

BOT2800C - Plants in Human Affairs – Fall 2020

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!

Instructors

Lecture (online): C. Lorena Endara, Ph.D., clendara@ufl.edu / lorenaendara.net
(Zoom hours T - R 5:10 - 6:00 pm or by appointment)

Lab meetings (face to face):

Section (Class)	Day Time	Periods	Rolfs Hall Room #	Instructor	Contact
021H (11680)	R 9:35 – 11:30 am	3-4	114	Lauren Whitehurst	laurenwhitehurst@ufl.edu Dickinson Hall
022H (28062)	R 9:35 – 11:30 am	3-4	105	Ashley Hamersma	ahamersma@ufl.edu Dickinson Hall
0615 (11682)	R 12:50 – 2:45 pm	6-7	114	Lauren Whitehurst	laurenwhitehurst@ufl.edu Dickinson Hall
0616 (11683)	R 6:15 – 8:10 pm	11-E1	114	Kasey Pham	kasey.pham@ufl.edu Dickinson Hall
0625 (28070)	R 12:50 – 2:45 pm	6-7	105	Izu Ezukanma	iezukanma@ufl.edu 616 Bartram Hall
0626 (28071)	R 6:15 – 8:10 pm	11-E1	105	Ashley Hamersma	ahamersma@ufl.edu Dickinson Hall
04GE (11681)	F 12:50 – 2:45 pm	6-7	114	Kasey Pham	kasey.pham@ufl.edu Dickinson Hall
04HE (28068)	F 12:50 – 2:45 pm	6-7	105	Izu Ezukanma	iezukanma@ufl.edu 616 Bartram Hall

COURSE OUTLINE

Date	Lecture Topic (Online)	Lab (Face to face –subject to change)
Tue 1-Sep	1. Introduction	
Thu 3-Sep	2. Trees and plant classification	No lab
Tue 8-Sep	3. Plant structure	
Thu 10-Sep	4. Agriculture and domestication	Lab 1. Intro to plants
Tue 15-Sep	5. Herbs, spices and perfumes and how they changed civilization	
Thu 17-Sep	6. Essential oils	Lab 2. Essential oils
Tue 22-Sep	7. Pigments and Dyes *Quiz 1 (lectures 1-6)	
Thu 24-Sep	8. Photosynthesis, carbon and climate	Lab 3. Dyes
Tue 29-Sep	9. Raw materials and plantations in the 1900's	
Thu 1-Oct	10. Biodiversity and deforestation	No lab (Homecoming)
Tue 6-Oct	11. Lipids I: Fats, oils and waxes	
Thu 8-Oct	12. Lipids II: Soap and by products	Lab 4. Vegetables, fats, oils and waxes
Tue 13-Oct	13. Exudates I: Latex and rubber *Quiz 2 (lectures 7-12)	
Thu 15-Oct	14. Exudates II: Gums and resins	Lab 5. Soap making *Lab quiz 1 (Labs 1-5)
Tue 20-Oct	15. Plants, industry and technology I	
Thu 22-Oct	16. Fibers	Lab 6. Plant exudates
Tue 27-Oct	17. Wood	
Thu 29-Oct	18. Paper	Lab 7. Fibers
Tue 3-Nov	19. Plants, industry and technology II	
Thu 5-Nov	20. Toxic plants *Quiz 3 (lectures 13-20)	Lab 8. Wood
Tue 10-Nov	21. Psychoactive plants	
Thu 12-Nov	22. Stimulating beverages	Lab 9. Paper
Tue 17-Nov	23. Sugar, fermentation and alcohol	
Thu 19-Nov	24. Food I	Lab 10. Toxic and medicinal plants *Lab quiz 2 (Lab 6-10)
Tue 24-Nov	25. Food II	
Thu 26-Nov	Thanksgiving (Food lab assignment)	No lab
Tue 1-Dec	26. Medicinal plants	
Thu 3-Dec	27. Online expert symposium	Online expert symposium
Tue 8-Dec	28. Plants and our future *Quiz 4 (lectures 21-28)	
Thu 10-Dec	Reading days	

Course Materials and Guidelines

Textbooks

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

Grading

A total of 600 points can be earned in this class distributed in the following way (Lecture 400 points, Lab 200 points)

Lecture quizzes and exercises	Points	Covers	% of your grade
Quiz 1	50 points	Lectures 1-6	~8.33%
Quiz 2	50 points	Lectures 7-12	~8.33%
Quiz 3	50 points	Lectures 13-20	~8.33%
Quiz 4	50 points	Lectures 21-28	~8.33%
Plant expert symposium	150 points Topic and brief outline: 20 points Final outline: 20 points Final video: 100 points Turned it on time: 10 points		25%
Thanksgiving food lab assignment	50 points		~8.33%
Laboratory			
Lab quiz 1	100 points	Labs 1-5	~16.67
Lab quiz 2	100 points	Labs 6-10	~16.67

Grading Scale

• 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

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. Please be aware that this lab is designed for you to collect important information in class exercises, and pre- and post-lab assignments. This information will be in your lab quizzes. Please see your lab instructor for policies, expectations and the schedule of assignments.

Course attendance

This is a hybrid class. Lectures will be on-line, and we will have face-to-face lab instructional sessions to accomplish the student learning objectives of this course. All lab sessions are required, and attendance is essential for success in this course. 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. Being on time is a requirement and late arrivals may be denied access at the discretion of the TA, this is particularly important due to the circulation in the class during the COVID pandemic.

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](#).

Behavioral expectations during COVID-19

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

(<https://ufsa.ufl.edu/expectations/>):

-Face coverings are to be worn in all classrooms and buildings. You are required to wear **approved** face coverings (please no bandanas, neck gaiters and masks with valves) at all times during class and within buildings (e.g. bathrooms, hallways, etc.). Face coverings are to be worn in outside areas when physical distancing of 6 feet or more is not feasible. Following and enforcing these policies and requirements are all of our responsibility.

-Comply immediately with a request from a university official (i.e. instructors and lab managers) addressing health, safety or welfare such as a request to wear a face covering, maintain physical distancing or comply with other applicable law, policy or order while on university property, inside a university facility or attending a university sponsored event.

-In the lab: This course has been assigned a physical classroom with enough capacity to maintain physical distancing requirements (6 feet between individuals). 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, for this reason is very important to arrive on time to class. Practice physical distancing to the extent possible when entering and exiting the classroom.

-Failure to comply with policy is considered a disruption and threat to public health and will lead to a report to the Office of Student Conduct and Conflict Resolution.

Grade curves and extra credit

There is no curve for assignments, quizzes 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

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.

Use of CANVAS

BOT 2800C will use the Canvas classroom management system to distribute and store the course syllabus along with any syllabus updates, providing access to course materials, administrating quizzes, scheduling Zoom meetings, maintaining student grades, and regular communication with students. These practices will help ensure that all the class participants who may be geographically dispersed and taking courses asynchronously have access to course content. Canvas also will facilitate the process of making up of course work missed because of illness, periods of self-isolation, and other excused absences. Find additional information on using CANVAS (<https://elearning.ufl.edu/>).