

Chemistry Minor

Chair: Daniel Kraut, Ph.D.

Office Location: Mendel Science Center Rm. 215A

Telephone: (610) 519-4840

[Website](#)

About

Students must complete a year of general chemistry (or equivalent), a year of organic chemistry, two additional chemistry courses with associated laboratories, and one additional chemistry course (7 courses total). All course prerequisites and co-requisites apply¹. Biochemistry majors need to complete 2 CHM courses at the 3000 level or above that are not otherwise required for the biochemistry degree to fulfill the requirements for the Chemistry minor.

1. Or with approval of the Chemistry Advisor.

Program: [Chemistry](#)

Type: Minor

MINOR: Chemistry (27 credits)

Program notes:

- Courses that fulfill minor requirements may be used to fulfill other requirements (i.e., primary major, core curriculum, minors, concentrations, or free electives).

Course	Title	Credits
	General Chemistry Requirement	8
	Organic Chemistry Requirement	8
	CHM Elective & Lab	8
	Upper-division Chemistry Course	3

Category Descriptions

General Chemistry Requirement

Credits: 8

1 year of general chemistry & Lab. Choose one sequence.

Course	Title	Credits
CHM 1151	General Chemistry I	4
CHM 1103	General Chemistry Lab I	1
CHM 1152	General Chemistry II	4
CHM 1104	General Chemistry Lab II	1

Course	Title	Credits
CHM 1311	Inorganic Chemistry I	3
CHM 1301	Inorganic Chemistry Lab I	2
CHM 1512	Quantitative Analysis	3
CHM 1502	Quant Anal Lab	2

Organic Chemistry Requirement

Credits: 8

Choose one sequence.

Course	Title	Credits
CHM 2211	Organic Chemistry I	3
CHM 2201	Organic Chemistry Lab I	1
CHM 2212	Organic Chemistry II	3
CHM 2202	Organic Chemistry Lab II	1
Course	Title	Credits
CHM 3211	Organic Chemistry I	3
CHM 3201	Organic Chemistry Lab I	2
CHM 3212	Organic Chemistry II	3
CHM 3202	Organic Chemistry Lab II	2

CHM Elective & Lab

Credits: 8

Additional Laboratory Chemistry requirement (choose two of the following lecture/lab combos)

Choice A

Course	Title	Credits
CHM 3311	Inorganic Chem II	3
CHM 3301	Inorganic Chem Lab II	2

Choice B

Course	Title	Credits
CHM 3413	Molecular Thermodynamics	3
CHM 3405	Physical Chem Lab II	2

Choice C

Course	Title	Credits
CHM 4622	Biochemistry II:Metabolism	3
CHM 4604	Biochem Tech. and Pract II	1

Choice D

Only one of these two options can be used: CHM 3412 and 3404 OR CHM 3416 and 3402.

Course	Title	Credits
CHM 3412	Quantum Chemistry	3
CHM 3404	Physical Chem Lab I	2
CHM 3416	Physical Chem for Engineers	3
CHM 3402	Physical Chem Lab II	1

Choice E

Only one of these two options can be used: CHM 3511 and 3501 OR CHM 3514 and 3503.

Course	Title	Credits
CHM 3511	Instrumental Analysis	3
CHM 3501	Instrumental Analysis Lab	2
CHM 3514	Bioanalytical Chemistry	3
CHM 3503	Bioanalytical Chem Lab	1

Choice F

Only one of these two options can be used: CHM 4611 and 4601 OR CHM 4621 and 4603.

Course	Title	Credits
CHM 4611	Survey of Biochemistry	3
CHM 4601	Survey Biochemistry Lab	1
CHM 4621	Biochemistry I: Structure	3
CHM 4603	Biochem Tech. and Pract.	1

Upper-division Chemistry Course

Credits: 3

One additional upper-division chemistry course (with approval of the Chemistry Advisor)

- One additional course with lab from other requirements.
- CHM 3417: Biophysical Chemistry*
- CHE 5633: Nanomaterials & Surface Science
- Any 4000 level course
- Any 7000 level or higher course (*Except 7693 or 8662*)

**Cannot be used in combination with other Physical Chemistry courses and laboratories.*