

BS IN EDUCATION - GENERAL SCIENCE 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
Area IV (History, Social and Behavioral Sciences)		12
ED 299	Human Growth and Development ¹	
Area V (https://www.una.edu/areav)		
Total Hours		41

¹ 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 ¹	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
Total Hours		38

ALSDE/NCATE Approved Teaching Field: General Science

Code	Title	Hours
BI 111	Principles of Biology	4
BI 112	Principles of Biology	4
BI 305	Cell Biology	4
BI 306	Genetics	4
CH 111	General Chemistry	3
CH 111L	General Chemistry Laboratory	1
CH 112	General Chemistry	3

CH 112L	General Chemistry Laboratory	1
CH 311	Organic Chemistry	4
CH 311L	Organic Chemistry Laboratory	1
CS 135	Computer Skills for Problem-Solving	3
	(or higher level CS/CIS course)	
ES 131	Earth Science/Physical Geology	4
ES 132	Historical Geology	4
MA 125	Calculus I	4
MA 126	Calculus II	4
PH 251	Technical Physics I	5
PH 252	Technical Physics II	5
PH 343	Modern Physics	4
	One course with accompanying lab from the following:	4-5
CH 321 & 321LW	Quantitative Analysis and Quantitative Analysis Laboratory	
CH 322 & 322L	Instrumental Analysis and	
CH 341 & 341L	Applied Physical Chemistry and Applied Physical Chemistry Laboratory	
	One course from the following:	3-4
ES 330	Meteorology	
ES 375	Technology and the Environment	
ES 431 & 431L	Structural Geology and Structural Geology Lab	
ES 455W	Paleobiology	
	One course from the following:	3-5
BI 307	Microbiology	
BI 312	Evolution	
BI 421	Ecology	
CH 312 & 312L	Organic Chemistry and Organic Chemistry Laboratory	
ES 445	Mineralogy	
PH 125	Descriptive Astronomy	
PH 356W	Intermediate Laboratory	
Total Hours		72-76

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.