

Bachelor of Science (B.S.) Major in Biochemistry

Suggested Sequence of Chemistry, Biology, Math, and Physics Courses:

Students NOT placing in Math 118 or higher cannot start the Chemistry sequence until Math 117 is completed with a grade of C- or better. Such students are advised to enroll in first-year Chemistry courses in the summer sessions (after meeting the math requirement) in order to complete the major in four years.

First Year

Fall Semester

Chemistry 105 _____
Biology 101 & 111 _____
Math 131 or 161 _____

Spring Semester

Chemistry 106 _____
Biology 102 & 112 _____
Math 132 or 162 _____

Junior Year

Fall Semester

Chemistry 212 _____
Chemistry 214 _____
Chemistry 305 _____
Chemistry 370 _____

Spring Semester

Chemistry 306 _____
Chemistry 307 _____
Chemistry 371 _____

Sophomore Year

Fall Semester

Chemistry 221 _____
Biology 282 _____
Physics 111 & 111L _____
Statistics 203 _____

Spring Semester

Chemistry 222 _____
Biology 251 _____
Biology 283 _____
Physics 112 & 112L _____

Senior Year

Fall Semester

Chemistry 372 _____
*Biochemistry Elective _____

Spring Semester

Chemistry 373 _____
*Biochemistry Elective _____

Chemistry 300 (Undergraduate Research) and Chemistry 380 (Seminar) are strongly recommended and required to receive Departmental Honors with graduation. Credit hours earned in Chemistry 300 and/or Chemistry 380 do not count as elective hours satisfying the BIOC degree requirement. CHEM 361 does not count towards the BIOC-BS degree.

***Two Biochemistry Electives are required:**

One course must be from among these Biochemistry Focus Electives:

CHEM 365, 385, 386, 387, 388

and for the other you can choose from any of these Biochemistry Electives:

CHEM 323, 365, 385, 386, 387, 388, 396

BIOL 380, 382, 388, 389

(This is information that is on the backside of B.S. Major in Biochemistry)

BIOC-BS Advanced Coursework

Course #	Course Title	Credits
Chem 305	Physical Chemistry for the Biological Sciences (Biochem Majors only)	3
Chem 306	Physical Biochemistry Laboratory (Biochem Majors only)	1
Chem 307	Inorganic Chemistry for Biochem. Majors	3
Chem 370	Biochemistry I (for Biochem and Chem majors)	3
Chem 371	Biochemistry II (for Biochem Majors)	3
Chem 372	Biochemistry Laboratory I (for Biochem Majors)	2
Chem 373	Biochemistry Laboratory II (for Biochem Majors)	2

Biochemistry Electives

Chem 323	Medicinal Chemistry	3
Chem 365*	Proteomics	3
Chem 385*	Advanced Enzyme Kinetics and Mechanisms	3
Chem 386*	Chemistry of Enzymes	3
Chem 387*	Plant Biochemistry	3
Chem 388*	Biophysical Chemistry	3
Chem 396	Special Topics – Biochemistry	3
Biol. 380	Genetics and Evolution of Development	3
Biol. 382	Molecular Genetics	3
Biol. 388	Bioinformatics	3
Biol. 389	Introduction to Pharmacology	3

*Indicates that one of these courses is required to meet the Biochemistry Focus Electives Coursework for the major.