BIOINFORMATICS MINOR

The Bioinformatics minor at Loyola provides students with the training and opportunities in this ground-breaking discipline, with career advancement and post-graduate possibilities for years to come.

Curriculum

Degree Requirements

The following degree requirements are for students who have declared the minor in Bioinformatics.

| Code | Title | Hours |
|--------------------------------------|--|-------|
| Bioinformatics Electives | | |
| Select one of the following: | | 3 |
| BIOL 387 | Genomics | |
| BIOL 392 | Metagenomics | |
| BIOI 397 | Bioinformatics Survey | |
| Biology Fundamental Courses | | |
| BIOL 101 | General Biology I | 3 |
| BIOL 282 | Genetics | 3 |
| BIOL 388 | Bioinformatics | 3 |
| Computer Science Fundamental Courses | | |
| MATH 215 | Object-Oriented Programming with Mathematics | 3 |
| Math/Stats Fundamental Courses | | |
| MATH 131 | Applied Calculus I | 3 |
| MATH 132 | Applied Calculus II | 3 |
| STAT 335 | Introduction to Biostatistics | 3 |
| or STAT 203 | Introduction to Probability & Statistics | |
| STAT 337 | Quantitative Methods in Bioinformatics | 3 |
| Total Hours | | 27 |

There is no limit to courses double-dipping between the Bioinformatics minor and other majors/minors. (Please refer to other majors/minors regarding their policies.)

Required courses within the minor also satisfy the following university Core Curriculum (https://catalog.luc.edu/undergraduate/university-requirements/university-core/) requirements: scientific literacy (6 credits) and quantitative analysis (3 credits).

Learning Outcomes

Students minoring in Bioinformatics will be able to:

- · explain genetics concepts,
- · apply computational methods to biological data,
- · apply statistical methods to biological data, and
- evaluate computational & statistical methods for the analysis of biological data.