

BISP194: Environmental Regulation of Plant Development

General Information: Greetings BISP 194 students. I'm your instructor, Prof. Mark Estelle at mestelle@ucsd.edu. I hope that you are coming to this class eager to learn something about plants. I know that many of you will have little background in plant biology, and perhaps little interest. I hope to convince at least a few of you that plants are, indeed, very cool and important.

Time and Place: **Wednesday 10:00-11:20, 1138 Muir Biology Building.**
Instructor: **Dr. Mark Estelle, mestelle@ucsd.edu**
Office Hours: **by appointment.**

Class Content

Because they are sessile, plants exhibit a remarkable ability to sense their environment and to alter their developmental programs in response to changing conditions. As a result of this developmental plasticity, a plant's appearance can vary dramatically depending on the conditions in which it lives. In this course we will explore the mechanisms involved in environmental regulation of plant development.

Course Requirements

This is a seminar course in which all the information will be delivered through lectures. For this reason, attendance is mandatory. Only one unexcused absence is permitted without affecting your grade. Each additional unexcused absence will result in a drop of one letter grade. Attendance will be taken at each class meeting and you need to sign in BEFORE the lecture starts.

Grade

After each lecture, I will post a short multiple-choice quiz that you will have one week to complete. Each quiz will be worth 10 pts. In addition, we will have a final exam worth 100 pts.

UCSD POLICY ON INTEGRITY OF SCHOLARSHIP

You are expected to read and abide by the UCSD POLICY ON INTEGRITY OF SCHOLARSHIP. Breach of policy will result in a failing grade.

Schedule

| Date | Title/Topic |
|-------------|--|
| March 30 | Introduction to Plant Cell and Developmental Biology |
| April 6 | Hormone Signaling in Plants |
| April 13 | Stem Cells and Organ Initiation |
| April 20 | Flowering |
| April 27 | Light and regulation of plant development |
| May 4 | Root Development and Tropisms: Prof. Wolfgang Busch |
| May 11 | Shoot Architecture |
| May 18 | Algae: Prof. Steve Mayfield |
| May 25 | Trees: The Tallest Life Forms on Earth. |
| June 1 | Evolution and development |