## Environment 206A Environmental Horticulture Spring 2003

Instructor: Dr. Anna M. Colangeli Office: F-340D Office Phone: 370-3459

Lab/Lectures: 30 hours (May 6 - June 18)

Lab. Manual: <u>Environmental Horticulture: Spring 2003</u> Handouts, worksheets and assignments will be distributed in class throughout the course.

## Evaluation: 100% of grade from group and individual assignments.

Assignments:		Marks:
-	soil testing	20%
	plant propagation results	30%
	Container results (apple and herbs)	10%
	organic gardens: journal and results	20%
	Presentation	20%

ATTENDANCE in Lab and on field trips is COMPULSORY! No credit will be given for the assignment if you are NOT present when the module is conducted by the rest of the class. If you are ill or have a legitimate reason for not attending (to be determined legitimate by the instructor), please phone the instructor to make alternate arrangements. If you do not notify the instructor, you automatically get a zero on the assignment, regardless of whether it is an individual or group assignment.

Assignments will lose 15% per day late penalty. Assignments will NOT be accepted later than one week after the due date.

## <u>Course Objectives</u> The student will be able to:

- 1. Perform standard horticultural practices such as soil preparation, soil testing, planting, weeding, watering, fertilizing, pest control, pruning, thinning, transplanting, and propagating.
- 2. Take explants and do plant tissue culture. Understand the principles of tissue culture, including sterile technique, organogenesis, embryogenesis, callus initiation and proliferation.
- 3. Build and maintain a functional organic herb garden and vegetable garden.
- 4. Build and maintain functional composting systems.
- 5. Establish and maintain greenhouse plants.
- 6. Establish and maintain container gardens.
- 7. Identify, culture and disseminate biological control agents.
- 8. Understand the principles of integrated pest management.
- 9. Understand the principles of native plant gardening using xerophytic species.
- 10. Understand the principles of ecosystem restoration as it applies to native plant gardening and wildlife gardening.
- 11. Explain the principles and list the factual content of the course.

DATE	SECTION	Time	TOPICS
May 6	B/D	a.m.	Introduction to Environmental Horticulture
May 7	A/C		• Assignment of groups and gardens
			Lab. 1: Plant propagation:
			$\Rightarrow$ air layering,
			$\Rightarrow$ rooted cuttings
		p.m.	Lab. 2: Introduction to organic gardening
			• seeding and transplanting
			• dig gardens
			• soil amendments
			• take soil for soil testing
May 13	B/D	a.m.	Lab. 1: Plant propagation:
May 14	A/C		• Tissue culture
			Lab. 2: Plan gardens: include
			• Planting guide
			Companion planting ideas
		p.m.	• Plant gardens
			Plant tomato/herb baskets
			Repot apple tree
June 10	A/C	a.m.	Lab. 3: Soils
June 11	B/D		<ul> <li>Composting</li> </ul>
		p.m.	• Soil testing
			Lab. 4: Weed and Pest Control
			• biological control
			Integrated Pest Management
June 12	A/C	a.m.	Field trip: CellFor
June 13	B/D		Native Plant and Wildlife Gardening
		p.m.	Principles of xeriscaping
			Land reclamation
			Kingswood Camp
			Identification of Native Plants
			Horticulture Centre of Pacific
June 17	A/C	a.m.	Presentations
June 18	B/D	p.m.	Introduction to Bonsai
			Project Completion
			<ul> <li>Data analysis</li> </ul>
			Worksheet completion