

# B.A. in Science Education 9-12 (Chemistry Emphasis) Enhanced Academic Plan

## B.A. in Science Education 9-12 (Chemistry Emphasis) - CWILT

Recommended Courses				
Fall Semester 1	Interim Semester 1	Spring Semester 1	Career Planning and Preparation	R.E.A.L. Experience
CHE 113 & CHE 113D *2 General Chemistry I and General Chemistry I Lab	BIB 101 Introduction to the Bible	CHE 214 & CHE 215 (or elective if CHE 208/208D was taken in fall) *2 General Chemistry II/General Chemistry II Lab	<b>PHASE 1: EXPLORE</b>	Create your R.E.A.L. Portfolio
OR		GES 140 Introduction to Wellbeing	<i>Explore self, careers, &amp; God's call</i>	Consider joining a club or ministry of interest
CHE 208 & CHE 208D *2 Accelerated General Chemistry and Accelerated General Chemistry Lab		MAT 125 Calculus 2	Take a Career Assessment	Consider finding a mentor
MAT 124M Calculus 1		Leisure and Lifetime Sports (Q) course	Research Careers: O*Net, Candid Careers, & informational interviews w/ Alums	
GES 130 Christianity Western Culture			Gain Experience: Part-time job; Campus Involvement (e.g. student club); Volunteering	
GES 160 Inquiry Seminar				
15	3	12		
<b>MILESTONES: Consider study abroad options</b>				
Recommended Courses				
Fall Semester 2	Interim Semester 2	Spring Semester 2	Career Planning and Preparation	R.E.A.L. Experience
CHE 200 Laboratory Safety and Chemical Hygiene	Contemporary Western Life and Thought (L) course	CHE 226 & CHE 227 Organic Chemistry II and Organic Chemistry II Lab	<b>PHASE 1&amp;2: EXPLORE/EXPERIENCE</b>	Continue adding artifacts and reflections to your R.E.A.L. Portfolio.
CHE 224 & CHE 225 Organic Chemistry I and Organic Chemistry I Lab		PHY 296 & PHY 297 General Physics II and General Physics II Lab	<i>Finalize major if necessary &amp; begin gaining experience</i>	Consider taking a leadership position with a student club.
PHY 292 & PHY 292D General Physics I and General Physics I Lab		EDU 200 Introduction to Education	Create/update Resume & LinkedIn	Consider going on a spring break mission trip.
Second Language (S) course *1		EDU 201 Introduction to Education Field Experience	Build professional network (e.g. informational interviews)	
		GES 125 Introduction to the Creative Arts	Attend Spring Career Fair	
			Obtain Internship or relevant job by summer	
13	3	16		
<b>MILESTONES: Consider doing an online course over the summer</b>				
Recommended Courses				
Fall Semester 3	Interim Semester 3	Spring Semester 3	Career Planning and Preparation	R.E.A.L. Experience
CHE 395 Chemistry Seminar: Research and Professional Development	Interim Off	CHE 490 Chemistry Seminar: Research	<b>PHASE 2: EXPERIENCE</b>	Review your R.E.A.L. Portfolio and prepare to make it public.
THE 201 Christian Theology		CHE 312 & CHE 313 Quantitative Analysis and Quantitative Analysis Lab	<i>Use experiences to narrow down career choice &amp; develop relevant skills</i>	Consider studying abroad.
Elective		EDU 240 Educational Psychology	Participate in Fall & Spring Recruiting to obtain an internship	Consider applying for a Student Leadership Position in Student Life.
Science, Technology, and Society (K) course		EDU 241 Educational Psychology Field Experience	Schedule a Mock Interview	Consider being a TA for a favorite class.
World Cultures (U) course *3		Artistic Experience (A) course	Explore Grad Schools & Take Entrance Exams (e.g. GRE) if necessary	
Cross-cultural Experience (Z) course		Interpreting Biblical Themes (J) course	Expand Professional Network	
12-16	0	13-16		
<b>MILESTONE: A minimum 3.2 GPA in your major is a good goal to strive for</b>				
Recommended Courses				
Fall Semester 4	Interim Semester 4	Spring Semester 4	Career Planning and Preparation	R.E.A.L. Experience
CHE 344 Thermodynamics, Kinetics, and Statistical Mechanics	Contemporary Christian Issues (P) course	EDU 490 Student Teaching Block	<b>PHASE 3: EXECUTE</b>	Continue updating your public R.E.A.L. Portfolio with relevant experiences and reflection.
CHE 345 Thermodynamics, Kinetics, and Statistical Mechanics Lab		CHE 494 Chemistry Seminar: Research Presentation	<i>Execute an effective job or grad school search</i>	Consider mentoring an underclassman.
EDU 203 School Health and Drugs			Participate in Fall and Spring Recruiting	
EDU 317GZ Educational Equity			Apply for Graduate School if necessary	
EDU 320 Pedagogy and the Young Adolescent Learner			Expand Professional Network	
EDU 321 Integrated Literacy in the Content Areas				
EDU 420 Methods in Teaching 5-12 Science				
EDU 429 Science Education Practicum in Grades 5-8 or 5-12				
Contemporary Christian Issues (P) course				
18	3	15		
<b>Total Credits: 123-130</b>				
*1 Students must complete through the second semester of a first year language course or equivalent (Check the catalog for details of this option.)				
2. CHE 208/CHE 208D is a one-semester course that meets the requirements of CHE 113/CHE 113D and CHE 214/CHE 215. Students taking CHE 208/CHE 208D may choose an elective in the spring semester of their freshman year.				
3. The Education Department offers an interim trip that meets the U requirement - EDU 236UZ or EDU 204UZ. See Education Abroad Options.				
This program assumes student will use BIO 118/BIO 118D, EDU 317GZ, and math course to meet the general education Laboratory Science, Comparative Systems, and Math requirements.				
Most financial aid packages stipulate 12 credits/semester; Minnesota state grants are reduced when credit load falls below 15 credits/semester. (Interim credits may be split between fall and spring for state grant purposes only.)				

## B.A. in Science Education 9-12 (Chemistry Emphasis) Enhanced Academic Plan

### B.A. in Science Education 9-12 (Chemistry Emphasis) - Humanities

Recommended Courses				
Fall Semester 1	Interim Semester 1	Spring Semester 1	Career Planning and Preparation	R.E.A.L. Experience
CHE 113 & CHE 113D *2 General Chemistry I and General Chemistry I Lab OR CHE 208 & CHE 208D *2 Accelerated General Chemistry and Accelerated General Chemistry Lab MAT 124M Calculus 1 GES 140 Introduction to Wellbeing GES 145 Humanities I: Greco-Roman through Middle Ages <b>19</b>	GES 147 Humanities II: Renaissance and Reformation	BIB 101 Introduction to the Bible  Leisure and Lifetime Sports (Q) course CHE 214 & CHE 215 (or elective if CHE208/208D was taken in fall) *2 General Chemistry IIGeneral Chemistry II Lab MAT 125 Calculus 2 GES 244 Humanities III: European Enlightenment and American Culture to 1877 <b>4</b>	<b>PHASE 1: EXPLORE</b>  <i>Explore self, careers, &amp; God's call</i> Take a Career Assessment Research Careers: O*Net, Candid Careers, & informational interviews w/ Alums Gain Experience: Part-time job; Campus Involvement (e.g. student club); Volunteering <b>16</b>	Create your R.E.A.L. Portfolio Consider joining a club or ministry of interest Consider finding a mentor

**MILESTONES: Consider study abroad options**

Recommended Courses				
Fall Semester 2	Interim Semester 2	Spring Semester 2	Career Planning and Preparation	R.E.A.L. Experience
CHE 200 Laboratory Safety and Chemical Hygiene  CHE 224 & CHE 225 Organic Chemistry I and Organic Chemistry I Lab PHY 292 & PHY 292D General Physics I and General Physics I Lab GES 246 Humanities IV: Modern and Contemporary Western Culture <b>13</b>	EDU 200 Introduction to Education  EDU 201 Introduction to Education Field Experience	CHE 226 & CHE 227 Organic Chemistry II and Organic Chemistry II Lab PHY 296 & PHY 297 General Physics II and General Physics II Lab EDU 203 School Health and Drugs  Second Language (S) course *1 <b>4</b>	<b>PHASE 1&amp;2: EXPLORE/EXPERIENCE</b>  <i>Finalize major if necessary &amp; begin gaining experience</i> Create/update Resume & LinkedIn Build professional network (e.g. informational interviews) Attend Spring Career Fair Obtain Internship or relevant job by summer <b>14</b>	Continue adding artifacts and reflections to your R.E.A.L. Portfolio. Consider taking a leadership position with a student club. Consider going on a spring break mission trip.

**MILESTONES: Consider doing an online course over the summer**

Recommended Courses				
Fall Semester 3	Interim Semester 3	Spring Semester 3	Career Planning and Preparation	R.E.A.L. Experience
CHE 395 Chemistry Seminar: Research and Professional Development World cultures (U) course *3  Science, technology and Society (K) course Leisure and Lifetime Sports (Q) course Electives <b>14</b>	Interim Off	CHE 490 Chemistry Seminar: Research  CHE 312 & CHE 313 Quantitative Analysis and Quantitative Analysis Lab EDU 240 Educational Psychology EDU 241 Educational Psychology Field Experience <b>Interpreting Biblical Themes (J) course</b>  Artistic Experience (A) course <b>13-16</b>	<b>PHASE 2: EXPERIENCE</b>  <i>Use experineces to narrow down career choice &amp; develop relevant skills</i> Participate in Fall & Spring Recruiting to obtain an internship Schedule a Mock Interview Explore Grad Schools & Take Entrance Exams (e.g. GRE) if necessary Expand Professional Network	Review your R.E.A.L. Portfolio and prepare to make it public. Consider studying abroad. Consider applying for a Student Leadership Position in Student Life. Consider being a TA for a favorite class.

**MILESTONE: A minimum 3.2 GPA in your major is a good goal to strive for**

Recommended Courses				
Fall Semester 4	Interim Semester 4	Spring Semester 4	Career Planning and Preparation	R.E.A.L. Experience
CHE 344 & CHE 345 Thermodynamics, Kinetics, and Statistical Mechanics and Thermodynamics, Kinetics, and Statistical Mechanics Lab EDU 320 Pedagogy and the Young Adolescent Learner EDU 321 Integrated Literacy in the Content Areas EDU 420 Methods in Teaching 5-12 Science EDU 429 Science Education Practicum in Grades 5-8 or 5-12 EDU 317GZ Educational Equity <b>13</b>	Contemporary Christian Issues (P) course	EDU 490 Student Teaching Block  CHE 494 Chemistry Seminar: Research Presentation <b>3</b>	<b>PHASE 3: EXECUTE</b>  <i>Execute an effective job or grad school search</i> Participate in Fall and Spring Recruiting Apply for Graduate School if necessary Expand Professional Network <b>15</b>	Continue updating your public R.E.A.L. Portfolio with relevant experiences and reflection. Consider mentoring an underclassman.

**Total Credits: 138-131**

\*1 Students must complete through the second semester of a first year language course or equivalent (Check the catalog for details of this option.)

2. CHE 208/CHE 208D is a one-semester course that meets the requirements of CHE 113/CHE 113D and CHE 214/CHE 215. Students taking CHE 208/CHE 208D may choose an elective in the spring semester of their freshman year.

3. The Education Department offers an interim trip that meets the U requirement - EDU 236UZ or EDU 204UZ. See Education Abroad Options.

MN basic skills tests (MTLE) required for full admission to the Education Department.

This program assumes student will use BIO 118/BIO 118D, EDU 317GZ, and math course to meet the general education Laboratory Science, Comparative Systems, and Math requirements.

Most financial aid packages stipulate 12 credits/semester; Minnesota state grants are reduced when credit load falls below 15 credits/semester. (Interim credits may be split between fall and spring for state grant purposes only.)