BIOLOGY

Biology
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Faculty & Staff List (https://www.mills.edu/faculty/biology)

Study life! What could be more fascinating—and what could prepare you better to contribute to the future we share with each other and with the rest of the planet’s inhabitants? Our biology courses teach our current understanding of organisms and their amazing processes, structures, and interactions, and provide training in the logical and analytical approaches that produce our theories.

Upper-division courses offer advanced study and rigorous training in diverse fields of biology. All courses are taught in a highly personalized environment of encouragement, support, and guidance, and students have opportunities to work directly with professors in the laboratory and field. The Biology teaching and research laboratories in the Betty Irene Moore Natural Sciences Building are newly renovated, and the resources of the Bay Area are utilized for field trips.

The Jill Barrett Research Program in Biology provides financial support for students to carry out mentored summer research projects with faculty in the lab or at local field sites, and undergraduate research teams operate year-round. The Joseph & Vera Long Foundation Research Lab and the William Joseph McInnes Memorial Botanic Garden provide well-equipped research facilities. The Biology Department is also home to the W.M. Keck Foundation Zoology Laboratory which houses an impressive collection of museum-quality vertebrate and invertebrate specimens for the study of zoology, behavior, ecology and comparative anatomy.

Biology majors select one of three options: general biology, biology with a concentration in ecology, evolution, and behavior (EEB), or biology with a concentration in cell and molecular biology (CMB). General biology and EEB students can pursue either a BA or a BS degree; CMB students can pursue a BA degree. All students share the same set of core courses, and write and present a senior thesis, based either on synthesis of primary literature articles on a focused topic or on their own empirical research.

General Biology
The general track allows the student to select courses tailored to their own interests. This is especially useful for students desiring broad training in Biology, and those interested in a career that spans a wide range of biological topics, such as veterinary medicine. Recent graduates have pursued many interests, including medical school, graduate school in a variety of disciplines.

Concentration in Cell and Molecular Biology (CMB)
The concentration in cell and molecular biology (CMB) focuses on biological mechanisms at the cellular and molecular level. The courses that comprise this concentration give students a deep appreciation of how proteins and other biological molecules mediate life’s processes. This concentration prepares students for graduate study or employment in the biomedical fields. Recent graduates have pursued interests in biotechnology, biomedical research, genomics, and molecular biology or they have attended medical school or graduate school in a variety of disciplines.

Program Goals
• Possess knowledge of general biological principles.
• Have the ability to carry out standard laboratory and field techniques, including analysis of results.
• Have the ability to communicate findings in both oral and written modes.
• Understand and practice the process of scientific inquiry, including the logic of experimentation.
• Have the ability to evaluate a new area of research using knowledge of biological principles and the process of scientific inquiry, as well as the current biological literature.

Majors & Minors
Majors
Biological Major—BA (https://catalog.mills.edu/undergraduate/majors-minors/biology/biology-ba)
Biological Major—BS (https://catalog.mills.edu/undergraduate/majors-minors/biology/biology-bs)

Minor
Biological Minor (https://catalog.mills.edu/undergraduate/majors-minors/biology/biology-minor)

Resources
• Jill Barrett Research Program (https://inside.mills.edu/academics/undergraduate/bio/Barrett-Research-Program.php)