

# GENOMICS AND BIOINFORMATICS (MINOR)

Department Website (<http://as.nyu.edu/biology/>)

## Program Description

The science of biology aims to understand the workings of life in all its varied forms. The Department of Biology is home to world-class laboratories with faculty dedicated to pushing the frontiers of knowledge and educating the next generation of scientists and biomedical professionals. Research and teaching span the range of modern biology, from microbes to multicellular animals and plants, and from molecular and cellular processes to genetics, development, behavior, and evolution.

The department offers four minors in Biology designed to hone skills in one of four contemporary areas:

- Molecular and Cell Biology
- Genetics
- Genomics and Bioinformatics
- Environmental Biology

Students interested in one of the minors offered in Biology should consult the director of undergraduate studies as early as possible to plan a course of study that meets their needs.

## Minor Declaration

To request declaration of a minor, CAS students should visit the host department. To request declaration of a cross-school minor, CAS students should complete the online Minor Application available in their Albert Student Center. Students may also use the Minor Application (<https://www.nyu.edu/students/student-information-and-resources/registration-records-and-graduation/forms-policies-procedures.html>) in Albert to request cancellation of a CAS or cross-school minor.

## Program Requirements

This minor requires the completion of five 4-credit courses plus one 1-credit lab (21 credits) with a grade of C or better (courses graded Pass/Fail do not count).

| Course                        | Title   | Credits |
|-------------------------------|---|---------|
| <b>Minor Requirements</b>     |   |         |
| BIOL-UA 11                    | Principles of Biology I   | 4       |
| BIOL-UA 12                    | Principles of Biology II  | 4       |
| BIOL-UA 21                    | Molecular and Cell Biology I  | 4       |
| BIOL-UA 123<br>or BIOL-UA 223 | Principles of Biology Laboratory<br>Molecular and Cell Biology Laboratory | 1       |
| Select one of the following:  |   | 4       |
| BIOL-UA 103                   | Bioinformatics in Medicine and Biology                                    |         |
| BIOL-UA 124                   | Fundamentals of Bioinformatics  |         |
| Select one of the following:  |   | 4       |
| BIOL-UA 44                    | Microbiology and Microbial Genomics                                       |         |
| BIOL-GA 1007                  | Programming for Biologists  |         |
| BIOL-GA 1009                  | Biological Databases & Datamining   |         |
| BIOL-GA 1127                  | Bioinformatics & Genomes  |         |

BIOL-GA 1128 Systems Biology

BIOL-GA 1130 Appl Genomics: Intro to Bioinformtics &Netwrk Mod

**Total Credits**

**21**

## Policies

### Policies Applying to the Minor

#### Advanced Placement

Students who achieve a score of 4 or 5 on the College Entrance Examination Board Advanced Placement Examination in Biology (or have equivalent international exam credits) are exempted from taking the Principles of Biology I, II (BIOL-UA 11, 12) sequence. However, because of medical, dental, and other professional school requirements, students on the prehealth track cannot place out of Principles of Biology.

#### Biology Major and Minors: Restrictions

Students may not declare and pursue a Biology major (<https://bulletins.nyu.edu/undergraduate/arts-science/programs/biology-ba/#text>) in combination with any minor offered by the Department of Biology (Environmental Biology (<https://bulletins.nyu.edu/undergraduate/arts-science/programs/environmental-biology-minor/>); Genetics (<https://bulletins.nyu.edu/undergraduate/arts-science/programs/genetics-minor/>); Genomics and Bioinformatics (<https://bulletins.nyu.edu/undergraduate/arts-science/programs/genomics-bioinformatics-minor/>); or Molecular and Cell Biology (<https://bulletins.nyu.edu/undergraduate/arts-science/programs/molecular-cell-biology-minor/>)), or vice-versa. Students are also not permitted to double-minor in this department; the policy is therefore either one major or one minor in Biology. There are no exceptions.

### NYU Policies

University-wide policies can be found on the New York University Policy pages (<https://bulletins.nyu.edu/nyu/policies/>).

### College of Arts and Science Policies

A full list of relevant academic policies can be found on the CAS Academic Policies page (<https://bulletins.nyu.edu/undergraduate/arts-science/academic-policies/>).