HOS 4932 – Special Topics version –
Principles of Horticultural Crop Production
3 credits
Fall Semester 2025

Stay Safe and Healthy!

Class	Time and location
Lectures	• Monday, Wednesday & Friday, Period 3, 9:35-10:25 AM • Fifield 1304
Hands-on Practicum	• Not a part of this version of course

Instructors:

Dr. Amethyst G. Merchant
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Dr. Jeffrey G. Williamson
2113 Fifield Hall
352-273-4823
Email: jgrw@ufl.edu

Office Hours: We encourage you to call or email us directly if there are any questions or concerns. Please also feel free to email us to request an online appointment via zoom. For class-related communications, please use email messaging within the CANVAS E-learning platform.

Dr. Merchant: Tuesdays 1:00 – 2:00 pm in-person or via Zoom (by appointment) Other times by appointment; Zoom link - https://ufl.zoom.us/j/3712177953

Dr. Williamson: Wednesdays 1:00 – 2:00 pm or by appointment.

Pre-requisites: BOT 2010C or equivalent

Course Description:
This course introduces concepts and practices used to produce fruit and vegetable crops in Florida, the U.S., and globally. Topics covered include production regions, crop biology, crop nutrition, types of fruits and vegetables, disease and pest management, and marketing.

Learning Objectives:
Upon successful completion of this course, you will be able to:
- Discuss growth and development patterns for fruit and vegetable species.
- Explain production conditions and practices for fruit and vegetable crops and compare the various cultural systems.
- Identify and describe proper irrigation, fertilization, pruning, transplanting, and harvesting techniques in fruit and vegetable production.
- Define management plans for soil fertility, irrigation, and pest control in vegetable production.
- Critically analyze data from the fruit and vegetable industries at the regional, national, and global levels.
- Evaluate different marketing strategies for fruit and vegetable crops.

Textbooks:
A textbook is not required for this course. The instructors will provide links to UF/IFAS EDIS documents and other useful information on Canvas. Handouts will also be distributed in class and / or on Canvas.

Class Format:
This is a course consists of in-person lectures. Canvas (https://elearning.ufl.edu/) will be used to post class lecture slides, assignments, quizzes, resources, grades, and other relevant course materials and to facilitate class interactions outside of the scheduled class time.

Course Assessment Components and Grading:

1. **Exams**   **400 points**
   There will be four non-cumulative exams in the semester, two in the vegetable crops section and two in the fruit crops section. Each exam will be graded out of 100 points. Multiple choice, true or false, matching, calculation, short answer, and essay questions may be included in the exams. Exams will be completed in class and are closed-book, no notes.

2. **Quizzes**   **80 points**
   There will be eight quizzes in the semester, four in the vegetable crops section and four in the fruit crops section. Each quiz is worth 10 points. Multiple choice, true or false, matching, short answer, and calculation questions may be included in the quizzes.

3. **Attendance and Participation for Lecture**   **20 points**
   You are required to attend and participate actively in lectures. Please ask when you have questions. Lecture and hands-on practicum attendance and participation will be graded based on the following rubric. In addition to the assessment by instructors, self-evaluation and peer-evaluations for group projects will be used in determining the final class participation grade.

Attendance and Participation frequency	Score
Never	0
Rarely	4 - 8
Sometimes	12
Often	16
Always	20

Grading:

Activity	Points possible	Percentage of final grade
Exam #1	100	20
Exam #2	100	20
Exam #3	100	20
Exam #4	100	20
Quizzes (8 x 10 points)	80	16
Class attendance and participation	20	4
Total points = 500		**100%**

All points earned in the course will be summed to calculate your final grade. Letter grades will be based on the performance of each student relative to the following standard percentages (%):

93 – 100	A	73 – 76.9	C
90 – 92.9	A-	70 – 72.9	C-
87 – 89.9	B+	67 – 69.9	D+
83 – 86.9	B	63 – 66.9	D
80 – 82.9	B-	60 – 62.9	D-
77 – 79.9	C+	< 60	E

Information on current UF grading policies for assigning grade points can be found here:
- *Grading policy*, https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/.

Course Policies and Resources:
Attendance and Make-up Policy
Test makeups will be arranged only in the case of documented illness/emergency. Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:
- *UF Attendance policy*, https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/.

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. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

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.

- *Disability Resource Center*, 0001 Reid Hall, 352-392-8565, https://disability.ufl.edu/get-started/

Online Course Evaluation Process

Student assessment of instruction is an important part of efforts to improve teaching and learning. 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.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 https://ufl.bluera.com/ufl/.

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

Health and Wellness Resources:

Campus Helping Resources Students experiencing crises or personal problems that interfere with their general wellbeing 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.

- *Counseling & Wellness Center*: Visit www.counseling.ufl.edu or call 352-392-1575 for information on crisis services as well as non-crisis services.

- *U Matter, We Care*: If you or someone you know is in distress, please contact umatter@ufl.edu, 352-392-1575, or visit www.umatter.ufl.edu to refer or report a concern and a team member will reach out to the student in distress.

- *Student Success Initiative*, http://studentsuccess.ufl.edu.

- *Student Health Care Center:* Call 352-392-1161 for 24/7 information to help you find the care you need, or visit shcc.ufl.edu/.

- *University Police Department*: 352-392-1111 (or 9-1-1 for emergencies), www.police.ufl.edu.

- *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, https://ufhealth.org/emergency-room-trauma-center.

- *GatorWell Health Promotion Services:* For prevention services focused on optimal wellbeing, including Wellness Coaching for Academic Success, https://gatorwell.ufsa.ufl.edu/.

Academic Resources
- *E-learning Technical Support:* Contact the UF Computing Help Desk (https://helpdesk.ufl.edu/) at 352-392-4357 or via e-mail at helpdesk@ufl.edu.

- *Career Connections Center*: Career assistance and counseling services. Reitz Union Suite 1300, 352-392-1601, www.career.ufl.edu.

- *Library Support:* Various ways to receive assistance with respect to using the libraries or finding resources. https://uflib.ufl.edu/find/ask/.

- *Teaching Center:* Broward Hall, 352-392-2010 or to make an appointment 352- 392-6420. General study skills and tutoring. https://teachingcenter.ufl.edu/.

- *Writing Studio:* 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers. https://writing.ufl.edu/writing-studio/.

- *Student Complaints On-Campus:* Visit the Student Honor Code and Student Conduct Code webpage for more information. https://sccr.dso.ufl.edu/policies/student-honor-%20code-student-conduct-code/.

- *On-Line Students Complaints:* View the Distance Learning Student Complaint Process at https://distance.ufl.edu/getting-help/student-complaint-process/.

Tentative Lecture Schedule
HOS 3020C – Principles of Horticultural Crop Production
Fall 2025

Week	Date	Day	Topics
1	Aug 22	F	Introduction and course requirements
2	Aug 25	M	Classifying vegetables
	Aug 27	W	Vegetables and the vegetable industry

	Aug 29	F	Vegetables and the vegetable industry; Abiotic factors influencing vegetable growth and development – Vegetable growing conditions
3	Sept 1	M	*Labor Day (No Class)*
	Sept 3	W	Abiotic factors influencing vegetable growth and development – Vegetable growing conditions
	Sept 5	F	Abiotic factors influencing vegetable growth and development – Vegetable growing conditions
4	Sept 8	M	Abiotic factors influencing vegetable growth and development – Vegetable growing conditions
	Sept 10	W	Cultural practices, cropping, and management systems
	Sept 12	F	Cultural practices, cropping, and management systems; Vegetable seeds and crop establishment **Submit Blog Setup information DUE DATE**
5	Sept 15	M	Direct seeding, transplants, and cuttings
	Sept 17	W	**Review** Soils, nutrients, and nutrient management
	Sept 19	F	**Exam 1**
6	Sept 22	M	Soils, nutrients, and nutrient management; Fertilizer calculations
	Sept 24	W	Soils, nutrients, and nutrient management; Fertilizer calculations
	Sept 26	F	Irrigation management
7	Sept 29	M	Irrigation management
	Oct 1	W	Vegetable safety
	Oct 3	F	Integrated pest management (Biotic factors)
8	Oct 6	M	Integrated pest management (Biotic factors)
	Oct 8	W	Integrated pest management (Biotic factors) **Review**

	Oct 10	F	**Exam 2**
9	Oct 13	M	Origin, distribution, and climatic requirements of fruit crops
	Oct 15	W	Pruning and training fruit crops
	Oct 17	F	**Holiday - Homecoming**
10	Oct 20	M	Pruning and training fruit crops continued
	Oct 22	W	Orchard site selection and preparation
	Oct 24	F	Cold acclimation, dormancy and freezes
11	Oct 27	M	Freeze protection- principles and practices
	Oct 29	W	Dormancy and plant propagation, (cuttings, grafting, and budding)
	Oct 31	F	**Review for exam** Importance and use of rootstocks in fruit production
12	Nov 3	M	**Exam 3**
	Nov 5	W	Rootstock use continued; flowering, fruit set, and fruit thinning
	Nov 7	F	Classification and growth responses of plant hormones and plant growth regulators
13	Nov 10	M	Use of plant growth regulators in fruit production
	Nov 12	W	Nutrition and fertilization
	Nov 14	F	Nutrition and fertilization continued
14	Nov 17	M	Fruit crop irrigation management
	Nov 19	W	Fruit crop irrigation management continued; Harvesting fruit crops
	Nov 21	F	Survey of important fruit crops in Florida, where and why fruits succeed or fail
15	Nov 24	M	*Thanksgiving (No Class)*
	Nov 26	W	*Thanksgiving (No Class)*
	Nov 28	F	*Thanksgiving (No Class)*

16	Dec 1	M	**Review for exam** Current topics in fruit production
	Dec 3	W	**Exam 4**
			No exam during Finals Week