

Avila University-School of Education
Secondary Education Minor Requirements-Biology

Students who wish to teach high school (secondary) Biology will **major in Biology and minor in secondary education**. See the [Biology Department](#) for Core and Biology Degree Requirements. Below are the secondary education minor requirements and the state teacher certification requirements.

- Minimum of 120 credit hours are needed to graduate
- Bolded courses will double dip to meet a core requirement, major related requirement, education requirement, or certification requirement.
- All education majors and minors must take and pass the Missouri Gateway Education Assessment (MoGEA) and the Missouri Content Exam (MoCA)

SECONDARY EDUCATION MINOR RELATED REQUIREMENTS

MINOR RELATED / CERTIFICATION REQUIREMENTS (MOST OF THESE COURSES ALSO MEET CORE REQUIREMENTS)		
Biology Course with Lab		4 hours
BI 111	General Biology: Cells and Genes w/lab	
College Algebra		3 hours
MA 120	College Algebra	
Economics Course		3 hours
EC 202	Microeconomics	
Composition Course		3 hours
EN 112	Composition II – Rhetorical Argument	
Literature Course		3 hours
EN	CORE Literature Course	
American History Course*		3 hours
HI 203	American Experience I OR	
HI 204	American Experience II	
Physical Science		4 hours
NS 125	Introductory Physical Science	
American National Government		3 hours
PS 120	American National Government	

EDUCATION COURSES		
ED 184	Introduction to Educational Technology	1 hour
ED 185	Practicum	3 hours
ED 229	Developmental and Educational Psychology	3 hours
ED 235	Psychology of the Exceptional Child	3 hours
ED 245	Tests and Measurements	3 hours
ED 287	Multicultural Educational Foundations	3 hours
ED 314	Methods and Educational Technology	1 hour
ED 315	General Methods and Differentiated Learning	3 hours
ED 322	Language and Literacy in the Global Context	3 hours
ED 366	Consultation, Collaboration and Family Engagement: Middle / Secondary	1 hour

ED 375	Reading Strategies and Interventions in the Content Areas	3 hours
ED 381	Health and Safety in Schools	1 hour
ED 419	Managing the Learning Environment	3 hours
ED 455	Special Methods: Biology	2 hours
ED 494	Final Clinical Experience Seminar	2 hours
ED 495	Final Clinical Experience	10 hours

BIOLOGY CERTIFICATION STATE REQUIREMENTS (TYPICALLY MET THROUGH BIOLOGY DEGREE)		
CELL BIOLOGY		
BI 111	General Biology: Cells and Genes w/lab	4 hours
EVOLUTION		
BI 310	Evolution	3 hours
ANIMAL FORM AND FUNCTION		
BI 311	Animal Form, Function and Development	3 hours
PLANT FORM AND FUNCTION		
BI 313	Plant Form and Function	3 hours
BIOLOGY ELECTIVE		
	Biology Elective	4 hours
GENETICS		
BI 318	Genetics	3 hours
CHEMISTRY		
CH 131	General Chemistry I OR	4 hours
CH 135	Advanced General Chemistry	4 hours
EARTH SCIENCE		
NS 221	Physical Geology	4 hours
ENVIRONMENTAL SCIENCE		
BI 215	Humans and the Environment	3 hours
HISTORY & PHILOSOPHY OF SCIENCE AND TECHNOLOGY		
IS 369	Reasoning, History & Social Implications of Science OR	3 hours
NS 380	Special Topics: History & Phil of Science & Technology	3 hours
PHYSICS		
PH 231	General Physics I	5 hours