

HOS 5555 TROPICAL FRUIT PRODUCTION AND RESEARCH 2016 CLASS SYLLABUS

Instructor: Dr. Jonathan H. Crane, Tropical Fruit Crop Specialist

Dates: Monday, June 27th, 2016 to Friday, August 5, 2016 (class is Mon. through Fri.)

Location: Tropical Research and Education Center
18905 S.W. 280 St.
Homestead, FL 33031-3314
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Target audience: This course offers graduate students, scientists, extension faculty, and other professionals (including experienced producers) an opportunity to increase their knowledge of tropical fruit crop horticulture and plant physiology.

Class: Class begins at 8:30 AM each day. Lecture is usually until 12:00 PM (noon) and then we break for lunch from 12:00 PM (noon) to 1:00 PM or 1:30 PM. In the afternoons after lunch we are generally in the field up to 4:00 PM to 7:00 PM depending upon what is happening and the distance traveled.

The class will take two trips to other production areas, one with an overnight stay and one slightly long day. Students will be more comfortable in the field if they wear comfortable shoes or sneakers and a hat. You may want to bring water too. Sunscreen is always a good idea as is bug spray on some occasions.

Objectives of the class:

1. To emphasize horticultural practices of commercial tropical fruit crop management in Florida, the applied aspects of research, and explore the physiological basis for horticultural practices used in crop production of: avocado, mango, carambola, banana, papaya, pitaya, lychee, longan, mamey sapote, passion fruit, atemoya, sugar apple, guava and others.
2. To expose students to various aspects of fruit production from other tropical areas of the world through presentations.
3. To expose students to production practices through field visits to working orchards, nurseries, packinghouses, botanical gardens, and research/education institutions. Guest lectures will be offered in tissue culture, biotechnology, insect and disease management, genetics and plant breeding, hydrology, agricultural economics, and postharvest handling.
3. To have students understand and be able to apply the principles, concepts, and information from the class to their own situations in production, research, and teaching.

Methods for teaching:

- Formal lecture, as well as, informal open discussion and questioning.
- Reading of books and papers, slides, videos.
- Field visits to interact with production managers, orchardists, researchers, and extension faculty.

- One or two assignments may be used to demonstrate useful production and research concepts.

Required course texts:

Paull, R.E. and O. Duarte. 2011. Tropical Fruits, 2nd Edition, Volume 1. CABI International, Cambridge, MA. (estimated cost \$85.00)

Paull, R.E. and O. Duarte. 2012. Tropical Fruits, 2nd Edition, Volume 2. CABI International, Cambridge, MA. (estimated cost \$85.00)

* I will have these at the class. These may be purchased the first several days of class by money order or check. (Option – buy via the Internet ahead of time).

Optional texts: These texts are not required; may be of interest and students are responsible for ordering them. They may be available locally at several bookshops or through the Internet.

Verheij, E.W.M. and R.E. Coronel (eds.). 1992. Plant Resources of South-East Asia 2: Edible Fruits and Nuts. Backhuys Publishers B.V., Leiden, The Netherlands. (Estimated soft-cover \$85.00/ CD estimated \$110.00)*

Nakasone, H.Y. and R.E. Paull. 1998. Tropical Fruits. CAB International, Wallingford, UK. (Estimated cost \$70.00)*

Schaffer, B., B.N. Wolstenholme, and A.W. Whiley. 2013. The avocado: botany, production and uses. Second edition. CABI International, Boston, MA. (Estimated cost \$200.00)

Campbell, R.J. 1992. Mangos: A guide to mangos in Florida. Fairchild Tropical Garden, Miami, Florida. (Estimated cost \$140.00)

Janick, J. and R.E. Paull. 2008. The Encyclopedia of Fruits and Nuts. CABI, Cambridge, MA. (Estimated cost \$300.00).

Litz, R.E. (editor). 2009. The Mango: Botany, Production and Uses. CAB International, NY, NY. (Estimated cost \$230.00)

Menzel, C. et al. 2005. Litchi and longan: botany, cultivation and uses. CABI International, NY, NY. (Estimated cost \$50.00).

Morton, J.F. 1987. Fruits of warm climates. Creative Resource Systems, Inc., Winterville, NC. (Estimated cost \$65.00)

Peña, J.E., J.L. Sharp, and M. Wysoki. 2002. Tropical Fruit Pests and Pollinators. CABI Publishing, NY, NY. (Estimated cost \$80.00)

Ploetz, R.C. 2003. Diseases of Tropical Fruit Crops. CAB International, NY, NY. (Estimated cost \$220.00)

Sisir, M. and B.C.K.V. Alaya, K. 1997. Postharvest Physiology and Storage of Tropical and Subtropical Fruits. CAB International, NY, NY. (Estimated cost \$270.00)

Whiley, A.W., B. Schaffer, and B.N. Wolstenholme. 2002. The Avocado: Botany, Production and Uses. CABI Publishing, NY, NY. (Estimated cost \$270.00)

Numerous handouts will also be provided. Daily reading is expected from texts and handouts on pertinent class subjects.

Course attendance:

Students are expected to attend every day of class. Special arrangements may be made ahead of time for specific problems and reasons.

Exams: There are three to four exams. Exams are not cumulative with respect to the crop species but is expected that concepts and strategies that are applied throughout the course are fair game for exams. Exams usually last 1-2 hours. The final grade is an average of all exams and student presentations. Test questions on exams consist of primarily short answer and essay.

Grading scale -

A	91-100
B	81-90
C	71-80
D	61-70
F	≤ 60

Academic honesty statement: I (the student) understand that the University of Florida expects its students to be honest in all their academic work. I agree to adhere to this commitment to academic honesty and understand that my failure to comply with this commitment may result in disciplinary action up to and including expulsion from the University.

UF counseling services: Resources are available on the main campus in Gainesville for students with physical and mental medical issues. These resources include -

1) Univ. Counseling & Wellness Center, (352) 392-1575 (<http://www.counseling.ufl.edu/cwc>), personal and career counseling; 2) GatorWell, (352) 273-4450 (<http://gatorwell.ufsa.ufl.edu/>); 3) Sexual Assault Recovery Services, (352) 392-1161 (<http://www.shcc.ufl.edu/>); 4) Univ. of Fla. Office of Victim Services (352) 392-5648/352-392-1111 (<http://www.police.ufl.edu/victim-services/>) and 5) Career

Resource Center, (352) 392-1601 (<http://www.crc.ufl.edu/>), career counseling. They can all be reached by Internet at <http://www.counseling.ufl.edu/cwc/>

Instructors office hours: At my office (Bldg. 8223, Rm. 2; phone, 786-217-9271), Monday through Friday before class (7:30 AM to 8:15 AM) and after class (usually after 4:00 PM). Saturdays and Sundays please call my cellphone at 786-255-5878.

Health care: Students are advised that no University health-care services are available in Homestead. Students needing medical care must obtain it from private sources and pay for it themselves or by private insurance.

Accommodations and Transportation

Students must arrange their own transportation to and from Homestead, Florida at the beginning and end of the course. If there is space, registered, degree-seeking UF students may stay on the TREC campus in student housing. Unfortunately, no rooms will be available for non-UF students.

There are many motels in the Homestead area, with a wide range in prices. To view, web-search 'hotels homestead florida' or 'hotels florida city florida'. You may wish to share a room with another student - those arrangements can be made during the first day of class. An arrangement has been made for a reduced accommodations rate with the Everglades International Hostel (<http://www.evergladeshostel.com/>) in Florida City - not too far from TREC. The proprietor will offer rooms at a discount rate with every 5th night free to students taking the course. In order to get this rate, you must contact the hostel directly the course. The email address is info@evergladeshostel.com and the phone number is 1-800-372-3874 or 305-248-1122 and fax.305-245-7622.

Transport to and from your local hotel or the hostel will be provided. Please contact me if you will be staying at the hostel or a local hotel.

TREC ADMINISTRATION OFFICE POLICIES

ALL STUDENTS - FRONT OFFICE POLICY

The Administration Building is generally off limits to the students. This is because the office staff is very busy serving the needs of the faculty at TREC. If you need to make a phone call and/or send/receive a fax please speak with Dr. Crane. You must pay for long distance phone calls by calling card. The photocopying machine is not for student use.

MAIL

Students may receive mail at TREC. However, Dr. Crane will pick up the mail from the front office for distribution. Dr. Crane will also be glad to have mail forwarded (you pay postage) from the front office.

The schedule of lectures and field visits is being finalized.

(c://teaching/HOS5555/syllabus 2016.doc)