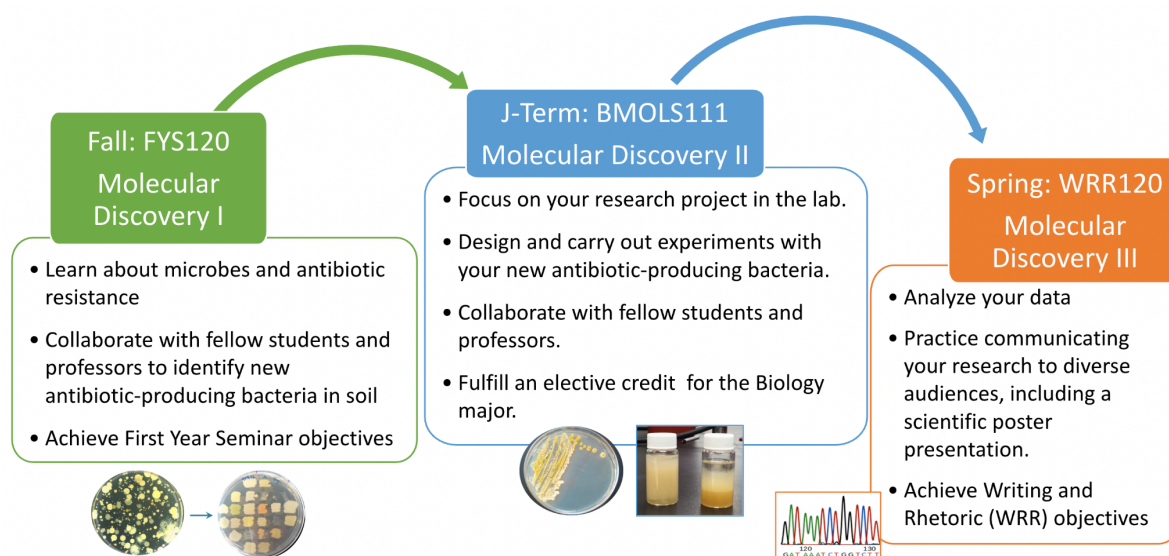


Molecular Discovery: A first-year learning community anchored by research into novel antibiotics from soil bacteria

Molecular Discovery is an immersive, year-long sequence of courses that intentionally engages students with a research question rooted in the molecular world. Molecular Discovery students fulfill the goals of the First Year Seminar and Writing and Rhetoric courses (FYS and WRR) in the context of this research project. These courses guide students through the research process including acting on curiosity, building research skills, and communicating results.

In 2025-2026, Molecular Discovery students will learn about microbes, antibiotics, the rise of antibiotic resistance, and scientists who study in these fields. Molecular Discovery students will also work collaboratively to collect soil samples, identify antibiotic-producing bacteria from these soils, design and carry out laboratory experiments to learn about these novel bacteria, and contribute their findings to a global database. Finally, Molecular Discovery students will learn to communicate their research to diverse audiences, culminating in a scientific poster presentation of their research findings.



FYS120: Molecular Discovery I. COURSE DESCRIPTION - In this first course of the Molecular Discovery learning community, you will practice collaboration and curiosity by starting a year-long research project. Through reading, writing, laboratory work, and reflection, you will nurture your curiosity as a way of learning and explore your science identity. The class culminates with a group literature research project. You will complete your FYS through this course. **Requirement:** Co-enrollment in either CHEM122, CHEM125, or BIO150.

BMOLS111: Molecular Discovery II. COURSE DESCRIPTION: In this second course of the Molecular Discovery learning community, you will build on the content and research skills introduced in the first course while engaging in a laboratory-based research project. This course emphasizes experimental design, implementation, and data analysis. Prerequisite: FYS 120, section entitled Molecular Discovery I.

WRR120: Molecular Discovery III. COURSE DESCRIPTION - In this third course of the Molecular Discovery learning community, you will continue the research conducted in the Fall and January term courses, and practice a variety of ways to communicate that research and related science to diverse audiences. You will also examine some key science-and-society connections such as research ethics, and science representation and accuracy in the entertainment industry. Your reflection on your own science identity in the context of communities of scientists will remain a key part of this course. This course fulfills the WRR requirement. Prerequisites: FYS 120 (Molecular Discovery I) and BMOLS 111 (Molecular Discovery II).