

Biomedical Science

Bachelor of Science

Pre-Veterinarian Concentration

The Biomedical Science major is designed for highly motivated students who are considering a career in health science areas such as medicine, dentistry or veterinary medicine. The major focuses on those disciplines of the natural sciences and mathematics which will assist students in their preparation for matriculation into professional or graduate schools.

Career Options:

- Medical or Veterinary Careers (with graduate training)
- Academic Research in University Settings
- Research and Product Development in Medical Supply and Pharmaceutical Industries
- Laboratory Technology

Major Requirements:

Life Science w/Lab	Organic Chemistry I w/Lab
Methods in Biology	Organic Chemistry II w/Lab
Cell Biology	Calculus I
Evolution	Elementary Statistics
Genetics	General Physics I w/Lab
Senior Seminar	General Physics II w/Lab
General Chemistry I w/Lab	
General Chemistry II w/Lab	

Concentration Requirements:

Pre-Veterinarian:

- Vertebrate Zoology
- Microbiology
- Biochemistry w/Lab
- Physiological Ecology
- Histology
- Animal Nutrition

Additional Information:

Additional coursework may be required for admission into a specific school's program and entry into professional school may require a specific number of hours in related volunteer work.

Department Contact:

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General Education Requirements

I. Interdisciplinary Requirements	Credits
Ethics	3
International Studies	3
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Total Hours	6
II. Science Courses	Credits
Mathematics	3
Biology, including lab	4
Physics, Earth Science or Chemistry, incl. lab	4
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Total Hours	11
III. Social Science Courses	Credits
History, Political Science	3
Communication, Economics, Geography or Criminal Justice	3
Psychology or Sociology	3
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Total Hours	9

IV. Humanities Courses	Credits
Religion	3
English Composition	6
Literature	3
Art, Music or Entertainment/Theatre	3
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Total Hours	15
TOTAL GENERAL EDUCATION HOURS	41

Unless otherwise specified, transferred credits may be used to fulfill the general requirements at the Registrar's discretion.

Major Requirements

	Credits
BIO 101 Life Science	3
BIO 102 Life Science Lab	1
BIO 123 Methods in Biology	2
BIO 200 Cell Biology	3
BIO 222 Evolution	3
BIO 303 Genetics	4
BIO 412 Senior Seminar	3
CHM 111 General Chemistry I	3
CHM 112 General Chemistry I Lab	1
CHM 121 General Chemistry II	3
CHM 122 General Chemistry II Lab	1
CHM 301 Organic Chemistry I	3
CHM 302 Organic Chemistry I Lab	1
CHM 311 Organic Chemistry II	3
CHM 312 Organic Chemistry II Lab	1
MAT 121 Calculus I	3
MAT 213 Elementary Statistics	3
PHY 211 General Physics I	3
PHY 212 General Physics I Lab	1
PHY 221 General Physics II	3
PHY 222 General Physics II Lab	1

Concentration Reqs.

	Credits
Pre-Veterinarian:	
BIO 314 Vertebrate Zoology	4
BIO 316 Microbiology	4
BIO 321 Biochemistry	3
BIO 322 Biochemistry Lab	1
BIO 404 Physiological Ecology	4
BIO 408 Histology	4
BIO 306 Animal Nutrition	3
One additional course from the following list:	
BIO 300 Animal Behavior	3
BIO 308 Developmental Biology	3
BIO 309 Developmental Biology Lab	1
BIO 311 Invertebrate Zoology	4
BIO 330 Global Water Issues	5
BIO 396 Cancer Biology	4
BIO 401 Ecology	3
BIO 402 Ecological Methods	2
BIO 406 Pathophysiology	3
or BIO 407 Molecular Evolution/Biotechnology	4

A customized plan will be developed for each student.

General Graduation Guidelines:

Total of 120 semester hours, 39 of which must be numbered 300 or 400.

(Other programs may require coursework beyond 120 semester hours.)

At least 9 semester hours of courses designated as writing intensive.

A declared major.

A cumulative GPA average of C (2.00) and at least a C average in the graduation major.