

CHEMISTRY - TEACHING MAJOR (2020 Catalog)

Bachelor of Arts Degree

120 Semester Hours Minimum

Chemistry Courses

CHEM 1110 General Chem I	4	_____
CHEM 1120 General Chem II	4	_____
OR		
CHEM 1130 General Chem I-II	5	_____
CHEM 2040 Appl. Org. & Biochem.	4	_____
OR		
CHEM 2210 Organic Chem I	3	_____
CHEM 2220 Organic Chem II	3	_____
CHEM 2230 Organic Chem Lab	2	_____
CHEM 2010 Chemical Safety	1	_____
CHEM 2110 Descriptive Inorg Chem	4	_____
CHEM 2310 Chromatog. and Quant.	4	_____
CHEM 4420 Physical Chemistry I	3	_____

Methods Courses

SCI ED 3300 Orient. Sci Teach	4	_____
SCI ED 4800 Meth. in Teach. Science	3	_____

Physics & Math Courses

MATH 1420 Calculus I	4	_____
PHYSICS 1511 General Physics I	4	_____
PHYSICS 1512 General Physics II	4	_____
OR		
PHYSICS 1701 Physics I	4	_____
PHYSICS 1702 Physics II	4	_____

Professional Development Courses

TEACHING 2017 FE: Expl. Teach.	1	_____
EDPSYCH 2030 Dynam Hum. Develop.	3	_____
SPED 3150 Meet. Needs of Div Learn.	2	_____
TEACHING 3128 FE: Teach Chng Agent	1	_____
TEACHING 3129 Sec. Class. Mgmt	1	_____
EDPSYCH 3148 Learning & Instruction	3	_____
MEASRES 3150 Classrm Assessment	2	_____
SOCFOUND 3119 Schools in Am. Soc.	3	_____
TEACHING 4170 Human Relations	3	_____
TEACHING 3138 Student Teach	12	_____

Total: 74-75 hours

NOTE: Students are encouraged to take additional course work in physics to obtain an endorsement in physics, and additional course work in earth science and biology to obtain an endorsement in basic science. A grade of C- or better must be earned in all courses counting towards any teaching certification.

Liberal Arts Core

Category 1: Core Competencies (12 hrs)

_____ A. Writing and Reading	3 hr
_____ B. Speaking and Listening	3 hr
<u>X</u> C. Quantitative Techniques	3 hr
Satisfied by MATH 1420 4hrs	
_____ D Dimensions of Wellbeing	2 hr

Category 2: Civilization & Cultures (9 hrs)

_____ A. Humanities (take 2 of I, II, and III)	3 hr
_____ B. Non-Western Cultures	3 hr

Category 3: Fine Arts, Literature, Philosophy and Religion (6 hrs)

_____ A. Fine Arts	3 hr
_____ B. Lit., Philosophy, or Religion	3 hr

Category 4: Natural Science and Technology (7 hrs)

_____ A. Life Sciences	3 hr
Take BIOL 2052 4 hr	
<u>x</u> B. Physical Sciences	4 hr
Satisfied by CHEM 1110 or 1130	

Category 5: Social Science (9 hrs)

_____ A. Soc. & Historical Perspectives	3 hr
_____ B. Individual & Institutional Perspectives	3 hr
<u>x</u> C. Diversity & Global Issues	3 hr
Satisfied by EDPSYCH 2030	

Category 6: Capstone (2 hrs)

_____ Capstone	
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**10 hours satisfied
34 hours needed**

NOTE: Students taking CHEM1130 General Chem I-II instead of CHEM1110 General Chem I and CHEM1120 General Chem II must take CHEM2210 Organic Chem I, CHEM2220 Organic Chem II and CHEM2230 Organic Chem Lab.

Sample Plan of Study for the B.A. Major in Chemistry -Teaching
 An average of 15 credits per semester is needed to graduate in 8 semesters

FRESHMEN YEAR

<u>FALL</u>		<u>SPRING</u>	
CHEM 1110 General Chemistry I	4	CHEM 1120 General Chemistry II	4
MATH 1140 Precalculus	4	MATH 1420 Calculus 1	4
ENGLISH 1005 College Write&Res	3	COMM 1000 Oral Communication	3
Liberal Arts Core	<u>3</u>	Liberal Arts Core	<u>3</u>
	14		14

SOPHOMORE YEAR

<u>FALL</u>		<u>SPRING</u>	
CHEM 2040 Appl Org & Biochem	4	CHEM 2310 Chromatog. and Quant.	4
PHYSICS 1511 Gen Physics I	4	CHEM 2010 Chemical Safety	1
TEACHING 2017 FE: Expl Tchng	1	PHYSICS 1512 Gen Physics II	4
EDPSYCH 2030 Dynam. Hum. Dev.	3	SPED 3150 Meeting the Needs	2
Liberal Arts Core	<u>3</u>	Liberal Arts Core	<u>6</u>
	15		17

JUNIOR YEAR

<u>FALL</u>		<u>SPRING</u>	
CHEM 2110 Descrip. Inorg. Chem	4	SCI ED 3300 Orient. Sci. Teach	4
TEACHING 3128 FE: Tchr Chng Agnt	1	SOCFOUND 3119 Schools in Am. Soc.	3
EDPSYCH 3148 Learning&Instr.	3	Liberal Arts Core/Electives	<u>8</u>
MEASRES 3150 Classrm Assessment	2		15
TEACHING 3129 Sec. Class. Mgmt	1		
Liberal Arts Core/Electives	<u>6</u>		
	17		

SENIOR YEAR

<u>FALL</u>		<u>SPRING</u>	
CHEM 4420 Physical Chemistry I	3	TEACHING 3138 Student Teaching	<u>12</u>
SCI ED 4800 Meth. in Teach. Science	3		12
TEACHING 4170 Human Relations	3		
Liberal Arts Core/Electives	<u>7</u>		
	16		

Total Hours

Liberal Arts Core	34 hours (10 covered by the major)
Major	44-45 hours
Professional Education	30 hours
Electives	<u>11-12 hours</u>
	120 hours minimum

ADVISING NOTE: The above program represents one example of a variety of alternative schedules for completing the Chemistry Teaching Major, and leads to teaching certification in chemistry. Students are encouraged to take a total of 12 credits in physics to obtain a physics endorsement. Students are encouraged to take two courses in biology and two courses in earth science in order to obtain a basic science endorsement. Requirements are subject to change.