

## Genetics and Plant Biology (GPB)

Overview of Major: Genetics and Plant Biology (GPB) combines traditional plant sciences (physiology, biochemistry, morphology) with more recent biological disciplines (molecular genetics and genomics) to study the role of plants in the global environment. The discipline emphasizes the study of plants from the sub-molecular levels to the organismal level. Relevant applications include biotechnology, bioenergy, agriculture, biomedical, food science, bio informatics, and genetic counseling. Electives in the major are organized into five concentrations: (1) biotechnology and bioenergy; (2) plant diversity and evolution; (3) plant genetics, genomics, and bioinformatics; (4) plant microbe interactions; and (5) experimental plant biology. Offered by the [Department of Plant & Microbial Biology](#) (PMB).

Minimum Admission Requirements: Must be completed by the end of spring term preceding fall enrollment.

Berkeley Courses:
English R1A & English R1B
Chemistry 1A & 1AL
Chemistry 3A & 3AL
Chemistry 3B & 3BL
Biology 1A & 1AL
Biology 1B
Math 1A or 10A or 16A
Math 1B or 10B or 16B
Check assist.org for the course equivalencies at your community college

Other helpful courses:

- Statistics 2, 20, or 131A
- Physics 8A (and 8B if premed)
- Breadth requirements (15 units of humanities and social sciences)
- American Cultures Requirement

Admissions Review Process:

- Holistic review: Based on combination of academic and non-academic achievements.
- Includes personal essay, coursework, test scores, interest in the major and field. A thoughtful essay demonstrating a clear interest in the major helps build a stronger application.
- For more about admissions review: <http://admissions.berkeley.edu/selectsstudents>

Application Timeline:

- UC Systemwide Application (November)
- UC Berkeley Work in Progress Update (January)
- Advisor Review (February)
- Decision notification (Late April)

Helpful Things to Know:

- IGETC satisfies Reading & Composition and all breadth requirements.
- Research experience is strongly encouraged, though not required.

How to contact an advisor:

Major Advisor: Patricia Helyer, [pmb.ugrad@berkeley.edu](mailto:pmb.ugrad@berkeley.edu) (appointments are preferred for prospective students)

Genetics and Plant Biology Website: <http://nature.berkeley.edu/advising/majors/genetics-and-plant-biology>