

BIOLOGY MAJOR - SECONDARY EDUCATION

Acceptance to Major Requirements

Course Requirements: BIOL 101 Foundations of Biology, BIOL 201 Intermediate Cell Biology and Genetics, and any other 4-credit course in the major

Minimum Cumulative GPA: 2.50

Other Requirements: Must have a Biology faculty member as Academic Advisor

Acceptance to Education Department

Students must make formal application to the Education Department for admission to the Teacher Education Program. Application is made while students are enrolled in EDUC 212 or EDUC 213. Descriptions of all admission requirements and the application process are specified on the Education Department's website at <https://www.csbsju.edu/education/student-resources/apply-to-the-program> (<https://www.csbsju.edu/education/student-resources/apply-to-the-program/>)

Due to the professional nature of this program, students must:

- Maintain a cumulative, content area, department, and additional license GPA of 2.50 or above. In addition, a grade of C or above is required in content area, minor, and additional license courses
- Successfully complete edTPA during student teaching
- Complete background checks as required by the districts in which students are placed for field and student teaching experiences. Individual schools and districts will determine student eligibility to participate in field experiences per their policies regarding background checks.
- Purchase liability insurance through Education Minnesota on an annual basis.
- Students should reference the Education Department website for additional information about requirements.

Please see Secondary Education Minor (<https://catalog.csbsju.edu/catalog/academic-departments/education/secondary-education-minor/#requirementstext>) for Education Department requirements.

Required Biology Major Courses

Code	Title	Hours
BIOL 101	Foundations of Biology	4
BIOL 201	Intermediate Cell Biology and Genetics	4
BIOL 202	Evolution in Action	4
20 credits from the following ¹		20
BIOL (300 Level) courses		
CSCI 317D	Bioinformatics (2 credits from the following)	
2 credits from the following		2
BIOL 380@ (Topics)		
BIOL 372	Biological Research	
COLG 398	Distinguished Thesis Essay, Research or Creative Project	

BIOL XXX (Comprehensive Exam)

MATH 124	Probability and Statistical Inference	4
CHEM 125	Introduction to Chemical Structure and Properties	4
CHEM 201	Purification and Separation Lab I	0-1
One of the following:		4
MATH 118	Essential Calculus	
MATH 119	Calculus I	
MATH 120	Calculus II	
PHYS 105	Physics for the Life Sciences I	
CHEM 250 & CHEM 202	Reactions of Nucleophiles and Electrophiles (Reactivity 1) and Purification and Chromatography Lab II	
CHEM 251 & CHEM 203	Intermediate Reactions of Nucleophiles and Electrophiles (Reactivity 2) and Synthesis Lab	
CHEM 255 & CHEM 205	Macroscopic Chemical Analysis and Chemical Measurement Lab	
CSCI 130	Concepts of Computing: Science and Applications	
CSCI 140	Concepts of Computing: Science and Mathematics	
CSCI 150	Introduction to Computing in the Liberal Arts and Sciences	
CSCI 239	Discrete Computational Structures	
ENVR 175	Earth Systems Science	

Total Hours **46-47**

¹ Cannot count BIOL 371, 373A, 373B, 373J, 373O, 373P, 373R, or 374.

Additional Requirements:

General Education Requirements:

All undergraduate students must complete the requirements of the Integrations Curriculum (IC) which is designed to ensure all of our students receive a liberal arts education. Please review details of the Integrations Curriculum (<https://catalog.csbsju.edu/catalog/academic-programs-policies-regulations/integrations-curriculum/>) requirements here (<https://catalog.csbsju.edu/catalog/academic-programs-policies-regulations/integrations-curriculum/>).

Graduation Requirements:

In addition to the Integrations Curriculum, all undergraduate students must meet the following minimum degree requirements to earn their degree from CSB and SJU.

Credits: 124 total credits, 40 of which must be from upper division coursework

GPA: 2.0 or higher*

Residency: At least 24 of your last 32 credits must be completed at CSB and SJU

Please visit Graduation (<https://catalog.csbsju.edu/catalog/academic-programs-policies-regulations/graduation/>) under the Academic Policies and Regulations (<https://catalog.csbsju.edu/catalog/academic-programs-policies-regulations/graduation/>)

programs-policies-regulations/) portion of the catalog for additional details regarding degree requirements.

** Cumulative GPA as well as major(s)/minor(s) GPA. Please note some majors/minors may require a higher GPA to earn their degree.*

Biology Major with a Minor in Secondary Education

Course	Title	Hours
First Year		
Fall		
CHEM 125 & CHEM 201	Introduction to Chemical Structure and Properties and Purification and Separation Lab I	5
INTG 100	Foundations (LF)	4
THEO 100	Theological Explorations (TE)	4
BIOL 101	Foundations of Biology	4
INTG 105	College Success	1
Hours		18
Spring		
EDUC 111	Introduction to Teaching and Learning in a Diverse World	4
LANG 111		4
Elective (INTG Requirement)		4
BIOL 201	Intermediate Cell Biology and Genetics	4
Hours		16
Second Year		
Fall		
MATH 119	Calculus I	4
LANG 112		4
BIOL 202	Evolution in Action	4
Elective (INTG Requirement)		4
Hours		16
Spring		
EDUC 203	Development, Learning, and Mental Health in Childhood and Adolescence	4
BIOL 316	General Genetics	4
LANG 211		4
EDUC 379A	Educational Psychology: Myths Versus Science	4
EDUC 213	Clinical Experience for K-12/5-12 Majors	2
Hours		18
Third Year		
Fall		
BIOL 323 or BIOL 327	Animal Physiology or Plant Physiology	4
BIOL 334 or BIOL 337	General Ecology or Aquatic Ecology	4
MATH 124	Probability and Statistical Inference	4
INTG REQ or Elective		4
Hours		16
Spring		
INTG REQ or Elective		4
BIO 3@@@		4
Additional MATH/COMP SCI/SCI course		4
Theological Integrations (TU)		4
EDUC 305	Human Exceptionalities: School, Home, and Community	1
Hours		17
Fourth Year		
Fall		
EDUC 355B	Social Science Pedagogy in Grades 9-12	4
EDUC 390	Ethics in Human Relations	4

BIOL 307	Biology of Microorganisms	4
Bio Capstone		2
EDUC 359	Issues in Education K-12	2
Hours		16
Spring		
EDUC 36@ Student Teaching		16
Hours		16
Total Hours		133