

# Biochemistry, Minor

The biochemistry minor allows students to engage in interdisciplinary study of biochemistry to complement their major plans of study.

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

The biochemistry minor is not available to majors in biology, cell and molecular biology, biochemistry, or any combined major that involves biochemistry, due to curricular overlap.

## Required Courses

Code	Title	Hours
<b>Core Courses</b>		
BIOL 4707	Cell and Molecular Biology	4
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5
CHEM 5620	Protein Chemistry	3

## Biology Core Course

Code	Title	Hours
Complete one of the following course options (other advanced BIOL courses may be accepted at the discretion of the Biochemistry Director):		
BIOL 2327	Human Parasitology	4
BIOL 3405	Neurobiology	
BIOL 3421 and BIOL 3422	Microbiology and Lab for BIOL 3421	
BIOL 3409	Current Topics in Biology	
BIOL 3605	Developmental Neurobiology	
BIOL 5307 and BIOL 5308	Biological Electron Microscopy and Lab for BIOL 5307	
BIOL 5541	Endocrinology	
BIOL 5543	Stem Cells and Regeneration	
BIOL 5549	Inventions in Microbial Biotechnology	
BIOL 5573	Medical Microbiology	
BIOL 5581	Biological Imaging	
BIOL 5583	Immunology	
BIOL 5591	Advanced Genomics	
BIOL 5593	Cell and Molecular Biology of Aging	
BIOL 5597	Immunotherapies of Cancer and Infectious Disease	

## Chemistry Core Course

Code	Title	Hours
Complete one of the following course options (other advanced CHEM courses may be accepted at the discretion of the Biochemistry Director):		
CHEM 3331 and CHEM 3332	Bioanalytical Chemistry and Lab for CHEM 3331	4-5
CHEM 3431 and CHEM 3432	Physical Chemistry and Lab for CHEM 3431	
CHEM 4460	Enzymes: Chemistry and Chemical Biology	
CHEM 4628 and CHEM 4629	Introduction to Spectroscopy of Organic Compounds and Identification of Organic Compounds	
CHEM 5550	Introduction to Glycobiology and Glycoprotein Analysis	
CHEM 5611	Analytical Separations	
CHEM 5612	Principles of Mass Spectrometry	
CHEM 5613	Optical Methods of Analysis	

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CHEM 5616 and CHEM 5617	Protein Mass Spectrometry and Protein Mass Spectrometry Laboratory
CHEM 5621 and CHEM 5622	Principles of Chemical Biology for Chemists and Lab for CHEM 5621
CHEM 5625	Chemistry and Design of Protein Pharmaceuticals
CHEM 5638	Molecular Modeling
CHEM 5676	Bioorganic Chemistry

**GPA Requirement**

2.000 GPA required in the minor