

# BOT2010C Introductory Botany

Fall 2024 - 3 credits, letter grade

## Lecture Instructor

**Name:** Gordon Burleigh

**E-mail:** [gburleigh@ufl.edu](mailto:gburleigh@ufl.edu)

**Office:** 218 Carr Hall

**Office Hours:** M: 2pm-3pm, W: 11:45am-12:35pm

## Lab Instructor

**Name:** Ashley Hamersma

**E-mail:** [ahamersma@ufl.edu](mailto:ahamersma@ufl.edu)

**Office Hours:** T: 11:45-12:45 (online) or by appointment

## Schedule

### Lecture (211 Bartram Hall)

**All Sections:** Tuesday & Thursday, 10:40am - 11:30am (Period 4)

### Labs (105 Rolfs Hall)

**Section 0607:** Wednesday, 9:35am - 11:30am (Periods 3-4)

**Section 0608:** Tuesday, 1:55pm - 3:50pm (Periods 7—8)

**Section 0609:** Wednesday, 11:45am - 1:40pm (Periods 5-6)

## About the Course

This course covers the structures and functions of cells, tissues, and organs of plants (focusing on flowering plants). Students with credit in BSC 2005 or BSC 2010 cannot register for this course; they should take BOT2011C. (**Attributes:** General Education - Biological Science)

The lab provides opportunities to conduct original research (with instructor input). These research projects will require some statistics (contingency tests, comparison of distributions with t-tests, and regression), but prior knowledge of statistics is not required.

### The lecture portion of the course has three main sections:

**Exam 1:** Plant Cell, Energetics, and Genetics.

**Exam 2:** Plant Diversity.

**Exam 3:** Plant Structure & Function, and Ecology.

### Throughout our studies in these core areas, we will gain experience with:

- The scientific method
- Working as part of a team to solve problems
- Presenting your work orally and in written forms.
- Understanding social issues associated with Botany, such as transgenic crops and climate change

## Course Resources

### Texts:

- **Laboratory Manual for Introductory Botany (BOT2010C).**  
This is available at [Target Copy](#), 1412 West University Avenue, across from UF's Main Library. Please purchase this before your first lab class (which will be on either August 29 or 30) and bring it to your lab section.
- **Raven Biology of Plants (8<sup>th</sup> edition).** This is the main textbook for the class. We will use not only the text, but also digital exercises and resources. By far the easiest and cheapest way to purchase the digital ebook version from the UF Bookstore as part of the "UF All Access" program using the following link:  
<https://www.bkstr.com/floridastore/shop/textbooks-and-course-materials>
- **Achieve** is an online assignments and tutorial system from MacMillan Publishing. After you have purchased the textbook through UF All Access, you can access Achieve through the "MacMillan Learning" link on Canvas.
- Any additional readings will be posted on the course's Canvas e-learning site.

### Course Website (Canvas):

Class material including the syllabus, discussion readings, and problem sets, exam results, some lecture slides and other information related to the course will be posted on the course Canvas website (<http://lss.at.ufl.edu>). The course is found under "E-Learning in Canvas". You are responsible for **all** announcements made in lecture and/or posted on the course website for this class. For help with Canvas, call the UF Computing Help Desk at 352-392-4357, or visit the Canvas E-Learning support website: (<http://lss.at.ufl.edu/help.shtml>).

### Software:

- Microsoft Word or equivalent word-processing software
- Microsoft Excel with the *Statistics* add-on.

All UF students have access to Microsoft Office 365 (which includes Word and Excel) through Gatorcloud. Visit <http://www.it.ufl.edu/gatorcloud/free-software-downloads-office-365-proplus/get-o365-proplus> and log in with your UF e-mail to download the software.

## Assessments and Grading:

### Exams

There will be three "midterm" exams, but there will be no cumulative "final" exam. The midterm exams will be administered during your normal lecture class periods in Bartram 211 (see schedule below). Each exam will cover material from lecture and the online assignments. The exams will **not** be cumulative, however, some of the concepts taught in this course build on each other. Each exam will be worth **10%** of the overall course grade.

## Make-up Exams

No make-up exams 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, etc.) should let the instructor know **a minimum of two weeks in advance**. In case of illness or personal emergency on exam day, students must submit documentation to the Dean of Students office (<https://care.dso.ufl.edu/instructor-notifications/>) and request an instructor notification to be sent. These notes must be received within five business days after the exam.

## Online Quizzes

In general, the expectation in a 3 credit hour course is that for each hour in lecture, you are supposed to spend 2 hours working on your own. You should take a substantial portion of this 2 hours to read about a topic before coming to class because lecture periods will be dedicated to using this knowledge, not as information dumps. As motivation for you to read before class (and as a way to assess what portions of the reading gave you trouble), a substantial portion of your grade in this course will be based on your having successfully completed a series of online chapter quizzes that are due before class. These online assignments are administered through the *Achieve* site that will account for 20% of your overall grade. There will be approximately 24 of these assignments, one due before each lecture class. Most of these will be multiple choice quizzes cover material in the chapter of the textbook covered by each lecture. These assignments will be posted at least one week in advance of the due date. They will be open book, and there is no time limit; however, you are expected to work by yourself on the assignments and cheating will not be tolerated. You will not be able to make up a missed online assignment; however, your lowest 3 grades for the online assignments will be dropped. Thus, missing up to three of the online assignments will not affect your grade.

## Participation

In class participation in the lecture sections will be worth 10% of your total grade. The grades will be based on answers to in class questions using the iClicker system through MacMillan Learning's Achieve system. We will give more details about this in the first few classes.

## Laboratory

Your laboratory grade will be based on pre-lab questions, post-lab quizzes and assignments, and your research projects. Please consult your lab instructor for details concerning preparation for the lab quizzes and completing assignments. Details regarding the research projects and poster symposium will be provided as the time approaches. Pre-lab questions and the previous week's post-lab assignments and quizzes will be due at the beginning of your lab section unless otherwise stated. There are 12 lab classes in addition to the poster session. Your grade will be calculated based on 11 of these labs; however, if you cannot attend lab one week, you will not be able to make up that lab.

### **Course grades will be determined as follows:**

<b>Lecture</b>	
Online quizzes on assigned reading	20%
In-class participation	10%
Lecture exams	30%
<b>Laboratory</b>	
Pre-lab questions	11%
Post-lab assignments and quizzes	22%
Poster presentation	7%

### **Course Prerequisites / Corequisites**

There are no pre- or co-requisites for this course.

### **Attendance Policy, Class Expectations, and Make-Up Policy**

Attendance is very important for success in this course. However, if you are sick, please do not come to class. Notify us, the instructors, beforehand, by e-mail and we will work with you to make up missed work. Excused absences must be consistent with university policies in the [Undergraduate Catalog](#). Additional information can be found in [Attendance Policies](#).

## Grading Policy

Percent	Grade
90.0 - 100.0	A
87.0 - 89.9	A-
84.0 - 86.9	B+
81.0 - 83.9	B
78.0 - 80.9	B-
75.0 - 79.9	C+
72.0 - 74.9	C
69.0 - 71.9	C-
66.0 - 68.9	D+
63.0 - 65.9	D
60.0 - 62.9	D-
0 - 59.9	E

Remember that the time to improve your grade is *during* the semester, not after final grades are calculated. Grades will only be changed at the end of the semester if there were calculation errors. More information on UF grading policy may be found at the [UF Undergraduate Catalog](#).

### Students Requiring Accommodations

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with [Disability Resource Center](#). It is important for students to share their accommodation letter with their instructor and discuss their

access needs, as early as possible in the semester. This class will have several labs which require physical exertion outside, but we can work with students to ensure participation in activities. Please reach out to the instructors if you have any concerns.

### **Campus Health and Wellness Resources:**

- **U Matter, We Care:** If you or a friend is in distress, please contact [umatter@ufl.edu](mailto:umatter@ufl.edu), 352-392-1575, or visit U Matter We Care website to refer or report a concern and a team member will reach out to the student in distress. If there is an immediate threat to you or another student's safety, call 911.
- **Counseling and Wellness Center:** [Visit the Counseling and Wellness Center website](#) or call 352-392-1575 for information on crisis services as well as non-crisis services.
- **Student Health Care Center:** Call 352-392-1161 for 24/7 information to help you find the care you need, or [visit the Student Health Care Center website](#).
- **GatorWell Health Promotion Services:** For prevention services focused on optimal wellbeing, including Wellness Coaching for Academic Success, visit the [GatorWell website](#) or call 352-273- 4450.
- **University Police Department:** The campus police department can be reached at <https://police.ufl.edu/> and 352-392-1111 (or 911 for emergencies).

### **Campus Academic Resources:**

- **E-learning technical support:** Contact the [UF Computing Help Desk](#) at 352-392-4357 or via e-mail at [helpdesk@ufl.edu](mailto:helpdesk@ufl.edu).
- **Career Connections Center:** The CCC provides career assistance and counseling services. See <https://career.ufl.edu>, visit the CRC at Reitz Union Suite 1300, or call 352-392-1601.
- **Library Support:** Various ways to receive assistance with respect to using the libraries or finding resources. Call 866-281-6309 or email [ask@ufl.libanswers.com](mailto:ask@ufl.libanswers.com) for more information.
- **Teaching Center:** 1317 Turlington Hall, 352-392-2010 or to make an appointment 352- 392-6420. General study skills and tutoring.
- **Writing Studio:** Daytime (9:30am-3:30pm): 2215 Turlington Hall, 352-846-1138 | Evening (5:00pm-7:00pm): 1545 W University Avenue (Library West, Rm. 339). Help brainstorming, formatting, and writing papers.
- Academic Complaints: Office of the Ombuds; [Visit the Complaint Portal webpage for more information](#).
- Enrollment Management Complaints (Registrar, Financial Aid, Admissions): [View the Student Complaint Procedure webpage for more information](#).

### **Course Evaluation**

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. 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>.

## **University Honesty Policy**

UF students are bound by The Honor Pledge which states, "*We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code.*"

On all work submitted for credit by students 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.*"

[The UF Conduct Code](#) specifies a number of behaviors that are in violation of this code and the possible sanctions. If you have any questions or concerns, please consult with the instructor or TA in this class.

## **Software Use**

All faculty, staff, and students of 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.

## **In-Class Recording**

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal education use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish, share, or distribute recorded lectures without the written consent of the instructor.

## **Student Privacy**

There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see the [Notification to Students of FERPA Rights](#).

## Course Schedule

Day	Date	Lecture Topic and Readings	Lab Topic	Lab Notes
Thurs	<b>Aug</b> 22	Introduction to Class - No Readings	No Lab	
Tues	27	Chemistry of Life - Chapter 2	Lab 1: Intro to Plants	
Thurs	29	Plant Cell – Chapter 3		
Tues	<b>Sep</b> 3	Energy - Chapter 5	Lab 2: Lawn Ecology	Outdoors lab
Thurs	5	Respiration - Chapter 6		
Tues	10	Photosynthesis - Chapter 7	Lab 3: Photosynthesis and Respiration	
Thurs	12	Reproduction and Heredity - Chapter 8		
Tues	17	Heredity and Gene Expression - Chapter 9	Lab 4: Mitosis & Meiosis	
Thurs	19	Plant Biotechnology - Chapter 10		
Tues	24	<b>Exam 1</b>	Lab 5: Growth Experiments	
Thurs	26	Systematics – Chapter 12		
Tues	<b>Oct</b> 1	Red & Green Algae - Chapter 15	Lab 6: Plant Interactions	Outdoor Lab; visit NATL
Thurs	3	Bryophytes - Chapter 16		
Tues	8	Lycophytes & Ferns - Chapter 17	Lab 7: C-fern Genetics	
Thurs	10	Gymnosperms - Chapter 18		
Tues	15	Angiosperms - Chapter 19	Lab 8: Plant	



Thurs	17	Evolution of Angiosperms - Chapter 20	Diversity	
Tues	22	Finish topics / review	Lab 9: Ancient Plants and Paleoclimate	
Thurs	24	<b>Exam 2</b>		
Tues	29	Plant Cells & Tissues - Chapter 23	Lab 10: Growth Experiment Data Analysis	
Thurs	31	The Shoot - Chapter 25		
Tues	<b>Nov</b> 5	Secondary Growth - Chapter 26	Lab 11: Observing Plants	
Thurs	7	Plant Hormones - Chapter 27		
Tues	12	Plant Growth - Chapter 28	Lab 12: Life History	
Thurs	14	Plant Nutrition - Chapter 29		
Tues	19	Movement of Water & Solutes - Chapter 30	Lab 13: Water Movement	
Thurs	21	Dynamics of Communities & Ecosystems - Chapter 31 Global Ecology - Chapter 32		
Tues	26	No Class (Holiday)	No Lab (Holiday)	
Thurs	28	No Class (Holiday)		
Tues	Dec 3	<b>Exam 3</b>	Poster Presentations (see Poster Rubric)	Send poster file to TA in advance.