**Chemistry Certification (7-12)**

Students pursuing Chemistry Certification (7-12) through a UNH teacher education program must complete a B.A. or a B.S. in Chemistry, in addition to the Education Program requirements.

**Chemistry course requirements**

- CHEM 400 Freshman Seminar
- CHEM 403 & 404 General Chemistry
- CHEM 517 & 518 Quantitative Analysis
- CHEM 547 & 549 Organic Chemistry I & Lab
- CHEM 548 & 550 Organic Chemistry II & Lab
- CHEM 574 Introduction to Inorganic Chemistry
- CHEM 683 & 685 Physical Chemistry I & Lab
- CHEM 684 & 686 Physical Chemistry II & Lab
- CHEM 762 & 763 Instrumental Methods of Chemical Analysis & Lab
- CHEM 698 Seminar
- CHEM 699 Thesis
- CHEM 755 & 756 Advanced Organic Chemistry & Lab
- CHEM 774 & 775 Advanced Inorganic Chemistry & Lab
- CHEM 776, Physical Chemistry III

**Other Requirements**

All majors: MATH 425 & 426, Calculus I & II, BMCB 658 General Biochemistry or BMCB 751 Principles of Biochemistry

**B.S. degree:** PHYS 407 & 408, General Physics I & II; one chemistry-related course

**B.A. degree,** chemistry major: PHYS 407, General Physics I, or PHYS 401 & 402, Introduction to Physics I & II; two other CHEM courses, except 698, or two approved chemistry-related courses.

**Education course requirements**

*EDUC 500/935A Exploring Teaching
EDUC 700/800 Educational Structure & Change
EDUC 701/801 Human Development & Learning: Educ Psyc
*EDUC 705/805 Contemporary Educ Perspectives
EDUC 707/807 Teaching Reading through the Content Areas
EDUC 751B/851B Educating Exceptional Learners: Secondary
EDUC 791/891 Methods of Teaching Secondary School Science
EDUC 900A & EDUC 901A Internship & Seminar in Teaching (2 semesters Fall and Spring)

*Indicates course work must be completed before the internship

Any Education course taken for a teacher licensure requirement must be completed with a grade of B- or better. This applies to any courses from other departments that have been designated as equivalent to an Education course.

<table>
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<th>Degrees (Minimum of 32 Graduate credits)</th>
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<tr>
<td>M.Ed. In addition to the 12 credit internship, 10 graduate credits must be UNH Education courses. The remaining graduate credits can be in Education, English or another department.</td>
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<tr>
<td>M.A.T. In addition to the 12 credit internship, three graduate level courses (9-12 credits) must be in Chemistry. The remaining graduate credits can be in Chemistry, Education or another department.</td>
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Admission to the M.Ed. or M.A.T. is competitive and requires submission of an application to the UNH Graduate School. This includes official transcripts, scores from the Praxis Core exam, personal statement and three letters of recommendations. Thirty-two (32) Graduate credits are the minimum for either degree.

For questions regarding Science course requirements contact Professor Chris Bauer at chris.bauer@unh.edu
For questions regarding Education course requirements contact Cindy Glidden at cindy.glidden@unh.edu
Chemistry course requirements for students who have completed a baccalaureate degree at a school other than UNH

Students seeking certification as teachers of Chemistry (grades 7-12) through the University of New Hampshire are expected to have a major in Chemistry or its equivalent. In order to be certified, they must have completed the following subject area requirements, through undergraduate or graduate coursework.

CHEM 403 & 404 General Chemistry  
Equivalent course_________________________

CHEM 517 & 518 Quantitative Analysis  
Equivalent course_________________________

CHEM 547 & 549 Organic Chemistry I & Lab  
Equivalent course_________________________

CHEM 548 & 550 Organic Chemistry II & Lab  
Equivalent course_________________________

CHEM 574 Introduction To Inorganic Chemistry  
Equivalent course_________________________

CHEM 683 & 685 Physical Chemistry I & Lab  
Equivalent course_________________________

CHEM 684 & 686 Physical Chemistry II & Lab  
Equivalent course_________________________

CHEM 762 & 763 Instrumental Methods of Chemical Analysis & Lab  
Equivalent course_________________________

CHEM 755 & 756 Advanced Organic Chemistry & Lab  
Equivalent course_________________________

CHEM 774 & 775 Advanced Inorganic Chemistry & Lab  
Equivalent course_________________________

CHEM 776, Physical Chemistry III  
Equivalent course_________________________

Other Requirements
All majors: MATH 425 & 426, Calculus I & II  
BMCB 658 General Biochemistry or BMCB 751 Principles of Biochemistry  
Equivalent course_________________________

B.S. degree: PHYS 407 & 408, General Physics I & II  
one chemistry-related course  
Equivalent course_________________________

B.A. degree, chemistry major: PHYS 407, General Physics I  
or PHYS 401 & 402, Introduction to Physics I & II  
Equivalent course_________________________

two other CHEM courses, except 698  
or two approved chemistry-related courses.  
Equivalent course_________________________

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