

## B.A. in Science Education 9-12 (Physics Emphasis) 2016-2017: Option 1 - CWILT

First Year					
Fall	Credits	Interim	Credits	Spring	Credits
PHY292 & 292D General Physics I and General Physics Lab	4	<a href="#">GES125 Introduction to the Creative Arts</a>	4	PHY296 & PHY297 General Physics II and General Physics Lab II	4
MAT124M Calculus *1	4			MAT125 Calculus *2	4
<a href="#">GES106 Introduction to Liberal Arts</a>	1			<a href="#">GES110 College Writing</a>	3
<a href="#">GES130 Christianity Western Culture</a>	4			<a href="#">BIB101 Introduction to the Bible</a>	3
<a href="#">PEA100 Physical Wellness for Life</a>	1				
	14		4		14
Second Year					
Fall	Credits	Interim	Credits	Spring	Credits
CHE113 & 113D General Chemistry I and General Chemistry I Lab	4	Nature of Persons (N) course	3	CHE214 & CHE215 General Chemistry II and General Chemistry II Lab	4
<a href="#">MAT223 Multivariable Calculus</a>	3			<a href="#">EDU200 Introduction to Education</a>	3
PHY302 & PHY303 Electronics and Electronics Lab	4			<a href="#">EDU201 Introduction to Education Field Experience</a>	1
<a href="#">PHY260 Careers in Engineering and Physics Seminar</a>	1			PHY312 & PHY313 Modern Physics and Modern Physics Lab	4
Second Language (S) course *1	4			<a href="#">THE201 Christian Theology</a>	3
	16		3		15
Third Year					
Fall	Credits	Interim	Credits	Spring	Credits
PHY112 & 112D Introduction to Astronomy and Introduction to Astronomy Lab	4	World Cultures (U) course2	3	<a href="#">EDU203 School Health and Drugs</a>	2
Interpreting Biblical Themes (J) course	3			<a href="#">EDU241 Educational Psychology Field Experience</a>	1
Science, Technology & Society (K) course	3			<a href="#">EDU240 Educational Psychology</a>	3
Leisure and Lifetime sports (Q) course	1			PHY352 & PHY353 Computer Methods in Physics and Engineering and Computer Methods in Physics and Engineering Lab	4
				Contemporary Western Life and Thought (L) course	3
	11		3		13
Fourth Year					
Fall	Credits	Interim	Credits	Spring	Credits
<a href="#">EDU317GZ Educational Equity</a>	3	Contemporary Christian Issues (P) course	3	<a href="#">EDU490 Student Teaching Block</a>	14
<a href="#">EDU320 Pedagogy and the Young Adolescent Learner</a>	1				
<a href="#">EDU321 Integrated Literacy in the Content Areas</a>	1				
<a href="#">EDU420 Methods in Teaching Secondary Science</a>	3				
<a href="#">EDU429 Science Education Practicum in grades 5-8 or 5-12</a>	1				
Artistic Experience (A) course	0-3				
Elective	3				
	12-15		3		14
Total Credits: 122-125					

\*1 Students must complete through the second semester of a first year language course or equivalent.

\*2 The Education Department offers interim trips that meet the U requirement - EDU236UZ, EDU204UZ, or EDU255UZ. See Education Abroad Options.

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

This program assumes a student will use PHY292/292D, EDU317GZ, and MAT124M 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 (Physics Emphasis) 2016-2017: Option 2 - Humanities

First Year						
	Fall	Credits	Interim	Credits	Spring	Credits
PHY292 & 292D General Physics I and General Physics Lab		4	<u>GES147 Humanities II: Renaissance and Reformation</u>		4 PHY296 & PHY297 General Physics II and General Physics Lab II	4
MAT124M Calculus *1		4			MAT125 Calculus 2	4
<u>GES106 Introduction to Liberal Arts</u>		1			<u>GES244 Humanities III: European Enlightenment and American Culture to 1877</u>	4
<u>GES145 Humanities I: Greco-Roman through Middle Ages</u>		4			Second Language (S) course *1	4
<u>BIB101 Introduction to the Bible</u>		3				
		16		4		16
Second Year						
	Fall	Credits	Interim	Credits	Spring	Credits
CHE113 & 113D General Chemistry I and General Chemistry I Lab		4	Nature of Persons (N) course	3	CHE214 & CHE215 General Chemistry II and General Chemistry II Lab	4
MAT223 Multivariable Calculus		3			<u>EDU200 Introduction to Education</u>	3
PHY302 & PHY303 Electronics and Electronics Lab		4			<u>EDU201 Introduction to Education Field Experience</u>	1
<u>GES246 Humanities IV: Modern and Contemporary Western Culture</u>		4			PHY312 & PHY313 Modern Physics and Modern Physics Lab	4
<u>PHY260 Careers in Engineering and Physics Seminar</u>		1			<u>PEA100 Physical Wellness for Life</u>	1
		16		3		13
Third Year						
	Fall	Credits	Interim	Credits	Spring	Credits
PHY112 & 112D Introduction to Astronomy and Introduction to Astronomy Lab		4	World Cultures (U) course *2	3	<u>EDU203 School Health and Drugs</u>	2
Interpreting Biblical themes (J) course		3			<u>EDU220 Introduction to Middle Level Education</u>	3
Science, Technology and Society (K) course		3			<u>EDU240 Educational Psychology</u>	3
Leisure and Lifetime Sports (Q) course		1			<u>EDU241 Educational Psychology Field Experience</u>	1
Elective		3			PHY352 & PHY353 Computer Methods in Physics and Engineering and Computer Methods in Physics and Engineering Lab	4
		14		3		13
Fourth Year						
	Fall	Credits	Interim	Credits	Spring	Credits
<u>EDU317GZ Educational Equity</u>		3	Contemporary Christian Issues (P) course	3	<u>EDU490 Student Teaching Block</u>	14
<u>EDU320 Pedagogy and the Young Adolescent Learner</u>		1				
<u>EDU321 Integrated Literacy in the Content Areas</u>		1				
<u>EDU420 Methods in Teaching Secondary Science</u>		3				
<u>EDU429 Science Education Practicum in grades 5-8 or 5-12</u>		1				
Artistic Experience (A) course		0-3				
Electives		3-6				
		12-18		3		14
Total Credits: 127-133						

\*1 Students must complete through the second semester of a first year language course or equivalent.

\*2 The Education Department offers interim trips that meet the U requirement - EDU236UZ, EDU204UZ, or EDU255UZ. See Education Abroad Options.

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

This program assumes a student will use PHY292/292D, EDU317GZ, and MAT124M 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.)