

Syllabus BIOL 3339 – 001 (21321)

Plant Biology

Spring 2025

Meeting Times: Mondays, Wednesdays, and Fridays 11:15am – 12:10pm

Location: Herrington Patriot Center Room 02255. Note: This is the gym building.

First Day of Class: Monday, January 13th

Last Day of Class: Friday, April 25th

Final Exam: Monday, April 28th from 10:15am – 12:15pm

Date to Withdraw Without Penalty (Census Date): Monday, January 27th

Spring Break (No Classes): Monday, March 17th – Friday, March 21st

Instructor:

Dr. Joshua Banta

Director, Center for Environment, Biodiversity, and Conservation

Professor, Department of Biology

Office: Hudnall, Pirtle, Roosth Building (HPR) Room 129

Phone: (903) 565-5655

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Office Hours: MWF 12:10pm – 1:10pm, or by appointment, or call my office.

Course Description: This course focuses on plants, their unique features, their diversity, and how they profoundly influence all life on Earth. The goals of this course are for students to understand what makes a plant a plant and to appreciate the ways in which plants make life possible for humans and life on Earth in general.

Student Learning Objectives: By the end of the class, you should be able to...

- 1) Describe what a plant is and how plants are different from animals
- 2) Describe a plant cell, its parts, and its unique features
- 3) Explain how a plant cell captures energy (photosynthesis)
- 4) Describe the main groups of plants and how they differ from each other
- 5) Understand the significance of plants to you and your life, and be able to use your knowledge of plants to make informed decisions

Required Materials:

- Top Hat™ Student Response and Engagement System.
- A smartphone with a working camera.
 - You must be able to hear sound through your smartphone!
- The Respondus lockdown browser installed on your laptop (not a Chromebook):
<http://www.respondus.com/lockdown/download.php?id=593832943>
 - If you do not have a laptop, or if you use a Chromebook, there will be a computer lab available for you to take the exams.

Recommended Textbook

- *Plant Biology, Third Edition*, published by LJLM Press (Graham, Graham, and Wilcox, authors)
 - Available exclusively for download through this link:
 - http://ljlmpress.com/plant_biology.html
 - Cost: \$40.
 - Do not print out the book. It is designed to be read directly on your computer, laptop, smartphone, or tablet.

Grading:

Three exams, each worth 15% of final grade (worth 45% of final grade when added together)

One comprehensive final exam, worth 25% of final grade

Quizzes, worth 10% of the final grade when added together

Top Hat questions, worth 5% of the final grade when added together

In-Person Attendance, worth 5% of the final grade when added together

Graded assignments, worth 10% of final grade when added together

Total: **100%**

90% – 100% = A

80% – 89.999% = B

70% – 79.999% = C

60% – 69.999% = D

59.999 or lower = F

Final overall scores will not be rounded up to the next highest letter. For instance, an 89.999% will be a B and not an A. But extra credit assignments are available that can make the difference.

Attendance:

- This is not an online or a hybrid course. You are expected to be at class on time for every class, and you are expected to stay the whole time.
- I will take in-person attendance during every class period and the attendances count for 10% of your final grade when added together. That means you could drop by an entire letter grade in the course if you do not attend regularly.
- Attendance will be taken using the Top Hat student engagement system. It marks your geographic location using your smart phone.
 - You must be physically present in class for your attendance to count. You are not allowed to do the attendance from home, or from the parking lot on your way into class, etc.
 - It is your responsibility to make sure you are marked as present. If you are marked as absent but you were there, I will not change it later.
- You are expected to stay focused during class, or else you will be penalized up to a zero for attendance for the day, at my discretion. No warning will be given beforehand, and no notification may be provided afterwards. The following are examples where you would be penalized:
 - Working on any other courses (including labs) during class time
 - You are not allowed to work on the plant biology laboratory course during our class time
 - Studying for other course exams, for instance studying for organic chemistry or biochemistry
 - Streaming movies or other videos not directly related to the content we are working on
 - Watching social media (Instagram, Snapchat, TikTok, YouTube)
 - Sleeping
 - Not doing the required work or not paying attention for some other reason
- If you leave class early, or come late, you will lose attendance points for the day, up to the full amount, at my discretion.

Make-up policy: There will always be make-up work to do at home if you miss class, so communicating with me in a timely manner is very important.

Excused absences:

- I may excuse you from class for the following reasons:
 - Fever or chills, shortness of breath or difficulty breathing, nausea or vomiting, or diarrhea.
 - A sporting or other university-related event
 - The death of a close family member
- Take into consideration:
 - You must tell me right away (on the same day).
 - You will still have work to do at home!
 - For the first five excused absences, I will not require documentation, provided that you communicated with me right away, and provided that I decided to excuse your absence.
 - But even if you provided documentation, the first five excused absences will still count towards your first five.
 - But even for the first five excused absences, you can only be excused for an excused reason, and it is still at my discretion. The first five excused absences are not freebies.
 - After your first five excused absences, I will require official documentation, to my satisfaction and at my discretion, for any further excused absences. Without documentation, further absences will not be excused and will result in zeros for attendance and potentially for other assignments including exams.
 - This means that, if you already have five or more excused absences, you must go to the doctor if you are sick
 - The UT Tyler student health clinic has daily walk-in appointments and does not require health insurance
 - <https://www.uttyler.edu/student-life/health-wellness/university-health-clinic/>
 - Call them beforehand
 - Examples of potentially acceptable official documentation include:
 - A doctor's note directing me to excuse your absence and listing the specific dates covered
 - An official correspondence from the university directing me to excuse your absence and listing the specific dates covered
 - A police report containing your name and the relevant dates
 - A letter or an email from a funeral home listing the deceased person and the date of the funeral
 - Examples of unacceptable documentation include:
 - Any photos, including:

- Photos of yourself holding a thermometer and/or looking sick
 - Photos of a car accident
 - Any receipts, including a receipt from a towing company
 - Airline tickets
 - A doctor's note that you filled out yourself, whether in whole or in part
- You are not excused from class for these reasons:
 - Attending another instructor's or TA's or SI leader's office hours or study sessions
 - Taking a make-up exam or an exam that is scheduled by the testing center
 - Making up a laboratory
 - Attending an advising appointment (even if they are hard to get)
 - Car troubles, car maintenance, or traffic
 - Living far away from campus
 - Taking a long-planned family vacation
 - A routine dental, vision, or medical checkup
 - Airline tickets and/or other reservations that would be expensive to change or cannot be changed
 - Obligations outside of class such as your work schedule
 - Weddings, honeymoons, baby showers, family reunions, and similar events, even if you are in the wedding party and/or you are organizing the event(s).
- If you miss more than 10 classes, whether excused or unexcused:
 - You may have the option to drop or withdraw from the course. But this is at the discretion of the university, not at my discretion
 - If you are not given the option to drop or withdraw from the course, you will generally receive an F as your final overall letter grade, regardless of your overall performance in the course.
 - This F will not be changed in the future, except according to the university's regular grade replacement policy.
 - For more information: <https://www.uttyler.edu/current-students/registrar/policies/repeating-courses-grade-replacement/>
 - I will not allow a student to pass the course with more than 10 absences, excused or otherwise, unless I am directed to do so by the Student Accessibility and Resources (SAR) office or by other university officials.
 - If you have a chronic condition or a disability that may require you to miss more than 10 classes, please work with the Student Accessibility and Resources (SAR) office to come up with a plan and to direct me as to what accommodations I should provide.
 - <https://www.uttyler.edu/academics/success-services/disability-services/>
 - Phone number: 903-566-7079
 - Email: saroffice@uttyler.edu
 - If you are pregnant, resources are available, and the university will direct me as to what accommodations I should provide. But you must opt into this system by contacting the Student Accessibility and Resources (SAR) office and reporting yourself pregnant. The university will maintain the confidentiality of student records and documentation to the extent possible under state and federal law.
 - More information: <https://uttyler.smartcatalogiq.com/en/uttyler/uttyler-hop/series-500-student-success/5-14-3-student-pregnancy-and-parenting-nondiscrimination/>
 - Without direction from the SAR office, I must hold you to the same attendance standards as all other students.

Correspondence: You are required to activate the email address that is listed for you on Canvas and to check it regularly. You must check this email address at a minimum every Monday, Wednesday, and Friday morning, for the entire duration of the semester, for any correspondence from me. You are also required to check the Canvas site for this course every Monday, Wednesday, and Friday morning as well, for the entire duration of the semester, for any announcements. You will be held responsible for any information, including deadlines, that I communicate to you via your email address listed on Canvas and/or through the announcements on the Canvas course site. The information could come from one or both places (email and/or Canvas announcements), so you must check **both** places on the schedule indicated above.

Due Dates and Deadlines: You are required to have this course visible in your calendar on Canvas. To do so, make sure the box for the course has a check mark. You will be held responsible for all of the due dates and deadlines for this course that are indicated in your Canvas calendar.

Appeals: If you think something was scored incorrectly, you will need to follow the following procedure:

- Write a few sentences explaining why you think you should have received a different score.
- Appeals will only be accepted through Canvas, and must be turned in no later than one week after the assignment was graded. Go to the course site and select “Modules” → “Appeals.”
- Failure to follow these rules means that your appeal will not be considered.
- The only reasons I will give back points are if: (1) I made a math error; or (2) I decide that your answer was factually correct and followed all applicable rules indicated in the syllabus and elsewhere. By “factually correct,” I mean that your answer was really true about the world. Please also note that I, alone, will determine what is factually correct and what is not.
- The following are **not** valid reasons for getting points back: you feel that I explained something badly, you misunderstood what I was saying, or you feel that my PowerPoint slides or other materials were wrong or unclear.
- Please note that I cannot discuss anyone else’s scores with you because of privacy reasons, even if you say that you have their permission, and even if they say that I have their permission. I lack the legal expertise to allow someone to waive their privacy privileges, even if they want me to, and even if they have already shared their scores with others on their own.
- Appeals can result in a lower score, the same score, or a higher score than you originally received. Specifically note that I reserve the right to **lower** your score if I re-evaluate it and deem it appropriate.
- The rules about copying apply to appeals as well. See above.

Weather and/or closures: In the event of weather-related or other closures, the course will proceed entirely online instead. Deadlines will not be altered except under extreme circumstances at my discretion. The bottom line is that, even if the university gets closed, this course will stay “open” as originally scheduled unless I announce otherwise.

Privacy: Students do **not** have the right to be “anonymous” whether classes are in person or online, or for all-online classes. All discussion will take place within Canvas, and your names will be displayed.

Artificial Intelligence (AI): UT Tyler is committed to exploring and using artificial intelligence (AI) tools as appropriate for the discipline and task undertaken. We encourage discussing AI tools’ ethical, societal, philosophical, and disciplinary implications. All uses of AI should be acknowledged as this aligns with our commitment to honor and integrity, as noted in UT Tyler’s Honor Code. Faculty and students must not use protected information, data, or copyrighted materials when using any AI tool. Additionally, users should be aware that AI tools rely on predictive models to generate content that may appear correct but is sometimes shown to be incomplete, inaccurate, taken without attribution from other sources, and/or biased. Consequently, an AI tool should not be considered a substitute for traditional approaches to research. You are ultimately responsible for the quality and content of the information you submit. Misusing AI tools that violate the guidelines specified for this course (see below) is considered a breach of academic integrity. The student will be subject to disciplinary actions as outlined in UT Tyler’s Academic Integrity Policy.

For this course, AI is permitted only for specific assignments or situations, and appropriate acknowledgment is required. This means that you can use AI for everything except for the exams and except for the final exam. Use of AI on the exams or the final exam will result in a zero. Please note that this only applies to the lecture course. The laboratory course is entirely separate, and you should follow all the rules in the laboratory syllabus and elsewhere.

Quizzes: There are three quizzes due three times per week (**please note: three times per week**). The quizzes are embedded into pre-recorded videos on Canvas. In other words, you will take the quizzes as you watch the videos. The quiz questions automatically pop up on your screen as you go along. The due dates of the quizzes are indicated in your Canvas calendars. The quizzes are due **every Tuesday, Thursday, and Sunday evening** throughout the entire semester. There will almost always be multiple videos with quizzes due on a particular day. Together they will be 10% of your final grade when they are all added together. **If you do not keep up with the quizzes, you could drop a whole letter grade or more, just based on the lost points!**

Top Hat Questions:

- You will have multiple-choice questions to answer using Top Hat as part of your homework that will be due every Sunday, Tuesday, and Thursday night.
- These questions are for me (and for you) to discover what you do and do not understand, as well as to help you study for the exams.
- There will be multiple Top Hat questions to answer on a particular day, which together will add up to 100 Top Hat points for the day.
- Together with all of the other Top Hat questions throughout the semester, they will be 5% of your final grade when they are all added together.
- **The Top Hat questions could make the difference between one letter grade and another!**
- Please note: **when you register for Top Hat, you are required to use your Patriots email address as your email address.** Please do not give Top Hat any other email addresses.

Exams:

- There will be three exams this semester.
- You must take the exam on a laptop, not on an iPad and not on your phone. You cannot use a Chromebook. I will have a computer lab available to those who need it.
- The exam is open-book but not open-internet. You will only be able to access the textbook and the PowerPoint slides. You will be using a lockdown browser. You should print out or write out anything else that you want to use and bring it with you to the exam. If you forget to bring those materials, then you will have to take the exam without them.
- No other devices are allowed. All iPads, phones, and other internet devices must be put away during the entire exam, or you will get a penalty up to a zero on the exam at my discretion.
- There will be a strict time limit of 50 minutes.
- You are not allowed to work on your exam with anyone else, to talk to anyone else about your exam, to help anyone else with their exam, or to accept anyone else's help with your exam.
 - If you are caught working with anyone else on an exam, you will receive a zero for that exam and so will the person who was working on it with you or helping you.
- **Each person's exam is different**, because each person's questions are drawn from a test bank of hundreds of questions.
 - On average, you will only have one minute to answer each question!
 - Study just as hard for these exams, and memorize things just as much for these exams, as you would for any regular closed-book exams.
- The exams will be taken during regularly scheduled class times. You must be in class, in person, on exam days, just like on any other class days.
 - If you were excused ahead of time, please remind me and I will arrange for a make-up exam.

Final Exam:

- **All of the information above for the regular exams also pertains to the final exam.**
- The only differences are:
 - The final exam will be longer. Rather than 50 minutes, you will have two hours.
 - Rather than 50 questions, there will be 100 questions.
 - The final exam will be cumulative, meaning that it will cover everything from throughout the entire semester.

Graded Assignments: There will be many assignments this semester, but only some of them will be for a grade. **If you don't keep up with the assignments, you could drop a whole letter grade or more just based on the lost points!**

Extra Credit: There will be extra credit available.

Grade grubbing: Grade grubbing will not be tolerated. I have quoted some relevant passages below about grade grubbing. They come from an excellent website that I recommend you read:

<https://marktomforde.com/academic/undergraduates/GradeGrubbing.html>

Grade Grubbing (also called "grade begging" or "grade lawyering") is the act of a student going to a professor and asking for a grade to be raised for no legitimate reason. Often the student argues that they feel their work was "not graded fairly", or they made only a small mistake and should get more points, or they knew what they were doing even though they gave the wrong answer. Grade grubbing often involves asking for detailed justification of why certain points were taken off, questioning subjective aspects of grading (e.g., Why is this problem worth 5 points and this one worth 7 points?), and wearing down the professor by arguing, begging, and pleading until they finally relent and increase the student's grade.

...In addition, grade grubbing presents a very negative image of you: it indicates that you do not care about learning the material, and that all that matters to you is your grade in the class, even if you get that grade unfairly or ***when you do not deserve it.***

Grade grubbing greatly affects the way your professors view you and the way they will treat you in the future. If you challenge your grade without a good reason, you will probably not be remembered fondly when you ask that professor for a recommendation...

...If an obvious error has been made in grading, such as points added incorrectly or a clearly correct answer was inadvertently marked wrong, then by all means talk to the professor and they will likely change your grade immediately. Likewise, if you don't understand why you lost points, or want clarification (not justification) of the grading, most professors are happy to talk with you. ***And, if you want to discuss the material, learn what you did wrong, or discuss how to do better on future work, most professors will probably be thrilled to speak to you about this.***

However, if you are going to approach a professor who has spent their life studying, teaching, and doing research on a particular topic, and then argue that their decision of how to grade or award points should be changed to what you say it should be, then you better be prepared with a strong and convincing argument.

Source: <https://marktomforde.com/academic/undergraduates/GradeGrubbing.html>

Please do not ask me to raise your grade when you have not earned it, even if you really need or really want a higher grade. This presents a very negative picture of you. I will not honor those requests. Below is a made-up example:

Dear Dr. Banta, I'm writing about my overall final score of 78.9% to see if it could be adjusted to a B. While I accept that it is my fault, I really need a B to maintain a 3.0 GPA and to keep my scholarships. Thank you for considering my request. Sincerely, _____

Academic integrity: Cheating or any other type of academic misconduct will be reported to the university administration, and at minimum will result in failure of the course.

Class schedule (subject to change):

Lecture Topics

Introduction

Plants and People

Plant Cells

Photosynthesis: Overview

Plant Structure, Growth, and Development

Stems and Materials Transport

Roots and Plant Nutrition

Leaves

Photosynthesis: Different Types of Photosynthesis

Plant “Behavior”

Reproduction and Life Cycles

Plant Diversity: Seedless Plants

Plant Diversity: Gymnosperms

Plant Diversity: Angiosperms

Animal-Plant Coevolution

Tentative exam schedule (subject to change):

Exam 1: Friday, February 7th

- Introduction
- Plants and People
- Plant Cells
- Photosynthesis: Overview

Exam 2: Friday, March 7th

- Plant Structure, Growth, and Development
- Stems and Materials Transport
- Roots and Plant Nutrition
- Leaves
- Photosynthesis: Different Types of Photosynthesis

Exam 3: Friday, April 11th

- Plant “Behavior”
- Reproduction and Life Cycles
- Plant Diversity: Seedless Plants
- Plant Diversity: Gymnosperms

Final Exam: Wednesday, April 28th

- The final will be ***cumulative*** and cover:
 - Everything from the entire semester, as well as:
 - Plant Diversity: Angiosperms
 - Animal-Plant Coevolution

Top Hat

We will be using Top Hat Pro (www.tophat.com) for class participation. You will be able to submit answers to in-class questions using Apple or Android smartphones and tablets, laptops, or through text message. For instructions on how to create a Top Hat account and enroll our course, please refer to the invitation sent to your school email address or consult Top Hat's Getting Started Guide (<https://support.tophat.com/article/Student-Top-Hat-Overview-and-Getting-Started-Guide>).

If you already have a Top Hat account, go to <https://app.tophat.com/e/967642/> to be taken directly to our course. If you are new to Top Hat, follow the link in the email invitation you received or...

- Go to <https://app.tophat.com/register/student>
- Click "Search by school" and input the name of our school
- Search for our course with the following join code: 967642

Should you require assistance with Top Hat at any time please contact their Support Team directly by way of email (support@tophat.com), the in-app support button, or by calling 1-888-663-5491. Specific user information may be required by their technical support team when troubleshooting issues.

The UT-Tyler bookstore also has Top Hat licenses that you can purchase using student loans.

Please note: **when you register for Top Hat, you are required to use your Patriots email address as your email address.** Please do not give Top Hat any other email addresses.

Student Resources and University Policies: These can be found on the Canvas course page under “Modules” → “Course Information.”