						
	CHEM 321	Organic Chemistry I	5						
	CHEM 351	Biochemistry	3						
	STAT 241 or STAT 261	Principles of Statistics or Applied Statistics	4 or 3				x x	x	

This information must be used in conjunction with the 2024-2025 Grand View University Catalog and does not reflect a student's official record of progress. Students are expected to use the Progress tool found on myGVU > Tools > My Academics > 'Plan and register for courses' to monitor and plan coursework. Other available resources include: Course Planning Documents (found on myGVU under Academics and Advising Resources) and the faculty and staff who work with academic requirements.

Take two courses from the following:

Essential Competencies-Outcome Skills

****Transfer courses do not receive outcome skills****

				IL	W	O	Q	IC	V
	BIOL 140	Introduction to Nutrition	3					x	
	BIOL 380	Cell Biology	4			x	x		
	BIOL 411	Histology	3						
	BIOL 415	Molecular Biology	4						
	BIOL 425	Reproductive and Developmental Biology	3						
	BIOL 444	Immunology	3						
	BIOL 499	Research in Biology	1-3						

Select one of the following pathways:

Pre-Medical/Pre-Dental Pathway

				IL	W	O	Q	IC	V
	PHYS 131 or PHYS 241	General Physics I or Classical Physics I	4 or 5					x	
	PHYS 132 or PHYS 242	General Physics II or Classical Physics II	4 or 5						

Pre-Physician Assistant Pathway

	No additional courses are needed
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Pre-Veterinary Medicine Pathway

				IL	W	O	Q	IC	V
	PHYS 131 or PHYS 241	General Physics I or Classical Physics I	4 or 5					x	

These courses required for the major and the chosen Pathway will be counted in computing the 2.20 GPA for the major.