

BOT2800C - Plants in Human Affairs – Spring 2019

Lecture meetings TR 5:10 – 6:00, MCCARTY A G186

Lab meetings (Rolf's Hall 0114):

R 9:35 – 11:30 am (class number 11899)

R 12:50 – 2:45 pm (class number 11901)

R 6:15 – 8:10 pm (class number 11902)

F 12:50 – 2:45 pm (class number 11900)

Instructors

Lecture:

Dr. Norman Douglas, nadouglas@ufl.edu, 618A Carr Hall

Lab instructors:

Jerald Pinson, jbp4166@ufl.edu, 521 Bartram Hall

Lindsey Riibe, la.riibe@ufl.edu, 521 Bartram Hall

Course description

This course is an introduction to the vast array of plants and plant products that shape our lives. We will explore some of the plants that humans use and learn how they influence human culture and have shaped civilization. To better understand why plants are so crucial to us, we will also learn basic structure and function of plant tissues and metabolites in the body of the living plant. We hope that you not only come away from this course with a better understanding of and appreciation for the importance of plants in our lives, but also have fun in the process.

Learning objectives

After completion of this course, students will be able to:

- Draw and describe the basic structure of a plant and the location of major tissues important to humans
- Describe the structure and function of fibers, vascular tissue, and wood and how this relates to human use
- Distinguish between primary and secondary metabolites and the functions of these for both plants and human use
- Discuss the relative definitions of “toxic” and “medicinal” plants
- List the plants that were foundational in the development of human civilization and explain why
- List and discuss several of the world’s most economically important plants
- Discuss the centers of origin for agriculture and human civilization
- Explain how domestication occurs and describe the evolutionary evidence for domestication
- Describe the role of plants during European colonization throughout the world
- Critically evaluate commercially available plant products for their ecological and humanitarian impact
- Discuss scientific, economic, and political issues with genetically modified crop plants
- Make candles, soap, tie-dyed cloth with natural dyes, rope, paper, rubber balls, and more!

Textbooks

1) Lab manual for BOT2800C. (**Required**) This is available for purchase at Target Copy in Gainesville.

Grading

Four in-class quizzes – 50 points each	200
Lab – (2 lab practicals for a total of 100 pts, pre-labs 50 pts, in-class exercises 50 pts, post-labs 50 pts)	250
Plant expert research – 20/30/50 pts per part, three parts	100
Plant expert symposium – 50 pts	50
Participation (including peer reviews, attendance at poster session, and in-class activities)	50
Final exam (optional, cumulative) – 100 pts	100
Total	750

• Point Range (%)	• Letter Grade
• \geq 90.00	• A
• \geq 86.66	• A-
• \geq 83.33	• B+
• \geq 80.00	• B
• \geq 76.66	• B-
• \geq 73.33	• C+
• \geq 70	• C
• \geq 66.66	• C-
• \geq 63.33	• D+
• \geq 60	• D
• \geq 56.66	• D-
• $<$ 56.66	• E

Important – Plagiarism

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

- Submitting all or part of someone else's work as if it is your own
- "Borrowing" without crediting the source
- Submitting duplicate assignments
- Collaborating or receiving substantive help in writing your assignment unless I require such collaboration as part of the work
- Failing to cite sources, or citing them improperly

Consequences of plagiarism in BOT2800C –

- 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://web.uflib.ufl.edu/msl/07b/studentplagiarism.html>

Laboratory

Your laboratory grade will be based upon two practical exams, in class exercises, and pre- and post-lab assignments. Please see your lab instructor for policies, expectations and the schedule of assignments.

Course attendance

Attendance is essential for success in this course. We understand that absences happen, but if you make this a habit, you will perform poorly in this class. All lab sessions are required. If you know in advance that you are unable to attend your lab section (e.g. conference, religious holiday), please contact your TA promptly in order to facilitate attending one of the other three lab sections. Students who arrive late to lab miss important introductory material and directions. If you arrive >10 minutes late, you will be penalized 1 point off your pre-lab; if >30 minutes late, you will only be eligible to receive half credit on your pre-lab. Being on time to the two lab practicals is a requirement and late arrivals may be denied access at the discretion of the TA.

Grade curves and extra credit

At the instructor's sole discretion, a curve MAY be applied to grades for quizzes. There is no curve for assignments, or final course scores. There MAY be opportunities for extra credit – if so, such opportunities will be announced in class and offered to all students equally.

Make up policy

There is no way to make up the final exam. Make-up lecture quizzes, lab practicals, and online lab assignments will only be offered in extreme circumstances if a valid and documented excuse is provided through the Dean of Students' office. Every effort should be made to attend your lab section or to make arrangements to attend another section. As online lab assignments are available for multiple days, you should have plenty of time to complete them.

UF counseling services

Resources are available on campus for students having personal problems or lacking clear career and academic goals. The resources include:

- UF Counseling & Wellness Center, 3190 Radio Rd, 392-1575, psychological and psychiatric services.
- Career Resource Center, Reitz Union, 392-1601, career and job search services.
- Many students experience test anxiety and other stress – related problems. “A Self Help Guide for Students” is available through the Counseling Center (301 Peabody Hall; 392-1575) and at their web site: <http://www.counsel.ufl.edu/>.

Academic Honesty Policy

All students registered at the University of Florida have agreed to comply with the following statement:

“I understand that the University of Florida expects its students to be honest in all their academic work. I agree to adhere to this commitment to academic honesty and understand that my failure to comply with this commitment may result in disciplinary action up to and including expulsion from the University.”

In addition, on all work submitted for credit the following pledge is either required or implied:

“On my honor I have neither given nor received unauthorized aid in doing this assignment.”

If you witness any instances of academic dishonesty in this class, please notify the instructor or contact the Student Honor Court (392-1631) or Cheating Hotline (392-6999). For additional information on Academic Honesty, please refer to the University of Florida Academic Honesty Guidelines at: <https://catalog.ufl.edu/ugrad/current/advising/info/student-honor-code.aspx#honesty>.

Remember, plagiarism is also a violation of the Academic Honesty Policy. Please see above for a source on how to avoid plagiarism.

Accommodations for students with disabilities

Students who will require a classroom accommodation for a disability must contact the Dean of Students Office of Disability Resources, in Peabody 202 (phone: 352-392-1261). Please see the University of Florida Disability Resources website for more information at: <http://www.dso.ufl.edu/drc/>. Note that the student should provide documentation of a

requirement for accommodation **as soon as possible**. No accommodations are available to students who lack this documentation. It is the policy of the University of Florida that the student, not the instructor, is responsible for arranging accommodations when needed. Once notification is complete, the Dean of Students Office of Disability Resources will work with the instructor to accommodate the student.

Day	Date	Lecture Topic (subject to change)	Lab
T	20-Aug	Introduction	
R	22-Aug	Trees and plant classification	NO LAB
T	27-Aug	Plant structure	
R	29-Aug	Agriculture & Domestication	1 - Intro to plants
T	3-Sep	Essential oils	
R	5-Sep	Spice Trade to Age of Discovery	2 - Essential oils
T	10-Sep	Pigments and Dyes	
R	12-Sep	Fiber, Quiz 1	3 - Dyes
T	17-Sep	Raw materials, plantations, and colonialism	
R	19-Sep	Latex & rubber	4 - Fibers
T	24-Sep	Gums and Resins	
R	26-Sep	Photosynthesis, Carbon, and Climate	5 - Exudates
T	1-Oct	Sugar & Alcohol	
R	3-Oct	Wood, Quiz 2	NO LAB
T	8-Oct	Paper	
R	10-Oct	Deforestation	Lab practical 1
T	15-Oct	SPRING BREAK	
R	17-Oct	SPRING BREAK	6 - Wood
T	22-Oct	Medicines	
R	24-Oct	Toxins	7 - Paper
T	29-Oct	Psychoactive plants	
R	31-Oct	Stimulating beverages	8 - Toxic and medicinal plants
T	5-Nov	Lipids, Quiz 3	
R	7-Nov	Protein: Beans & Bread	9- Fats, Oils, and Waxes
T	12-Nov	GMOs	
R	14-Nov	Plant experts symposium (Poster session I)	10 - Soap
T	19-Nov	Plant experts symposium (Poster session II)	
R	21-Nov	Botany & your health	Lab practical 2
T	26-Nov	Plant Biodiversity	
R	28-Nov	Food lab in Rolfs Hall during lecture period	NO LAB
T	3-Dec	Quiz 4	
W	11-Dec	Optional Final Exam 5:30 PM - 7:30 PM in McCarty room G186	