BIOLOGY, B.S.

Through Saint Louis University's biology major, students better understand living organisms and how they interact with the environment. Biological research seeks to answer a broad range of questions, from factors that affect human health to ecological issues.

SLU's biology program offers courses that emphasize concepts over facts and aim to provide a foundation for careers in the life sciences, health professions, K-12 education and advanced post-graduate study in various disciplines. Five Bachelor of Science in Biology degree concentrations allow students to focus on specific disciplinary areas. SLU also offers a Bachelor of Arts in Biology (https://catalog.slu.edu/colleges-schools/arts-sciences/biology/biology-ba/).

- The program is enriched by interactions with the School of Medicine, Missouri Botanical Garden, Donald Danforth Plant Science Center, Saint Louis Zoo and many St. Louis-based life science companies. Research experiences and internships provide students with opportunities to study biology beyond the classroom.
- SLU's Department of Biology (https://www.slu.edu/arts-and-sciences/biology/) has a field station (https://www.slu.edu/arts-and-sciences/biology/reis-biological-station/) that provides unique opportunities for students to explore ecology, conservation and environmental science in an Ozark forest ecosystem. The field station offers students opportunities to take a summer class, conduct undergraduate research and participate in a semester-long program of field biology coursework.
- Students are encouraged to participate in co-curricular activities. Groups such as Beta Beta Beta, the biology honorary society, and Alpha Epsilon Delta, the preprofessional honor society, are social and academic organizations that further students' interest in biology while exposing them to its relationship with other scientific disciplines.

Curriculum Overview

The undergraduate curriculum in the Department of Biology is diverse and will meet a variety of interests in the rapidly expanding fields of the biological sciences. It is also designed to provide an intensive educational experience for students in other disciplines who are interested in biology. In addition to courses in Macelwane Hall, the department offers courses at the University's Reis Biological Station (https://www.slu.edu/arts-and-sciences/biology/reis-biological-station/), located by the Huzzah Creek in the Ozarks.

B.S. students may choose one of five concentrations:

Biological Science

This concentration provides students with a strong foundation in biology and prepares them for entry-level employment in the life sciences, health professions, K-12 education, and graduate school.

Biological Chemistry and Molecular Biology

This concentration focuses on the latest advances in biochemistry, genomics, molecular and cell biology. It is designed for students interested in careers involving biomedical research or biotechnology.

Cell Biology and Physiology

This concentration provides students with a strong foundation in the structure and function of organ systems and the tissues that comprise them. It is a good choice for students planning careers in medicine, pharmacology or health care.

Ecology, Evolution and Conservation

This concentration is designed for students interested in various aspects of organismal biology. It is a good choice for students preparing for graduate study or planning a career as a research biologist or wildlife specialist.

Plant Science

This concentration is designed for students interested in various aspects of plant biology. It prepares students for careers in agricultural industries, botanical research institutes or advanced training in graduate degree programs.

Fieldwork and Research Opportunities

The benefits of SLU's biology program include several internship and career opportunities. Advanced undergraduate students with good academic records are encouraged to apply for teaching or learning assistant positions. In addition to a stipend, students gain teaching experience and the opportunity to help others become interested in biology.

Biology majors can enroll in courses that provide credit for structured internships through collaborations with various local organizations, including the Missouri Botanical Garden, Saint Louis Zoo, Sigma-Aldrich, Bayer and firms in the growing biotechnology field.

Careers

The biology major develops strong critical thinking and problem-solving skills that provide excellent preparation for professional schools, such as:

- Medical school
- Veterinary science school
- Dental school
- Optometry school
- Graduate school in a broad range of disciplines

The skills biology majors gain also open the door to a wide variety of career options in health care, biotechnology, environmental management, conservation, education and the pharmaceutical industry.

Recent biology majors have earned grants from Sigma Xi and the National Science Foundation and prestigious fellowships from the NSF, Fulbright Scholar Program, Mayo Clinic, Smithsonian Institution, NeuroSURF and the American Society for Microbiology.

Admission Requirements

Begin Your Application (https://www.slu.edu/apply.php)

Saint Louis University also accepts the Common Application and the Coalition Application.

Freshman

All applications are thoroughly reviewed with the highest degree of individual care and consideration to all credentials that are submitted. Solid academic performance in college preparatory coursework is a primary concern in reviewing a freshman applicant's file.

To be considered for admission to any Saint Louis University undergraduate program, applicants must be graduating from an

accredited high school, have an acceptable HiSET exam score or take the General Education Development (GED) test.

Transfer

Applicants must be a graduate of an accredited high school or have an acceptable score on the GED or HiSET.

Students who have attempted fewer than 24 semester credits (or 30 quarter credits) of college credit must follow the above freshmen admission requirements. Students who have completed 24 or more semester credits (or 30 quarter credits) of college credit must submit transcripts from all previously attended college(s).

In reviewing a transfer applicant's file, the Office of Admission holistically examines the student's academic performance in college-level coursework as an indicator of the student's ability to meet the academic rigors of Saint Louis University. Where applicable, transfer students will be evaluated on any courses outlined in the continuation standards of their preferred major.

International Applicants

All admission policies and requirements for domestic students apply to international students along with the following:

- Demonstrate English Language Proficiency (https://catalog.slu.edu/academic-policies/office-admission/undergraduate/english-language-proficiency/)
- All academic records must include an English translation. An official course-by-course transcript evaluation may be required and accepted.

Tuition

Tuition/Fee	Cost Per Year
Undergraduate Tuition	$58,960
University Fees	$1,000

Additional charges may apply. Other resources are listed below:

Information on Tuition and Fees (https://catalog.slu.edu/academic-policies/student-financial-services/tuition/)

Miscellaneous Fees (https://catalog.slu.edu/academic-policies/student-financial-services/fees/)

Information on Summer Tuition (https://catalog.slu.edu/academic-policies/student-financial-services/tuition-summer-current/)

Scholarships and Financial Aid

There are two principal ways to help finance a Saint Louis University education:

- **Scholarships:** Scholarships are awarded based on academic achievement, service, leadership and financial need.
- **Financial Aid:** Financial aid is provided through grants and loans, some of which require repayment.

Saint Louis University makes every effort to keep our education affordable. In fiscal year 2025, 99.6% of first-time freshmen and 92% of all students received financial aid (https://www.slu.edu/financial-aid/) and students received more than $517 million in aid University-wide.

For priority consideration for merit-based scholarships, apply for admission by Dec. 1 and complete a Free Application for Federal Student Aid (FAFSA) by Feb. 1.

For more information on scholarships and financial aid, visit the Office of Student Financial Services (https://www.slu.edu/financial-aid/).

Learning Outcomes

1. **Graduates will know core concepts of biology at all levels of biological organization.** *(Students will demonstrate their knowledge of the five core conceptual areas of biology identified by the Vision and Change report (AAAS, 2011): structure and function; information flow and storage; evolution; transformations of energy and matter; systems) at the cellular/molecular, organismal and ecosystem levels).*
2. **Graduates will apply knowledge of biology and scientific ways of thinking to reason about complex questions.** *(Students will apply their understanding of biology and scientific reasoning skills to work on questions that require applying fundamental paradigms and ways of thinking across diverse biological systems. Application problems may require, for example, that students construct models, provide explanations, analyze texts or figures, recognize patterns, make inferences and predictions. Application problems should range from course- and content-specific questions to broader social, environmental and ethical questions).*
3. **Graduates will use the approaches and tools of scientific practice.** *(Students will practice the skills biologists use in their work, including: (a) formulating research questions, hypotheses, and testable predictions; (b) conceptualizing experiments; (c) gathering data through appropriate laboratory and/or field techniques; (d) using appropriate qualitative and/or quantitative approaches to analyze data and draw conclusions).*
4. **Graduates will communicate effectively about biology** *(Students will generate written, visual, and/or oral communication artifacts that (a) are grounded within the analysis and synthesis of scientific literature, (b) demonstrate alignment with disciplinary standards, (c) incorporate instructor and/or peer feedback, and (d) are appropriately tailored for specific intended audiences).*

Requirements

Biology students must complete a minimum total of **74 credits** for the major, **35** of which must in the BIOL subject code at the 3000 level or above.

Code	Title	Credits
University Undergraduate Core (https://catalog.slu.edu/academic-policies/academic-policies-procedures/university-core/)		**32-35**
Major Requirements		**74**
Required Introductory Courses		
BIOL 1240 & BIOL 1245	General Biology: Information Flow and Evolution and Principles of Biology I Laboratory	4
BIOL 1260 & BIOL 1265	General Biology: Transformations of Energy and Matter and Principles of Biology II Laboratory	4
BIOL 3010	Evolutionary Biology	3
BIOL 3020	Biochemistry and Molecular Biology	3
BIOL 3030	Principles of Genetics	3
BIOL 3040	Cell Structure & Function	3

BIOL 3070	General Ecology	3
CHEM 1110 & CHEM 1115	General Chemistry 1 and General Chemistry 1 Laboratory	4
CHEM 1120 & CHEM 1125	General Chemistry 2 and General Chemistry 2 Laboratory	4
MATH 1510	Calculus I	4
Statistics Course		
STAT 1300	Elementary Statistics with Computers	3-4
or BIOL 4790	Biometry	
or BST 3100	Applied Biostatistics I	
Additional Science Lab Courses *		*16*
Complete four of the following seven combinations: *		
CHEM 2410 & CHEM 2415	Organic Chemistry 1 and Organic Chemistry 1 Laboratory *	
CHEM 2420 & CHEM 2425	Organic Chemistry 2 and Organic Chemistry 2 Laboratory *	
PHYS 1310 & PHYS 1320	College Physics I and College Physics I Laboratory	
PHYS 1330 & PHYS 1340	College Physics II and College Physics II Laboratory	
EAS 1420 & EAS 1425	Introduction to Atmospheric Science and Introduction to Atmospheric Science Lab	
EAS 1430 & EAS 1435	Introduction to the Solid Earth and Introduction to the Solid Earth Lab	
EAS 1450 & EAS 1455	Introduction to Oceanography and Intro to Oceanography Lab	
Concentrations		
Select one of the following Concentrations:		19
Note: all Concentration Biology Electives must be at the 3000 level or above. A total of 4 credits of BIOL 3970 Independent Research in Biology, BIOL 4970 Advanced Independent Research, BIOL 4980 Advanced Independent Study, and Internship courses (BIOL 3910-3919 and BIOL 4910-4919) can be counted toward the B.S. degree.		
Biological Chemistry and Molecular Biology (p. 3)		
Biological Sciences (p. 3)		
Cell Biology & Physiology (p. 3)		
Ecology, Evolution & Conservation (p. 4)		
Plant Science (p. 4)		
Senior Inquiry		*1*
Select one of following:		
BIOL 4910	Internship in Conservation	
BIOL 4911	Integrated Bioinformatics Internship	
BIOL 4912	Internship in Plant Science	
BIOL 4970	Advanced Independent Research	
BIOL 4980	Advanced Independent Study	
BIOL 5xxx	BIOL 5000-level elective	
University Electives		**14**
Total Credits		**120**

* Students in the **Biological Chemistry and Molecular Biology** concentration must take CHEM 2410 Organic Chemistry 1 (3 cr), CHEM 2415 Organic Chemistry 1 Laboratory (1 cr), CHEM 2420 Organic Chemistry 2 (3 cr), and CHEM 2425 Organic Chemistry 2 Laboratory (1 cr).

Laboratory Requirement

All B.S. students must complete three structured upper-level Biology laboratory experiences as part of their concentration.

Independent Research

A total of 4 credits of BIOL 3970 Independent Research in Biology (1-3 cr), BIOL 4970 Advanced Independent Research (1-4 cr), and/or BIOL 4980 Advanced Independent Study (1-3 cr) can be counted toward the B.S. degree. These courses do not count as structured lab courses.

Senior Inquiry Project Submission

Upon completion of their Senior Inquiry Project, students must turn in their final project to the faculty member with whom they are registered.

Continuation Standards

Students must have a 2.00 grade point average (GPA) in all courses used to fulfill major requirements. Students who fall below the 2.0 GPA in major coursework will be placed on program probation. If a student's major GPA falls below a 2.00 for two consecutive semesters, the student will be eligible for dismissal from the major.

Biological Chemistry and Molecular Biology Concentration

Code	Title	Credits
BIOL 4700	Molecular Biology	3
Select one course with a 'Biological Chemistry/Molecular Biology Elective' attribute.		*3*
Select two courses with a 'Biological Chemistry/Molecular Biology Lab' attribute.		*3-6*
Complete a minimum of one additional structured laboratory experience.		*1-5*
Biology Elective Courses (a minimum of 19 credits is required for the concentration)		*9-12*
Total Credits		**19**

Biological Sciences Concentration

Code	Title	Credits
Complete a minimum of three structured laboratory experiences.		*3-13*
Biology Elective Courses (a minimum of 19 credits is required for the concentration)		*6-16*
Total Credits		**19**

Cell Biology and Physiology Concentration

Code	Title	Credits
Required Course		
BIOL 4540	Human Systemic Physiology	3
Select one course with a 'Cell Biology-Related Lab' attribute		*1-4*
Select two courses with a 'Cell Biology/Physiology Elective' attribute.		*6-9*
Select one course with a 'Physiology-Related Lab' attribute.		*1-5*
Complete a minimum of one additional structured laboratory experience.		*1-5*

Biology Elective Courses (a minimum of 19 credits is required for the concentration)	*0-7*
Total Credits	**19**

Ecology, Evolution and Conservation Concentration

Code	Title	Credits
BIOL 4760	General Ecology Laboratory	1
Select one course with a Tools Elective attribute		2-4
Complete three courses with the Ecology, Evolution, & Organismal Elective attribute		9-15
Complete a minimum of two additional structured lab experiences.		2-10
Biology Elective Courses (a minimum of 19 credits is required for the concentration)		0-5
Total Credits		**19**

Plant Science Concentration

Code	Title	Credits
Required Courses		
BIOL 3260	Biology of Plants & Fungi	4
BIOL 3490	Plant Physiology	3
BIOL 4090	Plant Ecology	4
Complete a minimum of one additional structured lab experience.		1-5
Biology Elective Courses (a minimum of 19 credits is required for the concentration)		3-8
Total Credits		**19**

Roadmap

This roadmap is just one example of a semester-by-semester plan of study for this program. There are other plans students can and do take. The plan of study for each particular student is established in consultation with each student's academic advisor; *this roadmap does not replace academic advising appointments.*

Roadmap notes:

- This Roadmap assumes full-time enrollment unless otherwise noted.
- Courses/Milestones marked with an "!" are critical and must be completed in the semester listed in the Roadmap to ensure a timely graduation.
- Course availability and sequencing are subject to change.

Biological Chemistry and Molecular Biology

Course	Title	Credits
Year One		
Fall		
BIOL 1240 & BIOL 1245	General Biology: Information Flow and Evolution and Principles of Biology I Laboratory (BIOL 1240 satisfies CORE 3800)	4
CHEM 1110 & CHEM 1115	General Chemistry 1 and General Chemistry 1 Laboratory	4
CORE 1000	Ignite First Year Seminar (Must be taken in first 36 credit hours at SLU / Cannot carry attributes)	2-3
CORE 1500	Cura Personalis 1: Self in Community (Must be taken in first 36 credit hours at SLU / Cannot carry attributes / Must be taken at SLU)	1
CORE 1900	Eloquentia Perfecta 1: Written and Visual Communication (Should be taken in first 36 credit hours at SLU / Cannot carry attributes)	3
University Electives		1
	Credits	**15-16**
Spring		
BIOL 1260 & BIOL 1265	General Biology: Transformations of Energy and Matter and Principles of Biology II Laboratory	4
CHEM 1120 & CHEM 1125	General Chemistry 2 and General Chemistry 2 Laboratory	4
MATH 1510	Calculus I (satisfies CORE 3200)	4
CORE 1600	Ultimate Questions: Theology	3
	Credits	**15**
Year Two		
Fall		
BIOL 3020	Biochemistry and Molecular Biology	3
CHEM, EAS, or PHYS course w/lab *		4
CORE 1700	Ultimate Questions: Philosophy	3
CORE 1200	Eloquentia Perfecta 2: Oral and Visual Communication	3
University Electives		2
	Credits	**15**
Spring		
BIOL 3040	Cell Structure & Function	3
CHEM, EAS, or PHYS course w/lab *		4
STAT 1300 or BIOL 4790 or BST 3100	Elementary Statistics with Computers or Biometry or Applied Biostatistics I	3-4
CORE 2500	Cura Personalis 2: Self in Contemplation	0
CORE 2800	Eloquentia Perfecta 3: Creative Expression	2-3
University Electives		2
	Credits	**14-16**
Year Three		
Fall		
BIOL 3010	Evolutionary Biology	3
BIOL 3030	Principles of Genetics	3
BIOL 4700	Molecular Biology	3
CHEM, EAS, or PHYS course w/lab *		4
CORE 3400	Ways of Thinking: Aesthetics, History, and Culture	3
	Credits	**16**
Spring		
Course with a 'Biological Chemistry/Molecular Biology Lab' attribute		1-2
BIOL Elective		3

CHEM, EAS, or PHYS course w/lab *		4
CORE 3600	Ways of Thinking: Social and Behavioral Sciences	3
CORE 4000	Collaborative Inquiry	3
University Electives		2
	Credits	**16-17**
Year Four		
Fall		
Course with a 'Biological Chemistry/Molecular Biology Elective' attribute		3
Structured Lab		1-5
BIOL 3070	General Ecology	3
CORE 3500	Cura Personalis 3: Self in the World	1
University Electives		7-3
	Credits	**15**
Spring		
Biology Elective		3
Course with a 'Biological Chemistry/Molecular Biology Lab' attribute		1-4
Senior Inquiry		1-3
Senior Inquiry Project Submission		
University Electives		10-5
	Credits	**15**
	Total Credits	**121-125**

* Note: CHEM 2410, 2415, 2420, and 2425 are required for the BCMB concentration.

Biological Sciences

Course	Title	Credits
Year One		
Fall		
BIOL 1240 & BIOL 1245	General Biology: Information Flow and Evolution and Principles of Biology I Laboratory (BIOL 1240 satisfies CORE 3800)	4
CHEM 1110 & CHEM 1115	General Chemistry 1 and General Chemistry 1 Laboratory	4
CORE 1000	Ignite First Year Seminar (Must be taken in first 36 credit hours at SLU / Cannot carry attributes)	2-3
CORE 1500	Cura Personalis 1: Self in Community (Must be taken in first 36 credit hours at SLU / Cannot carry attributes)	1
CORE 1900	Eloquentia Perfecta 1: Written and Visual Communication (Should be taken in first 36 credit hours at SLU / Cannot carry attributes)	3
University Electives		1
	Credits	**15-16**
Spring		
BIOL 1260 & BIOL 1265	General Biology: Transformations of Energy and Matter and Principles of Biology II Laboratory	4
CHEM 1120 & CHEM 1125	General Chemistry 2 and General Chemistry 2 Laboratory	4
MATH 1510	Calculus I (satisfies CORE 3200)	4
CORE 1600	Ultimate Questions: Theology	3
	Credits	**15**
Year Two		
Fall		
BIOL 3020	Biochemistry and Molecular Biology	3
CHEM, EAS, or PHYS course w/lab		4
CORE 1700	Ultimate Questions: Philosophy	3
CORE 1200	Eloquentia Perfecta 2: Oral and Visual Communication	3
University Electives		2
	Credits	**15**
Spring		
BIOL 3040	Cell Structure & Function	3
CHEM, EAS, or PHYS course w/lab		4
STAT 1300 or BIOL 4790 or BST 3100	Elementary Statistics with Computers or Biometry or Applied Biostatistics I	3-4
CORE 2500	Cura Personalis 2: Self in Contemplation	0
CORE 2800	Eloquentia Perfecta 3: Creative Expression	2-3
University Electives		3
	Credits	**15-17**
Year Three		
Fall		
BIOL 3010	Evolutionary Biology	3
BIOL 3030	Principles of Genetics	3
Biology Elective		3
CHEM, EAS, or PHYS course w/lab		4
CORE 3400	Ways of Thinking: Aesthetics, History, and Culture	3
	Credits	**16**
Spring		
Biology Elective		3
Laboratory Elective		1-2
CHEM, EAS, or PHYS course w/lab		4
CORE 3600	Ways of Thinking: Social and Behavioral Sciences	3
CORE 4000	Collaborative Inquiry	3
University Electives		2
	Credits	**16-17**
Year Four		
Fall		
Biology Elective		3
Laboratory Elective		1-5
BIOL 3070	General Ecology	3
CORE 3500	Cura Personalis 3: Self in the World	1
University Electives		7
	Credits	**15-19**
Spring		
Biology Elective		3
Laboratory Elective		1-5

Senior Inquiry		1-3
Senior Inquiry Project Submission		
University Electives		9-4
	Credits	**14-15**
	Total Credits	**121-130**

Cell Biology and Physiology

Course	Title	Credits
Year One		
Fall		
BIOL 1240 & BIOL 1245	General Biology: Information Flow and Evolution and Principles of Biology I Laboratory (BIOL 1240 satisfies CORE 3800)	4
CHEM 1110 & CHEM 1115	General Chemistry 1 and General Chemistry 1 Laboratory	4
CORE 1000	Ignite First Year Seminar (Must be taken in first 36 credit hours at SLU / Cannot carry attributes)	2-3
CORE 1500	Cura Personalis 1: Self in Community (Must be taken in first 36 credit hours at SLU / Cannot carry attributes)	1
CORE 1900	Eloquentia Perfecta 1: Written and Visual Communication (Should be taken in first 36 credit hours at SLU / Cannot carry attributes)	3
University Electives		1
	Credits	**15-16**
Spring		
BIOL 1260 & BIOL 1265	General Biology: Transformations of Energy and Matter and Principles of Biology II Laboratory	4
CHEM 1120 & CHEM 1125	General Chemistry 2 and General Chemistry 2 Laboratory	4
MATH 1510	Calculus I (satisfies CORE 3200)	4
CORE 1600	Ultimate Questions: Theology	3
	Credits	**15**
Year Two		
Fall		
BIOL 3020	Biochemistry and Molecular Biology	3
CHEM, EAS, or PHYS course w/lab		4
CORE 1700	Ultimate Questions: Philosophy	3
CORE 1200	Eloquentia Perfecta 2: Oral and Visual Communication	3
General Electives		2
	Credits	**15**
Spring		
BIOL 3040	Cell Structure & Function	3
CHEM, EAS, or PHYS course w/lab		4
STAT 1300 or BIOL 4790 or BST 3100	Elementary Statistics with Computers or Biometry or Applied Biostatistics I	3-4
CORE 2500	Cura Personalis 2: Self in Contemplation	0
CORE 2800	Eloquentia Perfecta 3: Creative Expression	2-3
University Electives		3
	Credits	**15-17**
Year Three		
Fall		
BIOL 3010	Evolutionary Biology	3
Course with 'Cell Biology/Physiology Elective' attribute		3
BIOL 4540	Human Systemic Physiology	3
CHEM, EAS, or PHYS course w/lab		4
CORE 3400	Ways of Thinking: Aesthetics, History, and Culture	3
	Credits	**16**
Spring		
BIOL 3030	Principles of Genetics	3
Course with 'Cell-Related Lab' attribute		1
Course with 'Physiology-Related Lab' attribute		2-5
CHEM, EAS, or PHYS course w/lab		4
CORE 3600	Ways of Thinking: Social and Behavioral Sciences	3
CORE 4000	Collaborative Inquiry	2-3
	Credits	**15-19**
Year Four		
Fall		
Course with 'Cell Biology/Physiology Elective' attribute		3
BIOL Elective		3
BIOL 3070	General Ecology	3
CORE 3500	Cura Personalis 3: Self in the World	1
University Electives		5
	Credits	**15**
Spring		
Laboratory Elective		1-5
Senior Inquiry		1-3
Senior Inquiry Project Submission		
University Electives		12-2
	Credits	**14-10**
	Total Credits	**120-123**

Ecology, Evolution and Conservation

Course	Title	Credits
Year One		
Fall		
BIOL 1240 & BIOL 1245	General Biology: Information Flow and Evolution and Principles of Biology I Laboratory (BIOL 1240 satisfies CORE 3800)	4
CHEM 1110 & CHEM 1115	General Chemistry 1 and General Chemistry 1 Laboratory	4
CORE 1000	Ignite First Year Seminar (Must be taken in first 36 credit hours at SLU / Cannot carry attributes)	2-3
CORE 1500	Cura Personalis 1: Self in Community (Must be taken in first 36 credit hours at SLU / Cannot carry attributes)	1

CORE 1900	Eloquentia Perfecta 1: Written and Visual Communication (Should be taken in first 36 credit hours at SLU / Cannot carry attributes)	3
University Electives		1
	Credits	**15-16**
Spring		
BIOL 1260 & BIOL 1265	General Biology: Transformations of Energy and Matter and Principles of Biology II Laboratory	4
CHEM 1120 & CHEM 1125	General Chemistry 2 and General Chemistry 2 Laboratory	4
MATH 1510	Calculus I (satisfies core 3200)	4
CORE 1600	Ultimate Questions: Theology	3
	Credits	**15**
Year Two		
Fall		
BIOL 3020	Biochemistry and Molecular Biology	3
CHEM, EAS, or PHYS course w/lab		4
CORE 1700	Ultimate Questions: Philosophy	3
CORE 1200	Eloquentia Perfecta 2: Oral and Visual Communication	3
University Elective		2
	Credits	**15**
Spring		
BIOL 3040	Cell Structure & Function	3
CHEM, EAS, or PHYS course w/lab		4
STAT 1300 or BIOL 4790 or BST 3100	Elementary Statistics with Computers or Biometry or Applied Biostatistics I	3-4
CORE 2500	Cura Personalis 2: Self in Contemplation	0
CORE 2800	Eloquentia Perfecta 3: Creative Expression	2-3
University Elective		3
	Credits	**15-17**
Year Three		
Fall		
BIOL 3010	Evolutionary Biology	3
BIOL 3030	Principles of Genetics	3
BIOL 3070 & BIOL 4760	General Ecology and General Ecology Laboratory	4
CHEM, EAS, or PHYS course w/lab		4
CORE 3400	Ways of Thinking: Aesthetics, History, and Culture	3
	Credits	**17**
Spring		
Course with a 'Ecology, Evolution, and Organismal' attribute		3-4
Course with a 'Ecology, Evolution, and Organismal' attribute		3-4
Laboratory Elective		1-2
CHEM, EAS, or PHYS course w/lab		4
CORE 3600	Ways of Thinking: Social and Behavioral Sciences	3
CORE 4000	Collaborative Inquiry	2-3
	Credits	**16-20**
Year Four		
Fall		
Course with a 'Tools Elective' attribute		2-4
BIOL Elective		3
CORE 3500	Cura Personalis 3: Self in the World	1
University Electives		9
	Credits	**15-17**
Spring		
Course with a 'Ecology, Evolution, and Organismal' attribute		3-5
Laboratory Elective		1-5
Senior Inquiry		1-3
Senior Inquiry Project Submission		
University Electives		7
	Credits	**12-20**
	Total Credits	**120-137**

Plant Science

Course	Title	Credits
Year One		
Fall		
BIOL 1240 & BIOL 1245	General Biology: Information Flow and Evolution and Principles of Biology I Laboratory (BIOL 1240 satisfies CORE 3800)	4
CHEM 1110 & CHEM 1115	General Chemistry 1 and General Chemistry 1 Laboratory	4
CORE 1000	Ignite First Year Seminar (Must be taken in first 36 credit hours at SLU / Cannot carry attributes)	2-3
CORE 1500	Cura Personalis 1: Self in Community (Must be taken in first 36 credit hours at SLU / Cannot carry attributes)	1
CORE 1900	Eloquentia Perfecta 1: Written and Visual Communication (Should be taken in first 36 credit hours at SLU / Cannot carry attributes)	3
University Elective		1
	Credits	**15-16**
Spring		
BIOL 1260 & BIOL 1265	General Biology: Transformations of Energy and Matter and Principles of Biology II Laboratory	4
CHEM 1120 & CHEM 1125	General Chemistry 2 and General Chemistry 2 Laboratory	4
MATH 1510	Calculus I (satisfies CORE 3200)	4
CORE 1600	Ultimate Questions: Theology	3
	Credits	**15**
Year Two		
Fall		
BIOL 3020	Biochemistry and Molecular Biology	3
CHEM, EAS, or PHYS course w/lab		4
CORE 1700	Ultimate Questions: Philosophy	3
CORE 1200	Eloquentia Perfecta 2: Oral and Visual Communication	3

University Electives		2
	Credits	**15**
Spring		
BIOL 3040	Cell Structure & Function	3
CHEM, EAS, or PHYS course w/lab		4
STAT 1300 or BIOL 4790 or BST 3100	Elementary Statistics with Computers or Biometry or Applied Biostatistics I	3-4
CORE 2500	Cura Personalis 2: Self in Contemplation	0
CORE 2800	Eloquentia Perfecta 3: Creative Expression	2-3
University Electives		3
	Credits	**15-17**
Year Three		
Fall		
BIOL 3010	Evolutionary Biology	3
BIOL 4090	Plant Ecology	4
CHEM, EAS, or PHYS course w/lab		4
CORE 3400	Ways of Thinking: Aesthetics, History, and Culture	3
University Electives		1
	Credits	**15**
Spring		
BIOL 3490	Plant Physiology	3
BIOL 3030	Principles of Genetics	3
CHEM, EAS, or PHYS course w/lab		4
CORE 3600	Ways of Thinking: Social and Behavioral Sciences	3
CORE 4000	Collaborative Inquiry	2-3
	Credits	**15-16**
Year Four		
Fall		
BIOL Elective		3
BIOL 3070	General Ecology	3
Laboratory Elective		1-2
CORE 3500	Cura Personalis 3: Self in the World	1
University Electives		7-0
	Credits	**15-9**
Spring		
BIOL 3260	Biology of Plants & Fungi	4
BIOL Elective		3
Senior Inquiry		1-3
Senior Inquiry Project Submission		
University Electives		7
	Credits	**15-17**
	Total Credits	**120**

2+SLU

2+SLU programs provide a guided pathway for students transferring from a partner institution.

- Biology, B.S. (STLCC 2+SLU) (https://catalog.slu.edu/academic-policies/office-admission/undergraduate/2plusslu/stlcc/biology-bs/)

Contact Us

For additional information about this program, please contact biology@slu.edu or call 314-977-3900.