

BOT2010C Introductory Botany

Fall 2022 - 3 credits, letter grade

Lecture Instructor

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Office Hours:

Lab Instructor

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Schedule

Lecture (211 Bartram Hall)

All Sections: Tuesday & Thursday, 10:40am - 11:30am

Labs (105 Rolfs Hall)

Section 1: Tuesday, 1:55pm - 3:50pm

Section 2: Wednesday, 9:35am - 11:30am

Section 3: Wednesday, 12:50pm - 2:45pm

About the Course

Structures and functions of cells, tissues, and organs of 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 lots of instructor input). The first research project is on aquatic plant growth, and the second is on plant biomechanics. 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.

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

Texts:

- Laboratory Manual for Introductory Botany (BOT2010C)
Available immediately before classes commence at [Target Copy](#), 1412 West University Avenue, across from UF's Main Library.
- Raven Biology of Plants (Please do not purchase until the first day of class; see Instructions for purchasing on the Canvas Website)
- Any additional reading will be posted on the course's Canvas e-learning site.

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.

Course grades will be determined as follows:

Lecture	
Quizzes on assigned reading	15%
In-class and at-home exercises	15%
Lecture exams	30%
Laboratory	
Pre-lab questions	10%
Post-lab assignments and quizzes	20%
Poster presentation	10%

Lecture readings and assignments

All lecture readings and assignments should be completed prior to coming to lecture. For example, before coming to class on August 30th, you should have already read Chapter 2 in your textbook (“The molecular composition of plant cells”). —Consult the course Canvas page for access to reading assignments.

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.

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.

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, especially with regards to lab sections. 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 would like to request academic accommodations should connect with the [Disability Resource Center](#). Please share your accommodation letter and discuss access needs as early as possible in the semester. In addition, 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 or 352-392-1575. If there is an immediate threat to you or another student's safety, call 911.
- **Counseling and Wellness Center:** For mental health workshops, group therapy, one-on-one care, etc., the CWC can be reached at <https://counseling.ufl.edu> and 352-392-1575.
- **CWC Crisis Support:** The CWC provides immediate 24/7 support for students in crisis. Visit <https://counseling.ufl.edu/services/crisis> for more information, or call 352-392-1575.
- **Sexual Assault Recovery Services (SARS):** Resources for victims of sexual assault can be found at the Student Health Care Center at <https://shcc.ufl.edu> or 352-392-1161.
- **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:** More information can be found at <https://elearning.ufl.edu>. You can reach E-learning @ UF at 352-392-4357 (select option 2) or e-mail learning-support@ufl.edu.
- **Career Resource Center:** The CRC provides career assistance and counseling. For more information, see <https://career.ufl.edu>, visit the CRC at Reitz Union Suite 1300, or call 352-392-1601.
- **Library Support:** You can get assistance in using UF Library resources at <https://uflib.ufl.edu/find/ask>.
- **Teaching Center:** For learning resources such as tutoring and workshops, visit <https://academicresources.clas.ufl.edu> or stop by 1317 Turlington Hall.
- **Writing Studio:** You can receive one-on-one consultation or attend workshops on writing at the UF Writing Studio. Visit <https://writing.ufl.edu/writing-studio>, stop by 2215 Turlington Hall, or call 352-846-1138 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 Honor Code](#) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructors.

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.

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	Aug 25	Introduction to Class - No Readings	None	
Tues	30	Chemistry of Life - Read Chapter 2	Lab 1: Intro to Plants	
Thurs	Sep 1	Plant Cell - Read Chapter 3		
Tues	6	Energy - Read Chapter 5	Lab 2: Pollinator Interactions	Outdoors lab, visit to NATL
Thurs	8	Respiration - Read Chapter 6		
Tues	13	Photosynthesis - Read Chapter 7	Lab 3: Photosynthesis and Respiration	
Thurs	15	Reproduction and Heredity - Read Chapter 8		
Tues	20	Heredity and Gene Expression - Read Chapter 9	Lab 10: Mitosis & Meiosis	
Thurs	22	Evolution - Read Chapter 11		
Tues	27	Exam 1	Lab 5: Growth Project	
Thurs	29	Systematics - Read Chapter 12		
Tues	Oct 4	Fungi - Read Chapter 14	Lab 13: Observing Plants	
Thurs	6	Red & Green Algae - Read Chapter 15		
Tues	11	Bryophytes - Read Chapter 16	Lab 11: C-fern Genetics	
Thurs	13	Lycophytes & Ferns - Read Chapter 17		
Tues	18	Gymnosperms - Read Chapter 18	Lab 6: Plant	

Thurs	20	Angiosperms - Read Chapter 19	Diversity	
Tues	25	Evolution of Angiosperms - Read Chapter 20	Lab 9: Growth Experiment Data Collection	
Thurs	27	Exam 2		
Tues	Nov 1	Plant Cells & Tissues - Chapter 23	Lab 8: Biomechanics	Bring plant materials to test.
Thurs	3	The Shoot - Chapter 25		
Tues	8	Secondary Growth - Chapter 26	Lab 12: Life Histories	
Thurs	10	Plant Hormones - Chapter 27		
Tues	15	Plant Growth - Chapter 28	Lab 4: Water Movement	
Thurs	17	Plant Nutrition - Chapter 29		
Tues	22	Movement of Water & Solutes - Chapter 30	None	
Thurs	24	NO CLASS		
Tues	29	Dynamics of Communities & Ecosystems - Chapter 31	Poster Presentations (see Poster Rubric)	Send poster file to TA in advance.
Thurs	Dec 1	Global Ecology - Chapter 32		
Tues	6	Exam 3		
Wed	14			