

BOT2010C Introductory Botany

Fall 2020 - 3 credits

Lecture: Online, asynchronous.

Lecture Instructors

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LECTURE (All Sections) Online, asynchronous
LABS (tentative):

11651: W | Period 3 - 4 (9:35 AM - 11:30 AM)ROL 0105

11652: T | Period 7 - 8 (1:55 PM - 3:50 PM)ROL 0105

11653: W | Period 6 - 7 (12:50 PM - 2:45 PM)ROL 0105

28084: W | Period 3 - 4 (9:35 AM - 11:30 AM)ROL 0114

28085: T | Period 7 - 8 (1:55 PM - 3:50 PM)ROL 0114

28086: W | Period 6 - 7 (12:50 PM - 2:45 PM)ROL 0114

11654: T | Period 9 - 10 (4:05 PM - 6:00 PM)ROL 0105

28087: T | Period 9 - 10 (4:05 PM - 6:00 PM)ROL 0114

The course has three main sections:

Part 1: How plants meet their water and nutrient needs (Exam 1).

Part 2: How plants grow and reproduce (Exam 2).

Part 3: Plant genetics, evolution, and diversity (Exam 3).

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

- The scientific method;
- Evaluating different types of science communications (research articles, reviews, perspectives);
- The modern societal relevance of core botanical topics;
- Evaluating social issues 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 and Supplies

1. Berg, Linda R. 2008. *Introductory Botany: Plants, People, and the Environment*. 2nd edition. Belmont, Thomson Brooks/Cole.
2. *Laboratory manual for Introductory Botany (BOT2010C), Fall 2018*. Will soon be available at Target Copy on University Avenue across from UF's Main Library.

Additional reading and in-class exercises printed from the Canvas e-learning site for the course.

Software: WORD or equivalent word-processing software.

Course grades will be determined as follows:

Quizzes on assigned reading = 16%

In-class and at-home exercises = 16%

Lecture exams = 30%

Laboratory = 38%

Lecture readings and assignments: All lecture readings and assignments should be completed prior to coming to lecture (a copy of the textbook is on reserve in Marston Science Library, if you haven't already obtained a copy). For example, before coming to class on August 31th, you should have already read Chapter 1 of your textbook. Please take into serious consideration the expectation that for each hour in class (i.e., "lecture") you are supposed to spend 2 hours working on your own. Your taking a portion of this 2 hours to read about a topic BEFORE coming to class will allow us to avoid using lecture periods as information dump sessions and instead to concentrate on learning. 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 on-line chapter quizzes that are due before class starts.

Laboratory: Your laboratory grade will be based on pre-lab questions, post-lab quizzes and assignments, and your lab project and its presentation in a course symposium. Please consult your lab instructor for details concerning preparation for the lab quizzes and completing assignments. Details regarding the lab project and 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 attendance, curves, and make up policy: Attendance is required and essential for success in this course. If you have a **valid documented excuse and notify us in advance**, you will be permitted to make up missed assignments for the full point value.

Grades: Your grade will be calculated as follows:

93-100% A; 90-92% A-; 87-89% B+; 83-86% B; 80-82% B-; 77-79% C+;

73-76% C; 70-72% C-; 67-69% D+; 63-66% D; 60-62% D-; 0-59% E

Grades will be rounded to the nearest whole point (e.g. 89.5 = 90, 89.49 = 89)

Information on current UF grading policies for assigning grade points can be found at:

<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

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.

UF Counseling Services:

Contact information for the Counseling and Wellness Center:

<http://www.counseling.ufl.edu/cwc/Default.aspx>, 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

Your well-being is important to the University of Florida. The U Matter, We Care initiative is committed to creating a culture of care on our campus by encouraging members of our community to look out for one another and to reach out for help if a member of our community is in need. If you or a friend is in distress, please contact umatter@ufl.edu so that the U Matter, We Care Team can reach out to the student in distress. A nighttime and weekend crisis counselor is available by phone at 352-392-1575. The U Matter, We Care Team can help connect students to the many other helping resources available including, but not limited to, Victim Advocates, Housing staff, and the

Counseling and Wellness Center (UF Counseling & Wellness Center, 3190 Radio Rd, 392-1575). Please remember that asking for help is a sign of strength. In case of emergency, call 9-1-1.

Academic 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 (<https://www.dso.ufl.edu/sccr/process/student-conducthonor-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 instructor or TAs in this class.

Plagiarism is a serious violation of the Student Honor Code that includes:

- Submitting all or part of someone else's work as if it is your own
- "Borrowing" ideas or prose without crediting the source
- Submitting duplicate assignments
- Collaboration on assignment when such collaboration is not part of the work
- Failing to cite sources, or citing them improperly

Consequences of plagiarism:

- Failing grade on assignment AND
- Course grade penalty of one letter grade AND
- Report to the Office of the Dean of Students.

Please review plagiarism and how to avoid it:

http://www.uflib.ufl.edu/msl/subjects/images/plagiarism_26_guidelines.pdf

Accommodations for students with disabilities: Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting <https://disability.ufl.edu/students/get-started/>. 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.

Course Evaluation: Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <https://gatorevals.aa.ufl.edu/>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <https://gatorevals.aa.ufl.edu/>.

COVID-19 Precautions: BOT2010C will meet online except for the lab. Labs will be structured to maximize the safety of both students and instructors. Full compliance with the UF mask policy is MANDATORY. Everyone will be expected to wear an approved mask

(covering both the nose and mouth, “gaiter” style masks are not approved) at all times in the building. Students not wearing a mask, observing social distancing, or following other guidelines and procedures intended to reduce the likelihood of contagion represent a threat to the health of others in the same room and will be asked to leave the lab immediately. TAs are required to enforce these rules.

Course schedule

Day	Date	Lecture Topic and Readings	T or W Lab	Notes on Lab
T	1-Sep	Introduction & data graphing, Ch 1	No lab	
R	3-Sep	Chemistry of life, mostly water, Ch 2		
T	8-Sep	Photosynthesis, Ch 4	1. Introduction to plants and the growth experiment	
R	10-Sep	Energy & carbon, Ch 4		
T	15-Sep	Respiration; topic selection for plant growth project	2. Photosynthesis & respiration; 4. Water	
R	17-Sep	Carbon cycle		
T	22-Sep	Water	3. Plant growth project - set up experiment	
R	24-Sep	Water, wood, & SPAC, Ch 10		
T	29-Sep	Leaves, Ch 8	5. Plant interactions	Go to NATL
R	1-Oct	Flowers & fruits, Ch 9		
T	6-Oct	Exam 1	6. Plant growth experiment data collection	
R	8-Oct	Plant Cells, Ch 3		
T	13-Oct	Primary & secondary growth, Ch 5-7	8. Plant diversity, flowers and fruits	
R	15-Oct	Biomechanics		
T	20-Oct	TBA	9. Plant growth experiment statistics workshop	
R	22-Oct	Nitrogen		
T	27-Oct	Enzymes, p. 36-38	10. Genetics (fern)	Bring formatted data and computer
R	29-Oct	TBA		
T	3-Nov	Nitrogen Cycle, p. 532-534	11. Genotype to phenotype with mutants	Take home data, submit report next lab
R	5-Nov	Exam 2		
T	10-Nov	DNA & protein synthesis, Ch 12-14		
R	12-Nov	Genotype to phenotype, Ch 14	12. Mitosis and meiosis	Bring plant materials to test (n > 15)
T	17-Nov	Evolution through natural selection, Ch 16		
R	19-Nov	Speciation & diversity, Ch 17	Review of drafts of presentations	
T	24-Nov	TBA		
R	26-Nov	THANKSGIVING		
T	1-Dec	Ecology of Florida, Ch 26		
R	3-Dec	Presentation symposium (Appendix III)		
T	8-Dec	Exam 3		