



The Bachelor of Science Degree in Biochemistry (B.S.)

The Bachelor of Science curriculum is designed for students seeking to become professional biochemists or enter biotechnology fields.

- Chemistry 1610-1620 and Chemistry 2610-2620 are the recommended sequences for chemistry and biochemistry majors, although qualified students are urged to take the Honors sequences.
- Chemistry 1612 and 1622 are highly recommended. They provide a structure in which students can work actively in groups of 6 to 8 peers to enhance learning.
- Undergraduate Research (Biochemistry 4998/4999) is strongly recommended as an elective course.

Autumn Semester (Year 1)		Spring Semester (Year 1)	
General Chemistry 1 (1910H , 1610 , 1210)	5	General Chemistry 2 (1920H , 1620 , 1220)	5
PLTL in Gen Chem (1612)	1	PLTL in Gen Chem (1622)	1
Calculus 1 (Math 1151)	5	Calculus 2 (Math 1152)	5
GE Course (ex: social and behavioral science)	3	Introductory Biology 1 (Biol 1113)	4
Freshman Survey (Arts Sci 1100.10)	1	Launch Seminar (Gen Ed 1201)	1
	<hr/> 15		<hr/> 16
Autumn Semester (Year 2)		Spring Semester (Year 2)	
Organic Chemistry 1 (2910H , 2610 , 2510)	4	Organic Chemistry 2 (2920H , 2620 , 2520)	4
Organic Chemistry Laboratory 1 (2540)	2	Organic Chemistry Laboratory 2 (2550)	2
Calculus 3 (Math 2153)	4	Biochemistry 1 (5613)	3
GE Course (ex: writing and information literacy)	3	Introductory Biology 2 (Biol 1114)	4
GE Course (ex: world language 1101)	4	GE Course (ex: world language 1102)	4
	<hr/> 17		<hr/> 17
Autumn Semester (Year 3)		Spring Semester (Year 3)	
Introductory Physics 1 (1250)	5	Introductory Physics 2 (1251)	5
Biochemistry 2 (5614)	3	Biochemistry 3 (5615)	3
GE Course (ex: world language 1103)	4	Biochemistry lab (5621)	4
GE Course (ex: citizenship theme)	3-4	GE Course (ex: hist. and cultural studies)	3
	<hr/> 15-16		<hr/> 15
Autumn Semester (Year 4)		Spring Semester (Year 4)	
Physical Biochemistry 1 (5721)	3	Physical Biochemistry 2 (5722)	3
Molecular Genetics (MolGen 4500 or 4606)	3-4	GE Course (ex: race, ethnicity, and gender diversity)	3
GE Course (ex: literary, visual, and performing arts)	3	GE Course (ex: citizenship theme course #2) or Elective	3-4
GE Course (ex: second theme)	3-4	GE Course (ex: second theme course #2) or Elective	3-4
Elective	1	Reflection Seminar (Gen Ed 4001)	1
	<hr/> 13-15		<hr/> 13-15

Note:

- Classes listed in **BOLD** are only offered in those semesters – Autumn or Spring ONLY, as shown.
- The world language courses are a requirement of the College of Arts and Sciences and students must demonstrate proficiency through the 1103 level in their chosen language.
- Please see degree requirements for further details, including options for each GE course requirement.

There is some flexibility in course scheduling – please see an undergraduate Biochemistry advisor for more information.

Total credit hour summary: minimum 38 semester hours in the major (121 minimum total semester hours for the degree). There are 39 upper division hours required, of which 38-39 hours are encompassed in the major.