## BIOCHEMISTRY MINOR

## Overview

The biochemistry minor has four required courses taken from biological sciences and chemistry. These are: Genetics (BISC 2539 and BISC 2549) and Molecular Biology (BISC 3752 or NSCI 4176 and NSCI 4876) and Biochemistry I and II (CHEM 4221, CHEM 4231, and CHEM 4222). Two elective courses outside of a student's major complete the six course total that corresponds to a minor. (Note that the required laboratory corequisites are not counted).

Research opportunities are subject to respective departmental policies. Interested students should contact faculty members or the program director.

## Requirements

The biochemistry minor requires six (6) courses:

| Course | Title | Credits |
| :---: | :---: | :---: |
| Required Courses |  |  |
| CHEM 4221 <br> \& CHEM 4231 | Biochemistry I and Biochemistry Lab I | 4 |
| CHEM 4222 | Biochemistry II | 3 |
| One of the following: |  | 5 |
| $\begin{aligned} & \text { BISC } 2539 \\ & \& \text { BISC } 2549 \end{aligned}$ | General Genetics and General Genetics Lab |  |
| NSCI 3133 <br> \& NSCI 3833 | Genetics Lecture and Genetics Lab |  |
| One of the following: |  | 3 to 5 |
| BISC 3752 | Molecular Biology |  |
| NSCI 4176 <br> \& NSCI 4876 | Molecular Biology Lecture and Molecular Biology Lab |  |
| Electives |  | 6 to 10 |
| Select two courses that do not count towards a major. |  |  |
| BISC 3643 \& BISC 3653 | Microbiology and Microbiology Lab | 5 |
| BISC 3754 | Cell Biology | 3 |
| CHEM 3622 | Physical Chemistry II | 4 |
| CHEM 3721 | Quantitative Analysis | 4 |
| CHEM 4241 | Biomimetic Chemistry | 3 |
| CHEM 4621 | Bionanotechnology and Introduction to Nanomedicine | 4 |
| CHEM 4625 | Computational Chemistry | 3 |
| NSCI 2122 <br> \& NSCI 2822 | Immunology Lecture and Immunology Lab | 5 |
| NSCI 4080 | Pharmacological Chemistry | 3 |
| NSCI 4081 | Neurochemistry | 3 |
| NSCI 3154 | Cell and Development Biology Lecture ${ }^{1}$ | 3 |
| NSCI 4143 <br> \& NSCI 4843 | Advanced Microbiology Lecture | 5 |
| ${ }^{1}$ NSCI 3854 Cell and Development Biology Lab may, optionally, be taken with this course. |  |  |

The pre-requisites for the biochemistry minor core, namely General and Organic Chemistry, are required courses for biological sciences, chemistry, and natural science majors, as well as for students associated with the pre-health program. Of the allied interdisciplinary STEM programs whose students are most likely to pursue a biochemistry minor, nearly all require General Chemistry and some require a semester of Organic Chemistry. The four core courses represent a complete, full-year course in fundamental biochemistry complemented by courses providing a thorough foundation in molecular biology.

## Availability

The minor in biochemistry is available at Fordham College at Rose Hill and Fordham College at Lincoln Center. Students in Fordham's School of Professional and Continuing Studies may minor in biochemistry only if they receive the approval of their advising dean and/or department, and their schedules are sufficiently flexible to permit them to take day courses at the Rose Hill or Lincoln Center campuses.

