

Biology Secondary Education

Courses required for the first year: CHEM 131, CHEM 132; PSYC 100; second language requirement
Courses recommended for the first year: Courses designated with a PA, PP, PL, or G
BIOL 130 and BIOL 140 are generally taken during the 2nd year
Contact: Dr. Kevin Geedey, Biology Advisor (kevingeedey@augustana.edu) or Education advisor Charlotte Shepherd, (charlotteshepherd@augustana.edu)*

* Students interested in this major are strongly encouraged to contact Prof. Shepherd prior to registration for Spring Semester.

The Major in Biology Secondary Education

28 credits, including BIOL-130, BIOL-140, BIOL-250, BIOL-310, BIOL-343, One of BIOL-360 or BIOL-362, one of BIOL-386 or BIOL -387; one 4 credit SI experience from biology chosen from BIOL 464, BIOL-465, BIOL-466 or the combination of EDUC-422, EDUC-450 and INTR-EDA90 as part of the Secondary Education program. See the Director of Secondary Education for more details. Required supporting courses (28 credits): CHEM-131, CHEM132, PHYS-151, PHYS-152, ASTR-142, ESGE-200 or ESGE-225, GEOL-101

Candidates can also earn licensure to teach science in grades 5-8 by completing the major in Middle Grades: Science.

Required Courses in Biology

Course Number	Course Name	Learning Perspective	Prerequisites	Credits
BIOL 130	Molecules to cells			4
BIOL 140	Organisms to Ecosystems			4
BIOL 250	Genetics		BIOL 130 and BIOL 140	4
BIOL 310	Evolution		BIOL 250	4

BIOL 343	Microbiology		BIOL 250	4
BIOL 360 or BIOL 362	Human physiology or Comparative physiology		BIOL 130 or BIOL 130 and BIOL 140	4
BIOL 386 or BIOL 387	Ecology or Aquatic Biology		BIOL 130 and BIOL 140 or BIOL 250	4
BIOL-464, BIOL 465, BIOL-466	Biology Senior Inquiry*			4

* Students may take the combination of EDUC-422, EDUC-450 and INTR-EDA90 as part of the Secondary Education program to complete the Senior Inquiry requirement.

Required Supporting Courses

Course Number	Course Name	Learning Perspective	Prerequisites	Credits
CHEM 131	General Chemistry 1	PN		4
CHEM 132	General Chemistry 2	PN	CHEM 131	4
PHYS 151	Principles of Physics 1	PN		4
PHYS 152	Principles of Physics 2	PN	PHYS 151	4
ASTR 145	Stars and Galaxies	PN		4
GEOG 105	Weather, Climate and Society	PN		4
GEOL 101	Physical Geology	PN		4

Education Professional Sequence (Required)

Course Number	Course Name	Learning Perspective	Prerequisites	Credits
EDUC 301	Educational Psychology and Assessment			4

EDUC 310	Computers in Education		EDUC 301; Retention in Teacher Education	1
EDUC 340	Methods of Inclusion	D	EDUC 301; Retention in Teacher Education	4
EDUC 370	General Methods		EDUC 301; Retention in Teacher Education	4
EDUC 386	Methods 5-8 Science		EDUC 301; Retention in Teacher Education	4
EDUC 396	Clinical Experience 5- 8		EDUC 301 and EDUC 340; Retention in Teacher Education	1
EDUC 397	Clinical Experience 9- 12		EDUC 301 and EDUC 340; Retention in Teacher Education	1
EDUC 412	Methods of Literacy: 5-12		EDUC 301; Retention in Teacher Education	4
INTR EDA90	Student Teaching	PH	EDUC 396 and EDUC 397; Retention in Teacher Education	10
EDUC 422	Clinical Seminar	PH	Co-requisite: Student Teaching and EDUC 450	1
EDUC 450	School and Society	PH	Co-requisite: Student Teaching and EDUC 422	2

Major Overview

This major is required for teaching licensure in Illinois in grades 9-12. Students completing this major along with all other licensure requirements are eligible for high school teaching positions in science (Biology, Chemistry, and Physics) in Illinois. Students who complete this major will have met most requirements for licensure to teach science in grades 5-8.

*Fall, J term, Spring, Summer; see Academic Calendar for specific dates
Updated January 2026