## **Chemistry Minor**

## **Requirements for a Chemistry Minor**

A minor in chemistry may be a useful addition to students majoring in other natural sciences and health sciences. The minor consists of a minimum of 20 credits in chemistry, with at least 9 of these at or above the 300 level *in residence at UWM*. These credits must include:

- Chem 100 (unless placed in Chem 102)
- Chem 102
- Chem 104
- At least one course each from three of the following areas:
  - o Analytical (Chem 221, 524)
  - o Biochemistry (Chem 501, 601, 602, 603, 604)
  - o Inorganic (Chem 311, 511, 614)
  - Organic (Chem 341-345)
  - o Physical (Chem 560-563)

At least one course with a laboratory, beyond general chemistry, must be taken. A grade point average of 2.5 in the minor is required.

## Majors and career paths that are often paired with a Chem Minor:

- Biology, B.S
  - Cell and Molecular (CMB)
  - Ecology, Evolution, & Behavior (EEB)
  - Microbiology
- Biomedical Engineering
- Biomedical Sciences
- Conservation & Environmental Science, B.S. (water resource track)
- Pre-professional Degree
  - Dentistry
  - Medicine
  - Pharmacy
  - Physician assistant
  - Veterinary

Majors on track to earn a Chemistry Minor										
Major	CHEM 100	102	CHEM 104	341	342	CHEM 343	CHEM 344	CHEM 345	501	Courses needed for a Chemistry Minor
Bio- CMB, Microbiology	Х	Х	Х			Х	Х	Х		Need 2 chem courses, see <i>Path A</i>
Bio- EEB	Х	Х	Х							Need 2 chem courses, see <i>Path A</i>
Biomedical Engineering	Х	Х	Х			Х	Х	Х		Need 1 chem course, see <i>Path C</i>
Biomedical Sciences	Х	Х	Х	Х	Х				Х	Need 3 chem courses, see <i>Path B</i>
Conservation & Environmental Science	Х	X	Х							Need 3 chem courses, see <i>Path B</i>
Pre-professional	Х	Х	Х			Х	Х	Х	Х	Need 1 chem course, see <i>Path C</i>

<sup>\*</sup>The information above was found on UWM's course catalog. Please discuss degree requirements with your advisor.

Path A: To achieve a Chemistry minor, only two more courses from four of the following areas needs to be taken, one of which needs to 300+ level:

Analytical (CHEM 221, 524)

**Biochemistry** (CHEM 501, 601, 602, 603, 604)

Inorganic (CHEM 311, 511, 614)

Physical (CHEM 560-563)

Path B: To achieve a Chemistry minor, 10 more chemistry credits are needed, 9 of which need to be from 300+ level courses, and one course must include a lab. At least one course from three of the following areas must be taken:

Analytical (CHEM 221, 524)

**Biochemistry** (CHEM 501, 601, 602, 603, 604)

Inorganic (CHEM 311, 511, 614)

**Organic** (CHEM 341-345)

Physical (CHEM 560-563)

Path C: To achieve a Chemistry minor, one course from one the following areas must be taken:

Analytical (CHEM 221, 524)

Inorganic (CHEM 311, 511, 614)

Physical (CHEM 560-563)

For further information regarding chemistry degree requirements, see Academic Undergraduate Advisor- Gloria Freschl (office CHM 145). Please bring a copy of your transcript when meeting with the advisor to declare a minor. Unofficial free of charge UWM transcripts may be obtained from the Registrar's Office in Mellencamp 274 or via PAWS. Any questions or requests for an advising appointment can be sent to advising-chem@uwm.edu.