BIOLOGY, BACHELOR OF SCIENCE

College: College of Science and Health
Department: Biological Sciences
Student Type: Traditional Undergraduate
Degree: Bachelor of Science
Campus: Lisle Campus

Progression in the Biological Sciences Programs (B.S. in Biology or B.A. in Biology)

A student in either Biology major (B.S. or B.A.) must complete the following with a grade of "C" or better in each of these courses and receiving no more than a total of three "W," "D," or "F" grades in these courses:

Code	Title	Hours
BIOL 1195	Principles of Organismal Lab	1
BIOL 1197	Principles of Organismal Biology	3
BIOL 1198	Principles of Biology	3
CHEM 1108	Preparatory General Chemistry (if required based on placement)	3
CHEM 1113	General Chemistry I	3
CHEM 1123	General Chemistry II	3
Total Hours		**16**

The entire introductory sequence must be completed prior to taking any 2000-level courses in BIOL. A transfer student must meet these requirements through equivalent transfer courses. Transfer students must complete their first two semesters with no more than two "W," "D," or "F" grades in College of Science lecture courses in the degree program.

If it is determined at any time that a student cannot continue in the Biology program or cannot graduate with a Biology degree, the student will be required to change their major and seek academic advising outside of that program.

We encourage students to further their learning by assisting in labs. However, only 2 semester credit hours in BIOL 2292 Biology Teaching will count toward the B.A. or B.S. in Biology major.

BIOL 3389 Biological Research and other 3000-level or higher College of Science and Health research courses can be counted as elective credits toward the B.S. in Biology major, up to a maximum of three credits across all such research courses.

Requirements - Major

The B.S. in Biology major must complete 36 semester credit hours of biology courses with a grade of "C" or higher. A minimum of 18 semester hours in BIOL must be at the 3000 level or above including 6 hours at the 4000 level. Coursework must include:

Code	Title	Hours
BIOL 1195	Principles of Organismal Lab	1
BIOL 1197	Principles of Organismal Biology	3
or BIOL 2297	Honors Organismal Biology	
BIOL 1198	Principles of Biology	3
BIOL 1199	Principles of Biology Lab	1
BIOL 2250	Genetics	3
BIOL 2251	Genetics Laboratory	1
BIOL 4340	Cell Biology	3
BIOL 4341	Cell Molecular Biology Laboratory [1]	1
BIOL 4363	Ecology	3
BIOL 4364	Ecology Laboratory [1]	1
CHEM 1113	General Chemistry I	3
CHEM 1114	General Chemistry I Laboratory	1
CHEM 1123	General Chemistry II	3
CHEM 1124	General Chemistry II Laboratory	1
CHEM 2242	Organic Chemistry I	3
CHEM 2243	Organic Chemistry I Laboratory	1
CHEM 2247	Organic Chemistry II	3
CHEM 2248	Organic Chemistry II Laboratory	1
CHEM 3261	Principles of Biochemistry	3
PHYS 1113	College Physics I	3
PHYS 1114	College Physics I Laboratory	1
PHYS 1118	College Physics II	3
PHYS 1119	College Physics II Laboratory	1
MATH 1111	College Trigonometry	3
MATH 2229	Biostatistics	3
MATH 2210	Calculus I (or higher)	4
NTSC 1101	College of Science and Health Experience	1
Organismal Course		
Select one of the following:		3-4
BIOL 2204	Advanced Botany	
BIOL 2249	Parasitology	
BIOL 2271	Biology of Mammals	
BIOL 2272	Zoology	
BIOL 2275	Invertebrate Zoology	
BIOL 2284	Woody Plants of the Western Great Lakes Region	
BIOL 3208	General Microbiology	
Other Approved Courses		
Systems Course		
Select one of the following:		3-4
BIOL 2228	Vertebrate Embryology	
BIOL 3203	Human Anatomy	
BIOL 3256	Comparative Animal Physiology	
BIOL 3258	Human Physiology	
BIOL 4322	Paleobiology	
BIOL 4360	Basic Endocrinology	
BIOL 5319	Histology	
BIOL 5325	Biology of Complex Systems	
Other Courses approved by program faculty		
Biology Electives at the 2000 level or above		8-10
Total Hours		**72-76**

[1] Writing intensive course.

A student majoring in Biology (B.A. or B.S.) may only earn one major in the Biochemistry/Molecular Biology, Biology, Environmental Science, Health Science, Physics, and Medical Humanities programs.

Objectives

Students who earn a B.S. in Biology will achieve the following student learning outcomes (SLO):

Student Learning Outcome 1: Students will demonstrate biological knowledge required in professional settings
• University SLO: 1. Disciplinary Competence and Skills

Student Learning Outcome 2: Students will use scientific evidence to communicate biological concepts
• University SLO: 3. Communication Skills

Student Learning Outcome 3: Students will use quantitative reasoning to solve biological problems
• University SLO: 2. Critical and Creative Thinking Skills; 5. Analytical Skills

Student Learning Outcome 4: Students will relate biological sciences with other natural, physical, chemical, and mathematical sciences
• University SLO: 1. Disciplinary Competence and Skills

Student Learning Outcome 5: Students will discuss biological relevance to societal issues
• University SLO: 7. Civic Engagement and Social Responsibility; 8. Stewardship