

Biochemistry, Minor

Overview

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
Core Courses		
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5
BIOL 4707	Cell and Molecular Biology	4
CHEM 5620	Protein Chemistry	3

Biology Core Course

Code	Title	Hours
Complete one of the following (other advanced BIOL courses may be accepted at the discretion of the biochemistry director):		4-5
BIOL 2327	Human Parasitology	
BIOL 2329	Bioethics	
BIOL 3401	Comparative Vertebrate Anatomy	
BIOL 3405	Neurobiology	
BIOL 3409	Current Topics in Biology	
BIOL 3411	Current Topics in Cell and Molecular Biology	
BIOL 3413	Current Topics in Organismal and Population Biology	
BIOL 3415	Current Topics in Behavioral Neuroscience	
BIOL 3421 and BIOL 3422	Microbiology and Lab for BIOL 3421	
BIOL 3601	Neural Systems and Behavior	
BIOL 3603	Mammalian Systems Physiology	
BIOL 3605	Developmental Neurobiology	
BIOL 3607	Current Trends in Reproductive Sciences	
BIOL 4705	Neurobiology of Cognitive Decline	
BIOL 4709	Neurobiology of Learning and Memory	
BIOL 5301	Clinical Embryology	
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 5585	Evolution	
BIOL 5587	Comparative Neurobiology	
BIOL 5591	Advanced Genomics	
BIOL 5593	Cell and Molecular Biology of Aging	
BIOL 5595	Cell and Molecular Neuroscience	
BIOL 5597	Immunotherapies of Cancer and Infectious Disease	
BIOL 5601	Multidisciplinary Approaches in Motor Control	

Chemistry Core Course

Code	Title	Hours
Complete one of the following (other advanced CHEM courses may be accepted at the discretion of the biochemistry director):		3-6
CHEM 2321 and CHEM 2322	Analytical Chemistry and Lab for CHEM 2321	
CHEM 3331 and CHEM 3332	Bioanalytical Chemistry and Lab for CHEM 3331	
CHEM 3410	Environmental Geochemistry	
CHEM 3431 and CHEM 3432	Physical Chemistry and Lab for CHEM 3431	
CHEM 4456 and CHEM 4457	Organic Chemistry 3: Organic Chemistry of Drug Design and Development and Lab for CHEM 4456	
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 5614	Electroanalytical Chemistry	
CHEM 5621 and CHEM 5622	Principles of Chemical Biology and Lab for CHEM 5621	
CHEM 5625	Chemistry and Design of Protein Pharmaceuticals	
CHEM 5626	Organic Synthesis 1	
CHEM 5627	Mechanistic and Physical Organic Chemistry	
CHEM 5628	Principles of Spectroscopy of Organic Compounds	
CHEM 5630	Nucleic Acid Chemistry	
CHEM 5636	Statistical Thermodynamics	
CHEM 5638	Molecular Modeling	
CHEM 5640	Biopolymeric Materials	
CHEM 5641	Computational Chemistry	
CHEM 5648	Chemical Principles and Application of Drug Metabolism and Pharmacokinetics	
CHEM 5655	Molecular Symmetry and Group Theory	
CHEM 5660	Analytical Biochemistry	
CHEM 5670	Global Biogeochemistry	
CHEM 5676	Bioorganic Chemistry	
CHEM 5688	Principles of Nuclear Magnetic Resonance	

GPA Requirement

2.000 GPA required in the minor