

Biology 1411

General Botany

Fall 2021



Instructor

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Office Hours

Office hours are available MW 11am-12pm, R 9:30-10:45am or by appointment.

Course Information

Course Description

This is a survey of life characteristics of the plant-like and fungi-like protists, plants, and fungi.

Prerequisite Courses: Principles of Biology I and II (Biol 1305, 1306).

Prerequisite Skills

Accessing Internet websites and proficiency with Blackboard and PowerPoint are required for Botany.

Student Learning Outcomes

Upon completion of this course, students will be able to:

- Identify the cells, tissues, and organs that make up a multicellular plant or fungus body.
- Explain how structures are related to function and how they allow organisms to carry on fundamental life processes in different environments.
- Determine of the major characteristics of the phyla (=divisions) of plant-like and fungi-like protists in the Kingdom Protista and the characteristics of members of the Kingdom Plantae, and Kingdom Fungi (Myxomycota).
- Describe the relatedness of the different plant phyla to one another and fungi phyla to each other as well as their major evolutionary pathways.
- Recognize of the importance of plants and fungi in human ecology.

Course Delivery

Lectures will be delivered in the classroom; lab exercises will be conducted in the botany lab. Support documents are available in Blackboard¹.

Required Textbook

Evert, R. F. and S. E. Eichhorn. 2012. *Raven Biology of Plants*, 8th edition, W. H. Freeman & Co.

Technology Requirements

Lecture homework assignments and pre-lab quizzes will be available via Respondus LockDown Browser and WebCam. These programs require internet access and a desktop computer, laptop, or Chromebook and a webcam. For best results, use an ethernet cable to connect to your Internet source instead of relying on Wifi. Open either of the botany Blackboard courses, navigate to Announcements and select Technology Support from the top menu for Respondus LockDown Browser installation instructions.

Top Hat will be used to take attendance and deliver in class quizzes. See <https://support.tophat.com/s/article/Top-Hat-Browser-Requirements> to determine which web browser you should use and which mobile devices are compatible. Your join code for botany is: 067951.

Communication

I will respond to email and/or telephone messages within 24 hours during working hours Monday through Friday.

All written communication will be done exclusively through your ASU email address. Check frequently for announcements and policy changes. In your emails to me, include the course name and section number in your subject line and the questions or problems you have for me.

Evaluation and Grades

Course grades will be based upon completing course requirements and meeting student learning outcomes.

There will be two components to the final grade. The lecture grade will be determined by the average of five lecture exams plus the average of lecture homework quizzes (minus the two lowest scores)/in class quizzes. The lab average will be based on scores for three lab practices and the average of your ten best post quiz scores.

Lecture will count for 75% of your final grade (final lecture average x 0.75) and lab will contribute 25% of your grade (final lab average x 0.25). The two percentages will be summed to determine the course grade. Course grades will be determined as indicated in the table provided.

Lecture Assessment

<i>Activities</i>	<i>Points</i>
Lecture homework/in class quiz average	100
Five lecture exams (100 points each)	500
Average of 4 lecture exams + homework average X 0.75 (= lecture points)	Total possible = 75

Lab Assessment

<i>Activities</i>	<i>Points</i>
Average of 10 best post lab quizzes (100 points)	100
Three lab practicals (100 points each)	300
Average of grades of three lab practicals + post lab quizzes X 0.25 (= lab points)	Total possible = 25

Course Grade**Grading System**

The following grading scale is used for this course:

A = 89.5-100 points

B = 79.5-89.4 points

C = 69.5-79.4 points

D = 59.5-69.4 points

F = 0-59.4 points

Rounding will follow scientific rounding rules; fractions will be rounded to tenths.

Assignment and Activity DescriptionsLecture Activities

Lectures are delivered via in class PowerPoint presentations, accompanied by study guides, homework quizzes, videos, worksheets, and links to helpful web sites. All are available on Blackboard Lecture. You can find the lecture schedule on Blackboard Lecture along with reading assignments.

Homework Assignments

Homework quizzes are assigned for each lecture topic. The purpose of each assignment is to provide you with an opportunity to test your understanding of lecture information before each exam. You may take each lecture homework assignment three times; your highest grade will be recorded. You are NOT allowed to use any form of assistance when taking the quizzes. You must take each quiz using Respondus LockDown Browser and WebCam. Your homework average is equivalent to one lecture exam grade. Homework quizzes will be available the Friday prior to the scheduled lecture; due dates/times for homework assignments will be posted with the quiz on Blackboard (Assignments). An email will be sent to you informing you a homework assignment has been posted.

In class quizzes will be given via Top Hat. You are required to bring your electronic device with you to each class.

Lecture Exams

Exams 1-5 are a combination of multiple choice, fill-in-the-blank, and true/false questions. Exams 1-5 are each worth 100 points.

You have the option of taking an Optional Comprehensive Final Exam which is also worth 100 points; the grade on this exam can be used to replace your lowest exam score among Lecture

Exams 1-4; your grade on Exam 5 cannot be replaced. If your grade on the optional comprehensive exam is lower than your scores on exams 1-4 the grade will not replace another exam grade nor will it be used in your final grade calculations. Questions for each exam are taken from lectures, homework assignments, and from supplemental learning tools (i.e. videos, reading assignments, worksheets). Exam dates are posted on the lecture syllabus and will be administered during a regularly scheduled class period.

No make-up exams are given. If you miss one of the first four exams, you must take the Optional Comprehensive Final Exam. Your grade on the comprehensive exam will replace the 0 for the missed exam. For example, if your exam scores for exams 1-4 are 90, 0, 88, 82 and you make a 75 on the Comprehensive Exam the 0 becomes a 75. You are only allowed to “make-up” one exam during the semester by substituting it with a grade from the comprehensive final exam. If you miss Exam 5 you will get a zero; this grade cannot be replaced.

Lab Activities

Each lab consist of four activities: 1) a required pre-lab reading assignment/activity (available on Blackboard Lab), 2) an optional pre-lab quiz (read more to learn about extra credit) (available on Blackboard Lab), 3) the lab exercise available on Blackboard Lab, bring a copy of the exercise with you to lab), and 4) a post lab quiz administered at the beginning of the following week's lab (see below exceptions for labs the week before lab practicals). You are not allowed to use any form of assistance while taking Post Lab Quizzes. The lab for each week will be available Monday at 5pm the week prior to the scheduled lab.

Due date and time for the pre-lab quizzes are posted on the lab schedule (available on Blackboard Lab). Please read the Lab Syllabus for additional information (posted on Botany Blackboard Lab).

Lab Practicals

There will be three lab practicals administered during the semester, each worth 100-points. All lab practicals are based on text, illustrations, microscope slides, and specimens viewed during the lab exercise and information from the pre-lab assignments (see Botany Lab Schedule). However, information presented in lecture and lab for a given topic (i.e. tissue systems, non-vascular plants) is very similar, although presented in a different manner. You may find it helpful to review the lecture information to help you gain a better understanding of the information presented in lab. Each Lab Practical is administered during one of the regularly scheduled labs.

Pre-lab Reading Assignments, Pre-lab Quizzes, Lab Extra Credit

You may take each pre-lab quiz as many times as you wish; your highest grade is recorded. The pre-lab exercises are to provide you with background information to help you better understand the lab.

The pre-lab quizzes are not required; however, if you take **ALL** the pre-lab quizzes and have a 70% or higher average on your final pre-lab quiz average, you will earn 50 points, which will be

added to your total lab points (i.e. before the average calculation). Pre-Lab quizzes must be taken using Respondus LockDown Browser; however, use of WebCam is not required. You are not allowed to use any form of assistance on a Pre-Lab Quiz.

Post-Lab Quizzes

Another 100 points is based on an average of your 10 individual best 100-point post lab quizzes (out of 12 scores). Post lab quizzes will be normally administered at the beginning of the next week's lab; however, the post lab quiz for the lab the week before a lab practical will be given either during lecture or online.

Missed Assignments

To succeed in botany you MUST keep up with and complete all assignments. I will provide ample time for you to complete assignments, for that reason if you miss an assignment there will be no make-up opportunity. If you submit a score past the deadline, that score will not be counted.

Attendance

Your attendance for the course will be based on roll taken during both lecture and lab.

Glitches and Bumps

If you encounter a problem with any online activities (i.e. pre-lab quizzes, homework), please send me an email immediately describing the problem so I can fix it.

General Policies Related to This Course

All students are required to follow the policies and procedures presented in these documents:

- Angelo State University Student Handbook²
- Angelo State University Catalog³

Academic Integrity

Students are expected to maintain complete honesty and integrity in all work. Any student found guilty of any form of dishonesty in academic work is subject of disciplinary action and possible expulsion from ASU. It is dishonest to use any form of assistance (i.e. another student, notes) while using Respondus LockDown Browser and WebCam to complete a graded assignment.

The College of Science and Engineering adheres to the university's Statement of Academic Integrity.⁴

Accommodations for Students with Disabilities

ASU is committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs or activities of the university, or be subjected to discrimination by the university, as

provided by the Americans with Disabilities Act of 1990 (ADA), the Americans with Disabilities Act Amendments of 2008 (ADAAA) and subsequent legislation.

Student Disability Services is located in the Office of Student Affairs, and is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability. It is the student's responsibility to initiate such a request by contacting an employee of the Office of Student Affairs, in the Houston Harte University Center, Room 112, or contacting the department via email at ADA@angelo.edu. For more information about the application process and requirements, visit the Student Disability Services website.⁵ The employee charged with the responsibility of reviewing and authorizing accommodation requests is:

Dallas Swafford, Director of Student Disability Services Office of Student Affairs; 325-942-2047; dallas.swafford@angelo.edu; Houston Harte University Center, Room 112

Incomplete Grade Policy

It is policy that incomplete grades be reserved for student illness or personal misfortune. Please contact faculty if you have serious illness or a personal misfortune that would keep you from completing course work. Documentation may be required. See ASU Operating Policy 10.11 Grading Procedures⁶ for more information.

Plagiarism

Plagiarism is a serious topic covered in ASU's Academic Integrity policy⁷ in the Student Handbook. Plagiarism is the action or practice of taking someone else's work, idea, etc., and passing it off as one's own. Plagiarism is literary theft.

In your discussions and/or your papers, it is unacceptable to copy word-for-word without quotation marks and the source of the quotation. It is expected that you will summarize or paraphrase ideas giving appropriate credit to the source both in the body of your paper and the reference list.

Papers are subject to be evaluated for originality. Resources to help you understand this policy better are available at the ASU Writing Center.⁸

Student Absence for Observance of Religious Holy Days

A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. See ASU Operating Policy

10.19 Student Absence for Observance of Religious Holy Day⁹ for more information.

Title IX at Angelo State University

The University prohibits discrimination based on sex, which includes pregnancy, sexual orientation, gender identity, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing all forms of gender-based harassment or discrimination including:

sexual assault, sex-based discrimination, sexual exploitation, sexual harassment, public indecency, interpersonal violence (domestic violence and/or dating violence), and stalking. As a faculty member, I am a Responsible Employee meaning that I am obligated by law and ASU policy to report any allegations I am notified of to the Office of Title IX Compliance.

Students are encouraged to report any incidents of sexual misconduct directly to ASU's Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator at:

Michelle Miller, J.D.

Special Assistant to the President and Title IX Coordinator Mayer Administration Building, Room 210; 325-486-6357; michelle.boone@angelo.edu

You may also file a report online 24/7 at www.angelo.edu/incident-form.

If you are wishing to speak to someone about an incident in confidence you may contact the University Health Clinic and Counseling Center at 325-942-2173 or the ASU Crisis Helpline at 325-486-6345. For more information about Title IX in general you may visit www.angelo.edu/title-ix.

Safety Standards

Students, faculty and staff are required to complete the wellness check if:

- You have tested positive for COVID-19
- You are experiencing symptoms of COVID-19.
- You have had contact with a person who has recently tested positive for COVID-19.
- Masks are optional everywhere on campus. Anyone who feels more comfortable wearing a face covering should know your decision is supported.
- Washing hands is highly encouraged to prevent spread of all germs.
- Students who do not pass the wellness check should contact their instructors, just as they would for any illness.
- Students who do not feel comfortable coming back to in-person classes should look for online class opportunities or seek an ADA accommodation.

Modifications to the Syllabus

This syllabus, including grade evaluation and course schedule, is subject to modification.

Teaching Philosophy

Teaching botany is extremely important to me for several reasons. As a botanist I find plants fascinating and I want everyone to know just how amazing they are. Another reason is the critical, frightening situation happening on Earth. We are experiencing a biodiversity crisis often referred to as the sixth mass extinction. Plant extinction is twice that of all bird, mammal, and amphibian extinctions combined. Plant extinction is bad, bad news for all species. Plants form the infrastructure of ecosystems and are interdependent with other organisms and with one

another. We don't yet have an understanding of all of the ways plants interact with each other, with animals, with fungi, and with their physical environment...but what we do know is truly mindboggling. Baba Dioum summed up why I teach botany, "In the end we will conserve only what we love; we will love only what we understand; and we will understand only what we are taught." I hope you enjoy this course and gain an understanding of why everyone must be good and adamant stewards of plant conservation.

1 angelo.blackboard.com

2 <https://www.angelo.edu/current-students/student-handbook/>

3 <https://www.angelo.edu/academics/catalog/>

4 <https://www.angelo.edu/live/files/27603-student-handbook-2020-21#page=96>

5 <https://www.angelo.edu/current-students/disability-services/>

6 <https://www.angelo.edu/content/files/14197-op-1011-grading-procedures>

7 <https://www.angelo.edu/live/files/27603-student-handbook-2020-21#page=96>

8 https://www.angelo.edu/current-students/writing-center/academic_honesty.php

9 https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance_of