

COURSE OUTLINE

I. CATALOG STATEMENT

A. Plant Science 4 - Orchard Management

B. An overview of orchard crop management in California with an emphasis on those grown in the Central Valley. Subjects covered include: orchard site development, variety characteristics and selection, orchard physiology, pest management, pruning, fertility management, irrigation management, harvest, and marketing.

C. Time: 2 lecture and 3 laboratory hours per week.

D. Units: 3

II. TEXTBOOKS

A. Peaches, Plums, and Nectarines : Growing and Handling for Fresh Market.
University of California. Publication 3331.

III. DESCRIPTION OF EVALUATION PROCEDURES

A. The final grade for the course will be determined by the following:

1. Assignments/Quizzes	200
2. Laboratory Assignments & Participation	200
3. Examinations	<u>600</u>
	Total 1000

B. The final grading scale for the course will be as follows:

1. >90% of the possible points = A
2. 80-89% of the possible points = B
3. 70-79% of the possible points = C
4. 60-69% of the possible points = D
5. <60% of the possible points = F

C. Attendance: Regular attendance is required for class credit. Excessive absences may affect final grades. Examinations must be reconciled within 1 week and arranged by the student. Missed quizzes will not be taken later. Late assignments will be accepted up to 1 week late for a 10% penalty.

D. Last Day To:

Drop Class with Refund:	January 21, 2000
Drop w/o Transcript Record:	January 28, 2000
Change CR/NR:	February 11, 2000
Drop w/o a Letter Grade Assigned	March 10, 2000

E. Office Hours:

Monday: 11:00 Wednesday 11:00 Thursday 1:00

Final exam date

Tentative Lecture Topic Schedule

<u>Date</u>	<u>Topics</u>
1/10	Introduction/Administration
1/12	Introduction/Varieties/Rootstocks
1/17	Holiday - No Class
1/19	Propagation
1/24	Orchard Design
1/26	Training & Pruning
1/31	Growth & Development
2/2	Growth & Development
2/7	Photosynthesis & Respiration
2/9	Photosynthesis & Respiration
2/14	Review
2/16	Examination I
2/21	Holiday - No Class
2/23	Dormancy & Plant Hardiness
2/28	Pollination/Flowering
3/1	Fruit Thinning/Tree Girdling
3/6	Soil & Water Analysis
3/8	Soil & Water Analysis
3/13	Mineral Nutrition
3/15	Mineral Nutrition
3/20	Mineral Nutrition
3/22	Orchard Fertilization
3/27	Orchard Fertilization/Review
3/29	Examination II
4/3	Irrigation Management
4/5	Irrigation Management
4/10	Integrated Pest Management
4/12	Insect & Mite Pest Management
4/17	Spring Break - No Class
4/19	Spring Break - No Class
4/24	Insect & Mite Pest Management
4/26	Orchard Diseases
5/1	Orchard Diseases/Weeds
5/3	Nematodes
5/8	Harvesting & Marketing
5/10	Review

LABORATORY SCHEDULE

1. Orchard - Twig ID / Orchards Inspection
2. Twig ID Test / Orchard Land Measurements / Orchard Layout
3. Peach & Nectarine Pruning
4. Plum Pruning
5. Orchard Mark & Plant
6. Orchard Costs/Crop Loss Calculations
7. Grafting
8. Orchard Sprayer Calibration
9. Soil & Irrigation Water Quality
10. Orchard Soil Analysis & Management
11. Fruit Thinning & Tree Girdling
12. Orchard Leaf Analysis Interpretations
13. Water Budgeting/ Installation
14. Irrigation System Evaluation
15. Insects & Mites
16. Nematodes - Kearney Ag Center/Nematodes Limited/Novartis
17. Packing House Field Trip