

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 co-requisites 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 & CHEM 4231	Biochemistry I and Biochemistry Lab I	4
CHEM 4222	Biochemistry II	3
<i>One of the following:</i>		5
BISC 2539 & BISC 2549	General Genetics and General Genetics Lab	
NSCI 3133 & NSCI 3833	Genetics Lecture and Genetics Lab	
<i>One of the following:</i>		3 to 5
BISC 3752	Molecular Biology	
NSCI 4176 & 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 & 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 & NSCI 4843	Advanced Microbiology Lecture and Advanced Microbiology Lab	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.