

# CHEMISTRY MAJOR (B.A.)

<http://ceps.unh.edu/chemistry/chemistry-undergraduate-programs>

## Description

This curriculum offers students the opportunity to combine the chemistry major with other interests, such as pre-professional programs, education, or business.

## Requirements

### Required Courses

CHEM 400	Freshman Seminar	1
CHEM 403 & CHEM 404	General Chemistry I and General Chemistry II	8
CHEM 517 & CHEM 518	Quantitative Analysis and Quantitative Analysis Laboratory	5
CHEM 547 & CHEM 549	Organic Chemistry I and Organic Chemistry Laboratory	5
CHEM 548 & CHEM 550	Organic Chemistry II and Organic Chemistry Laboratory	5
CHEM 574	Chemistry Across the Periodic Table	4
CHEM 683 & CHEM 685	Physical Chemistry I and Physical Chemistry Laboratory	5
CHEM 684 & CHEM 686	Physical Chemistry II and Physical Chemistry Laboratory	5
CHEM 762 & CHEM 763	Instrumental Methods of Chemical Analysis and Instrumental Methods of Chemical Analysis Laboratory	5
CHEM 798	Senior Seminar	1
Advanced Chemistry Elective <sup>2</sup>		
Chemistry Related Elective <sup>3</sup>		
MATH 425	Calculus I	4
MATH 426	Calculus II	4
PHYS 407	General Physics I	4
or PHYS 401	Introduction to Physics I	
or PHYS 402	Introduction to Physics II	
Total Credits		56

<sup>1</sup> The B.A. major offers CHEM 698 Seminar as the capstone experience. Students work with the faculty member teaching the seminar to prepare a presentation based upon a research project or subject-driven professional engagement.

<sup>2</sup> Advisor's discretion: CHEM 696 Independent Study or any 700 or 800 level Chemistry course.

<sup>3</sup> Advisor's discretion: MATH 527 or MATH 528; PHYS 505; ESCI 741 or ESCI 752; CHE; CIE; or 700/800 level course.

## Degree Plan

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
CHEM 400	Freshman Seminar	1
CHEM 403	General Chemistry I	4
MATH 425	Calculus I	4
Discovery Course		4
Discovery Course		4
Credits		17
Total Credits		17

Course	Title	Credits
<b>First Year</b>		
<b>Spring</b>		
CHEM 404	General Chemistry II	4
MATH 426	Calculus II	4
ENGL 401	First-Year Writing	4
Discovery Course		4
Credits		16
Total Credits		16

Course	Title	Credits
<b>Second Year</b>		
<b>Fall</b>		
CHEM 517	Quantitative Analysis	4
CHEM 518	Quantitative Analysis Laboratory	1
CHEM 547	Organic Chemistry I	3
CHEM 549	Organic Chemistry Laboratory	2
PHYS 401	Introduction to Physics I	4
Language 1		4
Credits		18
Total Credits		18

Course	Title	Credits
<b>Second Year</b>		
<b>Spring</b>		
CHEM 548	Organic Chemistry II	3
CHEM 550	Organic Chemistry Laboratory	2
CHEM 574	Chemistry Across the Periodic Table	4
PHYS 402	Introduction to Physics II	4
Language 2		4
Credits		17
Total Credits		17

Course	Title	Credits
<b>Third Year</b>		
<b>Fall</b>		
CHEM 683	Physical Chemistry I	3
CHEM 685	Physical Chemistry Laboratory	2
Discovery Course		4
Discovery Course		4

Elective	4
Credits	17
Total Credits	17

Course	Title	Credits
<b>Third Year</b>		
<b>Spring</b>		
CHEM 684	Physical Chemistry II	3
CHEM 685	Physical Chemistry Laboratory	2
CHEM 762	Instrumental Methods of Chemical Analysis	3
CHEM 763	Instrumental Methods of Chemical Analysis Laboratory	2-3
Discovery Course		4
Elective		4
Credits		18-19
Total Credits		18-19

Course	Title	Credits
<b>Fourth Year</b>		
<b>Fall</b>		
Advanced Chemistry Elective		4
Discovery Course		4
Elective		4
Elective		4
Credits		16
Total Credits		16

Course	Title	Credits
<b>Fourth Year</b>		
<b>Spring</b>		
CHEM 798	Senior Seminar	1
Chemistry Related Elective		4
Elective		4
Elective		4
Credits		13
Total Credits		13