B.A. in Science Education 9-12: Life Science Emphasis 2019-2020: Option 1 - CWILT

FIRST YEAR Fall	Credits Interim		Credits Spring		Credits
BIO 122		L60 Inquiry Seminar		BIB 101Introduction to the Bible	Orear
& BIO 122D	1				
Introduction to Organismic Biology and Introduction to Organismic					
Biology Lab					
CHE 113	4			BIO 126	
& CHE 113D	'			& BIO 127	
General Chemistry I and General Chemistry I Lab				Integrative Biology and Global Health and Integrative Biology and	
				Global Health Lab	
GES 130Christianity Western Culture	4			CHE 214	
				& CHE 215	
				General Chemistry II and General Chemistry II Lab	
GES 140Introduction to Wellbeing	3			GES 125Introduction to the Creative Arts	
<u> </u>	15		3		
SECOND YEAR					
Fall	Credits Inte	im	Credits	Spring	Credi
BIO 120		d Cultures (U) course		BIO 238	5.001
& BIO 120D				& BIO 239	
Introduction to Molecular and Cellular Biology and Introduction to				Human Anatomy and Physiology and Human Anatomy and Physiology	
Molecular and Cellular Biology Lab				Lab	
BIO 380	4			EDU 200Introduction to Education	
& BIO 383	"			EDO 2001111 Oddetion to Eddeation	
Environmental Plant Biology and Environmental Plant Biology Lab					
Environmental Flant Blology and Environmental Flant Blology Lab					
Contemporary Western Life and Thoughts (L) course	3			EDU 201Introduction to Education Field Experience	
Leisure and Lifetime Sport (Q) course	1			Math choice: MAT123M, MAT124M, PSY230M, Calculus 1,	
Leisure and Lifetime Sport (Q) course				Introduction to Statistical Methods and Experimental Design	
				Second Language (S) course ¹	
	12		3		1
THIRD YEAR					
Fall	Credits Inte	im	Credits	Spring	Credi
BIO 399Introduction to Research	1 Inter	preting Biblical Themes (J) course	3	BIO 354	
				& BIO 355	
				Cell Biology and Cell Biology Lab	
EDU 317GZEducational Equity	3		:	BIO 4952 Biology Seminar	
THE 201 Christian Theology	3			EDU 203 School Health and Drugs	
PHY 102	4			EDU 240Educational Psychology	
& PHY 102D	1				
Physics of Everyday Life and Physics of Everyday Life-Lab	4			FDIT 241Educational Psychology Field Experience	
	4			EDU 241Educational Psychology Field Experience EDU 13/Dedagogy and the Young Adolescent Learner	
Physics of Everyday Life and Physics of Everyday Life-Lab	4			EDU 320Pedagogy and the Young Adolescent Learner	
Physics of Everyday Life and Physics of Everyday Life-Lab			2	EDU 320Pedagogy and the Young Adolescent Learner EDU 321Integrated Literacy in the Content Areas	
Physics of Everyday Life and Physics of Everyday Life-Lab Science, Technology & Society (K) course	15		3	EDU 320Pedagogy and the Young Adolescent Learner EDU 321Integrated Literacy in the Content Areas	
Physics of Everyday Life and Physics of Everyday Life-Lab Science, Technology & Society (K) course FOURTH YEAR	15	im		EDU 320Pedagogy and the Young Adolescent Learner EDU 321Integrated Literacy in the Content Areas	1
Physics of Everyday Life and Physics of Everyday Life-Lab Science, Technology & Society (K) course FOURTH YEAR Fall	15 Credits Inte		3 Credits	EDU 320Pedagogy and the Young Adolescent Learner EDU 321Integrated Literacy in the Content Areas Spring	
Physics of Everyday Life and Physics of Everyday Life-Lab Science, Technology & Society (K) course FOURTH YEAR Fall BIO 332	15			EDU 320Pedagogy and the Young Adolescent Learner EDU 321Integrated Literacy in the Content Areas	1
Physics of Everyday Life and Physics of Everyday Life-Lab Science, Technology & Society (K) course FOURTH YEAR Fall BIO 332 & BIO 333	15 Credits Inte			EDU 320Pedagogy and the Young Adolescent Learner EDU 321Integrated Literacy in the Content Areas Spring	1
Physics of Everyday Life and Physics of Everyday Life-Lab Science, Technology & Society (K) course FOURTH YEAR Fall BIO 332 & BIO 333 Genetics and Genetics Lab	15 Credits Inte			EDU 320Pedagogy and the Young Adolescent Learner EDU 321Integrated Literacy in the Content Areas Spring BIO 499 Biology Symposium	Credi
Physics of Everyday Life and Physics of Everyday Life-Lab Science, Technology & Society (K) course FOURTH YEAR Fall BIO 332 & BIO 333 Genetics and Genetics Lab BIO 496 Biology Research	Credits Inte			EDU 320Pedagogy and the Young Adolescent Learner EDU 321Integrated Literacy in the Content Areas Spring	1
Physics of Everyday Life and Physics of Everyday Life-Lab Science, Technology & Society (K) course FOURTH YEAR Fall BIO 332 & BIO 333 Genetics and Genetics Lab BIO 496 Biology Research EDU 420 Methods in Teaching 5-12 Science	Credits Inte			EDU 320Pedagogy and the Young Adolescent Learner EDU 321Integrated Literacy in the Content Areas Spring BIO 499 Biology Symposium	Credi
Physics of Everyday Life and Physics of Everyday Life-Lab Science, Technology & Society (K) course FOURTH YEAR Fall BIO 332 & BIO 333 Genetics and Genetics Lab BIO 496 Biology Research EDU 420 Methods in Teaching 5-12 Science EDU 429 Science Education Practicum in Grades 5-8 or 5-12	Credits Inte			EDU 320Pedagogy and the Young Adolescent Learner EDU 321Integrated Literacy in the Content Areas Spring BIO 499 Biology Symposium	Credi
Physics of Everyday Life and Physics of Everyday Life-Lab Science, Technology & Society (K) course FOURTH YEAR Fall BIO 332 & BIO 333 Genetics and Genetics Lab BIO 496 Biology Research EDU 420 Methods in Teaching 5-12 Science EDU 429 Science Education Practicum in Grades 5-8 or 5-12 Artistic Experience (A) course	15 Credits Inter			EDU 320Pedagogy and the Young Adolescent Learner EDU 321Integrated Literacy in the Content Areas Spring BIO 499 Biology Symposium	Credi
Physics of Everyday Life and Physics of Everyday Life-Lab Science, Technology & Society (K) course FOURTH YEAR Fall BIO 332 & BIO 333 Genetics and Genetics Lab BIO 496 Biology Research EDU 420 Methods in Teaching 5-12 Science EDU 429 Science Education Practicum in Grades 5-8 or 5-12	Credits Inte			EDU 320Pedagogy and the Young Adolescent Learner EDU 321Integrated Literacy in the Content Areas Spring BIO 499 Biology Symposium EDU 490 Student Teaching Block	Credi

- 1. Students must complete through the second semester of a first year language course or equivalent.
- 2. May be taken in fall of senior year.
- 3. The Education Department offers an interim trip that meets the U requirement EDU 236UZ. See Education Abroad Options.

See Education section in catalog for testing requirements.

This program assumes a student will use BIO 122D, 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: Life Science Emphasis 2019-2020: Option 2 - Humanities

FIRST YEAR			
Fall	Credits Interim	Credits Spring	Credits
BIO 122	4 GES 147Humanities II: Renaissance and Reformation	4 BIB 101Introduction to the Bible	3
<u>& BIO 122D</u>			
Introduction to Organismic Biology and Introduction to			
Organismic Biology Lab			
CHE 113	4	<u>BIO 126</u>	4
<u>& CHE 113D</u>		<u>& BIO 127</u>	
General Chemistry I and General Chemistry I Lab		Integrative Biology and Global Health and Integrative Biology	
CEC 4.40 linture disenting to MA-IIII aire a		and Global Health Lab	4
GES 140Introduction to Wellbeing	3	CHE 214 & CHE 215	4
		General Chemistry II and General Chemistry II Lab	
GES 145Humanities I: Greco-Roman through Middle Ages	4	GES 244Humanities III: European Enlightenment and American	4
GES 145Hullianities I. Greco-Kollian through Whodie Ages	*	Culture to 1877	4
	15	4	15
SECOND YEAR	10	1	10
Fall	Credits Interim	Credits Spring	Credits
BIO 120	4 World Culture (U) course ³	3 BIO 238	4
& BIO 120D	violid Culture (0) Course	& BIO 239	
Introduction to Molecular and Cellular Biology and Introduction		Human Anatomy and Physiology and Human Anatomy and	
to Molecular and Cellular Biology Lab		Physiology Lab	
BIO 380	4	EDU 200Introduction to Education	3
& BIO 383			
Environmental Plant Biology and Environmental Plant Biology			
Lab			
GES 246Humanities IV: Modern and Contemporary Western Culture	4	EDU 201Introduction to Education Field Experience	1
		Math choice: MAT123M, MAT124M, PSY230M, Calculus 1,	4
		Introduction to Statistical Methods and Experimental Design	
		9 11 79 1	4
		Second Language (S) course ¹	4
THE VEAD	12	3	16
THIRD YEAR			
Fall	Credits Interim	Credits Spring	16 Credits
		Credits Spring 3 BIO 354	
Fall	Credits Interim	Credits Spring 3 BIO 354 & BIO 355	
Fall BIO 399Introduction to Research	Credits Interim 1 Interpreting Biblical Themes (J) course	Credits Spring 3 BIO 354 & BIO 355 Cell Biology and Cell Biology Lab	Credits 4
Fall BIO 399Introduction to Research EDU 317GZEducational Equity	Credits Interim 1 Interpreting Biblical Themes (J) course	Credits Spring 3 8IO 354 8 BIO 355 Cell Biology and Cell Biology Lab BIO 4952 Biology Seminar	Credits 4
Fall BIO 399Introduction to Research EDU 317GZEducational Equity PHY 102	Credits Interim 1 Interpreting Biblical Themes (J) course	Credits Spring 3 BIO 354 & BIO 355 Cell Biology and Cell Biology Lab	Credits 4
Fall BIO 399Introduction to Research EDU 317GZEducational Equity PHY 102 & PHY 102D	Credits Interim 1 Interpreting Biblical Themes (J) course	Credits Spring 3 8IO 354 8 BIO 355 Cell Biology and Cell Biology Lab BIO 4952 Biology Seminar	Credits 4
Fall BIO 399Introduction to Research EDU 317GZEducational Equity PHY 102	Credits Interim 1 Interpreting Biblical Themes (J) course	Credits Spring 3 8IO 354 8 BIO 355 Cell Biology and Cell Biology Lab BIO 4952 Biology Seminar	Credits 4
Fall BIO 399Introduction to Research EDU 317GZEducational Equity PHY 102 & PHY 102D Physics of Everyday Life and Physics of Everyday Life-Lab	Credits Interim 1 Interpreting Biblical Themes (J) course 3 4	Credits Spring 3 BIO 354 & BIO 355 Cell Biology and Cell Biology Lab BIO 4952 Biology Seminar EDU 203 School Health and Drugs	Credits 4
Fall BIO 399Introduction to Research EDU 317GZEducational Equity PHY 102 & PHY 102D Physics of Everyday Life and Physics of Everyday Life-Lab Science, Technology & Society (K) course	Credits Interim 1 Interpreting Biblical Themes (J) course 3 4	Credits Spring 3 BIO 354 & BIO 355 Cell Biology and Cell Biology Lab BIO 4952 Biology Seminar EDU 203 School Health and Drugs EDU 240Educational Psychology	Credits 4 1 2
Fall BIO 399Introduction to Research EDU 317GZEducational Equity PHY 102 & PHY 102D Physics of Everyday Life and Physics of Everyday Life-Lab	Credits Interim 1 Interpreting Biblical Themes (J) course 3 4	Credits Spring 3 BIO 354 & BIO 355 Cell Biology and Cell Biology Lab BIO 4952 Biology Seminar EDU 203 School Health and Drugs EDU 240Educational Psychology EDU 241Educational Psychology Field Experience	1 2 3 1
Fall BIO 399Introduction to Research EDU 317GZEducational Equity PHY 102 & PHY 102D Physics of Everyday Life and Physics of Everyday Life-Lab Science, Technology & Society (K) course	Credits Interim 1 Interpreting Biblical Themes (J) course 3 4	Credits Spring 3 BIO 354 & BIO 355 Cell Biology and Cell Biology Lab BIO 4952 Biology Seminar EDU 203 School Health and Drugs EDU 240Educational Psychology EDU 241Educational Psychology Field Experience EDU 320Pedagogy and the Young Adolescent Learner	Credits 4 1 2 3 3 1 1 1 1
Fall BIO 399Introduction to Research EDU 317GZEducational Equity PHY 102 & PHY 102D Physics of Everyday Life and Physics of Everyday Life-Lab Science, Technology & Society (K) course	Credits Interim 1 Interpreting Biblical Themes (J) course 3 4 3 1	Credits Spring 3 BIO 354 & BIO 355 Cell Biology and Cell Biology Lab BIO 4952 Biology Seminar EDU 203 School Health and Drugs EDU 240Educational Psychology EDU 241Educational Psychology Field Experience EDU 320Pedagogy and the Young Adolescent Learner EDU 321Integrated Literacy in the Content Areas	Credits 4 1 2 3 3 1 1 1 1 1 1
Fall BIO 399Introduction to Research EDU 317GZEducational Equity PHY 102 & PHY 102D Physics of Everyday Life and Physics of Everyday Life-Lab Science, Technology & Society (K) course Leisure and Lifetime Sport (Q) course	Credits Interim 1 Interpreting Biblical Themes (J) course 3 4	Credits Spring 3 BIO 354 & BIO 355 Cell Biology and Cell Biology Lab BIO 4952 Biology Seminar EDU 203 School Health and Drugs EDU 240Educational Psychology EDU 241Educational Psychology Field Experience EDU 320Pedagogy and the Young Adolescent Learner	Credits 4 1 2 3 3 1 1 1 1
Fall BIO 399Introduction to Research EDU 317GZEducational Equity PHY 102 & PHY 102D Physics of Everyday Life and Physics of Everyday Life-Lab Science, Technology & Society (K) course	Credits Interim 1 Interpreting Biblical Themes (J) course 3 4 3 1	Credits Spring 3 BIO 354 & BIO 355 Cell Biology and Cell Biology Lab BIO 4952 Biology Seminar EDU 203 School Health and Drugs EDU 240Educational Psychology EDU 241Educational Psychology Field Experience EDU 320Pedagogy and the Young Adolescent Learner EDU 321Integrated Literacy in the Content Areas	Credits 4 1 2 3 3 1 1 1 1 1
Fall BIO 399Introduction to Research EDU 317GZEducational Equity PHY 102 & PHY 102D Physics of Everyday Life and Physics of Everyday Life-Lab Science, Technology & Society (K) course Leisure and Lifetime Sport (Q) course FOURTH YEAR Fall	Credits Interim 1 Interpreting Biblical Themes (J) course 3 4 4 5 5 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Credits Spring 3 BIO 354 & BIO 355 Cell Biology and Cell Biology Lab BIO 4952 Biology Seminar EDU 203 School Health and Drugs EDU 203 School Health and Drugs EDU 241Educational Psychology EDU 241Educational Psychology Field Experience EDU 320Pedagogy and the Young Adolescent Learner EDU 321Integrated Literacy in the Content Areas 3 Credits Spring	Credits 4 1 2 3 1 1 1 1 1 1 1 13
Fall BIO 399Introduction to Research EDU 317GZEducational Equity PHY 102 & PHY 102D Physics of Everyday Life and Physics of Everyday Life-Lab Science, Technology & Society (K) course Leisure and Lifetime Sport (Q) course	Credits Interim 1 Interpreting Biblical Themes (J) course 3 4 3 1 12 Credits Interim	Credits Spring 3 BIO 354 8 BIO 355 Cell Biology and Cell Biology Lab BIO 4952 Biology Seminar EDU 203 School Health and Drugs EDU 240Educational Psychology EDU 241Educational Psychology Field Experience EDU 320Pedagogy and the Young Adolescent Learner EDU 321Integrated Literacy in the Content Areas 3	Credits
Fall BIO 399Introduction to Research EDU 317GZEducational Equity PHY 102 & PHY 102D Physics of Everyday Life and Physics of Everyday Life-Lab Science, Technology & Society (K) course Leisure and Lifetime Sport (Q) course FOURTH YEAR Fall BIO 332	Credits Interim 1 Interpreting Biblical Themes (J) course 3 4 3 1 12 Credits Interim	Credits Spring 3 BIO 354 & BIO 355 Cell Biology and Cell Biology Lab BIO 4952 Biology Seminar EDU 203 School Health and Drugs EDU 203 School Health and Drugs EDU 241Educational Psychology EDU 241Educational Psychology Field Experience EDU 320Pedagogy and the Young Adolescent Learner EDU 321Integrated Literacy in the Content Areas 3 Credits Spring	Credits
Fall BIO 399Introduction to Research EDU 317GZEducational Equity PHY 102 & PHY 102D Physics of Everyday Life and Physics of Everyday Life-Lab Science, Technology & Society (K) course Leisure and Lifetime Sport (Q) course FOURTH YEAR Fall BIO 332 & BIO 333 Genetics and Genetics Lab	Credits Interim 1 Interpreting Biblical Themes (J) course 3 4 3 1 12 Credits Interim	Credits Spring 3 BIO 354 & BIO 355 Cell Biology and Cell Biology Lab BIO 4952 Biology Seminar EDU 203 School Health and Drugs EDU 240Educational Psychology EDU 241Educational Psychology Field Experience EDU 320Pedagogy and the Young Adolescent Learner EDU 321Integrated Literacy in the Content Areas 3 Credits Spring 0 EDU 490 Student Teaching Block	Credits
Fall BIO 399Introduction to Research EDU 317GZEducational Equity PHY 102 & PHY 102D Physics of Everyday Life and Physics of Everyday Life-Lab Science, Technology & Society (K) course Leisure and Lifetime Sport (Q) course FOURTH YEAR Fall BIO 332 & BIO 333 Genetics and Genetics Lab BIO 496 Biology Research	Credits Interim 1 Interpreting Biblical Themes (J) course 3 4 3 1 12 Credits Interim 4 Interim Off	Credits Spring 3 BIO 354 & BIO 355 Cell Biology and Cell Biology Lab BIO 4952 Biology Seminar EDU 203 School Health and Drugs EDU 203 School Health and Drugs EDU 241Educational Psychology EDU 241Educational Psychology Field Experience EDU 320Pedagogy and the Young Adolescent Learner EDU 321Integrated Literacy in the Content Areas 3 Credits Spring	3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Fall BIO 399Introduction to Research EDU 317GZEducational Equity PHY 102 & PHY 102D Physics of Everyday Life and Physics of Everyday Life-Lab Science, Technology & Society (K) course Leisure and Lifetime Sport (Q) course FOURTH YEAR Fall BIO 332 & BIO 333 Genetics and Genetics Lab BIO 496 Biology Research EDU 420 Methods in Teaching 5-12 Science	Credits Interim 1 Interpreting Biblical Themes (J) course 3 4 3 1 1 2 Credits Interim 4 Interim Off	Credits Spring 3 BIO 354 & BIO 355 Cell Biology and Cell Biology Lab BIO 4952 Biology Seminar EDU 203 School Health and Drugs EDU 240Educational Psychology EDU 241Educational Psychology Field Experience EDU 320Pedagogy and the Young Adolescent Learner EDU 321Integrated Literacy in the Content Areas 3 Credits Spring 0 EDU 490 Student Teaching Block	3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Fall BIO 399Introduction to Research EDU 317GZEducational Equity PHY 102 & PHY 102D Physics of Everyday Life and Physics of Everyday Life-Lab Science, Technology & Society (K) course Leisure and Lifetime Sport (Q) course FOURTH YEAR Fall BIO 332 & BIO 333 Genetics and Genetics Lab BIO 496 Biology Research	Credits Interim 1 Interpreting Biblical Themes (J) course 3 4 3 1 1 2 Credits Interim 4 Interim Off	Credits Spring 3 BIO 354 & BIO 355 Cell Biology and Cell Biology Lab BIO 4952 Biology Seminar EDU 203 School Health and Drugs EDU 240Educational Psychology EDU 241Educational Psychology Field Experience EDU 320Pedagogy and the Young Adolescent Learner EDU 321Integrated Literacy in the Content Areas 3 Credits Spring 0 EDU 490 Student Teaching Block	3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Fall BIO 399Introduction to Research EDU 317GZEducational Equity PHY 102 & PHY 102D Physics of Everyday Life and Physics of Everyday Life-Lab Science, Technology & Society (K) course Leisure and Lifetime Sport (Q) course FOURTH YEAR Fall BIO 332 & BIO 333 Genetics and Genetics Lab BIO 496 Biology Research EDU 420 Methods in Teaching 5-12 Science	Credits Interim 1 Interpreting Biblical Themes (J) course 3 4 3 1 1 2 Credits Interim 4 Interim Off	Credits Spring 3 BIO 354 & BIO 355 Cell Biology and Cell Biology Lab BIO 4952 Biology Seminar EDU 203 School Health and Drugs EDU 240Educational Psychology EDU 241Educational Psychology Field Experience EDU 320Pedagogy and the Young Adolescent Learner EDU 321Integrated Literacy in the Content Areas 3 Credits Spring 0 EDU 490 Student Teaching Block	Credits 4
Fall BIO 399Introduction to Research EDU 317GZEducational Equity PHY 102 & PHY 102D Physics of Everyday Life and Physics of Everyday Life-Lab Science, Technology & Society (K) course Leisure and Lifetime Sport (Q) course FOURTH YEAR Fall BIO 332 & BIO 333 Genetics and Genetics Lab BIO 496 Biology Research EDU 420 Methods in Teaching 5-12 Science EDU 429 Science Education Practicum in Grades 5-8 or 5-12	Credits Interim 1 Interpreting Biblical Themes (J) course 3 4 4 5 5 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Credits Spring 3 BIO 354 & BIO 355 Cell Biology and Cell Biology Lab BIO 4952 Biology Seminar EDU 203 School Health and Drugs EDU 240Educational Psychology EDU 241Educational Psychology Field Experience EDU 320Pedagogy and the Young Adolescent Learner EDU 321Integrated Literacy in the Content Areas 3 Credits Spring 0 EDU 490 Student Teaching Block	3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Fall BIO 399Introduction to Research EDU 317GZEducational Equity PHY 102 & PHY 102D Physics of Everyday Life and Physics of Everyday Life-Lab Science, Technology & Society (K) course Leisure and Lifetime Sport (Q) course FOURTH YEAR Fall BIO 333 Genetics and Genetics Lab BIO 496 Biology Research EDU 420 Methods in Teaching 5-12 Science EDU 429 Science Education Practicum in Grades 5-8 or 5-12 Artistic Experience (A) course	Credits Interim Interpreting Biblical Themes (J) course 3 4 3 1 1 Credits Interim Interim Off 1 3 -Feb	Credits Spring 3 BIO 354 & BIO 355 Cell Biology and Cell Biology Lab BIO 4952 Biology Seminar EDU 203 School Health and Drugs EDU 240Educational Psychology EDU 241Educational Psychology Field Experience EDU 320Pedagogy and the Young Adolescent Learner EDU 321Integrated Literacy in the Content Areas 3 Credits Spring 0 EDU 490 Student Teaching Block	Credits 4

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