Plant Ecology
PCB3601C

Summer 2023 (3 credits)

Course Information

Time: Tuesday, Period 2-4
(9:30AM – 1:45PM)
Location: Rolf Hall 0114 (First Class*)
Prerequisites: Introductory Biology

Instructor Information

Gage LaPierre (Course Instructor)
Email: gagemo@ufl.edu
Phone: (352) 352-362-4846
Office: 3007 Steinmetz Hall
Office Hours: Tue 8:00AM & by Appointment

⭐ Course Overview

This course will provide an overview of the fundamental principles and concepts of plant ecology, from individual plant physiology to ecosystem-level processes. This includes overview and modern understanding of classical topics including plant competition, herbivory, succession, pollination, and plant-plant interactions. The course will also emphasize the importance of practical applications of plant ecology such as conservation biology, ecological restoration, and wildlife management. In this course we will emphasize Florida plants and ecosystems. Upon completion of this course, students will have gained a comprehensive understanding of plant ecology and its relevance to local and global ecological issues.

☑ Student Learning Outcomes

By the end of the course, students will be able to:
- Explain the processes that influence species distribution and abundance using examples of populations or communities shaped by these processes.
- Discuss interactions between species and the environment that determine community composition and structure.
- Explain how models and other analytical techniques are used to explain population growth and community structure.
- Apply ecological principles to current conservation issues.
- Critically analyze papers from the ecological literature.

Course Schedule

Below is a tentative* schedule of topics & assignments for the semester. Readings/videos should ideally be completed before the start of each class. All assignments must be submitted via Canvas by 11:59pm on the due date (unless indicated otherwise).

Week	Lab Dates	Textbook Topic	Field Topic, Speaker, Location	Assignments	Due Dates
1	May 16th (Tue)	Chapter One Plants & Biosphere	Overview of Course & Plant Evolution Rolf Hall 0114 Dr. Pamela Soltis	Quiz #1 Reflection #1	May 21st (Sun)
2	May 23rd (Tue)	Chapter Two Global Patterns	Botany & Plant Traits Morningside Nature Center Alex de La Paz	Quiz #2 Reflection #2	May 28th (Sun)
3	May 30th (Tue)	Chapter Three Resources	Wetland Plant Ecology Natural Area Teaching Laboratory Dr. Mark Clark	Quiz #3 Reflection #3	June 4th (Sun)
4	June 6th (Tue)	Chapter Four Competition	Fire Ecology Ordway-Swisher Biological Station Dr. Dan Johnson	Quiz #4 Reflection #4	June 11th (Sun)
5	June 13th (Tue)	Chapter 5 Disturbance	Soils & Nutrient Cycling Austin Cary Forest Dr. Rosvel Bracho	Quiz #5 Reflection #5	June 18th (Sun)
6	June 20th (Tue)	Chapter 6 Herbivory	Wildlife & Plants Payne's Prairie Daniel Pearson	Mid-Term	June 25th (Sun)
7	June 27th (Tue)	--------------------	No Class! – Summer Break	--------------------	July 2nd (Sun)
8	July 4th (Tue)	Chapter 7 & 8 Interactions & Time	No Class! – Independence Day	Quiz #6 Reflection #6	July 9th (Sun)
9	July 11th (Tue)	Chapter 9 Populations	Seed Ecology TBD	Quiz #7 Reflection #7	July 16th (Sun)
10	July 18th (Tue)	Chapter 10 Stress	Stress & Climate Change Cedar Key Scrub & Shell Mound TBD	Quiz #8 Reflection #8 ChatGPT	July 23rd (Sun)
11	July 25th (Tue)	Chapter 11 Gradients & Plant Communities	Gradients & Plant Communities Longleaf Flatwoods TBD	Quiz #9 Reflection #9	July 30th (Sun)
12	Aug 1st (Tue)	Chapter 12 Diversity	Plant Diversity & Natural History Gold Head State Branch Dr. Reed Noss	Quiz #10 Reflection #10	Aug 6th (Sun)
13	Aug 8th (Tue)	Chapter 13 Conservation & Management	Conservation & Management Ichetucknee Springs River Sam Cole	Final Exam	Aug 11th (Fri)

Although we will do our best to adhere to this schedule, it may be adjusted during the semester to accommodate opportunities, disruptions, and other circumstances. These changes will be communicated clearly via Canvas.

List of Important Dates

Key dates to remember are below– be sure to add them to your calendar now! Due dates for other assignments are listed in the Course Schedule above and/or on Canvas.

- June 25th: Mid-Term Due
- June 27th: Summer Break – No Class
- July 4th: Independence Day - No Class
- July 23rd: ChatGPT Assignment Due
- Aug 11th: Final Exam

Readings & Course Materials

Readings & Videos: Students are required to secure a copy of Plant Ecology: Origins, Processes, Consequences by Paul A. Keddy 2nd Edition (ISBN-13 978-1107114234). All quizzes and exams will feature content from the textbooks. Other selected articles and readings will be posted on Canvas. Students are expected to complete all required readings <u>before</u> the corresponding class session. You may also be required to watch brief videos before class, which will be posted on Canvas as well.

Computer Requirement: All students must have regular access to a computer with a reliable internet connection to access assignments and materials on Canvas.

Communication & Conduct

Meeting Policy: Students are encouraged to come to office hours or schedule a time to meet with the instructor if they are struggling. Outside of office hours, email is the preferred method of contact. I will do my best to respond to messages within 48 hours (not including weekends or holidays). As a courtesy, please check the syllabus and Canvas before reaching out; answers to many of your questions can be found there!

Canvas: Important announcements and updates will be regularly posted to the course Canvas website, so be sure to check Canvas frequently! To ensure that you do not miss anything, please ensure that your Canvas profile is set to receive notifications.

Email Accounts: It is UF policy that you use your GatorLink account or Canvas when emailing your instructors; we will not answer emails sent from other accounts (e.g., personal Gmail, etc).

Professional Conduct: All members of the class are expected to always conduct themselves in a professional and respectful manner. Please use appropriate etiquette when interacting with your peers and instructors, including during class, on Canvas, and via email. There is a zero-tolerance policy for discriminatory or derogatory behavior. Students who behave disrespectfully or disruptively will be reported to the Dean of Students Office.

Projects & Assignments

Quizzes (20%): There will be a total of 10 short online quizzes throughout the semester (see Canvas for dates). Students will need complete each quiz prior to the start of each class. Quizzes will focus primarily on the textbook and minor lessons from field trip lectures.

Reflections (10%): Throughout the semester, you will be asked to submit 10 brief reflections via Canvas. The instructor will prompt reflections with a question(s). Students will have from Tuesday (afternoon) to Sunday (midnight) to complete the reflections. Students are encouraged to reply to reflections made by others. The goal of these reflections is to help you expand on our discussions and think deeply about topics discussed in the textbook, readings, and field lectures. Some reflections, you may be asked to analyze a relevant scientific paper related to the topic that week.

Exams (35%): There will be two online exams in this course (via Canvas), a mid-term (15%) and final (20%). The mid-term will feature questions on content primarily from the textbook but will also include some information from field lectures. Students are encouraged to take notes during field lectures and while reading the textbook. Both exams are open notes but are time limited.

ChatGPT Writing Assignment (20%): Students will pick a topic of their choice related to Plant Ecology (approved by instructor). Students will then use the online free version of ChatGPT to produce a two-page report on the topic. The report should include the history, development, opposing views, and modern takes on the topic. The report must also include citations and a reference page. Using the report that ChatGPT provides, students will then provide a two-page critique, highlighting incorrect or misinterpreted statements. Students will be expected to critically examine the topic via their own review of the literature. Using tract changes, students will then use the report ChatGPT provided to enhance the report. This version of the report should reach 5 – 8 pages (not including the two-page critique). Extra credit points will be given to students that use reference manager such as Mendeley within their report.

Attendance (15%): Students are required to attend and participate in the course and field trips. Attendance will be taken for each class session. Make-up periods will **not** be provided. All students are expected to attend every class session on time and stay for the entire session.

Extra Credit: Extra credit assignments may be posted at the **instructors' discretion only**. Any other extra work submitted in order to raise a grade will not be accepted and requests for additional extra credit will not be considered.

Missed Classes & Assignments:

* All assignments must be submitted electronically via Canvas unless otherwise noted. Emailed or paper submissions for Canvas assignments will not be accepted. You are responsible for ensuring that all your work is uploaded correctly and completely by the deadline. Corrupted files will be treated as missing work (= 0 grade) until they are reuploaded correctly and late penalties will apply if your resubmission is past the deadline. Always double check your files right after you upload them. If you experience

technical problems when submitting your work in Canvas, contact the UF Computing Help Desk for assistance: https://helpdesk.ufl.edu.

*No make-up exams or classes will be given without prior permission or documentation of illness. Students that will be missing an exam due to a pre-arranged university-approved excused absence (sports, religious reasons, medical, etc.) should let the instructor know a minimum of two weeks in advance. These students may be required to take the make-up exam before the scheduled in-class exam. In case of illness on exam day, a letter from the student's primary care provider is required. This letter must state that the student was unable to complete the exam on the scheduled date (i.e., a letter stating only that the student was seen in a clinic is not sufficient) and must go through the Dean of Students Instructor Notification system (https://care.dso.ufl.edu/instructor-notifications/). A personal matter must also go through the same process. These notes must be received within five business days after the exam. Make up exams may be short-answer or essay format.

Grading Policies

This course uses a points system for grading. The anticipated maximum that can be earned in the course is 1000 points, distributed as follows:

Quizzes: **200** (20%)
Reflections: **100** (10%)
Mid-Term: **150** (15%)
Final: **200** (20%)
ChatGPT Assignment: **200** (20%)
Class Attendance: **150** (15%)

At the end of the semester, your total course grade will be converted to a letter grade using the scale below:

93 – 100% = **A**	73 – 76.9% = **C**
90 – 92.9% = **A-**	70 – 72.9% = **C-**
87 – 89.9% = **B+**	67 – 69.9% = **D+**
83 – 86.9% = **B**	63 – 66.9% = **D**
80 – 82.9% = **B-**	60 – 62.9% = **D-**
77 – 79.9% = **C+**	below 60% = **E**

Please note that the instructors do not round up grades— requests to do so will not be considered.

For current UF policies on assigning grade points, consult the following policy website: https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

*Disputing a grade: If you wish to dispute a grade for any exam/assignment, you must contact the instructors in writing within two days (48 hours) after the assignment has been returned. In your message, you must include a specific explanation for why you think the grade is incorrect and how you think it should be changed. An instructor will then arrange

a meeting with you to discuss the issue and determine whether to the grade should be changed. The grade assigned following this meeting will be final.

Attendance & Participation

Requirements for class attendance and make-up exams, assignments and other work are consistent with university policies that can be found at: https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/.

Due to the hands-on nature of this course, attendance in class is *critically important*. All students are expected to **attend every class session on time** and **stay for the entire session**. Since this is a **face-to-face course**, you will *not* have the option to join remotely via Zoom (and our class sessions will not be recorded). Students who miss more than 30% of class sessions will automatically earn an E (= failing grade) in the course.

Students are also expected to be **fully prepared for and engaged** in each session– this includes completing all required readings/videos, submitting all assignments on time, paying attention during class, and actively participating in all class activities. Participation in class sessions is worth **15% of your final course grade.**

If you need to miss a class due to an **excusable absence**, you must let the instructors know **as far in advance as possible** to discuss arrangements for making up missed work. Excusable absences include serious illness or injury, family emergencies, approved professional activities, severe weather, religious holidays, & court-imposed legal obligations. In order to make up missed work, you will be required to submit appropriate documentation of your absence via the official **Instructor Notification portal**: https://care.dso.ufl.edu/instructor-notifications.

If you are absent for any other reason or fail to notify the instructors of your absence in a timely manner, you will earn a 0 for attendance that class period. Please note that personal travel/vacations are not considered excusable absences, and thus students will earn a 0 for any work missed due to personal travel/vacations during the course.

If you do miss a class meeting, we recommend that you contact a classmate for notes from that session; the instructors will not provide notes. If the content is still unclear after you review your classmate's notes (and the required readings/other materials on Canvas), please don't hesitate to come to office hours or schedule a meeting with the instructor. Please come to that meeting prepared to discuss the specific questions you have.

Late Work & Make-Up Assignments

All assignments are due **by the date and time indicated on the assignment page in Canvas**. Extensions for assignments will be considered on a *case-by-case basis* (and granted at the instructors' discretion) **only in the event of unforeseen emergencies**. In such a case, you must contact the instructors as soon as possible to discuss your situation. You must also submit appropriate documentation of your emergency via the official **Instructor Notification portal** in a timely manner: https://care.dso.ufl.edu/instructor-notifications. No extensions will be granted for students who miss a deadline for any other reason. Please note that credit cannot be earned on any assignment that is submitted after the instructor has graded and returned that assignment to the class, regardless of the circumstances. Late work will also not be accepted after the deadline for the final assignment in the course.

A note about deadlines: Remember, the due date doesn't have to be the "do" date! In other words, we encourage you to work on your assignments in advance– don't wait until right before the deadline to submit your work! Last-minute computer problems or other non-emergency situations that arise right before the submission cut-off are not valid reasons for requesting an extension. Such requests will not be considered, and the late penalties described above will be applied to your work if it is not submitted on time.

Field Guidelines

This course is centered on outdoor field trips. Be aware that there are some inherent risks with being outdoors, this includes ticks, chiggers, mosquitoes, and poisonous snakes. Students are required to dress appropriately for the field and follow instructions to help minimize unpleasant encounters and risks. Students are required to wear sturdy closed toe shoes, long socks, and bring a hat or visor. Students should also bring a water container, notebook, raincoat, preferred sunscreen and bug repellent (if desired). Be aware on trips there is zero tolerance policy for discrimination and abuse towards others. Students who do not adhere to these guidelines will be dismissed from the lab and considered absent for that day and may also be reported to the Dean of Students Office for misconduct. You may also be liable for any damages to lab equipment that result from your misuse.

University Policy on Academic Honesty

As a student at the University of Florida, you have committed yourself to uphold the **Honor Code**, which includes the following pledge: *"We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity."* You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: *"On my honor, I have neither given nor received unauthorized aid in doing this assignment.*"

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g., assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code.

Accommodations for Students with Disabilities

The **Disability Resource Center** coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services, and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office.

The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation.

<u>Disability Resource Center</u>

001 Reid Hall
(352) 392-8565 | https://disability.ufl.edu/

Policy on Recording Class Sessions

Students are not permitted to record video of other students or guest lectures in this course. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

Use of Electronic Devices

You may use personal electronic devices such as laptops or tablets in class, unless otherwise noted by the instructor. However, it is your responsibility to make sure that you use your devices in a **professional and courteous manner**. This includes:

- Limiting device use only to activities that are **directly related to your learning of course material**, such as taking notes or running data analyses. Using your devices for any other purpose is not allowed in the classroom; doing so is disrespectful to the instructor, distracting to your fellow students, and robs you of a quality learning experience.
- Keeping your devices **always muted** to prevent disrupting others around you.
- Quietly stepping out into the hall if you must take a call or contact someone. We understand that emergencies can happen and will not prevent you from attending to them, but we also ask that you try to minimize disruptions to your peers.

If your device use is disruptive or inappropriate, you will be asked to put away your device. Students who repeatedly violate this policy will no longer be allowed to use devices in class.

Software Use

All faculty, staff and students at the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

Course Evaluations

Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this course using a standard set of university and college criteria. Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via **GatorEvals**. Guidance on how to give feedback in a professional and respectful manner is available at:

https://gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at: https://gatorevals.aa.ufl.edu/public-results/.

Campus Helping Resources

Students experiencing crises or personal problems that interfere with their general wellbeing are encouraged to utilize the university's counseling resources. **The Counseling & Wellness Center** provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance:

University Counseling & Wellness Center
Counseling Services, Groups and Workshops, Outreach and Consultation, Self-Help Library, Wellness Coaching

3190 Radio Road ✦ (352) 392-1575 ✦   https://counseling.ufl.edu/

Other campus resources include:

U Matter, We Care: http://umatter.ufl.edu

Career Connections Center: Reitz Student Union- First Floor; (352) 392-1601; http://career.ufl.edu

Student Success Initiative: http://studentsuccess.ufl.edu

Student Complaints: Complaints regarding on-campus courses may be filed at https://sccr.dso.ufl.edu/policies/student-honor-code-studentconduct-code/. For online courses, please see https://distance.ufl.edu/getting-help/student-complaint-process/

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It is your responsibility to ensure that you fully understand the policies outlined in this syllabus as well as the policies of the university as they relate to this course. By remaining enrolled in this course, you agree that you have read and understood all these policies and that you will be held accountable to them.

At their discretion, the instructors may change aspects of the course during the semester to accommodate new opportunities, unforeseen disruptions, or other circumstances. These changes will be communicated clearly in class and through Canvas. The current version of the syllabus will always be available on our course's Canvas website. It is your responsibility to ensure that you are following the most recent version of the syllabus.

If you have any questions, please contact the instructors as soon as possible (preferably at the beginning of the course)!