PLANT BIOLOGY, BACHELOR OF ARTS

College of Biological Sciences

The Major Program
As organisms that sequester carbon and convert solar energy into oxygen, sugar and other usable forms, plants are a primary source of food and myriad biomaterials on the planet, and function as an important buffer against climate change. The Plant Biology major focuses on fundamental aspects of how plants function as organisms, interact with their environment, and the use of this knowledge to address global challenges. A wide variety of scientific disciplines are integrated within the Plant Biology major, including physiology, cell and molecular biology, development, biochemistry and metabolism, genetics and genomics.

The Program
The Plant Biology Bachelor of Arts major consists of a biological sciences core covering the general principles of biology plus five plant-specific classes dealing with advanced aspects of plant biology including physiology, development, and anatomy. Electives allow students to tailor the degree to suit their interests. Independent research in a laboratory setting is a requirement, and majors in Plant Biology are guaranteed this opportunity. Because of the value of plants as a model system for research in molecular genetics, cell biology, and biochemistry, Plant Biology also can make an excellent minor or second major for students in these fields.

Career Alternatives
A degree in Plant Biology serves as an excellent launching point for a wide range of career options, including domestic and international opportunities in business, research, management, and teaching in both governmental and private sectors. The program is excellent preparation for students wishing to enter graduate or other professional schools, including medicine, law (particularly environmental or patent law) or journalism. Plant biologists can work in the laboratory, in the field, in the forest, in botanical gardens or nurseries, in agricultural companies, or in biotechnology, pharmaceutical, energy or chemical industries, or in the area of environmental protection.

Honors & Honors Programs
Students on the honors list may elect to include a maximum of 5 units of 194H in their major programs. For Dean's Honors List information, see the Honors & Prizes (https://catalog.ucdavis.edu/academic-information-policies-regulations/honors-prizes/) for the appropriate College section.

Faculty Advisor
Philipp Zerbe, Ph.D.

Graduate Study
Consult Plant Biology (Graduate Group) (https://catalog.ucdavis.edu/departments-programs-degrees/plant-biology-graduate-group/).

Code Title Units
Preparatory Subject Matter
Biological Science 15


Chemistry 10
Choose the 002 series or 004 series:
CHE 002A & CHE 002B General Chemistry and General Chemistry
OR
CHE 004A & CHE 004B General Chemistry for the Physical Sciences & Engineering and General Chemistry for the Physical Sciences & Engineering

008 series: 6
CHE 008A & CHE 008B Organic Chemistry: Brief Course and Organic Chemistry: Brief Course

Choose one: 4
STA 013 Elementary Statistics or STA 013Y Elementary Statistics
STA 100 Applied Statistics for Biological Sciences
PLS 120 Applied Statistics in Agricultural Sciences

Recommended
CHE 002C General Chemistry
OR
CHE 004C General Chemistry for the Physical Sciences & Engineering

Preparatory Subject Matter Subtotal 35

Depth Subject Matter

Biological Science
BIS 101 Genes & Gene Expression 4

Plant Biology
PLB/PLS 102 California Floristics (Discontinued) 5
OR
PLB 108 Systematics & Evolution of Angiosperms (Discontinued)
OR
EVE 108 Systematics & Evolution of Angiosperms (Discontinued)

PLB 105 Developmental Plant Anatomy 5
PLB 111 Plant Physiology 3
PLB 112 Plant Growth & Development 3
PLB 117 Plant Ecology 4
EVE 140 Paleobotany 4-5


Recommended
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<td>Introduction to Evolution</td>
<td>41-42</td>
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<td>PLB/PLP 148</td>
<td>Introductory Mycology</td>
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