

BOT2800C - Plants in Human Affairs – Spring 2016

Lecture meetings TR 5:10 – 6:00

Lab meetings:

R 1:55 – 3:50 pm (section 3603)

R 6:15 – 8:10 pm (section 4960)

F 9:35 – 11:30 am (section 042A)

F 1:55 – 3:50 pm (section 1F35)

Instructors

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

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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.

2) B. B. Simpson and M. C. Ogorzaly. *Economic Botany: Plants in Our World*. 4th edition. (Suggested) This is available at UF bookstores and online. It covers much of the material in this course. However, there are no assigned readings or homework that require the text.

Grading

Two exams – 100 points each	200
Lab – (2 lab practicals for a total of 80 pts, pre-labs 50 pts, in-class exercises 50 pts, post-labs 50 pts)	230
Plant expert assignment – 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)	20
Final exam (cumulative) – 100 pts	100
Total	700

Grading scale

100 – 90 %	= A
<90 – 80 %	= B
<80 – 70 %	= C
<70 – 60 %	= D
<60	= E

The instructors reserve the right to adjust grades according to student participation, attendance, and attitude.

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

There will be NO curve applied to grades for exams, 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.

Make up policy

There will be NO make-up lecture exams offered. In the event that you miss an exam, your final exam score will be counted twice. There is no way to make up the final exam. Make-up 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 **by the second week of classes**. 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.

Course schedule (subject to change)

Day	Date	Topic	Lecture homework	Lab (R or F)
T	5-Jan	Introduction		
R	7-Jan	Plant structure and overview of human use		No lab
T	12-Jan	Classification, evolution and tree thinking		
R	14-Jan	Agriculture & Domestication	Plant expert part 1 assigned	1 - Intro to plants
T	19-Jan	Protein: Beans & Bread		
R	21-Jan	Essential oils		2 - Essential oils
T	26-Jan	Spice Trade to Age of Discovery		
R	28-Jan	Pigments and Dyes		3 - Dyes
T	2-Feb	Fiber	Plant expert part 1 due; part 2 assigned	

R	4-Feb	Colonialism and raw materials		4 - Fibers
T	9-Feb	Latex & rubber		
R	11-Feb	Gums and Resins		5 - Exudates
T	16-Feb	GMOs		
R	18-Feb	Exam 1		Lab practical 1
T	23-Feb	Climate change		
R	25-Feb	Deforestation	Plant expert part 2 due; part 3 assigned	NO LAB
T	1-Mar	Spring Break		
R	3-Mar	Spring Break		NO LAB
T	8-Mar	Wood		
R	10-Mar	Paper		6 - Wood
T	15-Mar	Medicines		
R	17-Mar	Toxins		7 - Paper
T	22-Mar	Psychoactives & Beverages		
R	24-Mar	Sugar & Alcohol		8 - Toxic and medicinal plants
T	29-Mar	Science and Stats		
R	31-Mar	Lipids		9 - Fats, Oils, and Waxes
T	5-Apr	Plant experts symposium (Poster session I)	Plant expert part 4 due for students in Thursday lab sections	
R	7-Apr	Plant experts symposium (Poster session II)	Plant expert part 4 due for students in Friday lab sections	10 - Soap
T	12-Apr	Plant Biodiversity		
R	14-Apr	Exam 2		Lab practical 2
T	19-Apr	Food lab in Rolfs (during lecture time)		
T	27-Apr	Final Exam 3:00 p.m. - 5:00 p.m. in McCarty		