

# Chemistry Certification (7-12)

## Courses Required

Obtaining teacher certification requires fulfillment of the major in Chemistry as well as additional courses specified below.

Category	Descriptor	Credits	Courses
Course requirements for entry into Pre-Certification Initial Preparation Program (Must be completed prior to the end of the 2 <sup>nd</sup> year)	Two Math Intensive Courses	2	MATH 201 or higher level calculus required and MATH 202 recommended*
	Writing Intensive Course	1	Any W1 Course
	English Literature	1	Any ENLS Course (excluding courses with W1 designations) <sup>1</sup>
Subject Area Courses Required for Certification <sup>2</sup>	CHEM 205 or CHEM 207	1	CHEM 205 Principles of Chemistry or CHEM 207 Explorations in Chemistry
	CHEM 211	1	CHEM 211 Organic Chemistry I
	CHEM 212	1	CHEM 212 Organic Chemistry II
	CHEM 231	1	CHEM 231 Analytical Chemistry
	CHEM 321	1	CHEM 321 Inorganic Chemistry I
	CHEM 340 or CHEM 341	1	CHEM 340 Biological Physical Chemistry or CHEM 341 Physical Chemistry
Required EDUC Courses	EDUC 355	1	EDUC 355 Teaching of Science in Secondary School (typically taken Fall of the senior year)
	EDUC 101	1	Social foundation of Education
	EDUC 201	1	Educational Psychology
	EDUC 230	1	Foundations of Classroom Assessment
	EDUC 240	1	Literacy and Learning in the Diverse Classroom
	EDUC 334 or EDUC 335	1	EDUC 334 Later Childhood and Adolescent Development or EDUC 335 Child and Adolescent Development
	EDUC 339	1	Inclusive Practices
	EDUC 359	3	Student Teaching: Secondary
EDUC 459	1	Professional Seminar in Secondary Education	

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<sup>1</sup> English AP courses accepted for credit at Bucknell can be used to meet this requirement.

<sup>2</sup> Courses in this category may or may not meet major requirements for the students selected field of study. Students should consult the appropriate part of the Bucknell Catalog for listings of major requirements.

## Recommended Course Sequence for Secondary and K-12 Teaching Certification Programs

Secondary and K-12 certification programs are based on a major in the desired content area. In addition to meeting Bucknell's College Core Curriculum requirements along with requirements for their major, students must plan to take the equivalent of one education course per semester, and to spend one semester in the senior year in student teaching. Some certification areas require specialized content courses or have requirements outside of the major. Please see the specific requirements for your certification area and consult early and often with your education advisor to make sure you are fulfilling all requirements for teaching certification.

***Italicized courses are offered only in fall or spring semesters as listed.***

### Sample Secondary and K-12 Certification Configuration

<b>Year 1 Fall</b>	<b>Year 1 Spring</b>
<ul style="list-style-type: none"> <li>• EDUC 101 Social Foundations of Education</li> </ul>	<ul style="list-style-type: none"> <li>• EDUC 201 Educational Psychology</li> </ul>
<b>Year 2 Fall</b>	<b>Year 2 Spring</b>
<ul style="list-style-type: none"> <li>• EDUC 334 Later Childhood and Adolescence (field experience) or</li> <li>• EDUC 335 Child/Adolescent Development (required for K-12 certification) (field experience)</li> </ul>	<ul style="list-style-type: none"> <li>• <b><i>EDUC 230 Foundations of Classroom Assessment</i></b></li> <li>• <b><i>EDUC 240 Literacy and Learning in the Diverse Classroom (field experience)</i></b></li> </ul>
<b>Year 3 Fall</b>	<b>Year 3 Spring</b>
<ul style="list-style-type: none"> <li>• <b><i>EDUC 339 Inclusive Practices</i></b></li> </ul>	<ul style="list-style-type: none"> <li>• Abroad or</li> <li>• 1 of EDUC 230/EDUC 240</li> </ul>
<b>Year 4 Fall</b>	<b>Year 4 Spring</b>
<p>One of "Teaching of" Courses (all will include a field component; some offered alternate years only)</p> <ul style="list-style-type: none"> <li>• <b><i>MATH 207 Teaching of Mathematics in Secondary Schools</i></b></li> <li>• <b><i>EDUC 343 Teaching of Social Studies</i></b></li> <li>• <b><i>EDUC 354 Teaching of Art</i></b></li> <li>• <b><i>EDUC 355 Teaching of Science in Secondary Schools</i></b></li> <li>• <b><i>ENGL 297 Teaching of English</i></b></li> <li>• <b><i>LING 241 Teaching of Foreign language</i></b></li> </ul>	<ul style="list-style-type: none"> <li>• <b><i>EDUC 359 Secondary Student Teaching (equivalent of 3 courses 12 weeks) and</i></b></li> <li>• <b><i>EDUC 459 Professional Seminar in Secondary Education (field experience)</i></b></li> </ul>