

**Messiah College
Chemistry (B.S.)**

Requirements for students matriculating in 2015-2016

		HACC Course Options	
Major requirements	Credits		Credits
[CHEM 105] General Chemistry I	4	CHEM 101	
[CHEM 106] General Chemistry II	4	CHEM 102	
[CHEM 221] Chemical Analysis I*	4		
[CHEM 309] Organic Chemistry I	4	CHEM 203	
[CHEM 310] Organic Chemistry II	4	CHEM 204	
[CHEM 321] Chemical Analysis II	4		
[CHEM 342] Advanced Synthesis and Spectroscopy	3		
[CHEM 437] Physical Chemistry I	3.5		
[CHEM 438] Physical Chemistry II	3.5		
[CHEM 361] Inorganic Chemistry	4		
[CHEM 390] Junior Chemistry Seminar	1		
[CHEM 490] Senior Chemistry Seminar	1		
[CHEM 495] Capstone: Natural Sciences	3		
Three credits CHEM electives**	3		
[MATH 111] Calculus I	4	MATH 121	
[MATH 112] Calculus II	4	MATH 122	
<i>Three credits from the following:</i>	3		
[PHIL 101] Problems in Philosophy (3)		PHIL 101	
[PHIL 102] History of Philosophy (3)			
[PHYS 211] General Physics I	4	PHYS 211	
[PHYS 212] General Physics II	4	PHYS 212	
<i>Three to four credits of the following:</i>	3-4		
[MATH 211] Calculus III (4) OR		MATH 221	
[MATH 270] Advanced Math for Sciences (3)			
Experiential Learning requirement			

QuEST requirements	Credits	HACC Courses	
First Year Seminar	3	ENGL 101 (if taken after high school)	3
Oral Communication	3	COMM 101 or SPCH 101	3
Created and Called for Community (W)	3	<i>Messiah Course</i>	
Mathematical Sciences (MATH 111)	met/major	-	-
Laboratory Science (CHEM 105)	met/major	-	-
Science, Technology & the World	waived	-	-

Courses for Messiah College have been selected by joint agreement of HACC and Messiah College. However, curricula are subject to change and it is in your best interest to speak with your advisor and/or the Messiah College transfer advisor if you have questions. Courses that are “recommended” fulfill HACC requirements, as well as Messiah College general education and/or major requirements. It is in your best interest to take the recommended courses.

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<i>Two of the following (6 credits total):</i> Social Science European History U.S. History	6	<u>Social Science:</u> ECON 201, GP 201, 208, PSYC 101, SOCI 120, 201, 203, CJ 101 <u>European History:</u> HIST 111, 201, 202 <u>US History:</u> HIST 103, 104, 107	6
Literature	3	Any ENGL Literature 201 or higher	3
Philosophy and Religion (PHIL 101 or 102)	met/major	-	-
Arts	3	ARCH 111; ART 102, 105, 107, 121, 151, 171; MUS 102, 104, 110, 119, 210; THEA 101, 110, 111	3
First Semester of Language	3	Any Modern Language 1 st Level	3
Second Semester of Language	3	Any Modern Language 2 nd Level	3
Third Semester of Language or Cross Cultural (Messiah Course)	3	Any Modern Language Intermediate Level	3
Non-Western Studies	2 or 3	ANTH 205, 210, HIST 101, 102	2-3
Bible	3	<i>Messiah Course</i>	
Christian Beliefs	3	<i>Messiah Course</i>	
Wellness	1	Any two Messiah WELL 100 Equivalent Courses	2
Ethics, World Views or Pluralism	3	<i>Messiah Course</i>	
QuEST requirements	42-43		31-32
Major requirements	68-69		
Free electives	13-11		
Total	123		

*Fulfills Writing Enriched course requirement for Major.

**Approved Chemistry electives include any Chemistry course at the 200-level or above, excluding CHEM 391.

All of the courses in this major are vital to our program. If you plan to study abroad or graduate early, you must talk to your advisor early and make plans to take the required courses when they are offered. Directed study will not be offered for any lab courses, and will only be granted in extreme circumstances for non-lab courses.

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