Postharvest Technologies for Horticultural Crops  
HOS 5330, Section 0101

Thursdays, Periods 9, 10 (4:05 – 6:00 PM)  
2318 Fifield Hall

Spring 2015 Syllabus

Instructors  
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Sargent Office Hours  
Thursdays 3:00-3:45 PM on class days, or by appointment.

Catalog Description

Prerequisite:  
HOS 5085 suggested. Open to graduate students, and to upper-division undergraduate students with instructor consent.

Description:  
Intensive study of current technologies and procedures for harvesting and handling fresh fruit, vegetable, and ornamental crops grown in Florida. Requires field trip during spring break. Offered in spring.

Course Goals

1) To familiarize students with the current commercial methods used to harvest, pack, transport and market fresh horticultural crops grown in Florida, with emphasis on maintaining product quality and safety.
2) To prepare students to systematically evaluate and critically analyze these operations based on field trip experiences and course assignments.

Course Format, Evaluation and Expectations

The class will meet weekly prior to a field trip to South Florida during Spring Break. Students will self-divide into teams and will work on assignments designed to develop greater familiarity with principles of postharvest physiology and the technologies used to maintain quality and food safety from harvest through packing, handling and transportation.

Course grading consists of four areas:

- In-class participation in group assignments and discussions is critical to successful completion of this course.
During the field trip all students will maintain a written log of observations for each visit. Observations should include pertinent information including a description of the operation visited, crops, handling methods, and their impacts on quality. Afterwards the team will prepare a written journal (MS Word format) that collates team members’ observations in a neatly organized and illustrated manner. (30% of grade)

Each team will develop and write a technical report on a predetermined technology using examples and details observed during the field trip and pertinent literature. The goal of the technical report is to describe how fresh produce quality is maintained (or lost) by the appropriate use (or misuse) of the technology selected by the team. The report should follow this outline: 1) Brief introduction to the report, 2) Description of the technology and inclusion of examples observed during the field trip, 3) Discussion and analysis of the description, 4) Summary, and 5) Literature Cited. (40% of grade)

Each team will present their technical report to the class via a 15-minute PowerPoint presentation. (30% of grade)

All assignments will be submitted in pdf format for grading and will be returned at the end of the semester.

Lecture/Discussion Topics
1. Postharvest Losses and Systems Analysis; Produce Quality
2. Postharvest Physiology for Horticultural Crops
3. Harvest and Handling Operations; Temperature Management
4. Storage and Shipping Operations; Postharvest Treatments
5. Sanitation and Food Safety
6. Visit to local supermarket prior to Spring Break field trip
7. Follow-up discussion after trip

Required Reference Text

Additional materials will be provided by the instructors as necessary.
Academic Honesty, Software Use, UF Counseling Services
and Services for Students with Disabilities

Grades and Grade Points
For information on current UF policies for assigning grade points, see
https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

Absences and Make-Up Work
Requirements for class attendance and make-up exams, assignments and other work are consistent with university policies that can be found at:

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:

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.

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. 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/cwc/
  Counseling Services
  Groups and Workshops
  Outreach and Consultation
  Self-Help Library
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/