

July 18, 2023

Introductory Nursery Management ORH3253C

Instructor Contact Info

Dr. Kimberly Moore
3205 College Ave. Davie FL 33314
954-577-6328
954-475-4125 (fax)
Email: klock@ufl.edu;

Office hours:

[Book time to meet with me](#)

Join Zoom Meeting

<https://ufl.zoom.us/j/4945104654>

Email/phone messages: students can expect a response within 24 hrs. M-F and within 72 hrs. on weekends. **My preferred way of communicating with students is using email.** I check my UF email frequently every day and on the weekends. If I plan to be out of the office or out of email communication, I will email the class and post an announcement on the class website.

[\[Top\]](#)

Course Overview

This course presents an overview of planning, organizing, and managing protected horticulture production systems (greenhouses and nurseries) for ornamental and vegetable production. Topics to be covered include layout, growing structures (greenhouse structures), growing systems to manage light and temperature, irrigation and fertilization using soilless substrates, chemical and cultural growth regulators, and insect and disease management.

Text (optional)

Nelson, P.V. *Greenhouse Operations and Management, 6th edition*. Prentice Hall Inc. Upper Saddle River, NJ ISBN 0-13-010577-5

[\[Top\]](#)

Additional Reading

Agnew, M.L., N.H. Agnew, N.E. Christians, and A. M. VanDerZanden. 2008. *Mathematics for the Green Industry*. John Wiley & Sons Inc. Hoboken, NJ.

Anonymous. 1998. *Grades and Standards for Nursery Plants*. Florida Department of Agriculture and Consumer Services, Tallahassee, FL.

Ball, V. 1998. *Ball RedBook 16th edition*. Ball Publishing, Batavia, IL.

July 18, 2023

Davidson, H., R. Meckenburg, and C. Peterson. 2000. Nursery Management: Administration and Culture. Prentice Hall, Upper Saddle River, NJ.

Larson, R. 1992. Introduction to Floriculture. Academic Press Inc. San Diego, CA.

Reed, D.W. 1996. A Grower's Guide to Water, Media, and Nutrition for Greenhouse Crops. Ball Publishing, Batavia, IL.

Styer, R.C. and D. S. Koranski. 1997. Plug and Transplant Production, A Growers Guide. Ball Publishing, Batavia IL.

Whitcomb, C. E. 1984. Plant Production in Containers. Lacebark Publishing Inc. Stillwater, OK
[\[Top\]](#)

Course Prerequisites

Junior standing or permission from the instructor.

[\[Top\]](#)

Acceptable Course Participation

This is an online course with weekly lectures and assignments. The week begins on Monday and ends on Sunday. Students are expected to login to the course website at least once a week (see [schedule](#)) to watch the narrated lectures and complete the assignments (see [course goals and assignments](#) & [assessment](#)).

Each week also offers OPTIONAL MATERIALS – reading assignments, instructor created videos, and YouTube videos to help understand the topic of the week.

All course materials will be available via the Canvas course website.

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies.

<https://catalog.ufl.edu/UGRD/previous-catalogs/2021-2022/UGRD/academic-regulations/attendance-policies/#:~:text=The%20university%20recognizes%20the%20right%20of%20the%20instructor,subsequently%20assign%20a%20failing%20grade%20for%20excessive%20absences.>

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.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

July 18, 2023

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/>.

[\[Top\]](#)

Course Goals and Assignments

The objective of this course is to introduce students to the use of protected agriculture (greenhouse and nursery operations) to grow profitable ornamentals and vegetable crops.

Upon successful completion of this course, students will be able to:

Compare and contrast protected agriculture structures and business models used to produce high value crops
Analyze the effects of improper temperature and light control in protected agriculture structures on plant growth
Compare and contrast different substrate, fertilization, and irrigation systems used to produce crops
Compare and contrast methods for controlling plant growth
Compare and contrast integrated pest management systems for controlling weeds, insects, and disease

Each week, students will be responsible for watching the narrated presentation, completing a discussion post, and an assignment.

LIFE HAPPENS - There is a 4-day grace period for all discussion posts and assignments. The discussion and assignment will be locked 4 days after the due date. **HOWEVER**, I will accept discussions and assignments the last week of class for **HALF** the points.

Discussion posts: Discussion posts must be completed by **Wednesday** at 5 pm ET. Discussion posts should be well written and address the issue or question being discussed. All posts should be made within the week assigned. Discussions will be graded on the quality and timeliness of the response (see discussion grading rubric below). Each student is expected to comment on **three classmates' posts**. Discussion posts will be accepted up to four days after the due date but will be marked down 2 points. They are worth 10 points.

Points	
10	Addressed and responded to the original question and increased understanding of the topic; responding to 3 posts; advanced the conversation

July 18, 2023

9	Addressed and responded to the original question and increased understanding but only commented on 2 additional posts
8	Addressed and responded to the original question and increased understanding but only responded to 1 post
7	Addressed question BUT DID NOT respond to any additional posts

Assignments: Each assignment has clear instructions on how to complete the assignment as well as the rubric on how it will be graded. Assignments will be accepted up to four days after the due date on the [schedule](#) but will be marked down 5 points. All assignments are available under the assignment tab on the class website. Each assignment is worth 25 points.

Challenge question: Each module has a challenge assignment at the end of the module. The challenge question is related to the topics covered in that module. Students may work with their classmates to come up with an answer, BUT each student must submit a report. Reports should be written following the guidelines in the rubric attached to the challenge question. Each challenge is worth 25 points.

Criteria	Criteria
Quality of presentation (5 pts)	Student took time to correct for spelling, punctuation, and proper citation of sources
Answer the question (10 pts)	Student answered the question(s) and used multiple sources to support their answer
Connection to the module (10 pts)	Student connected the question(s) and answer to the topics covered in the module

Crop Production Protocol: Select a crop (ornamental, bedding plant, woody nursery, vegetable etc.). Develop a crop protocol. Your assignment may be turned in as a word document, Power Point presentation, video, or other format. This is worth 100 points.

Each protocol should have the following information:

- Common name and scientific name
- Scientific family name
- Use and general information about this crop (related species)
- Production Specifics
- Propagation
- Production

July 18, 2023

- Media
 - Irrigation
 - Nutrition
 - Spacing
 - Planting/timing/scheduling
 - Height control
 - Temperature/humidity/light
 - Insects and disease
- Other comments
- Market (local/global)
 - Personal experience with this crop or why should someone grow this crop.
 - Other

Grades for all assignments will be posted seven days after the student turns them in. If the instructor cannot return the assignment within this time frame, the instructor will notify the student as to when the assignment will be graded. [\[Top\]](#)

Assessment

See [schedule](#) for dates. The week begins on Monday and ends on Sunday. All discussions (due Wednesday), quizzes, or assignments (due Sunday) need to be completed by the end of each week.

The accepted format for all assignments is MS Word files. If there is a malfunction with the class site or computer malfunctions occur, assignments may be emailed or sent via fax. It is the obligation of the student to inform me of such malfunctions immediately. For resolving technical issues, please visit the helpdesk website (<https://helpdesk.ufl.edu/>) or call 352-392-4357.

All grades are based on the number of points earned out of total number of point* 100 to calculate a percentage.

TOTAL POSSIBLE POINTS & GRADES = 530 points

Points earned/530 pts*100 to calculate a percent

Information on current UF grading policies for assigning grade points. This may be achieved by including a [link to the university grades and grading policies](#).

A	(95-100%)	504-530 pts
A-	(90-94%)	477-503 pts
B+	(88-89%)	467-476 pts
B	(85-87%)	451-466 pts
B-	(80-84%)	424-450 pts
C+	(78-79%)	414-423 pts

July 18, 2023

C	(75-77%)	398-413 pts
C-	(70-74%)	371-397 pts
D+	(68-69%)	361-370 pts
D	(65-67%)	345-360 pts
D-	(60-64%)	318-344 pts
E	(0-59%)	0-317 pts

Assignment	Points	Number	Total points	Percentage of grade
Discussion posts	10	13	130	24
Assignments	25	9	225	42
Challenge	25	3	75	14
Production protocol	100	1	100	20
TOTAL			530	

[\[Top\]](#)

Absences and Make-Up Work

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies.

<https://catalog.ufl.edu/UGRD/previous-catalogs/2021-2022/UGRD/academic-regulations/attendance-policies/#:~:text=The%20university%20recognizes%20the%20right%20of%20the%20instructor,subsequently%20assign%20a%20failing%20grade%20for%20excessive%20absences.>

[\[Top\]](#)

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 Conduct Code specifies several behaviors that are in violation of this code and the possible sanctions. If you have any questions or concerns, please consult with the instructor in this class.

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

July 18, 2023

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://sccr.dso.ufl.edu/process/studnet-conduct-code/>.

In-Class Recording (This is an online course with pre-recorded lectures. However, here is the UF policy on recording class lectures)

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 the 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

Software Use

All faculty, staff and students at 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.

Campus Resources

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. <https://umatter.ufl.edu/>
- *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. <https://counseling.ufl.edu/>
- *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](#). <https://shcc.ufl.edu/>
- *University Police Department*: Visit [UF Police Department website](#) or call 352-392-1111 (or 9-1-1 for emergencies). <https://police.ufl.edu/contact/>
- *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](#). <https://ufhealth.org/uf-health-shands-emergency-room-trauma-center>

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*: <https://sccr.dso.ufl.edu/process/student-conduct-code/>
- *On-Line Students Complaints*: <https://distance.ufl.edu/state-authorization-status/>

Services for Students with Disabilities

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center (<https://disability.ufl.edu/>) 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 [\[Top\]](#)

July 18, 2023

Schedule

[\[Top\]](#)

Week of	Topic and Assignments	Due Date – 5 pm Eastern Time
Aug 23	Introduction	
	Self-Introduction (10 pts)	Aug 27
Aug 28	Greenhouse/Nursery Business	
	Discussion - Horticulture Markets (10 pts)	Aug 30
	Assignment – Cost Analysis (25 pts)	Sep 3
Sep 4	Greenhouse Construction/Design	
	Discussion- Site Selection (10 pts)	Sep 6
	Assignment – Nursery Layout (25 pts)	Sep 10
Sep 11	Cooling and Heating	
	Discussion – Best way to cool a greenhouse (10 pts)	Sep 13
	Assignment – Cooling and heating calculations (25 pts)	Sep 17
Sep 18	Light and Temperature	
	Discussion – Why does light impact temperature? (10 pts)	Sep 20
	Challenge Assignment (25 pts)	Sep 24
	End module 1	
Sep 25	Substrates	
	Discussion on sphagnum peat (10 pts)	Sep 27

July 18, 2023

Week of	Topic and Assignments	Due Date – 5 pm Eastern Time
	Assignment – Media comparison (25 pts)	Oct 1
Oct 2	<i>Water and Irrigation</i>	
	Discussion on water quality (10 pts)	Oct 4
	Assignment – Irrigation uniformity (25 pts)	Oct 8
Oct 9	<i>Fertilization/Nutrition</i>	
	Discussion on fertilizer choice (10 pts)	Oct 11
	Challenge 2 (25 pts)	Oct 15
Oct 16	<i>Growth Regulators</i>	
	Discussion on the value of DIF (10 pts)	Oct 18
	Assignment – Compare Growth Regulators (25 pts)	Oct 22
	End module 2	
Oct 23	<i>Weeds</i>	
	Discussion – weed control (10 pts)	Oct 25
	Weed and Insect ID (50 pts)	Nov 5
Oct 30	<i>Insects</i>	
	Discussion – insect families (10 pts)	Nov 1
	Weed and Insect ID (50 pts)	Nov 5
Nov 6	<i>Disease</i>	
	Discussion – Prevention or Cure (10 pts)	Nov 8
	Challenge 3 (25 pts)	Nov 12
Nov 13	<i>Crop Production Protocol</i>	

July 18, 2023

Week of	Topic and Assignments	Due Date – 5 pm Eastern Time
	Crop Production Protocol (100 pts)	Nov 19
<i>Nov 20</i>	<i>Thanksgiving – No Class</i>	
<i>Nov 27</i>	<i>Reflection – 10 pts</i>	Nov 29
<i>Dec 4</i>	<i>Catch up</i>	
	Turn in any missing assignment via email	Dec 6