

## APPENDIX 5.A

### MASTERS DEGREE IN HORTICULTURE WITH EMPHASIS IN ORGANIC SUSTAINABLE PRODUCTION

In order to earn a Master's Degree in Horticulture with Emphasis in Organic Sustainable Production, a student must satisfy the following specific course requirements. Deviations from the required curriculum are allowed if they are approved by the student's Master's Committee.

***Ecology*** (one course required)

- Forest and Wildlife Ecology/Botany 460. General Ecology (4 cr.) - Fall, Spring
- Agroecology 701. The Farm as Socio-Environmental Endeavor (3 cr.) – Fall
- Agroecology 702. The Multifunctionality of Agriculture (3 cr.) - Spring

***Horticulture*** (one course required)

- Hort 345. Fruit Crop Production (3 cr.) – Spring even years
- Hort 370. World Vegetable Crops (3 cr.) - Fall

***Plant Pathology*** (one course required)

- Plant Path 300. Introduction to Plant Pathology (4 cr.) – Fall
- Plant Path 517. Plant Disease Resistance (2-3 cr.) – Fall even years
- Plant Path 559. Diseases of Economic Plants (3 cr.) – Summer odd years

***Agronomy/Entomology*** (one required course)

- Entom 450. Basic and Applied Insect Ecology (3 cr.) – Fall odd years
- Agron 328. Integrated Weed Management (4 cr.) – Fall

***Soil Science*** (one course required)

- Soil Sci 323. Soil Biology (3 cr.) - Fall
- Soil Sci 326. Plant Nutrition Management (3 cr.) – Spring

***Statistics***

- Statistics 571. Statistical Methods for Bioscience I (4 cr.) – Fall

***Seminar*** (one course required)

- Agroecology 710. Agroecology Seminar (1 cr.) – Fall
- Horticulture 372. Colloquium in Organic Agriculture (1 cr.) – Spring
- Horticulture 374. Tropical Horticulture (2 cr.) - Fall

***Research*** (Total of 6 credits required)

- Horticulture 990. Research (1-12 cr.)

Students who have already taken one or more of the required courses listed above, or an equivalent, as an undergraduate are encouraged to choose among the following

courses in order to satisfy the Program requirement for earning 18 credits through graduate level courses taken while enrolled in the Master's Program (see 3.1.3).

Agricultural & Applied Economics 320. Farming Systems Management (3 cr.)

Agroecology 701. The Farm as a Socio-Environmental Endeavor (3 cr.)

Agroecology 702. The Multifunctionality of Agriculture (3 cr.)

Agronomy 300. Cropping Systems (3 cr.)

Agronomy 302. Forage Management and Utilization (3 cr.)

Agronomy 326. Plant nutrient management (3 cr.)

Agronomy 328. Integrated Weed Management (4 cr.)

Agronomy 632. Ecotoxicology: The Chemical Players (1 cr.)

Agronomy 633. Ecotoxicology: Impacts on Individuals (1 cr.)

Agronomy 634. Ecotoxicology: Impacts on Populations . . . (1 cr.)

Atmospheric & Oceanic Sciences 520. Bioclimatology (3 cr.)

Biol. Systems Engineering 372. On-Site Water Treatment and Dispersal (2 cr.)

Botany 460. General Ecology (4 cr.)

Economics 343. Environmental Economics (3-4 cr.)

Economics 421. Economic Decision Analysis (4 cr.)

Economics 449. Government and Natural Resources (3-4 cr.)

Entomology 302. Introduction to Entomology (4 cr.)

Entomology 351. Principles of Economic Entomology (3 cr.)

Entomology 473. Plant-Insect interactions (3 cr.)

Entomology 505. Plant Microbe Interactions (3 cr.)

Forest & Wildlife Ecology 550. Forest Ecology (3-4 cr.)

Horticulture 320. Environ. of Horticultural Plants (3 cr.)

Horticulture 345. Fruit Crop Production (3 cr.)

Horticulture 370. World Vegetable Crops (3 cr.)

Horticulture 372. Colloquium in Organic Agriculture (1 cr.)

Horticulture 374. Tropical Horticulture (2 cr.)

Horticulture 501. Principles of Plant Breeding (3 cr.)

Horticulture 502. Techniques of Plant Breeding (1 cr.)

Marketing 300. Marketing Management (3 cr.)

Plant Path 300. Introduction to Plant Pathology (4 cr.)

Plant Path 517. Plant Disease Resistance (2-3 cr.)

Plant Path 559. Diseases of Economic Plants (3 cr.)  
Plant Path 602. Ecology, Epidemiology and Control of Plant Disease (3 cr.)

Soil Science 323. Soil Biology (3 cr.)  
Soil Science 326. Plant Nutrient Management (3 cr.)  
Soil Science 523. Soil Microbiology and Biochemistry (3 cr.)  
Soil Science 575. Assessment of Environmental Impact (3 cr.)

Statistics 572. Statistical Methods for Bioscience II (4 cr.)