

# **Oakland 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 & 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 hour 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 (MAT 1150 at OCC) 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 <a href="https://wmich.edu/math/placement">https://wmich.edu/math/placement</a>.
- 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 credits in the department of Chemistry at WMU.
- Chemistry minors must complete at least 8 credits at WMU.

#### Courses that can be taken at OCC:

WMU courses	OCC courses	
CHEM 1100   1110	CHE 1510	
CHEM 1120 1130	CHE 1520	
CHEM 3750 3760	CHE 2610 and 2650	(elective for Geochem majors)
CHEM 3770 3780	CHE 2620 and 2650	(elective for Geochem majors)
MATH 1220	MAT 1730	
MATH 1230	MAT 1740	
PHYS 2050   2060	PHY 2400	(elective for Geochem majors)
PHYS 2070   2080	PHY 2500	(elective for Geochem majors)
Business-oriented majors may take these additional courses:		
ACTY 2100	ACC 1810	
BUS 1750	BUS 1100	
MKTG 2500	BUS 2640	
Biochemistry majors may take these additional courses:		
BIOS 1610	BIO 1530	
BIOS 1620	BIO 1560	
BIOS 2500	BIO 2560	
BIOS 3120	BIO 2710	

### Geochemistry majors may take these courses:

\*\*Very important note: Geochemistry majors only need the following Chemistry courses: CHE 1510, 1520, CHEM 2250 | 2260 (not available at OCC), and 9 hours of upper-level Chemistry coursework at WMU. You will also need 11 credits of Math and General Science (see below), and 9 credits of Geoscience electives (not available at OCC).

### Math and General Science or Chemistry electives:

CHEM 3750 3760	CHE 2610 and 2650
CHEM 3770   3780	CHE 2620 and 2650
MATH 3740	MAT 2810
PHYS 2050   2060	PHYS 2400
PHYS 2070   2080	PHYS 2500

## **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 OCC.
- 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