

Plant Physiology - BIO 4470 Spring 2010

Instructor: Dr. Matthew Weand

Office: E-107

E-mail: mweand@spsu.edu

Telephone: 678 915 3175

Course Time and Location

Tuesdays and Thursdays 9:00-10:15 AM

Office Hours

Monday and Wednesday 1:00 PM -2:00 PM

Tuesday and Thursday 10:30 AM-12:00 PM, *or by appointment*

Optional text

Introduction to Plant Physiology, Fourth Edition, by William Hopkins & Norman Hüner, 2009, John

Wiley and Sons, Inc. New York.

Handouts will be provided as text supplements. Information in handouts will be included on quizzes and exams.

Class Objectives:

1. To gain knowledge of fundamental concepts in plant physiology related to plant structures, light and energy production.
2. To understand and describe plant nutrient assimilation and water relations.
3. To understand the influence of plant hormones and environment on plant development.

Lecture Notes:

PDF files of lectures will be available on-line under the **GeorgiaView Vista 8** system using the class page under www.spsu.edu/vista/

Grading policy - The following are the standards (%) for assigning grades:

Letter Grade	Percent Score
A	90 – 100.0%
B	80 – 89.9%
C	70 – 79.9%
D	60 – 69.9%
F	Below 60.0%

Exams - Questions on exams can cover any of the lectures, labs, and any class handouts. Exams may also include questions that cover material from reading assignments. Exam dates are listed in the lecture schedule. The time and place of the final exam will be announced. If you have to miss an exam, you must **submit a signed note from a Doctor, Department**

Head, Coach or Supervisor. Please see me immediately to schedule a time to make up an exam. If you do not make up an exam **within a week** after it was originally scheduled, you will receive a **grade of zero** for the exam. If you have an unexcused absence from an exam, you will receive a **grade of zero** for the exam.

Quizzes – Quizzes (\approx 4-5) will be given during the semester. Dates of quizzes will be announced in class during the semester. **Quizzes cannot be made up**, and you will receive a **grade of zero** for each quiz that is missed.

Homework Homework will be used to supplement topics covered in class. Homework due dates will be assigned. If you have an excused absence (sports, doctor's notes, etc.) you will have one week to make up the assignment upon your return to class, after which your grade for the assignment will be zero. **Otherwise homework cannot be made up**

Class activities & Participation – In class you will be asked to complete activities and are expected to contribute to class discussion when appropriate. Class activities cannot be made up.

Grades

Grades will be determined in the following manner:

Class activities & Participation	5%
Quizzes	10%
Homework	10%
Exams	50%
Final Exam	25%

Attendance policy - There is no official attendance policy **in lecture**. However, attendance to class is essential for success in this course. **You are responsible for any and all announcements made in lecture (including changes to the syllabus).**

Withdrawal Policy – The last day to withdraw from this class with a **W** is **Friday March 4, 2011**. Thereafter, I **will not** issue any withdrawals from the course, and you will receive an official grade.

Academic dishonesty – Students found cheating on exams, homework assignments, quizzes, or laboratory assignments will receive an **F** for the entire course. No exceptions are made in this case, so please work independently. Be sure to read the relevant section and know and understand the potential penalties in the University Academic Regulations in the current undergraduate catalog or on the campus web site.

**Students who feel they may need an accommodation based on the impact of a disability should make an appointment with the ATTIC (678.915.7361) to coordinate reasonable accommodations. The students are also welcome to contact the instructor privately to discuss one's specific needs.*

USE OF CELL PHONES (INCLUDING TEXTING) IS NOT PERMITTED IN THIS CLASS!

Tentative Schedule

Week	Date	Topic	Quizzes
1	10-Jan	Introduction to Plant Physiology Plant structures, cellular	
2	17-Jan	Plant structures, whole plant Bioenergetics and ATP synthesis	
3	24-Jan	The Dual Role of Sunlight Photosynthesis: Harvesting Sunlight	Quiz 1
4	31-Jan	Exam 1 Photosynthesis: CO ₂ Assimilation	
5	7-Feb	Photosynthesis: Regulation Adaptations to the Environment	
6	14-Feb	Allocation, Translocation & Partitioning Cellular Respiration	Quiz 2
7	21-Feb	Nitrogen Assimilation Carbon Assimilation	
8	28-Feb	Plant Cells and Water Exam 2	
SPRING BREAK			
9	14-Mar	Whole Plant Water Relations Inorganic Nutrients	
10	21-Mar	Roots, Soils and Nutrient Uptake Patterns in Plant Development	
11	28-Mar	Plant Hormones 1 Plant Hormones 2	Quiz 3
12	4-Apr	Exam 3 Photomorphogenesis	
13	11-Apr	Plant movements (tropisms) Photoperiods & Clocks	
14	18-Apr	Temperature effects on plants Environmental Stress	Quiz 4
15	25-Apr	Flowering and Fruit Development	

***Last Day of Spring Classes –
April 28, 2011
FINAL EXAM- TBA***