

## **Citrus Culture and Production**

FRC 3212 (3 credits)

Fall Semester 2013

Fifield 2316

Mon, Wed, Friday, Period 2

### **Course Description and Requirements**

**Instructor:** Dr. J. X. Chaparro  
Fifield Hall  
562-3076  
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**Prerequisites:** This introductory course is intended for students who have no prior coursework in citrus, although participation by those with citrus backgrounds is encouraged. It is highly desirable for students to have some background in botany (BOT 2011) and/or horticulture (HOS 3020). Students in FRE or business have performed well in this course in the past.

**Text and Lecture Notes:** "Citrus Growing in Florida", 2009 by F. S. Davies and L.K. Jackson. This book is on reserve in the Marston Science Library. PowerPoint lecture notes will be distributed via an email Listserv at the end of each week.

### **Course Content and Objectives**

The objective of this course is to provide the student with a basic understanding of the world citrus industry. Emphasis will be placed on world, U.S., and Florida production regions, citrus botany, terminology, site selection, fruit quality factors, scion and rootstock characteristics, grove design, and production practices.

### **Grading and Attendance Policies**

I strongly urge students to attend class on a regular basis. Attendance will be considered at the end of the semester and may affect the final grade. Final grades will be based on the performance of each student relative to the following standard percentages:

<b>100-93</b>	<b>A</b>
<b>92-90</b>	<b>A-</b>
<b>89-87</b>	<b>B+</b>
<b>86-83</b>	<b>B</b>
<b>82-80</b>	<b>B-</b>
<b>79-77</b>	<b>C+</b>
<b>76-73</b>	<b>C</b>
<b>72-70</b>	<b>C-</b>
<b>69-67</b>	<b>D+</b>
<b>66-63</b>	<b>D</b>
<b>62-60</b>	<b>D-</b>
<b>59-00</b>	<b>E</b>

There will be 3 in-class exams (300 points) and a problem set during the semester which counts 150 points. There will also be 3 unannounced quizzes which will not be calculated in the final grade but will be used as extra credit and can only improve the final grade. There is no final exam.

The final grades will be determined as in the following example:

	Possible	Actual
Exams (3)	300	260
Problem Set	150	140
	450	400/450 = 89 AVG = B+

Please feel free to discuss your grades at any time during the semester.

### **Exam Policy**

You must attend on days of the exams. Students who miss exams will receive a zero for those exams.

I encourage all of you to participate in the class whether you come from a citrus background or not. Please feel free to ask questions at any time and to discuss any aspect of the course with me. I am available during office hours or by appointment by calling 273-4788 or via email.

### **Academic Honesty, Software Use, Services for Students with Disabilities, UF Counseling Services:**

The University of Florida requires all members of its community to be honest in all endeavors. Cheating, plagiarism, and other acts diminish the process of learning. When students enroll at UF they commit themselves to honesty and integrity. Your instructor fully expects you to adhere to the academic honesty guidelines you signed when you were admitted to UF. As a result of completing the registration form at the University of Florida, every student has signed the following statement:

*"I understand 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."* Furthermore, on work submitted for credit by UF students, 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 to be assumed all work will be completed independently unless the assignment is defined as group project, in writing by the professor.

This policy will be vigorously upheld at all times in this course.

### **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 crisis or personal problems that interfere with their general wellbeing are encouraged to utilize the university's counseling resources. Both the Counseling Center and Student Mental Health provide confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal or lacking clear career and academic goals, which interfere with their academic performance. The Counseling & Wellness Center is located at 3190 Radio Road. The Student Mental Health and the Counseling Centers have consolidated into a single comprehensive center to better serve the needs of the University of Florida students and campus community.

1      1      University Counseling & Wellness Center, 3190 Radio Road, 392-1575; student mental health, personal and career counseling: <https://www.counseling.ufl.edu/cwc/>

2      2      Student Health Care Center, 392-1161, personal counseling: <http://www.shcc.ufl.edu/>

3      Sexual Assault Recovery Services (SARS), Student Health Care Center, 392-1161, sexual assault counseling; and

4 Career Resource Center, Reitz Union, 392-1601, career development Assistance and counseling.

### **Students with Disabilities Act:**

The Dean of Students Office coordinates the needed accommodations of students with disabilities. This includes the registration of disabilities, academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services, and mediating faculty-student disability related issues. *Dean of Students Office*, 202 Peabody Hall, 392-7066 [www.dso.ufl.edu](http://www.dso.ufl.edu).

**Tentative Lecture Schedule  
Citrus Culture & Production  
FRC 3212, Fall 2013**

<b>Week No.</b>	<b>Date</b>	<b>Topic</b>	<b>Required Reading</b>
1	Aug 21	Introduction	Syllabus
	Aug 23	History and World Production	Chap. 1, p. 1-6
2	Aug 26	World Production	Chap. 2, p. 21-23
	Aug 28	Field Visit	Meet across the road
	Aug 30	Climate, Growth and Fruit Quality	Chap. 2, 21-33
3	Sept 2	Class suspended-labor Day	
	Sept 4	Climate, Growth and Fruit Quality	Chap. 11, 244-258
	Sept 6	United States Production	Chap. 1, p. 7-10
4	Sept 9	Florida Production	Chap. 1, p. 10-20
	Sept 11	Florida Climate and Soils	Chap. 2, p. 23-33; Chap. 2, p. 33-41
	Sept 13	Systematics- Genera Characteristics	Chap. 3, p. 42-45
5	Sept 16	Systematics- Citrus Group	Chap. 3, p. 45-52
	Sept 18	Vegetative Growth and Development	Chap. 3, p. 53-56
	Sept 20	Reproductive Growth and Development	Chap. 3, p. 56-62
6	Sept 23	Exam 1	
	Sept 25	Oranges	Chap. 4, p. 67-74
	Sept 27	Oranges	
7	Sept 30	Grapefruit	Chap. 4, p. 74-83

<b>Week No.</b>	<b>Date</b>	<b>Topic</b>	<b>Required Reading</b>
	Oct 2	Grapefruit	
	Oct 4	Mandarins	Chap. 4, p. 83-88
8	Oct 7	Mandarin-Hybrids	Chap. 4, p. 88-96
	Oct 9	Lemons, Limes- Cultivar Improvement	Chap. 4, p.96-105
	Oct 11	Field ID- Cultivars and rootstocks	Meet in the field
9	Oct 21	General Rootstock Characteristics	Chap. 5, p. 106-108
	Oct 23	Rootstock Descriptions	Chap. 5, p. 107-119
	Oct 25	Viruses, Viroids and Blight	Chap. 10, p. 227-230
10	Oct 28	Breeding and Biotechnology	
	Oct 30	Nursery & Propagation	Chap. 6, p. 120-137
	Nov 1	Site Selection, Grove Design and Planting	Chap. 7, p. 138-153
11	Nov 4	Rootstock- Scion Selection	
	Nov 6	Rootstock – Scion Selection	
	Nov 8	No Class-Homecoming	
12	Nov 11	No Class-Veterans Day	
	Nov 13	Exam 2	
	Nov 15	Nutrition-General	Chap. 9, p. 165-177
13	Nov 18	Fertilization Programs	Chap. 8, p. 157-160; Chap. 9, p. 177-185
	Nov 20	Irrigation and Water Relations	Chap. 8, p. 155-157; Chap. 9, p. 188-193
	Nov 22	Growth Regulators, Pruning and Training	Chap. 9, p. 185-188; Chap. 9, p. 193-197

<b>Week No.</b>	<b>Date</b>	<b>Topic</b>	<b>Required Reading</b>
14	Nov 25-29	No Class –Thanksgiving holiday	
15	Dec 2	Pest & Diseases	Chap. 10, p. 204-239
	Dec 4	Harvesting, Post-harvest Handling and Processing	Chap. 11, 240-256; Chap. 11, 256-264
16	Dec 12	Exam 3	