

# Biochemistry BS/BA Course Requirements (YEAR)

An Undergraduate degree in Biochemistry provides students with significant flexibility to fashion a degree to meet their educational goals. A student who receives a Biochemistry degree will be prepared to enter the workforce in a wide variety of areas that include pharmaceutical sciences and biotechnology, or to pursue advanced degrees in the biochemical sciences. Students will explore biophysical and biochemical aspects of life processes at the molecular level and select electives that provide depth and breadth.

1 <sup>st</sup> Fall	1 <sup>st</sup> Spring	2 <sup>nd</sup> Fall	2 <sup>nd</sup> Spring	3 <sup>rd</sup> Fall	3 <sup>rd</sup> Spring	4 <sup>th</sup> Fall	4 <sup>th</sup> Spring
Chem 1210 Gen Chem 1 4 cr. F,S,U SF	Chem 1220 Gen Chem 2 4 cr. F,S,U SF	Chem 2310 Org Chem 1 4 cr. F,S,U	Chem 2320 Org Chem 2 4 cr. F,S,U	Chem 3510 Biochem 1 3 cr. F,S,U	Chem 3520 Biochem 2 4 cr. S	Adv Lab 2-3 cr. F,S	Adv Lab 2-3 cr. F,S
Chem 1215 Gen Chem 1 Lab 1 cr. F,S,U SF	Chem 1225 Gen Chem 2 Lab 1 cr. F,S,U SF	Chem 2315 Ochem 1 Lab 2 cr. F,S,U SF	Chem 2325 Ochem 2 Lab 2 cr. F,S,U SF	Chem 3070 Thermodynamics 4 cr. F,S	Chem 3060/3090 Quantum or Biophysical 1 cr. F,S	Chem 3000/3100 QA or Inorg 4 cr. F,S,U	Adv Lab 2-3 cr. F,S
Math 1210 Calculus 1 4 cr. F,S,U QR	Math 1220 Calculus 2 4 cr. F,S,U QR	Math 2210 Calculus 3 3 cr. F,S,U QR	Wrtg 3014 Sci Writing 3 cr. F,S,U CW				
Chem 2000/4000 UG Seminar 1 cr. F,S,U	Biol 1610 Fund Biology 1 3 cr. F,S,U SF	Phys 2210 Phys S&E 1 4 cr. F,S,U SF	Phys 2220 Phys S&E 2 4 cr. F,S,U SF	Elective 3 cr. F,S,U	Elective 3 cr. F,S,U	Elective 3 cr. F,S,U	
		Phys 2215 Phys S&E 1 Lab 1 cr. F,S					

- Honors versions are available. Sequence starts in the fall. Must apply to add the class.
- Talk with advisors to see how other calculus sequences fulfill this requirement.
- Honors versions are 3210 + 3220
- 3 upper division labs required:
  - Fall options: Chem 5710, Chem 5730, Chem 3525
  - Spring options: Chem 5700, Chem 5750, Chem 5720, Chem 3515
  - 2 Credits of one of the following fulfill one Advanced Lab: Chem 4800, Chem 4965, or CHEM 4999
- Total of 8 Hours of elective needed. Check Degree Audit for options. Meet with advisor to have questions answered.