

PRE-VETERINARY, BS

Program Description

The Bachelor of Science degree in biology combines theory and concepts of biology with intensive, hands-on experiences in our state-of-the-art laboratories and a wealth of close-by field sites. Students build on a core of biology classes by selecting the physiology and taxonomy classes and other electives that best fit their interests.

The program is an excellent preparation for biology or related careers. Our graduates are currently employed as doctors, dentists, veterinarians, biological researchers, laboratory technicians, consultants and teachers. Many careers in biology require education beyond the baccalaureate degree and LSSU's biology program has a proven record of excellent preparation for professional and graduate school.

Pre-Veterinary concentration – with an embedded chemistry minor, prepares students to enter veterinary college after graduation from LSSU. It was designed to meet the specific requirements for the Michigan State University-College of Veterinary Medicine, but our students go to vet schools all over the country, for example North Carolina State, Oklahoma State and University of Illinois. This program stresses not only academics, but also the animal care experience that is critical for gaining admission to a veterinary college.

Program Learning Outcomes

- Thoroughly research and synthesize the primary literature for information relevant to a current scientific investigation.
- Design and conduct a scientific investigation of a testable hypothesis or methodology using appropriate tools and techniques.
- Effectively communicate the results or outcomes of a scientific investigation in multiple formats.
- Engage in professional activities related to the study of biological sciences and practice good professional ethics.

Degree Requirements

Bachelor of Science Biology, Pre-Veterinary Concentration

Code	Title	Hours
Biology Courses		
BIOL 131	General Biology: Cells	4
BIOL 132	General Biology: Organisms	4
BIOL 199	Freshman Seminar	1
BIOL 204	General Microbiology ¹	4
BIOL 220	Genetics	4
BIOL 280	Biostatistics	3
BIOL 299	Sophomore Seminar	1
BIOL 337	General Ecology	3
BIOL 399	Planning Research Project	1
BIOL 499	Senior Symposium	1
Physiology Elective		
Select one of the following:		4
BIOL 330	Animal Physiology	
BIOL 421	Adv Cell & Molecular Biology ¹	
Taxonomy Elective		

Select one of the following:		3
BIOL 306	Mycology	
BIOL 422	Parasitology	
BIOL 426	Animal Disease and Zoonoses	

Support Courses

CHEM 115	General Chemistry I	5
CHEM 116	General Chemistry II	5
CHEM 225	Organic Chemistry I	4
CHEM 326	Organic Chemistry II	4
CHEM 351	Introductory Biochemistry	4
MATH 111	College Algebra	3
MATH 112	Calculus Business/Life Science	4
PHYS 221	Principles of Physics I	4
PHYS 222	Principles of Physics II	4

Advanced Study

Select 17 credits from the following:		17
BIOL 208	Prin Animal Biology & Health	
BIOL 243	Vertebrate Anatomy	
BIOL 306	Mycology	
BIOL 332	Embryology	
BIOL 335	Principles of Animal Nutrition ¹	
BIOL 380	Clin Hematology & Hemostasis	
BIOL 405	Animal Behavior	
BIOL 423	Immunology	
BIOL 426	Animal Disease and Zoonoses	
BIOL 433	Histology and Histopathology	
BIOL 480	Adv Clinical Microbiology	
Free Electives		9-11
Total Hours		96-98

¹ These courses required by MSU-CVM.

General Education: All LSSU bachelor's degree candidates must complete the LSSU General Education Requirements.

A minimum of 124 credits (at the 100 level or higher) must be earned for graduation with a cumulative gpa of 2.75 or higher. A gpa of 2.00 or higher is also required in your Major, as well as in your General Education Requirements.