

BIOLOGY MINOR

The minor in biology is a perfect fit for students interested in the biological sciences, but who do not wish to pursue a career in biology. A minor in biology gives a strong basic background in cell biology, genetics, and ecology that will enhance a career in other areas such as: chemistry, physics, psychology, social sciences, computational sciences, humanities, or business.

Related Programs

Major

- Biology (BS) (<https://catalog.luc.edu/undergraduate/arts-sciences/biology/biology-bs/>)
- Biology with Ecology Emphasis (BS) (<https://catalog.luc.edu/undergraduate/arts-sciences/biology/biology-ecology-emphasis-bs/>)
- Biology with Molecular Biology Emphasis (BS) (<https://catalog.luc.edu/undergraduate/arts-sciences/biology/biology-molecular-biology-emphasis-bs/>)

Curriculum

Students take the basic lecture and laboratory biology courses with the Biology majors, as well as a limited number of biology electives. Students may satisfy requirements for a minor concentration in biology by completing a minimum of 24 credit hours of biology with grades of "C-" or better with an overall minor GPA of 2.0 or higher. The minor in biology requires 24 credit hours including 17 credit hours of required biology courses and seven credit hours of biology electives.

Code	Title	Hours
Required Courses		
BIOL 101	General Biology I	3
BIOL 102	General Biology II	3
BIOL 111	General Biology I Lab	1
BIOL 112	General Biology II Lab	1
BIOL 251	Cell Biology	3
BIOL 265	Ecology	3
BIOL 282	Genetics	3
Select seven credit hours of Biology Electives ¹		7
Total Hours		24

¹ Special topics courses (BIOL 377, BIOL 394, BIOL 394E, BIOL 394M, BIOL 395, BIOL 395E, BIOL 395M, BIOL 397, BIOL 397E, BIOL 397M) can be taken multiple times for credit as long as the course topic is different.

Transferring students who seek a minor in biology must take a minimum of 12 credit hours in biology at Loyola.

Biology Electives

Code	Title	Hours
Biology		
Any BIOL 200-Level Course ^{1,2}		
Any BIOL 300-Level Course ³		
BIOL 2TRN Biology 200-Level Transfer		
BIOL 3TRN Biology 300-Level Transfer		

Anthropology		
ANTH 246 / BIOL 246	Ancient Human-Animal Interactions	3
ANTH 280 / BIOL 280	Evolution of Human Disease	3
ANTH 281 / BIOL 281	Evolution of the Human Diet	3
ANTH 325 / BIOL 325	Primatology-Behavior & Ecology	3
ANTH 326 / BIOL 326	Human Osteology Lec/Lab	4
ANTH 327 / BIOL 378	Dental Anthropology	3
ANTH 346 / BIOL 346	Biology of Women	3
ANTH 359 / BIOL 359	Paleopathology	3
Chemistry		
CHEM 361 / BIOL 366	Principles of Biochemistry	3
Environmental Science		
ENVS 215 / BIOL 215	Ornithology	3
ENVS 267 / BIOL 347	Bird Conservation and Ecology	3
ENVS 340 / BIOL 340	Natural History of Belize	3
ENVS 345 / BIOL 349	Conservation and Sustainability of Neotropical Ecosystems	3
ENVS 367	Mammalogy	3
ENVS 369 / BIOL 348	Field Ornithology	3
Neuroscience		
NEUR 101	Introduction to Neuroscience ⁴	3
NEUR 300 / BIOL 303	Seminar in Neuroscience	1
NEUR 301 / BIOL 373	Laboratory in Neuroscience I	4
NEUR 302	Laboratory in Neuroscience II	3
Physics		
PHYS 371	Biophysics	3
Psychology		
PSYC 240 / BIOL 240	Psychology-Biology of Perception ⁴	3
PSYC 311 / BIOL 313	Lab in Psychobiology	3
PSYC 382 / BIOL 284	Behavioral and Cognitive Neuroscience	3
PSYC 388 / BIOL 373	Laboratory in Neuroscience I	4
Statistics		
STAT 310 / BIOL 310	Categorical Data Analysis	3
STAT 335 / BIOL 335	Introduction to Biostatistics	3

STAT 336 / BIOL 336	Advanced Biostatistics	3
STAT 337 / BIOL 337	Quantitative Methods in Bioinformatics	3

- ¹ If not already taken as a 200-level required course.
- ² BIOL 296 Introduction to Research can be taken multiple times, but only a maximum of 2 credit hours count as Biology Electives.
- ³ A maximum of 3 total credits of BIOL 396 Research, BIOL 396E Research (Ecology Emph), BIOL 396M Research (Molecular Emph), BIOL 398 Internship in Biology, BIOL 398E Internship in Biology (Ecology Emph), BIOL 398M Internship in Biology (Molecular Emph) can count as Biology Electives.
- ⁴ Either BIOL 240/PSYC 240 Psychology-Biology of Perception OR NEUR 101 Introduction to Neuroscience (but NOT both) count as Biology Electives.

Suggested Sequence of Courses

The below sequence of courses is meant to be used as a suggested path for completing coursework. An individual student’s completion of requirements depends on course offerings in a given term as well as the start term for the minor. Students should consult their advisor for assistance with course selection.

Course	Title	Hours
First Semester		
BIOL 101	General Biology I	3
BIOL 111	General Biology I Lab	1
Hours		4
Second Semester		
BIOL 102	General Biology II	3
BIOL 112	General Biology II Lab	1
Hours		4
Third Semester		
Select one of the following:		3
BIOL 251	Cell Biology	
BIOL 265	Ecology	
BIOL 282	Genetics	
Hours		3
Fourth Semester		
Select one of the following:		3
BIOL 251	Cell Biology	
BIOL 265	Ecology	
BIOL 282	Genetics	
Hours		3
Fifth Semester		
Select one of the following:		3
BIOL 251	Cell Biology	
BIOL 265	Ecology	
BIOL 282	Genetics	
Hours		3
Sixth Semester		
BIOL Elective		3
Hours		3

Seventh Semester	
BIOL Elective	4
Hours	4
Total Hours	24

Learning Outcomes

At the completion of the Undergraduate Biology Minor:

- Students will demonstrate developing mastery of the following Vision and Change core concepts and their related principals: evolution (the diversity of life-forms that have evolved over time through mutations, selection and genetic change; structure and function (the basic units of biological structures that define the functions of all living things); information flow, exchange and storage (the influence of genetics on the control of the growth and behavior of organisms); pathways and transformations of energy and matter (the ways in which chemical transformation pathways and the laws of thermodynamics govern the growth and change of biological systems); and systems (the ways in which living things are interconnected and interact with one another).
- Students will be able to retrieve, synthesize, and critically evaluate scientific literature.
- Students will be able to communicate (orally and in writing) results and interpretation of scientific research.