CHEMISTRY / BIOCHEMISTRY - DEGREE

Transfer Plan: Aligns with Associate of Science | mhcc.edu/Science

Faculty Advisers
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Chemistry is the study of the composition, analysis, structure and properties of matter as well as the transformations matter may undergo. With a degree in chemistry, a person can obtain a wide range of employment opportunities including research in scientific, environmental, or medical laboratories, forensics, food science, fermentation, qualitative analysis, or teaching.

Curricular Outcomes
At the completion of this curriculum, students should be able to:

- Retain and apply critical chemistry concepts while enrolled in the curriculum
- Use chemistry principles and logical reasoning skills to solve problems
- Demonstrate proper laboratory techniques with attention to detail, including the use of associated equipment and instrumentation
- Communicate scientific topics effectively
- Recognize connections between chemistry and other disciplines

Course | Title | Credits
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**First Quarter**
CH221 | General Chemistry I | 5
MTH251 | Calculus I: Differential Calculus | 5
WR121 | English Composition ★ | 4

Credits 14

**Second Quarter**
CH222 | General Chemistry II | 5
MTH252 | Calculus II: Integral Calculus | 5
WR122 | English Composition: Critical Thinking ★ | 4

Arts and Letters requirement (https://catalog.mhcc.edu/degree-certificate-requirements/as/#arts-letters) 3-4

Credits 17-18

**Third Quarter**
CH223 | General Chemistry III | 5
MTH253 | Calculus III | 4

Social Science requirement (https://catalog.mhcc.edu/degree-certificate-requirements/as/#social) 3-4

Credits 12-13

**Fourth Quarter**
CH241 | Organic Chemistry I ★ | 5
MTH254 | Calculus IV: Vector Calculus | 5
PH211 | General Physics with Calculus I | 5

Credits 15

**Fifth Quarter**
CH242 | Organic Chemistry II | 5
COMM111 | Fundamentals of Public Speaking ★ | 4
PH212 | General Physics with Calculus II | 5

Social Science requirement (https://catalog.mhcc.edu/degree-certificate-requirements/as/#social) 3-4

Credits 17-18

**Sixth Quarter**
CH243 | Organic Chemistry III | 5
PH213 | General Physics with Calculus III | 5

Health and Physical Education requirement (https://catalog.mhcc.edu/degree-certificate-requirements/as/#health) 3

Arts and Letters requirement (https://catalog.mhcc.edu/degree-certificate-requirements/as/#arts-letters) 3-4

Credits 16-17

Total Credits 91-95

1 This sequence may replace the 300-level organic chemistry requirement at colleges and universities. With an acceptable score on the ACS National Exam and a minimum of a “C” or better in each course, this sequence transfers as 11-15 credits of 300-level coursework to all Oregon public universities. Check with your transfer institution to determine any additional organic chemistry requirements.

Transfer Schools
- Eastern Oregon University (http://www.eou.edu/chem)
- Oregon State University:
  - Chemistry (http://www.chemistry.oregonstate.edu)
  - Biochemistry (http://biochem.science.oregonstate.edu)
- Portland State University (http://www.pdx.edu/chemistry)
- Southern Oregon University (http://www.sou.edu/chemistry)
- University of Oregon (http://chemistry.uoregon.edu)
- Western Oregon University (http://www.wou.edu/chemistry)

★ Course offered online
☆ Cultural Literacy course