## Biochemistry, Minor

## Overview

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

## Program 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 |  | 5 |
| BIOL 3611 | Biochemistry |  |
| and BIOL 3612 | and Lab for BIOL 3611 |  |
| BIOL 4707 | Cell and Molecular Biology | 4 |
| CHEM 5620 | Protein Chemistry | 3 |

Biology Core Course

| Code | Title |
| :--- | :--- |
| Complete one of the following (other advanced BIOL courses may be accepted at the discretion of the biochemistry director): |  |
| BIOL 2327 | Human Parasitology |
| BIOL 3405 | Neurobiology |
| BIOL 3409 | Current Topics in Biology |
| BIOL 3421 | Microbiology |
| and BIOL 3422 | and Lab for BIOL 3421 |
| BIOL 3605 | Developmental Neurobiology |
| 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 (other advanced CHEM courses may be accepted at the discretion of the biochemistry director): |  | 3-6 |
| CHEM 3331 and CHEM 3332 | Bioanalytical Chemistry and Lab for CHEM 3331 |  |
| CHEM 3431 and CHEM 3432 | Physical Chemistry and Lab for CHEM 3431 |  |
| 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 |  |
| CHEM 5616 and CHEM 5617 | Protein Mass Spectrometry and Protein Mass Spectrometry Laboratory |  |


| CHEM 5621 | Principles of Chemical Biology for Chemists |
| :--- | :--- |
| and CHEM 5622 | 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

