

# CHEMISTRY 7-12 TEACHING SUBJECT ENDORSEMENT, BACHELOR OF SCIENCE IN EDUCATION

Offered by Department of Chemistry (<http://catalog.unk.edu/undergraduate/departments-programs/chemistry/>)

Code	Title	Credit Hours
<b>General Studies</b>		
<i>Foundational Requirements (LOPERs 1-4)</i>		14
Including:		
LOPER 2: Writing Skills		
ENG 101	Introduction to Academic Writing	
LOPER 3: Oral Communication Skills		
SPCH 100	Fundamentals of Speech Communication	
LOPER 4: Mathematics, Statistics, and Quantitative Reasoning		
MATH 115	Calculus I with Analytic Geometry <sup>1</sup>	
<i>Broad Knowledge Requirements (LOPERs 5-8)</i>		13
Including:		
LOPER 7: Social Sciences		
PSCI 110	Introduction to American Politics	
LOPER 8: Natural Sciences		
BIOL 106	Biology II	
<i>Dispositional Requirements (LOPERs 9-10) <sup>2</sup></i>		6
Including:		
LOPER 10: Respect for Human Diversity		
TE 100	Teaching in a Democratic Society	
<b>Program Specified Requirements</b>		3
ENG 102	Special Topics in Academic Writing and Research	
<b>Professional Sequence <sup>3</sup></b>		
Select 25 credit hours including the following:		25
TE 206	Instructional Technology and the Preservice Teacher	
TE 306	Reading and Inclusion in K-12 Classrooms	
TE 319	Management and Assessment in K-12/ Secondary Classrooms	
TE 320	Field Experience in Secondary Classroom	
<b>Endorsement</b>		
Complete all required courses		42-45
<b>Unrestricted electives</b>		
Needed to reach 120 credit hour minimum		17-14
<b>Total Credit Hours</b>		<b>120</b>

## Endorsement

Code	Title	Credit Hours
<b>Chemistry Subject Endorsement Requirements</b>		
CHEM 160	General Chemistry	3
CHEM 160L	General Chemistry Laboratory	1
CHEM 161	General Chemistry	3
CHEM 161L	General Chemistry Laboratory	1
CHEM 169	Chemistry Foundations and Careers	1
CHEM 301	Analytical Chemistry	3
CHEM 301L	Analytical Chemistry Lab	1
CHEM 310	Safety in Chemistry	1
CHEM 351	Biochemistry I	4
CHEM 351L	Biochemistry Lab	1
CHEM 469	Advanced Seminar in Chemistry	1
CHEM 480	Physical Chemistry	3
	or CHEM 482 Survey of Physical Chemistry	
CHEM 490L	Advanced Chemistry Laboratory I	2
Select one of the following:		5
CHEM 250 & 250L	Fundamentals of Organic Chemistry and Fundamentals of Organic Chemistry Lab	
	or CHEM 360 & 360L Organic Chemistry and Organic Chemistry Laboratory	
<b>Chemistry Subject Endorsement Other Science Requirements</b>		
<i>Earth Science</i>		
PHYS 201	Earth Science	4
	or GEOG 201 Earth Science	
<i>Biology</i>		
Fulfilled by General Studies requirements above.		0
<i>Physics</i>		
PHYS 205 & 205L	General Physics I and Physics I Laboratory	5
	or PHYS 275 & 275L General Physics I (Calculus) and General Physics I (Calculus) Laboratory	
<b>Chemistry Subject Endorsement Methodology Requirement</b>		
BIOL 471	Methods in Secondary Science Teaching	3
	or PHYS 471 Methods in Secondary Science Teaching	
<b>Electives</b> <b>0-3</b>		
CSP 417	Counseling Skills	
Total Credit Hours		42-45

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Students without sufficient preparation will also need to take the following courses, increasing the total credit hours needed:

- MATH 102
- MATH 103

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Designated courses with the appropriate content may be approved to satisfy one of the Broad Knowledge requirements plus LOPER 9 or Broad Knowledge plus LOPER 10. Courses may be approved to satisfy LOPER 9 or LOPER 10 alone. (*Courses satisfying LOPER 9 or LOPER 10 alone must be 3 credit hours.*) Students applying this option will need to take additional hours in other categories to meet the required GS hours.

2 Chemistry 7-12 Teaching Subject Endorsement, Bachelor of Science in Education

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Students must apply for admission to all Teacher Education programs  
(<http://catalog.unk.edu/undergraduate/departments-programs/teacher-education/professional-sequence-education-degrees/>)