

**BOT 2410
GENERAL BOTANY**

Lecturer: Dr. Michael L. Moody
Office Hours: 1:30-2:30 Mon. & Wed.
Office: Biology B306
Phone: 747-5087
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COURSE MEETING AND LOCATION:

MW 10:00-11:20 (Chemistry Bldg 1.024); **Tues:** 4:30-6:20 (Biology 326)

T.A.:

TEXTBOOK (REQUIRED):

- Mauseth, James D. (2012). *Botany: An Introduction to Plant Biology* (5th ed.).
Sudbury, MA: Jones and Bartlett Learning.

COURSE OBJECTIVES:

- recognize the importance and function of plants for society and the environment
- understand the evolution and diversification of plants
- understand how plants function from subcellular to whole plant level
- recognize the complex interactions among plants at a community and global level
- be justifiably amazed by plants in general

GRADING:

Lab assignments	15%	Drop one
Weekly quizzes, etc.	15%	Drop two
Exam 1	15%	
Exam 2	15%	
Debate & write up	20%	Weeks 13-14, Nov. 17,18,19,24
Final exam	20%	

POLICY ON MAKE-UP EXAMINATIONS: No make-up exams will be given for reasons other than extreme illness (doctor's note required), absence with the instructor's prior approval, or when a student is on official University business (documentation required). Make-up exams will be scheduled at the Instructor's convenience.

POLICY ON ACADEMIC HONESTY: Academic Dishonesty will not be tolerated. It includes, but is not limited to, cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts. If you have any questions regarding the university policy on scholastic dishonesty please contact the Dean of Students.

POLICY ON ELECTRONIC DEVICES: Be courteous to your fellow students and lecturer. Turn off any cell phones, smart phones, Blackberries, etc. during lecture. You cannot text, surf the internet, watch movies, listen to music, etc. in my class. **★You will be asked to leave if this happens**

ATTENDANCE POLICY: Regular attendance will be necessary for success in this class.

POLICY ON DISRUPTIVE BEHAVIOR: Any student who disrupts the class will be asked to leave and will be referred to the Dean of Students.

DISABILITY STATEMENT: If you have a disability and need classroom accommodations, please contact: The Center for Accommodations and Support Services (CASS) at 747-5148, or by email to cass@utep.edu, or visit their office located in UTEP Union East, Room 106. For additional information, please visit the CASS website at www.sa.utep.edu/cass.

MILITARY STATEMENT: If you are a military student with the potential of being called to military service and /or training during the course of the semester, you are encouraged to contact me at the beginning of the semester.

IMPORTANT DATES:

Classes start: Mon. 25 Aug.

1st Exam: Wed. 24 Sept. (During Lecture time)

2nd Exam: Tues. 28 Oct. (During Lab time)

Labor Day: Mon. 1 Sept.

Thanksgiving Break 27-28 Nov.

Debates: 17, 18, 19, 24 Nov.

Last lecture: Wed. 3 Dec.

Dead Day: Fri. 5 Dec.

Finals week: 8-12 Dec.

DROP DEADLINE: Fri. 31 Oct.

Schedule for General Botany (BOT 2410)
(Subject to modification)

Week 1: Aug 25-29	Intro to Botany; What is a plant and why do we care?; Plants, People, Environment 1	Ch. 1
Week 2: Sept 1-5	Labor Day (Monday – no classes) plant diversity overview, plant cell – life cycles	Ch. 3 L1: Intro, GH
Week 3: Sept 8-12	Algae, Plant diversity – how we measure diversity, Systematics (taxonomy)	Ch. 19, 18 L2: Algae
Week 4: Sept 15-19	Early land plants Bryophytes Vasculature (xylem, phloem, etc.)	Ch. 20, 5 L3: Bryophytes
Week 5: Sept 22-26	Intro. vascular plants – Ferns, etc. Exam 1 (Wed. 10:00)	Ch. 21 L4: Ferns
Week 6: Sept 29- Oct 3	true roots form & function; stems, wood Leaves; Seeds, germination	Ch. 6-8, 22 L5: Roots & stems
Week 7: Oct 6-10	Woody plants – The Gymnosperms Flowers, double fertilization, fruits Pollination and seed dispersal	Ch. 22, 9 L6: Leaves & Gymnosperms
Week 8: Oct 13-17	Flowering plant diversity Photosynthesis – carbon fixation Plant Physiology	Ch. 23, 10, 11 L7: Flower & fruit
Week 9: Oct 19-24	Plant Physiology cont'd Behavior, hormones, defense	Ch. 11, 12 L8: Pollinator & photosynthesis
Week 10: Oct 27-Oct 31	Genetics and plant function Exam 2 (Tues. 4:30) mutualisms, parasitisms	Ch. 15, 16 L9: Exam
Week 11: Nov 3-7	co-evolution Fungi & Lichens	Ch. 26, 24 L10: Ecology I
Week 12: Nov 10-14	Evolution of populations & species Ecology & Ecosystems, Biomes	Ch. 26, 27 L11: Ecology II
Week 13: Nov 17-19	Debates	L12: Debates
Week 14: Nov. 24-28	Debates Desert plant ecology, Conservation Thanksgiving	Ch. 12, suppl. reading L13: Conservation
Week 15: Dec 1 & 3	Plants, People, Environment Revisited	No Lab

DEBATES: One of the most important skills in any science (or life in general) is to be able to formulate an argument based on evidence. There will be four topics dealing with controversial botanical issues for which you will be assigned a pro or con argument. You will work in teams of 3 with a standard debate format (provided in a separate handout). The purpose will be to have a strong understanding of your topic from both points of view.

Debates will be conducted Nov. 17-24. On the day of a debate, I will introduce the debate issue and the debate teams, the class period will be spent on the debate between two groups of students. Rules and procedures for debates will be explained in a separate handout. Issues discussed in debates will be covered on the final exam. Groups of three students will be assigned by me to a debating team. Two debating teams will debate one issue, with one team arguing for and one team arguing against the issue. Issues will be assigned by lottery to groups, and whether a team argues for or against an issue will be assigned by random draw.

Within one week after debates are assigned, each group will be required to meet with me to discuss the issue of their debate. Students are expected to work together with fellow group members to conduct library research out of class in order to discuss and develop their debating points as a group. Each group is then required to write up a **Contract (10 points)** describing each group member's responsibilities/contributions to the group effort to prepare for the debate – it is expected that different members will do different tasks, but each person should contribute equally to the effort. Each member must sign this contract and keep a copy for themselves.

The Topic Overview and Debating Points Written Outline (40 points):

Each member of the team will be required to turn in an individual 2-3 page outline, in class on the day of their debate. This is writing assignment with a 1 page overview of their topic followed by an outline of the debating points describing significance of each. In your Debating Points Written Outline, you must reference scientific literature in order to back-up your debating points. This must be presented in a Scientific (CSE) Citation Format at the end of the document and cited in your outline. You may NOT use websites or lecture material as references in your Debating Points Written Outline: all references must be published books or journal articles.

Oral Debate (50 points):

Each student in a group is required to contribute equally to the oral arguments made in class on the day of the debate (a portion of the oral presentation grade will include strength of group argument). Students may use (but are not required to use) power point or the whiteboard to present materials in support of their debating points. These must be original materials that they produced (for example, not copied from a book or downloaded from the internet).

Each student's debate will be graded on a 100-point scale: Contract 10 pts, Written topic overview and outline 40 pts, Oral Debate 50 pts