

PLS 3004C: PRINCIPLES OF PLANT SCIENCE SUMMER B 2021

INSTRUCTOR:

Gerardo Celis, PhD
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Office hours: Wednesday & Friday 10:45 - 11:30 am via Zoom

TEACHING ASSISTANTS:

Micah Dettweiler
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Office hours: Monday 12:50-2:45pm EDT via Zoom

Moni Qiande
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Office hours: Wednesday & Thursday 12:50-1:40pm EDT via Zoom

TA office hours are open for all students. However, to maximize the help needed for students to succeed in the course, each student will be assigned to a specific TA for communication beyond TA hour to discuss any specific questions, issues, exams, and homework assignments. Each TA will form a group in canvas to communicate with the assigned students.

COURSE DESCRIPTION

Introduction to the principles and practices of plant production systems. An overview of plant evolution, anatomy, physiology, improvement, pest, water, and nutrient management as applied to a variety of plant production systems. Course prerequisite: BOT 2010C or BSC 2010.

JUSTIFICATION

The purpose of this course is to prepare students with specific competencies they need for a fundamental understanding of plant biology and production. The course is designed to provide the student with basic knowledge of plant anatomy, genetics, physiology, soils, plant diseases, and production practices of various crops. Upon completion of this course, the student will possess an understanding of plant production systems and the impacts they have on the ecosystems they occupy.

COURSE OBJECTIVES

Upon successful completion of this course, the student should be able to:

- Apply the theoretical knowledge covered in the course to production situations and make scientifically sound recommendations.
- Formulate hypotheses about the processes that impact plant growth and develop and propose experiments that could be developed to test hypotheses based on the scientific method.
- Communicate in both oral and written forms about key scientific concepts related to plant anatomy, plant genetics, plant physiology, soils, and crop production practices to different audiences to inform them about issues of concern related to agricultural production.
- Assess future agricultural production needs and opportunities to identify potential career paths in the agricultural sciences.

LOCATION AND TIME

Online – Canvas (<https://elearning.ufl.edu>) asynchronous. Module lectures, assignments, quizzes, and exams will be posted online.

COURSE SCHEDULE

Week	Topics	Assessment	Assignments
1	Module 1		
6/28	Class introduction	Quiz	Activity 1
	History, Trends, Issues, and Challenges in Plant Science	Quiz	Crop Selection
	Library Research Skills	Quiz	
	Scientific Method, Experimentation, Plant Classification, and Common Crops	Quiz	
2	Module 2		
7/5	Climate and Soils	Quiz	Activity 2
	Ecosystems	Quiz	
	Plant Structure	Quiz	
	Plant Growth and Development	Quiz	
3	Module 3		
7/12	Plant Chemistry and Metabolism	Quiz	Activity 3
	Genetics and Propagation	Quiz	Crop Annotated Bibliography
	Carbon-Cycle Light Energy	Quiz & Exam	
4	Module 4		
7/19	Photosynthesis and Respiration	Quiz	Activity 4
	Plant Water Relations	Quiz	
	Plant Nutrition	Quiz	
5	Module 5		
7/25	Nitrogen Fixation	Quiz	Activity 5
	Soil and Water Management	Quiz	Crop Fact Sheet
	Integrated Pest Management	Quiz	
6		Final Exam	
8/2			

All due dates/times are listed in EDT. All assignments, projects, and quizzes are due on Sunday 11:59pm the week they are assigned.

SUGGESTED TEXT

For students with limited or no plant science background. This will be available on reserve at the library.
 Plant Science- Growth, Development and Utilization of Cultivated Plants, McMahon, M.J., Kofranek, A.M., and Rubatzky, V.E. eds. 5th Edition. Pearson Higher Ed Publishing: <https://www.pearson.com/us/higher-education/program/Mc-Mahon-Plant-Science-Growth-Development-and-Utilization-of-Cultivated-Plants-5th-Edition/PGM54231.html>

GRADING AND ASSIGNMENT SUMMARY**EVALUATION OF GRADES**

Requirement	Points each	Total Points
Activities (5)	20	100
Quizzes (17)	10	170
Crop Project	100	100
Midterm Exams	100	100
Final Exam	100	100
Total Points		570

GRADING SCALE

Score	Percent	Grade	Grade Points
570-535	100-94	A	4.00
513-<535	90-<94	A-	3.67
495- <513	87-<90	B+	3.33
478-<495	84-<87	B	3.00
456-<478	80-<84	B-	2.67
438-<456	77-<80	C+	2.33

Score	Percent	Grade	Grade Points
421-<438	74-<77	C	2.00
399-<421	70-<74	C-	1.67
381-<399	67-<70	D+	1.33
364-<381	64-<67	D	1.00
347-<364	61<64	D-	0.67
<347	<61	E	0.00

CLASS ATTENDANCE AND MAKE-UP POLICY

This course is asynchronous and there is no attendance requirement. However, you are expected to complete quizzes, exams, and assignments by the week they are assigned.

Late assignments will be deducted 10% for every day late after due date. There are no makeup quizzes or exams. Only due to extreme, documented circumstances. Students should arrange with the instructor for makeup and new due date.

Students Requiring Accommodations Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, www.dso.ufl.edu/drc/) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

CLASS DEMEANOR

Students are expected to behave in a manner that is respectful to the instructor and to fellow students. Opinions held by other students should be respected in discussion, and conversations that do not contribute to the discussion should be held at minimum, if at all.

MATERIALS AND SUPPLIES FEES

There are no material fees for this course

ONLINE COURSE EVALUATION PROCESS

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 <https://gatorevals.gg.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 <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.gg.ufl.edu/public-results/>.

SYLLABUS CHANGES

This syllabus is subject to change. Any changes will be announced well in advance of deadlines.

ACADEMIC HONESTY

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: *"We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity."* You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit 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."*

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: <http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code>.

SOFTWARE USE

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

The University of Florida expects students entering an online program to acquire computer hardware and software appropriate to his or her degree program. Most computers are capable of meeting the following general requirements. A student's computer configuration should include:

- PC/Mac computer
- Webcam
- Microphone
- Speakers or headphones
- Broadband connection to the Internet and related equipment (Cable/DSL modem)

- Microsoft Office Suite installed (provided by the university)

To complete your tasks in this course, you will need a basic understanding of how to operate a computer, how to use Microsoft Office software, and Zoom.

SERVICES FOR STUDENTS WITH DISABILITIES

The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation

0001 Reid Hall, 352-392-8565, www.dso.ufl.edu/drc/

GETTING HELP

For issues with technical difficulties for e-Learning in Canvas, please contact the UF Help Desk:

- Learning-support@ufl.edu
- (352) 392-HELP - select option 2
- <https://lss.at.ufl.edu/help.shtml>

Any requests for make-ups due to technical issues MUST be accompanied by the ticket number received from LSS when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail your instructor or TA within 24 hours of the technical difficulty if you wish to request a make-up.

Students experiencing crises or personal problems that interfere with their general well-being are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

- *University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575, www.counseling.ufl.edu*
Counseling Services
Groups and Workshops
Outreach and Consultation
Self-Help Library
Wellness Coaching
- U Matter We Care, www.umatter.ufl.edu/
- Career Resource Center, First Floor JWRU, 392-1601, www.crc.ufl.edu/next-level
- Student Complaints:
Residential Course: https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf

HARASSMENT

UF provides an educational and working environment that is free from sex discrimination and sexual harassment for its students, staff, and faculty. <http://www.hr.ufl.edu/eo/sexharassment.htm>

DISRUPTIVE BEHAVIOR

Faculty, students, administrative and professional staff members, and other employees (hereinafter referred to as 'member(s)' of the university), who intentionally act to impair, interfere with, or obstruct the mission, purposes, order, operations, processes, and functions of the university shall be subject to appropriate disciplinary action by university authorities for misconduct, as set forth in the applicable rules of the Board of Regents and the university and state law governing such actions. Be advised that you can and will be dismissed from class if you engage in disruptive behavior. For more information: <http://regulations.ufl.edu/wp-content/uploads/2012/09/1008.pdf>

TWELVE-DAY RULE

Students who participate in official athletic or scholastic extracurricular activities are permitted twelve (12) scholastic day absences per semester without penalty. In any case, it is the student's responsibility to maintain satisfactory academic performance and attendance.