

**PLS 3223 & PLS 3223L: Plant Propagation
Course Syllabus, Fall 2025**

INSTRUCTORS:

Dr. David Clark

Environmental Horticulture Department
Office: Fifield Hall 1533
Email: geranium@ufl.edu

Dr. Conner Austin

Environmental Horticulture Department
Office: Plant Science Facility Bldg 1214
Email: conner.austin@ufl.edu

COURSE MEETING TIMES:

LECTURE Tuesday, Period 5 (11:45AM-12:35PM)
1306 Fifield Hall

LAB Thursday, Period 7-8 (1:55PM-3:50PM)
Plant Science Facility Room 5

Dr. Brooks Parrish

Environmental Horticulture Department
Office: Plant Science Facility Bldg 1205
Email: brooks.parrish@ufl.edu

Office hours: By appointment only. Simply email the instructor you want to meet with – in that message please indicate your schedule of availability. We will look at our availability and get back to you promptly with a time and place to meet. Zoom conferences are available.

Course Summary: This course is designed to teach the basic procedures necessary to understand how to propagate a range of crops that are vital to the horticulture industry. The lecture focuses on foundational information necessary to understand how to reproduce plants. The laboratory focuses on hands-on application of lecture information using a wide range of plant examples.

Grading Scale (points): LECTURE & LAB

450-500	A	350-379	C
430-459	B+	330-349	D+
400-429	B	300-329	D
380-399	C+	<300	E

****PERCENTAGES ARE NOT ROUNDED UP****

LECTURE Grading: 500 TOTAL POINTS

Quizzes: 5 quizzes x 100 points each

LAB Grading: 500 TOTAL POINTS

Lab Reports: 3 reports x 100 points each

Project presentation: 200 points

Makeup Policy: If you miss a quiz, you will need a valid excuse to be able to take a make-up quiz. All make-up quizzes must be taken within 1 week of the original quiz date. If you have no valid excuse, or fail to take the make-up within 1 week, you will receive a "0".

Use of Canvas: Powerpoint slides will be made available on Canvas for all lectures. It will also be used for students to submit extra credit and out of class assignments, and for posting grades and occasional announcements.

Materials & Supplies Fees: There is a \$25 fee for plants and supplies related to this course. Select plants, seeds and supplies will be provided to students throughout the semester.

REQUIRED Textbook (free .pdf):

- Toogood, Alan. 2019. Propagating Plants: How to create new plants for free. DK Publishing, New York, NY

USEFUL References:

- F. Davies, R. Geneve and S.B. Wilson. 2018. Hartmann & Kester's Plant Propagation: Principles and Practices, 9th Edition.
- Beyl, C.A. and R.N. Trigiano. 2015. Plant Propagation Concepts and Laboratory Exercises, 2nd edition. CRC Press, Boca Raton, FL.
- Dirr, M.A. and C.W. Heuser, Jr. 2006. The Reference Manual of Woody Plant Propagation- From Seed to Tissue Culture, 2nd edition. Timber Press, Inc., Portland, OR.

- Kyte, L., J. Kleyn, H. Scoggins and M. Bridgen. 2013. *Plants from Test Tubes: An Introduction to Micropropagation*, 4th edition. Timber Press Inc., Portland, OR.
- Nau, J. (ed.). 2021. *Ball Redbook*. Volume 2, 19th edition. Ball Publishing, West Chicago, IL.
- MacDonald, P.T. 2014. *The Manual of Plant Grafting: Practical Techniques for Ornamentals, Vegetables, and Fruit*. Timber Press, Portland, OR.

Extra Credit: At our discretion, extra credit opportunities may be available over the course of the semester.

Course Decorum: Students are expected to arrive at class on time and behave in a manner that is respectful to the instructor and to fellow students. Please avoid the use of cell phones and restrict eating to outside of the classroom. 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.

Academic Honesty: 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://www.dso.ufl.edu/sccr/process/student-conducthonor-code/>) 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.

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. Such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

Social Media Use:

I encourage students to discuss class material and share notes through Canvas or other social media platforms (eg. GroupMe, Snapchat etc.). HOWEVER – we have had problems with students using these resources to cheat on class projects and extra credit opportunities. This type of behavior will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action.

Campus Helping Resources: Students experiencing crises or personal problems that interfere with their general well-being are encouraged to utilize the university’s counseling resources.

Students Requiring Accommodations: Students with disabilities 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 Evaluation: 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.ua.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.bluer.com/ufl/. Summaries of course evaluation results are available to students at gatorevals.ua.ufl.edu/public-results/.

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](#).

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](#)

WEEK	LECTURE	TOPIC	DUE	INSTRUCTOR	LAB	TOPIC	DUE
1					21-Aug	Safety Training - Facilities Orientation	
2	26-Aug	Intro to Plant Propagation		CLARK	28-Aug	Seed production, harvest and cleaning	
3	2-Sep	The Propagation Environment		CLARK	4-Sep	Planting seeds, rooting cuttings - basics	
4	9-Sep	Genetics & Physiology of Propagation	QUIZ 1	PARRISH	11-Sep	Woody plants - seeds and cuttings	REPORT 1
5	16-Sep	Plant hormones		CLARK	18-Sep	Woody plants - grafting layering	
6	23-Sep	Seed Propagation	QUIZ 2	AUSTIN	25-Sep	Perennials seed to seed/clone	
7	30-Sep	Vegetative Propagation		AUSTIN	2-Oct	Annuals seed to seed/clone	
8	7-Oct	Layering Grafting & Budding		PARRISH	9-Oct	Plant hormones	REPORT 2
9	14-Oct	Commercial Propagation - Scale Up	QUIZ 3	CLARK	16-Oct	Palms and cycads	
10	21-Oct	Supply Chain of Bulbs		PARRISH	23-Oct	Cacti and succulents	
11	28-Oct	Supply Chain of Ball Horticultural Co.		AUSTIN	30-Oct	Bulbs and roots	
12	4-Nov	Micropropagation	QUIZ 4	PARRISH	6-Nov	Micropropagation basics	REPORT 3
13	11-Nov	HOLIDAY			13-Nov	Gather experimental data	
14	18-Nov	Propagation Problems & Solutions		CLARK	20-Nov	Student presentations	
15	25-Nov	HOLIDAY			27-Nov	HOLIDAY	
16	2-Dec	LAST DAY	QUIZ 5	ALL			

TENTATIVE LECTURE & LAB SCHEDULES: FALL 2025