

Muskegon Community College

2025/26

Western Michigan University Chemistry Curriculum Guide

The WMU Department of Chemistry offers a choice of four majors:

- Chemistry major this 35-credit hour major in the College of Arts and Sciences is designed for students interested in graduate studies in chemistry. This major also suits students interested in teaching chemistry at the middle/high school level after completion of a Master of Arts in Teaching: Secondary Education.
- Biochemistry this 36-credit hour major is recommended for students interested in careers in health sciences (medicine, dentistry, nutrition, pharmacology, etc.) or a graduate career in biochemistry or molecular biology.
- Business-oriented chemistry major this 37-credit hour major is available to provide the chemical understanding needed if you are preparing for a career in the chemical industry, outside the laboratory. A minor will be chosen in the Haworth College of Business, and students are prepared to enter areas of management, sales, and some aspects of government service.
- Geochemistry major this 68-credit major is designed for students interested in the fields of geochemistry or environmental chemistry and is advised in the department of Geological and Environmental Sciences.

Important Information:

- You must meet one of the following math requirements: MATH ACT score of 27 or higher or MATH SAT score of 640 or successful completion of MATH 1110 with a grade of a "C" or higher or score 61% on the ALEKS math placement exam. More information about the ALEKS math placement can be found at https://wmich.edu/math/placement.
- All chemistry majors must meet with the College of Arts and Sciences chemistry advisor about major or minor, WES, and degree requirements. You must make an advising appointment to declare your major or minor.
- Chemistry majors must complete a minor (except Geochemistry). Business-oriented chemistry
 majors will be required to complete a minor in General Business, Management, or Marketing in
 the Haworth College of Business (HCoB).
- Chemistry majors must complete their last 14 credit hours in the department of Chemistry at WMU.
- Chemistry minors must complete at least 8 credits at WMU.

Courses that can be taken at Muskegon:

WMU courses	Muskegon courses	
CHEM 1100 1110	CHEM 101 and 101A	
CHEM 1120 1130	CHEM 102 and 102A	
CHEM 3750 3760	CHEM 201E and 201F	(elective for Geochem majors)
CHEM 3770 3780	CHEM 202F and 202G	(elective for Geochem majors)
MATH 1220	MATH 161	
MATH 1230	MATH 162A	(elective for Geochem majors)
PHYS 2050 2060	PHYS 203L & L	(elective for Geochem majors)
PHYS 2070 2080	PHYS 204L & L	(elective for Geochem majors)
Business-oriented majors may take these additional courses:		
ACTY 2100	ACC 201	
BUS 1750	BUS 121	
MGMT 2500	BUS 127	
MKTG 2500	BUS 260	
Biochemistry majors may take this additional course:		
BIOS 1610	BIOL 130	
BIOS 1620	BIOL 131	

Geochemistry majors may take these courses:

**Very important note: Geochemistry majors only need the following Chemistry courses: CHEM 101|101A, 102|102A and CHEM 2250|2260 (not available at MCC), and 9 hours of upper-level Chemistry coursework. You will also need 11 credits of Math and General Science (see below), and 9 credits of Geoscience electives (taken at WMU).

Required:

GEOS 1300 GEOL 101A GEOS 1310 GEOL 102

Math and General Science or Chemistry electives:

BIOS 2320

CHEM 3750 | 3760

CHEM 201E and 201F

CHEM 202F and 202G

MATH 3740

MATH 305

MATH 3740 MATH 295
PHYS 2050|2060 PHYS 203L & L
PHYS 2070|2080 PHYS 204L & L

General education requirements:

- Please refer to the <u>WMU Essential Studies (WES) transfer guide</u> that lists courses meeting WES requirements at WMU that may be taken at MCC.
- All students graduating from the College of Arts & Sciences must complete the College of Arts and Sciences Essentials (CASE). This includes world language proficiency (detailed in next bullet point), ENGL 1050/1060 sequence, and by completing the baccalaureate writing requirement.
- All students graduating from the College of Arts & Sciences must meet the world language proficiency by completing two semesters (6-8 hours) of the same foreign language or American Sign Language or passing WMU's proficiency by exam. Please contact the College of Arts & Sciences Undergraduate Advising Office at (269) 387-4366 with any questions. Neither the

MACRAO Agreement nor the Michigan Transfer Agreement satisfy the world language requirement.

- If the student's first language is not English, the student is exempt from this requirement. Determination of eligibility for this exemption is based on whether the student was required to take the TOEFL test for admission and can be verified through the WMU departments of Spanish or World Languages and Literatures.
- You may email the WMU advisors in the College of Arts & Sciences for further clarification about
 WES or CASE.

Contact information:

Chemistry Advisor
College of Arts & Sciences
Department of Chemistry
wmich.edu/chemistry/advising
chem-advising@wmich.edu
(269) 387-4341

For general education advising or world language requirement questions: wmich.edu/arts-sciences/advising