

**Messiah College**  
**BA in Chemistry with Teaching Certification**

<i>First Year ~ Fall</i>			<i>First Year ~ Spring</i>		
CHEM 105	General Chemistry I	4	CHEM 106	General Chemistry II	4
MATH 111 <sup>a</sup>	Calculus I	4	XXXX xxx <sup>a</sup>	Math Elective	3/4
COMM 105 <sup>a</sup>	Communication	3	PHIL 101/102	Philosophy	3
IDFY 101	First Year Seminar	3	ESS 201	Earth & Space Science	3
	History	3	IDCR 151	Created /Called for Com.	3
<b>TOTAL CREDITS</b>			<b>TOTAL CREDITS</b>		
17			16/ 17		
<i>Sophomore ~ Fall</i>			<i>Sophomore ~ Spring</i>		
CHEM 221	Chemical Analysis I	4	CHEM 310	Organic Chemistry II	4
CHEM 309	Organic Chemistry I	4	PHYS 211	General Physics I	4
EDUC 201	Ed. and Amer. Society	3	EDSP 207*	Intro to Special Ed	3
ENGL 122-176 <sup>a</sup>	Literature	3	EDUC 203*	Educational Psychology	3
BIBL 2XX	Encountering the Bible	3	EDUC 210*	Soph. Field Experience	0
			PHED	Introduction to Wellness	2
<b>TOTAL CREDITS</b>			<b>TOTAL CREDITS</b>		
17			16		
<i>Junior ~ Fall</i>			<i>Junior ~ Spring</i>		
CHEM 390	Junior Chemistry Seminar	1	CHEM XXX	Chemistry Elective	4
CHEM 337	Physical Chemistry I	3	CHEM 490	Senior Chem. Seminar	1
CHEM XXX	Chemistry Elective	4	ENGL 330*	TESOL Methodology	3
PHYS 212	General Physics II	4	EDUC 331*	Instruct. Design/ Assessmt	3
	Language	3	EDSP 307*	Inclusion Practices	3
PHED 1XX	Activity Course	1	EDUC 310 *	Junior Field Experience	0
				Language	3
<b>TOTAL CREDITS</b>			<b>TOTAL CREDITS</b>		
16			17		
<i>Senior ~ Fall (or Spring)</i>			<i>Senior ~ Spring (or Fall)</i>		
CHEM XXX	Chemistry Elective	4	<i>Professional Semester</i>		
CHEM 495	Natural Sciences Capstone	3	HDFS/PSYC 311	Adolescent Development	3
THEO 223	Global Christian Theology	3	EDUC xxx*	Student Teaching	8
	Arts	3	EDUC 420*	Professional Issues in Ed	2
	Language/Cross Cultural	3	XXXX 407*	Sec. Science Curr./Instr.	2
<b>TOTAL CREDITS</b>			<b>TOTAL CREDITS</b>		
16			15		

\*Courses to be taken concurrently

<sup>a</sup> indicates requirement for admission to the TEP

**TOTAL : 128 - 131**

W Course Requirement Met by \_\_\_\_\_

Chapter 354 Requirements

Math (6 credits): MATH 111, Math. elective

English (6 credits): ENGL 122-176, ENGL 330

This chart represents a suggested sequence of courses.