BACHELOR OF SCIENCE IN EDUCATION DEGREE IN SECONDARY EDUCATION - CHEMISTRY

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN 111</td>
<td>First-Year Composition I</td>
<td>6</td>
</tr>
<tr>
<td>EN 112</td>
<td>First Year Composition II</td>
<td>6</td>
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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 and Fine Arts Elective

Area III (Natural Sciences and Mathematics) 11-12

CH 111 | General Chemistry |
CH 111L | General Chemistry Laboratory |
CH 112 | General Chemistry |
CH 112L | General Chemistry Laboratory |
MA 112 | College Algebra |

or MA 125 | Calculus I |

Area IV (History, Social and Behavioral Sciences) 12

ED 299 | Human Growth and Development |

Area V (https://www.una.edu/areav/) 17-19

PH 251 | Technical Physics I |

PH 252 | Technical Physics II |

One course chosen from the following:

CIS 125 | Business Applications of Microcomputer Software |
CS 135 | Computer Skills for Problem-Solving |
CS 155 | Computer Science I |

Math sequence chosen from the following:

MA 126 | Calculus II (or) |

MA 121 | Calculus for Business and Life Sciences I |

& MA 122 | and Calculus for Business and Life Sciences II |

Professional Education Secondary: Chemistry (Grades 6-12)

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

ED 292 | Preprofessional Seminar and Laboratory Experience |

ED 381 | Instructional Technology for the High School |

ED 375 | Content Literacy |

EEX 340 | Introduction to Students with Exceptional Learning Needs |

SCED 480 | Teaching Science in the Secondary Schools |

ED 333W | Learning Theories and Student Development |

ED 382 | Classroom Management for Diverse Learning Environments and Communities |

ED 401 | Evaluation of Teaching and Learning |

ED 477 | Curriculum and Teaching |

ED 482 | High School Student Internship |

Alabama State Board of Education Approved Teaching Field: Chemistry

CH 311 | Organic Chemistry |

CH 311L | Organic Chemistry Laboratory |

CH 312 | Organic Chemistry |

CH 312L | Organic Chemistry Laboratory |

CH 321 | Quantitative Analysis |

CH 321LW | Quantitative Analysis Laboratory |

CH 322 | Instrumental Analysis |

CH 322LW | Instrumental Analysis Laboratory |

CH 341 | Applied Physical Chemistry |

CH 341L | Applied Physical Chemistry Laboratory |

Total Hours 121-123

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.

1 The CLEP examination may be taken for this course