

## Bachelor of Arts Major in Biochemistry (BIOC-BA)

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.*

<b>First Year</b>					
Fall	Chemistry 160		Spring	Chemistry 180	
	Chemistry 161			Chemistry 181	
	Biology 101			Biology 102	
	Biology 111			Biology 112	
	Math 131 or 161			Math 132 or 162	

<b>Sophomore Year</b>					
Fall	Chemistry 240		Spring	Chemistry 260	
	Chemistry 242*			Biology 251	
	Biology 282			Biology 283	
	Physics 111			Physics 112	
	Physics 111L			Physics 112L	

\*Chemistry 242 can be taken in either semester

<b>Junior Year</b>					
Fall	Chemistry 272		Spring	Chemistry 306	
	Chemistry 370			Chemistry 307	
	Chemistry 305			Chemistry 371	

<b>Senior Year</b>					
Fall	Biochemistry Elective**		Spring	Biochemistry Elective**	

**\*\*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 335, 380, 382, 388, 389**

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. Chemistry 361 does not count towards the BIOC-BA degree.

(This is additional information for the B.A. Major in Biochemistry)

### **BIOC-BA Foundational CHEM Classes**

<b>Course #</b>	<b>Course Title</b>	<b>Credits</b>
Chem 160	Chemical Structure and Properties	3
Chem 161	Chemical Structure and Properties Laboratory	1
Chem 180	Chemical Reactivity I	3
Chem 181	Chemical Reactivity I Laboratory	1
Chem 240	Chemical Reactivity II	3
Chem 242	Chemical Synthesis Laboratory	2
Chem 260	Quantitative Methods in Chemistry	3
Chem 272	Analytical Chemistry Laboratory	2

### **BIOC-BA Advanced CHEM Classes**

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

### **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 in Biochemistry	3
Biol/Stat 335	Biostatistics	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.