

CHEMISTRY

Department of Chemistry and Physics (<https://cas.umw.edu/chemistry/>)

The study of the structure, properties, and reactivity of matter, Chemistry has been titled the “central science” because of its focal position in a fundamental understanding of other scientific branches, such as biology, medicine, pharmacy, physics, environmental studies, and geology. The minor in Chemistry allows students with interests in these fields to explore the overlap between their disciplines and this “central science.” The Chemistry minor fosters both breadth in appreciation of the many facets of the chemical sciences and depth of understanding of each subspecialty. The flexibility afforded by the Chemistry curriculum frees students to tailor the minor to their specific interests, while providing a rigorous academic background for further study.

For instance, an interdisciplinary, **Biochemistry-oriented minor** can be designed with the choices of:

| Code | Title | Credits |
|------------------------|---|---------|
| CHEM 211 & CHEM 212 | Organic Chemistry I and Organic Chemistry II | 8 |
| CHEM 317 & CHEM 318 | Biochemistry I and Biochemistry II | 6 |
| CHEM 319 | Biochemistry Laboratory I | 1 |

While a **General Chemistry minor** might include:

| Code | Title | Credits |
|------------------------|---|---------|
| CHEM 211 & CHEM 212 | Organic Chemistry I and Organic Chemistry II | 8 |
| CHEM 317 | Biochemistry I | 3 |
| CHEM 343 | Inorganic Chemistry | 3 |
| CHEM 383A | Physical Chemistry I | 3 |

Minor Requirements

| Code | Title | Credits |
|---|---|---------|
| CHEM 111 | General Chemistry I | 4 |
| CHEM 112 | General Chemistry II | 4 |
| Select one of the following sequences: | | 8 |
| CHEM 211 & CHEM 212 | Organic Chemistry I and Organic Chemistry II | |
| CHEM 253 & CHEM 254 | Chemical Analysis I and Chemical Analysis II | |
| Select three of the following: ¹ | | 7-9 |
| CHEM 317 | Biochemistry I | |
| CHEM 318 | Biochemistry II | |
| CHEM 319 | Biochemistry Laboratory I | |
| CHEM 343 | Inorganic Chemistry | |
| CHEM 345 | Inorganic Chemistry Laboratory | |
| CHEM 383A | Physical Chemistry I | |
| CHEM 384A | Physical Chemistry II | |
| CHEM 387A | Physical Chemistry Laboratory I | |

Total Credits

23-25

¹ No more than one of the three 300-level courses may be a laboratory course.

Chemistry Faculty

K. Nicole Crowder, Chair
Janet A. Asper, Career Advisor

Professors

Janet A. Asper
K. Nicole Crowder
E. Davis Oldham
Kelli M. Slunt

Associate Professors

Leanna C. Giancarlo
Randall D. Reif

Assistant Professors

Sarah E. Smith

Lecturers

Suzanne M. Nguyen