

CHEMISTRY - AMERICAN CHEMICAL SOCIETY CERTIFIED CONCENTRATION (CHM-C)

This concentration is designed for students wishing to attend graduate school in chemistry or who plan to seek immediate employment in chemistry or an allied field. Students who complete this concentration will receive an American Chemical Society Certified Degree.

All students must complete the Chemistry and Biochemistry Common Curriculum Requirements and Concentration Requirements (below).

Chemistry and Biochemistry Common Curriculum

Code	Title	Hours
CHM 110	General Chemistry I	3.0
CHM 111	General Chemistry I Lab	1.0
CHM 114	Chemistry of the Elements	1.0
CHM 116	General Chemistry II	3.0
CHM 117	General Chemistry II Laboratory	1.0
CHM 252	Organic Chemistry I	3.0
CHM 253	Organic Chemistry Laboratory I	2.0
CHM 256	Organic Chemistry II	3.0
CHM 257	Organic Chemistry Laboratory II	1.0
CHM 320	Quantitative Analysis	3.0
CHM 321	Quantitative Analysis Laboratory	1.0
CHM 360	Biochemistry	3.0
CHM 380	Junior Seminar in Chemistry and Biochemistry	1.0
CHM 480	Senior Seminar in Chemistry and Biochemistry	1.0
BIO 151	Molecules to Cells	3.0
Total Hours		30

Concentration Requirements

Code	Title	Hours
CHM 361	Biochemistry Laboratory	1.0
CHM 412/512	Molecular Modeling	1.0
CHM 420/520	Instrumental Analysis	4.0
CHM 436/536	Inorganic Chemistry	3.0
CHM 470/570	Physical Chemistry I	3.0
CHM 471/571	Physical Chemistry Laboratory	1.0
CHM 476/576	Physical Chemistry II	3.0
PHY 110	University Physics I	4.0
PHY 201	University Physics II	4.0
MTH 121	Calculus I	4.0
MTH 122	Calculus II	4.0

Select a minimum of six additional hours in chemistry numbered 299 or above. At least three of the six credit hours must be selected from the list below.¹

CHM 299 Directed Studies in Chemistry and Biochemistry ²

CHM 417	Experimental Design Laboratory
CHM 441/541	Materials Chemistry Laboratory
CHM 499	Directed Studies in Chemistry and Biochemistry ²
LAS 301	Cooperative Education/Internship in LAS (approved internship) ²

Total Hours **38**

¹ Excluding CHM 302 Medical Terminology

² When LAS 301 Cooperative Education/Internship in LAS, CHM 299 Directed Studies in Chemistry and Biochemistry or CHM 499 Directed Studies in Chemistry and Biochemistry is used to complete this requirement, a well-written research paper that has been approved by the research advisor must be submitted to the department chair before study day of the final semester in residence.

Total hours required for the CHM-C concentration: 68.