

PRE-MEDICAL, 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-Medical concentration – prepares students for medical, dental, optometry, podiatry, chiropractic, and physician assistant graduate studies. Biology students will work with a pre-professional advisor to select the electives best suited for the health professional program of their choice while also providing a well-rounded biology education. This program has an embedded chemistry minor that meets the requirements of most U.S. medical schools. The LSSU Biology department is recognized by all health professional schools in Michigan as a top rate biology program.

LSSU participates in the Michigan State University College of Human Medicine's Early Assurance Program. During their junior year, students who excel in the LSSU biology pre-medical program may apply to the College of Human Medicine, and selected students will be assured of admission and begin a relationship with MSU College of Human Medicine during their senior year of 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-Medical Concentration

Code	Title	Hours
Biology Courses		
BIOL 121	Human Anatomy & Physiology I	4
BIOL 122	Human Anatomy & Physiology II	4
BIOL 131	General Biology: Cells	4
BIOL 132	General Biology: Organisms	4
BIOL 199	Freshman Seminar	1
BIOL 204	General Microbiology	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
BIOL 330	Animal Physiology ¹	4
or BIOL 421	Adv Cell & Molecular Biology	

Advanced Study

Select 17 credits from the following:		17
BIOL 243	Vertebrate Anatomy	
BIOL 306	Mycology	
BIOL 332	Embryology	
BIOL 380	Clin Hematology & Hemostasis	
BIOL 385	Public Hlth Stats Epidemiology	
BIOL 406	Immunohematology	
BIOL 422	Parasitology	
BIOL 423	Immunology	
BIOL 425	Virology	
BIOL 426	Animal Disease and Zoonoses	
BIOL 433	Histology and Histopathology	
BIOL 455	Clin Chem Body Fluid Analysis	
BIOL 480	Adv Clinical Microbiology	

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
PHYS 221	Principles of Physics I	4
PHYS 222	Principles of Physics II	4
HLTH 328	Multicultural Appr Health Care	3
PSYC 101	Intro to Psychological Science	3
SOCY 101	Introduction to Sociology	4
Free Electives		12-14

Total Hours **110-112**

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.