BACHELOR OF SCIENCE IN EDUCATION DEGREE IN SECONDARY EDUCATION - BIOLOGY

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

Code	Title	Hours
General Education Component: Biology		
Area I (Written Composition)		6
EN 111	First-Year Composition I	
EN 112	First Year Composition II	
Area II (Humanities and Fine Arts)		12
Two literature courses in sequence (EN 211/EN 212, EN 221/EN 222, EN 231/EN 232) or one literature course and one additional humanities elective		
One Humanities or Fine Arts Elective		
COM 201	Fundamentals of Speech	
Area III (Natural Sciences and Mathematics)		11-12
BI 111	Cellular Foundations of Biology	
BI 112	Organismal Foundations of Biology	
MA 112	College Algebra	
or MA 113	College Trigonometry	
or 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 [1]	
Area V (https://www.una.edu/areav/)		11
CH 111	General Chemistry	
CH 111L	General Chemistry Laboratory	
CH 112	General Chemistry	
CH 112L	General Chemistry Laboratory	
Professional Education Secondary: Biology (Grades 6-12)		
Note: ASBI/FBI background clearance is a prerequisite for all Professional Education Courses.		
ED 292	Preprofessional Seminar and Laboratory Experience	1
ED 381	Instructional Technology for the High School	3
ED 375	Content Literacy	3
EEX 340	Introduction to Students with Exceptional Learning Needs	3
ED 333W	Learning Theories and Student Development	3
ED 382	Classroom Management for Diverse Learning Environments and Communities	3
ED 401	Evaluation of Teaching and Learning	3
ED 477	Curriculum and Teaching	4
ED 480	Teaching Science in the Secondary Schools	3
ED 482	High School Student Internship	12
Alabama State Board of Education Approved Teaching Field: Biology		
BI 200W	Biological Literature	2
BI 241	Human Anatomy and Physiology I	4
BI 242	Human Anatomy and Physiology II	4
BI 306	Genetics	4
BI 307	Microbiology	4
BI 312	Evolution	3
BI 375	Cell Biology	4
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 Anatomy	
BI 308	Marine Biology	
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 415	Molecular Biology	
BI 435	Biostatistics	
BI 433	Embryology	
BI 441	Biochemistry	
BI 452	Entomology	
BI 453	Southeastern Fishes	
BI 471	Parasitology	
BI 472	Histology	
Choose one (3-4 course) from the following:		3-4
BI 406	Microbial Ecology and Evolution	
BI 411	Coastal Wetlands Ecology	
BI 412	Marine Ecology	
BI 413	Marine Behavioral Ecology	
BI 419	Tropical Ecology	
BI 420	Field Experience: Exploration of an Education Abroad Site	
BI 421	Ecology	
BI 423	Aquatic Ecology	
Total Hours		**123**

[1] The CLEP examination may be taken for this course

Notes:

- Candidates may take the following professional education courses prior to admission to TEP: 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.