

Biology Certification (7-12)

Courses Required

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

| Category | Descriptor | Credits | Courses |
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| Course requirements for entry into Pre-Certification Initial Preparation Program (Must be completed prior to the end of the 2 nd year) | Two Math Intensive Courses | 2 | MATH 201 or Math 202: Calculus I or II MATH 216: Statistics |
| | Writing Intensive Course | 1 | Any W1 Course |
| | English Literature | 1 | Any ENLS Course (excluding courses with W1 designations) ¹ |
| Subject Area Courses Required for Certification ² | BIOL 205 | 1 | BIOL 205 Intro to Molecules and Cells |
| | BIOL 206 | 1 | BIOL 206 Organismal Biology |
| | BIOL 207 | 1 | BIOL 207 Genetics |
| | BIOL 208 | 1 | BIOL 208 Principles of Ecology and Evolution |
| | BIOL 318 or BIOL 337 | 1 | BIOL 318 Microbial Genetics or BIOL 337 Biology of Aging |
| | CHEM 205 | 1 | CHEM 205 Principles of Chemistry |
| | CHEM 211 | 1 | CHEM 211 Organic Chemistry |
| | CHEM 321 | 1 | CHEM 321 Inorganic Chemistry |
| | PHYS 211 | 1 | PHYS 211 Classical and Modern Physics |
| | MATH 201 | 1 | MATH 201 Calculus I |
| MATH 216 | 1 | MATH 216 Statistics | |
| Required EDUC Courses | 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 355 | 1 | EDUC 355 Teaching of Science in Secondary School (typically taken Fall of the senior year) |
| | EDUC 359 | 3 | Student Teaching: Secondary |
| EDUC 459 | 1 | Professional Seminar in Secondary Education | |

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

² 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

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