

BISC548: Plant Cell and Developmental Biology (Spring 2020)

Dr. Sarah Liljegren

Class: TTh 11:00 am – 12:15 pm Shoemaker 408
Text: Plant Physiology and Development (6th edition, Taiz and Zeiger)

Office: 118 Shoemaker

e-mail: liljegren@olemiss.edu

Office Hours: by appointment, you may talk with me after class or email to set up!

Week 1: Jan 21, 23	Chapter 1/outside reading: <i>Plants in the News, Cool Features of Plant Cells</i> Presentations (3 min/articles 1/21; 3-5 min/features 1/23)
Week 2: Jan 28, 30	Chapter 2: <i>Plant Genes and Genomes</i> Presentations (3-5 min/genes 1/30)
Week 3: Feb 4, 6	Chapter 2: <i>Plant Genes and Genomes</i> Presentations (3-5 min/GMOs 2/6)
Week 4: Feb 11, 13	Chapter 14: <i>Signal Transduction</i>
Week 5: Feb 18, 20	Chapter 17: <i>Growth and Development</i> EXAM 1: Feb 20
Week 6: Feb 25, 27	Chapter 15: <i>Cell Walls</i>
Week 7: Mar 3, 5	Chapter 19: <i>Auxin</i> Presentations (10 min/Development)
Spring Break	WOO-HOO!
Week 8: Mar 17, 19	Chapter 21, 22: <i>Cytokinins, Ethylene</i>
Week 9: Mar 24, 26	Chapter 22, 24: <i>Ethylene; Brassinosteroids</i> Presentations (10 min/Hormones and development)
Week 10: Mar 31, Apr 2	Chapter 24: <i>Brassinosteroids</i> (continued) EXAM 2: Apr 2
Week 11: Apr 7, 9	Chapter 25: <i>Flowering</i>
Week 12: Apr 14, 16	TBD
Week 13: Apr 21, 23	TBD Presentations (10 min/Your selected plant topic)
Week 14: Apr 28, 30	TBD
Week 15: May 5	EXAM 3 (FINAL) Tuesday, May 5 at 12 noon



Course Description:

This course is designed to give Biology graduate students and undergraduates an enhanced understanding and appreciation of fundamental aspects of plant growth and development. Students will select specific areas of plant physiology to be covered in class based on their research interests. Emphasis will be placed on discussing key features of plant cells and the hormone signaling pathways that regulate plant development.

Grading:

Exams: 40%. Three exams, including the final, will be given. The final will not be cumulative. Exams will be based on the material discussed in lectures and student presentations and will be weighted based on the class periods covered. The first two exams will be worth 14 points each; the final will be worth 12 points. Lecture and presentation PowerPoints will be posted on Blackboard after class.

Presentations and Class Participation: 60%. Each of the four short presentations will be worth 5 points each (20 points total). Each of the three longer presentations will be worth 10 points each (30 points total); class participation and attendance during the semester will be worth 10 points. *Attendance verification will be documented on Thursday, January 23.*

Make up exam policy:

If you are seriously injured or ill or have a university-related function (ie. scientific conference), you may arrange an oral makeup exam if you arrange this with me BEFORE the day of the exam.

Revisions to this syllabus will be discussed in class and/or posted on Blackboard.

