

# Biochemistry BS/BA Course Requirements

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 <sup>1</sup> Gen Chem 1 4 cr. F,S,U SF	Chem 1220 <sup>1</sup> Gen Chem 2 4 cr. F,S,U SF	Chem 2310 <sup>1</sup> Org Chem 1 4 cr. F,S,U	Chem 2320 <sup>1</sup> Org Chem 2 4 cr. F,S,U	Chem 3510 Biochem 1 3 cr. F,S,U	Chem 3520 Biochem 2 3 cr. S	Chem 3070 Thermodynamics 4 cr. F,S	Chem 3000/3100 QA or Inorg 4 cr. F,S,U
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 3060/3090 Quantum or Biophysical 4 cr. F,S	Chem 3515 Biochem 1 Lab 3 cr. S, U	Chem 57XX <sup>3</sup> Adv Lab 2-3 cr. F,S	Chem 57XX <sup>3</sup> Adv Lab 2-3 cr. F,S
Math 1210 <sup>2</sup> Calculus 1 4 cr. F,S,U QR	Math 1220 <sup>2</sup> Calculus 2 4 cr. F,S,U QR	Math 2210 <sup>2</sup> Calculus 3 3 cr. F,S,U QR	Wrtg 3014 Sci Writing 3 cr. F,S,U CW				
Chem 2000/4000 <sup>5</sup> UG Seminar 1 cr. F,S	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 <sup>4</sup> 3 cr. F,S,U	Elective <sup>4</sup> 3 cr. F,S,U	Elective <sup>4</sup> 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.
- CHEM 3060 is highly recommended as prerequisite for CHEM 3100.
- CHEM 3090 is offered irregularly in the spring; check catalog for offerings.
- 3 upper division labs required:
  - Fall options: Chem 5710, Chem 5730, Chem 3525
  - Spring options: Chem 5710, Chem 5700, Chem 5750, Chem 5720
  - Two (2) Credits of one of the following fulfill one (1) Advanced Lab: Chem 4800, 4965, 4900, 4999
- Total of 8 Hours of elective needed. Check Degree Audit for options. Meet with advisor to have questions answered.
- CHEM 2000 has been replaced with SCI 1500 for students starting Fall 26. CHEM 4000 will remain for students on older catalogues.