



## 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.

- This example curriculum is designed for students who will begin their chemistry sequence courses with Chem 1205.
- This curriculum example does not take into account that some students may have course credit from transfer credit or AP scores and does not take into account any summer courses that students may be available to take.
- Undergraduate Research (Biochemistry 4998/4999) is strongly recommended as an elective course.

Autumn Semester (Year 1)		Spring Semester (Year 1)	
Foundation of General Chemistry (1205)	2	General Chemistry 1 (1210)	5
College Algebra (Math 1148)	4	Trigonometry (Math 1149)	3
GE Course (ex: world language 1101)	4	GE Course (ex: world language 1102)	4
GE Course (ex: social and behavioral science)	3	Introductory Biology 1 (Biol 1113)	4
<b>Freshman Survey (Arts Sci 1100.10)</b>	1		16
Launch Seminar (Gen Ed 1201)	1		
	<u>15</u>		
Autumn Semester (Year 2)		Spring Semester (Year 2)	
General Chemistry 2 (1220)	5	Organic Chemistry 1 (2510)	4
Calculus 1 (Math 1151)	5	Organic Chemistry Laboratory 1 (2540)	2
GE Course (ex: world language 1103)	4	Calculus 2 (Math 1152)	5
GE Course (ex: writing and information literacy)	3	Introductory Biology 2 (Biol 1114)	4
	<u>17</u>		<u>17</u>
Autumn Semester (Year 3)		Spring Semester (Year 3)	
Introductory Physics 1 (1250)	5	Introductory Physics 2 (1251)	5
Calculus 3 (Math 2153)	4	Biochemistry 1 (5613)	3
Organic Chemistry 2 (2520)	4	GE Course (ex: citizenship theme 4 credit course)	4
Organic Chemistry Laboratory 2 (2550)***	2	GE Course (ex: hist. and cultural studies)	3
	<u>15</u>		<u>15</u>
Autumn Semester (Year 4)		Spring Semester (Year 4)	
<b>Physical Biochemistry 1 (5721)</b>	3	<b>Physical Biochemistry 2 (5722)</b>	3
Biochemistry 2 (5614)	3	<b>Biochemistry 3 (5615)</b>	3
Molecular Genetics (MolGen 4500 or 4606)	3-4	Biochemistry Lab (5621)	4
GE Course (ex: literary, visual, and performing arts)	3	GE Course (ex: race, ethnicity, and gender diversity)	3
GE Course (ex: second theme 4 credit course)	4	Reflection Seminar (Gen Ed 4001)	1
	<u>16-17</u>		<u>14</u>

### 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.