

# CHEMISTRY (7-12) ENDORSEMENT

## Secondary Education, Bachelor Science in Education - Chemistry (7-12) Endorsement Requirements

Code	Title	Credits
<b>GENERAL EDUCATION REQUIREMENTS - 46 Hours Required</b>		
Minimum of "C-" required		
<b>Fundamental Academic Skills</b>		<b>15</b>
ENGL 1150	ENGLISH COMPOSITION I	
ENGL 1160	ENGLISH COMPOSITION II	
Writing in the Discipline Course		
CMST 1110 or CMST 2120	PUBLIC SPEAKING FUNDS ARGUMENTATION AND DEBATE	
MATH 1120 or MATH 1100 or MATH 1130 or MATH 1140 or MATH 1300 or STAT 1100 or STAT 1530	INTRODUCTION TO MATHEMATICAL AND COMPUTATIONAL THINKING DATA LITERACY AND VISUALIZATION QUANTITATIVE LITERACY QUANTITATIVE REASONING FOR HEALTHCARE PROFESSIONALS COLLEGE ALGEBRA WITH SUPPORT DATA LITERACY AND VISUALIZATION ELEMENTARY STATISTICS	
<b>Distribution Requirements</b>		<b>31</b>
Natural Science - From two disciplines and at least one lab - 7 hrs		
Social Science - From two disciplines - 9 hrs		
Humanities and Fine Arts - From two disciplines - 9 hrs		
Global Diversity - 3 hrs		
US Diversity - 3 hrs		
<b>MAJOR REQUIREMENTS - 90 Hours Required</b>		
**Course will satisfy UNO's General Education requirement		
^Course requires pre-requisite(s)		
<b>All of the following:</b>		<b>39</b>
TED 2100	EDUCATIONAL FOUNDATIONS (** ^)	
TED 2200	HUMAN RELATIONS FOR BIAS-FREE CLASSROOMS (** ^)	
TED 2380	DEVELOPMENT AND LEARNING IN ADOLESCENCE (^)	
TED 2400	PLANNING FOR EFFECTIVE TEACHING (^)	
SPED 3800	DIFFERENTIATION AND INCLUSIVE PRACTICES (^)	
TED 3550	SECONDARY CLASSROOM MANAGEMENT (^)	
TED 3690	LITERACY AND LEARNING (^)	
TED 4000	SPECIAL METHODS IN THE CONTENT AREA (^ Science)	
TED 4600	CLINICAL PRACTICE AND SEMINAR: ELEMENTARY OR SECONDARY LEVEL (^)	
<b>Chemistry Endorsement required courses</b>		<b>51</b>
CHEM 1180	GENERAL CHEMISTRY I (** ^)	

CHEM 1184	GENERAL CHEMISTRY I LABORATORY (** ^)
CHEM 1190	GENERAL CHEMISTRY II (^)
CHEM 1194	GENERAL CHEMISTRY II LABORATORY (^)
CHEM 2210	FUNDAMENTALS OF ORGANIC CHEMISTRY (^)
CHEM 2214	FUNDAMENTALS OF ORGANIC CHEMISTRY LABORATORY (^)
CHEM 2400	QUANTITATIVE ANALYSIS (^)
CHEM 2404	QUANTITATIVE ANALYSIS LAB (^)
CHEM 2500	INTRODUCTION TO INORGANIC CHEMISTRY (^)
CHEM 3350	PHYSICAL CHEMISTRY I (^)
CHEM 3354	PHYSICAL CHEMISTRY I LABORATORY (** ^)
CHEM 3650	FUNDAMENTALS OF BIOCHEMISTRY (^)
CHEM 3654	FUNDAMENTALS OF BIOCHEMISTRY LABORATORY (^)
BIOL 1450	BIOLOGY I (** ^)
GEOL 1170	INTRODUCTION TO PHYSICAL GEOLOGY (**)
PHYS 2120	GENERAL PHYSICS-CALCULUS LEVEL (^)
PHYS 1164	GENERAL PHYSICS LABORATORY II (^)
MATH 1950	CALCULUS I (^)
MATH 1960	CALCULUS II (^)

### ELECTIVES

Elective hours as required to reach a total of 120 hours

Candidates must have satisfactorily completed all required coursework prior to clinical practice.

A minimum grade of "C" must be earned in all certification requirements, endorsements, and concentrations. All grades of incomplete and any grades below "C" in these specific requirements must be removed prior to clinical practice. Candidates are responsible for contacting their advisor regarding said grades.

For courses in this major/ endorsement that require a grade of C or higher, CR/ NC is not permissible.

Candidates must have a minimum cumulative GPA of 2.75 or higher in order to be eligible for clinical practice.

## Secondary Education, Bachelor Science in Education - Chemistry (7-12) Endorsement Four Year Plan

### Freshman

Fall		Credits
ENGL 1150	ENGLISH COMPOSITION I	3
MATH 1950	CALCULUS I	5
CHEM 1180 & CHEM 1184	GENERAL CHEMISTRY I and GENERAL CHEMISTRY I LABORATORY	4
Social Science		3

\*Student must test into MATH 1950 Calculus I based off of ACT Math scores or Accuplacer exam, or bring transfer credit for MATH 1320 & 1330 or MATH 1340. These additional math courses may be required before MATH 1950 if the student does not test into it.

Attend Welcome Week events; other campus events  
 Advising appointment for spring: Sept. - Oct.  
 Note: ENGL 1150, ENGL 1160, CMST 1110 or 2120, and approved math (Quantitative Literacy) course should be taken and passed in the first academic year

**Credits** **15**

**Spring**

ENGL 1160	ENGLISH COMPOSITION II	3
CMST 1110	PUBLIC SPEAKING FUNDS	3
MATH 1960	CALCULUS II	4
CHEM 1190 & CHEM 1194	GENERAL CHEMISTRY II and GENERAL CHEMISTRY II LABORATORY	4

Advising appointment for fall: February - March  
 Join a student organization

Make a plan to take the Praxis Core

**Credits** **14**

**Sophomore****Fall**

TED 2100	EDUCATIONAL FOUNDATIONS	3
CHEM 2210 & CHEM 2214	FUNDAMENTALS OF ORGANIC CHEMISTRY and FUNDAMENTALS OF ORGANIC CHEMISTRY LABORATORY	5
CHEM 2400 & CHEM 2404	QUANTITATIVE ANALYSIS and QUANTITATIVE ANALYSIS LAB	4

Advising appointment for spring: Sept. - Oct.

Identify professional organization to get involved with. Begin resume development.

**Credits** **12**

**Spring**

TED 2200	HUMAN RELATIONS FOR BIAS-FREE CLASSROOMS	3
CHEM 2500	INTRODUCTION TO INORGANIC CHEMISTRY	3
CHEM 3650 & CHEM 3654	FUNDAMENTALS OF BIOCHEMISTRY and FUNDAMENTALS OF BIOCHEMISTRY LABORATORY	4

Humanities/ Fine Arts course 3

Advising appointment for fall: February - March

Apply to Educator Preparation Program March 1 or June 1 deadline

**Credits** **13**

**Summer**

PHYS 2120 & PHYS 1164	GENERAL PHYSICS-CALCULUS LEVEL and GENERAL PHYSICS LABORATORY II	5
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**Credits** **5**

**Junior****Fall**

TED 2380	DEVELOPMENT AND LEARNING IN ADOLESCENCE	3
TED 2400	PLANNING FOR EFFECTIVE TEACHING	6
CHEM 3350 & CHEM 3354	PHYSICAL CHEMISTRY I and PHYSICAL CHEMISTRY I LABORATORY	4

Humanities and Fine Arts 3

Advising appointment for spring: Sept. - Oct.

MUST attempt PRAXIS Core by January 10th and have 2.75 minimum NU GPA to progress in Educator Preparation Program.

**Credits** **16**

**Spring**

TED 3550	SECONDARY CLASSROOM MANAGEMENT	3
TED 3690	LITERACY AND LEARNING	3
SPED 3800	DIFFERENTIATION AND INCLUSIVE PRACTICES	3
BIOL 1450	BIOLOGY I	5

\*Social Science 3

\*May be taken in the summer to lighten course load

Advising appointment for fall: February - March

**Credits** **17**

**Senior****Fall**

TED 4000	SPECIAL METHODS IN THE CONTENT AREA	3
GEOL 1170	INTRODUCTION TO PHYSICAL GEOLOGY	4
Social Science		3
Humanities and Fine Arts		3
Humanities and Fine Arts with Global Diversity		3

Take Praxis II- Chemistry: Content Knowledge #5245

Advising appointment for spring: Sept. - Oct.

Apply for clinical practice at beginning of fall term.

**Credits** **16**

**Spring**

TED 4600	CLINICAL PRACTICE AND SEMINAR: ELEMENTARY OR SECONDARY LEVEL	12
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Apply for graduation

**Credits** **12**

**Total Credits** **120**

This roadmap is a suggested plan of study and does not replace meeting with an advisor. Please note that students may need to adjust the actual sequence of courses based on course availability. Please consult an advisor in your major program for further guidance.

This plan is not a contract and curriculum is subject to change

**Additional Information About this Plan:**

**University Degree Requirements:** The minimum number of hours for a UNO undergraduate degree is 120 credit hours. Please review the requirements for your specific program to determine all requirements for the program. In order to graduate on-time (four years for an undergraduate degree), you need to take 30 hours each year. Information based on 2024-2025 University of Nebraska at Omaha undergraduate catalog.

**Placement Exams:** For Math, English, Foreign Language, a placement exam may be required. More information on these exams can be found at <https://www.unomaha.edu/enrollment-management/testing-center/placement-exams/information.php>

\*\*Transfer credit or placement exam scores may change suggested plan of study

**GPA Requirements:**

2.5 minimum GPA to remain in College of Education, 2.5 minimum GPA to apply to Educator Preparation Program, 2.75 minimum GPA to progress in Educator Preparation Program

# Professional education course: a grade of C or higher is required to pass the class

**Graduation Requirements:** 2.75 minimum NU GPA