

BOT2800C - Plants in Human Affairs – Spring 2021

Lecture meetings TR 5:10 – 6:00, on Zoom

Lab meetings (Rolfs Hall 0114)

Class numbers 11473 & 28577: T | Period 6 - 7 (12:50 PM - 2:45 PM)

Class number 29641: W | Period 2 - 3 (8:30 AM - 10:25 AM)

Class number 29656: W | Period 6 - 7 (12:50 PM - 2:45 PM)

Class number 29660: R | Period 2 - 3 (8:30 AM - 10:25 AM)

Class number 29665: R | Period 4 - 5 (10:40 AM - 12:35 PM)

Instructors

Lecture:

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

Lab instructors:

Annika Smith, annikals@ufl.edu, Dickinson Hall

Tal Kinser, tkinser@ufl.edu, Dickinson 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 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 (~\$14) at Target Copy (on University Drive) in Gainesville.

Grading

	20
Four lecture quizzes – 50 points each	0
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 presentations – 50 pts	50
Participation (lecture-related activities, assignments, and pop quizzes)	50
Final exam (optional, cumulative) – 100 pts	100
Total	750

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

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.

Attendance and make ups

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found in the online catalog at:

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

If you are experiencing COVID-19 symptoms ([click here for guidance from the CDC on symptoms of coronavirus](#)), please use the UF Health screening system and follow the instructions on whether you are able to attend class. [Click here for UF Health guidance on what to do if you have been exposed to or are experiencing Covid-19 symptoms](#). Course materials will be provided to you with an excused absence, and you will be given a reasonable amount of time to make up work. Refer to the above link for more information on the university's attendance policy.

For situations not related to COVID-19: 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 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.

Make-up lecture quizzes, lab practicals, and online lab assignments will be offered under certain 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.

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. DO NOT request special treatment, extra extra credit, grade bumps, etc. at the end of the course.

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://sccr.dso.ufl.edu/wp-content/uploads/sites/4/2020/12/Orange-Book-Web-Version-2020.pdf>) 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.

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:

<https://guides.uflib.ufl.edu/copyright/plagiarism>

Accommodations for students with disabilities

Students 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 Evaluations

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available

at gatorevals.aa.ufl.edu/students/. 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 ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at gatorevals.aa.ufl.edu/public-results/.

Resources Available to Students

- Health and Wellness
 - U Matter, We Care: umatter@ufl.edu; 392-1575
 - Counseling and Wellness Center: <http://www.counseling.ufl.edu/cwc/Default.aspx>; 392-1575
 - Sexual Assault Recovery Services (SARS): Student Health Care Center; 392-1161
 - University Police Department: <http://www.police.ufl.edu/>; 392-1111 (911 for emergencies)
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- Academic Resources
 - E-learning technical support: Learningsupport@ufl.edu; <https://lss.at.ufl.edu/help.shtml>; 352-392-4357 (opt. 2)
 - Career Resource Center: Reitz Union; <http://www.crc.ufl.edu/>; 392-1601
 - Library Support: <http://cms.uflib.ufl.edu/ask>
 - Teaching Center: Broward Hall; 392-2010 or 392-6420
 - Writing Studio: 302 Tigert Hall; <http://writing.ufl.edu/writing-studio/>; 846-1138

Procedure for Conflict Resolution

Any classroom issues, disagreements or grade disputes should be discussed first between the instructor and the student. If the problem cannot be resolved, please contact the Undergraduate Coordinator or the Department Chair. Be prepared to provide documentation of the problem, as well as all graded materials for the semester. Issues that cannot be resolved departmentally will be referred to the University Ombuds Office (<http://www.ombuds.ufl.edu>; 392-1308) or the Dean of Students Office (<http://www.dso.ufl.edu>; 392-1261). For further information refer to https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf (for residential classes) or <http://www.distance.ufl.edu/student-complaintprocess> (for online classes).

Addendum: COVID-19 policies:

LAB:

We will have face-to-face instructional sessions to accomplish the student learning objectives of this course. In response to COVID-19, the following policies and requirements are in place to maintain your learning environment and to enhance the safety of our in-classroom interactions.

- You are required to wear approved face coverings at all times during class and within buildings. Following and enforcing these policies and requirements are all of our responsibility. Failure to do so will lead to a report to the Office of Student Conduct and Conflict Resolution.
- This course has been assigned a physical classroom with enough capacity to maintain physical distancing (6 feet between individuals) requirements. Please utilize designated seats and maintain appropriate spacing between students. Please do not move desks or stations.
- Sanitizing supplies are available in the classroom if you wish to wipe down your desks prior to sitting down and at the end of the class.
- Follow your instructor's guidance on how to enter and exit the classroom. Practice physical distancing to the extent possible when entering and exiting the classroom.
- If you are experiencing COVID-19 symptoms ([Click here for guidance from the CDC on symptoms of coronavirus](#)), please use the UF Health screening system and follow the instructions on whether you are able to attend class.

[Click here for UF Health guidance on what to do if you have been exposed to or are experiencing Covid-19 symptoms.](#)

- Course materials will be provided to you with an excused absence, and you will be given a reasonable amount of time to make up work. [Find more information in the university attendance policies.](#)

LECTURE:

Lectures will be recorded and will be posted prior to the course meeting time (generally by that morning). From time to time there will be short activities or writing assignments associated with the lecture that will be due by “the end of class” (that is, by 6PM). Dr. Douglas will be available on Zoom during the course meeting time to discuss material. You are strongly encouraged to attend these sessions.

Our class Zoom sessions may be audio visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who unmute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

Date	Lecture Topic (subject to change)	Lab
Tue 7-Jan	Introduction	
Thu 9-Jan	Trees and plant classification	NO LAB
Tue 14-Jan	Plant structure	
Thu 16-Jan	Agriculture & Domestication	1 - Intro to plants
Tue 21-Jan	Essential oils	
Thu 23-Jan	Spice Trade to Age of Discovery	2 - Essential oils
Tue 28-Jan	Pigments and Dyes	
Thu 30-Jan	Fiber	3 - Dyes
Tue 4-Feb	Raw materials, plantations, Quiz 1	
Thu 6-Feb	Latex & rubber	4 - Fibers
Tue 11-Feb	Gums and Resins	
Thu 13-Feb	Photosynthesis, Carbon, and Climate	5 - Exudates
Tue 18-Feb	Wood,	
Thu 20-Feb	Paper	Lab practical 1
Tue 25-Feb	Deforestation	
Thu 27-Feb	GMOs, Quiz 2	6 - Wood
Tue 3-Mar	SPRING BREAK	
Thu 5-Mar	SPRING BREAK	NO LAB
Tue 10-Mar	Medicines	
Thu 12-Mar	Toxins	7 - Paper
Tue 17-Mar	Psychoactive plants	
Thu 19-Mar	Stimulating beverages	8 - Toxic and medicinal plants
Tue 24-Mar	Sugar & Alcohol, Quiz 3	
Thu 26-Mar	Lipids	9- Fats, Oils, and Waxes
Tue 31-Mar	Protein: Beans & Bread	
Thu 2-Apr	Plant experts symposium (Poster session I)	10 - Soap
Tue 7-Apr	Plant experts symposium (Poster session II)	
Thu 9-Apr	Botany & your health	Lab practical 2
Tue 14-Apr	Plant Biodiversity	
Thu 16-Apr	Food lab during lecture period- Room TBA	NO LAB
Tue 21-Apr	Quiz 4	
Tue 28-Apr	Optional Final Exam 5:30 PM - 7:30 PM	