## 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.

#### **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 Organization** I will give lectures live on zoom at the regular class time on Fridays at 10:00 am. Each lecture will be recorded and posted as soon as it is available. I will also host a chat session on Wednesdays at 10:00 for questions. Or, you can email me directly with questions.

### Grade

When I post each lecture recording, I will also 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			
April 2	Introduction to plant development and tropisms			
April 9	Tropisms and auxin			
April 16	Florigen and flowering			
April 23	Branching			
April 30	Guest Lecture on Root Development: Prof Wolfgang Busch			
May 7	Guest Lecture on plant biotechnology: Prof. Steve Mayfield			
May 14	Light and regulation of plant development			
May 21	Guest Lecture on Agrobacterium: Prof. Marty Yanofsky			
May 28	Evolution and development			
June 6	TBD			