

# BS IN EDUCATION - BIOLOGY 6-12 MAJOR

Additional Graduation Requirements (<https://catalog.una.edu/undergraduate/academic-procedures-requirements/graduation-requirements>)

## General Education Component

Code	Title	Hours
Area I (Written Composition)		6
Area II (Humanities and Fine Arts)		12
Two literature courses in sequence (EN 211/EN 212, EN 221/EN 222, EN 231/EN 232, EN 233/EN 234)		
One Fine Arts Elective		
COM 201	Fundamentals of Speech	
Area III (Natural Sciences and Mathematics)		11-12
BI 111	Principles of Biology	
BI 112	Principles of Biology	
MA 112	Pre-Calculus Algebra	
MA 113	Pre-Calculus Trigonometry	
MA 115	Pre-Calculus Algebra and Trigonometry	
or MA 125	Calculus I	
Area IV (History, Social and Behavioral Sciences)		12
ED 299	Human Growth and Development <sup>1</sup>	
Area V ( <a href="https://www.una.edu/areav">https://www.una.edu/areav</a> )		11
CH 111	General Chemistry	
CH 111L	General Chemistry Laboratory	
CH 112	General Chemistry	
CH 112L	General Chemistry Laboratory	
CIS 125	Business Applications of Microcomputer Software	
(or higher CS or CIS course)		
<b>Total Hours</b>		<b>52-53</b>

<sup>1</sup> The CLEP examination may be taken for this course

## Professional Education Secondary (Grades 6-12)

**Note: ASBI/FBI background clearance is a prerequisite for all Professional Education Courses.**

Code	Title	Hours
ED 292	Preprofessional Seminar and Laboratory Experience	1
ED 381	Instructional Technology for the High School <sup>1</sup>	3
ED 375	Content Literacy	3
EEX 340	Introduction to Students with Exceptional Learning Needs	3
SCED 480	Teaching Science in the Secondary Schools	3
ED 333W	Learning Theories and Student Development	3
ED 382	Curriculum and Teaching I	3
ED 401	Evaluation of Teaching and Learning	3
ED 477	Curriculum and Teaching II	4

ED 482	High School Student Internship	12
<b>Total Hours</b>		<b>38</b>

## ALSDE/NCATE Approved Teaching Field: Biology

Code	Title	Hours
BI 111	Principles of Biology	4
BI 112	Principles of Biology	4
BI 200W	Biological Literature	1
BI 305	Cell Biology	4
BI 306	Genetics	4
BI 307	Microbiology	4
BI 312	Evolution	3
BI 498	Senior Assessment Seminar	1
Choose one (3-4) hour course from the following:		3-4
BI 362	Non-Vascular Plants	
BI 363	Vascular Plants	
BI 429	Marine Botany	
BI 460	Plant Physiology	
BI 463	Plant Taxonomy	
Choose two (3-4) hour courses from the following:		6-8
BI 310	Comparative Vertebrate Morphology	
BI 311	Animal Physiology	
BI 340	Invertebrate Zoology	
BI 341	Natural History of the Vertebrates	
BI 403	Marine Invertebrate Zoology	
BI 408	Marine Vertebrate Zoology	
BI 433	Embryology	
BI 451	Ornithology	
BI 452	Entomology	
BI 471	Parasitology	
BI 472	Histology	
Choose one (3-4 course) from the following:		3-4
BI 411	Coastal Wetlands Ecology	
BI 412	Marine Ecology	
BI 413	Marine Behavioral Ecology	
BI 421	Ecology	
BI 423	Aquatic Ecology	
<b>Total Hours</b>		<b>37-41</b>

Note:

- Candidates may take the following professional education courses prior to admission to educator preparation: Preprofessional Seminar and Laboratory Experience (ED 292), Content Literacy (ED 375), Instructional Technology for the High School (ED 381), Introduction to Students with Exceptional Learning Needs (EEX 340), and a content methods course.
- Courses that are taken to fulfill general education requirements which are also included in a teaching field may count in both areas.
- Candidates who plan to seek certification in another state should contact the State Department of Education in that state to find out whether or not a comparable certificate exists in that state.

- All requirements must be completed with a minimum of 120 credit hours.