

BOT2800C - Plants in Human Affairs – Spring 2022

Lecture meetings TR Period 10 (5:10 – 6:00PM)

McCarty A, G0186

Lab meetings (Rolfs Hall 0114)

Class# 26530 Section 3605: R | Period 7 - 8 (1:55 PM - 3:50 PM)

Class# 11201 Section 4960: R | Period 11 - E1 (6:15 PM - 8:10 PM)

Class# 11200 Section 3603: F | Period 3 - 4 (9:35 AM - 11:30 AM)

Class# 26518 Section 3604: F | Period 7 - 8 (1:55 PM - 3:50 PM)

Instructors

Lecture:

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

Lab instructors:

Yuley Encarnación Piñeyero, yuleyencarnacion@ufl.edu, Dickinson Hall

Alex Abair, aabair@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

Two lecture exams – 100 points each	200
Lab – (Two lab practicals, for a total of 200 pts, pre-labs 50 pts, in-class exercises 50 pts, post-labs 50 pts)	250
Plant expert research – 25/50 pts per part, two parts	75
Plant expert presentations – 50 pts	50
Participation (lecture-related activities, assignments, etc.)	25
Final exam (optional, cumulative) – 100 pts	100
Total	700

• 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 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

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."

Cases of plagiarism or other academic dishonesty will not be tolerated, and may result in grade penalties or other sanctions. At a minimum, each incident of academic dishonesty will result in **a zero on the assignment, a course grade penalty of one full letter grade, and a report to the Student Conduct & Conflict Resolution** (see <https://sccr.dso.ufl.edu/process/student-honor-code/> for more information about this process).

In this course, academic dishonesty includes (but is not limited to) collaborating with others on course assignments or quizzes without specific authorization, utilizing prohibited materials during quizzes, copying the work of other students in whole or in part, allowing other students to copy your work or otherwise sharing completed assignments in person or online (during the semester or in the future), discussing or sharing quiz questions or answers with other students, giving other students the password for locked quizzes, and plagiarism, including insufficient paraphrasing.

All materials for this course, including but not limited to lectures, quizzes, and worksheets, are the intellectual property of the professor, TAs, or textbook publisher, and are provided solely for the personal use of the currently enrolled students. These materials may not be distributed to other students or online repositories (e.g. Chegg, CourseHero) without express written permission, even after the conclusion of the course at the end of the semester. Doing so will be considered a violation of the UF Honor Code.

If you have knowledge of 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](#).

Use of GroupMe, Discord, and similar messaging applications facilitate communication and can be an important part of creating community in a course and can be valuable for studying and group projects. However, such groups typically exclude instructional staff and present great temptation for unauthorized academic dishonesty as described above. In this course, the use of GroupMe, etc. to share answers, screenshots of quizzes, "comparing" work, etc. is not authorized with the exception that the discussion of material related to lecture and lab for the purposes of studying is permitted, because it replaces or enhances classroom discussion that is encouraged among students. Simply posting answers (or asking others to "check" your answers, etc.) violates the intent of any exercise and turns it into a waste of time. ANY discussion of quiz or exam questions or answers is not allowed in any online forum once the first student has begun a quiz (including lab quizzes), including after the exam is concluded. All

students participating in such forums will be presumed to have benefitted from material posted to a GroupMe and will be subject to penalties outlined above.

Class recordings

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A “class lecture” is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session. Publication without permission of the instructor is prohibited. To “publish” means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

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 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

College can be a very stressful time in a person’s life. Resources are available on campus to help students meet academic goals and solve personal problems, which may interfere with their academic performance. If you find that you are having difficulty emotionally or academically, there is substantial support available. See “A Self Help Guide for Students” or contact one of the following services:

Health and Wellness

- U Matter, We Care: If you or someone you know is in distress, please contact umatter@ufl.edu, 352-392-1575, or visit [U Matter, We Care website](#) to refer or report a concern and a team member will reach out to the student in distress.
- Counseling and Wellness Center: Visit the [Counseling and Wellness Center website](#) or call 352-392-1575 for information on crisis services as well as non-crisis services.
- Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need, or visit the [Student Health Care Center website](#).
- University Police Department: Visit [UF Police Department website](#) or call 352-392-1111 (or 9-1-1 for emergencies).
- UF Health Shands Emergency Room / Trauma Center: For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; [Visit the UF Health Emergency Room and Trauma Center website](#).
- GatorWell Health Promotion Services: For prevention services focused on optimal wellbeing, including Wellness Coaching for Academic Success, [visit the GatorWell website](#) or call 352-273-4450.

Academic Resources

- E-learning technical support: Contact the [UF Computing Help Desk](#) at 352-392-4357 or via e-mail at helpdesk@ufl.edu.
- [Career Connections Center](#): Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.
- [Library Support](#): Various ways to receive assistance with respect to using the libraries or finding resources.
- [Teaching Center](#): Broward Hall, 352-392-2010 or to make an appointment 352- 392-6420. General study skills and tutoring.
- [Writing Studio](#): 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.
- Student Complaints On-Campus: [Visit the Student Honor Code and Student Conduct Code webpage for more information](#).
- On-Line Students Complaints: [View the Distance Learning Student Complaint Process](#).

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 “expected” to wear approved face coverings at all times during class and within buildings. Following these guidelines are all of our responsibility. Failure to do so increases the likelihood of illness for you and everyone else in the room.
- 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.
- Practice physical distancing to the extent possible in the lab.

- 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](#).
- *Labs are face-to-face. Alternative assignments are available upon request for those who are ill, withheld from campus, or voluntarily quarantining pending the results of COVID testing or other medical appointments. Plan to attend lab unless you have a good reason to stay away, but do not come if you think there is a chance you might expose others- we will respect your best judgement and accommodate you so that your grade is not penalized. Please communicate openly and promptly with your lab TA regarding absences from lab.*

LECTURE:

FOR Spring 2022: Lectures will be conducted face to face. Attendance is not mandatory, though it is encouraged if you are not ill, exposed, or otherwise possibly contagious. During lecture, certain activities, demonstrations, discussions, etc. may take place. Links to previous semesters's virtual recorded lecture for each day will be posted after class for those who do not attend the in-person lecture. These recordings are substantially similar to this semester's, though there may be small differences that are unlikely to make much, if any, difference to the overall course content. Please practice physical distancing to the extent possible in the lecture room.

Date	Lecture Topic (subject to change)	Lab
Thu 6-Jan	Introduction	NO LAB
Tue 11-Jan	Trees and plant classification	
Thu 13-Jan	Plant structure	1 - Intro to plants
Tue 18-Jan	Agriculture & Domestication	
Thu 20-Jan	Essential oils	2 - Essential oils
Tue 25-Jan	Spice Trade to Age of Discovery	
Thu 27-Jan	Pigments and Dyes	3 - Dyes
Tue 1-Feb	Fiber	
Thu 3-Feb	Raw materials, plantations	4 - Fibers
Tue 8-Feb	Latex & rubber	
Thu 10-Feb	Gums and Resins	5 - Exudates
Tue 15-Feb	Exam 1	
Thu 17-Feb	Photosynthesis, Carbon, and Climate	Lab practical 1
Tue 22-Feb	Sugar & Alcohol	
Thu 24-Feb	Deforestation	6 - Wood
Tue 1-Mar	Wood	
Thu 3-Mar	Paper	7 - Paper
Tue 8-Mar	Spring Break	
Thu 10-Mar	Spring Break	NO LAB
Tue 15-Mar	Medicines	
Thu 17-Mar	Toxins	8 - Toxic and medicinal plants
Tue 22-Mar	Psychoactive plants	
Thu 24-Mar	Stimulating beverages	9- Fats, Oils, and Waxes
Tue 29-Mar	Lipids	
Thu 31-Mar	Protein: Beans & Bread	10 - Soap
Tue 5-Apr	Plant experts symposium (Poster session I)	
Thu 7-Apr	Plant experts symposium (Poster session I)	Lab practical 2
Tue 12-Apr	GMOs	
Thu 14-Apr	Plant Biodiversity	NO LAB
Tue 19-Apr	Exam 2	