



BOT 480 / BOT 580

Spring 2024

Lecture T, Th 2-3:20  
Cordley 2602

## Photosynthesis & Photobiology

Students majoring in:

- Bioengineering
- Biology
- Botany
- Environmental Sciences
- Forestry
- Horticulture
- Oceanography

Students interested in:

- Natural Plant Communities
- Crops / Food Production
- Phytoplankton
- Plant Adaptations
- Light in Biological Systems
- Plant Stress
- Climate & Productivity

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*"It is more than a figure of speech to say that plants create life out of thin air."*

— Michael Pollan

### Photosynthesis and Photobiology 480/580

This course explores how light fuels life on Earth, the amazing strategies that photosynthetic organisms have evolved to optimize growth in variable environments, how plants regulate light absorption, gas exchange, and water loss and how they protect themselves from harmful light exposure, and how humanity has used fundamental properties of photosynthesis for purposes ranging from improving crop production to monitoring primary production on the global scale as it responds to climate variations and change.

**Prerequisites are:** One course in plant physiology or ecology, or permission of instructor.