

**NATURAL SCIENCES**  
**Institutional (ILO), Program (PLO), and Course (SLO) Alignment**

<b>Program: Environmental Horticulture</b>	<b>Number of Courses:</b> 9	<b>Date Updated:</b> 09.10.2014	<b>Submitted by:</b> T. Jim Noyes, ext. 3356
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<b>ILOs</b>	<b>1. Critical Thinking</b> <i>Students apply critical, creative and analytical skills to identify and solve problems, analyze information, synthesize and evaluate ideas, and transform existing ideas into new forms.</i>	<b>2. Communication</b> <i>Students effectively communicate with and respond to varied audiences in written, spoken or signed, and artistic forms.</i>	<b>3. Community and Personal Development</b> <i>Students are productive and engaged members of society, demonstrating personal responsibility, and community and social awareness through their engagement in campus programs and services.</i>	<b>4. Information Literacy</b> <i>Students determine an information need and use various media and formats to develop a research strategy and locate, evaluate, document, and use information to accomplish a specific purpose. Students demonstrate an understanding of the legal, social, and ethical aspects related to information use.</i>
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**SLO-PLO-ILO ALIGNMENT NOTES:**

*Mark boxes with an 'X' if: SLO/PLO is a major focus or an important part of the course/program; direct instruction or some direct instruction is provided; students are evaluated multiple times (and possibly in various ways) throughout the course or are evaluated on the concepts once or twice within the course.*

*DO NOT mark with an 'X' if: SLO/PLO is a minor focus of the course/program and some instruction is given in the area but students are not formally evaluated on the concepts; or if the SLO/PLO is minimally or not at all part of the course/program.*

<b>PLOs</b>	<b>PLO to ILO Alignment</b>			
	<i>(Mark with an X)</i>			
	1	2	3	4
<b>PLO #1 Planning with Given Materials</b> Upon completion of their study of course materials for the Environmental Horticulture Program, the successful student will be able to accurately identify a set of plant material; use that plant material in a landscape design; and prepare a maintenance schedule for the chosen plant materials.	X			
<b>PLO #2 Selection based on Criteria</b> Upon completion of their study of course materials for the Environmental Horticulture Program, the successful student will be able to select plant materials for a given landscape based on water requirements, soil type, pest and disease resistance, growth habits, and design requirements.	X			

SLOs	SLO to PLO Alignment <i>(Mark with an X)</i>		COURSE to ILO Alignment <i>(Mark with an X)</i>			
	P1	P2	1	2	3	4
<b>HORT 41 General Horticulture: SLO #1 Basic Concepts</b> The successful General Horticulture student will be able to describe the basic concepts of horticulture.		X	X			
<b>HORT 41 General Horticulture: SLO #2 Classifying Plants</b> The successful General Horticulture student will be able classify a plant using the plant binomial nomenclature system.		X				
<b>HORT 41 General Horticulture: SLO #3 Terminology</b> The successful General Horticulture student will be able to describe locations on trees and shrubs using horticulture terminology.	X					
<b>HORT 42 Plant Propagation: SLO #1 Basic Concepts</b> Basic Concepts The successful Plant Propagation student will be able to describe the basic concepts of plant propagation.		X	X			
<b>HORT 42 Plant Propagation: SLO #2 Preparing Cuttings</b> The successful Plant Propagation student will be able to use proper techniques to take and prepare cuttings for the propagation of a given plant.		X				
<b>HORT 42 Plant Propagation: SLO #3 Preparing Soil</b> The successful Plant Propagation student will be able to prepare soil for seed planting and properly sow a given variety of seed.		X				
<b>HORT 44 Ecology of Edible, Medicinal and Poisonous Plants: SLO #1 Identification</b> The successful student of Ecology of Edible, Medicinal and Poisonous Plants will be able to correctly identify approximately 150 plants commonly known to be edible, medicinal or poisonous.	X		X			
<b>HORT 44 Ecology of Edible, Medicinal and Poisonous Plants: SLO #2 Location</b> The successful student of Ecology of Edible, Medicinal and Poisonous Plants will be able to explain where indicated plants are typically found.	X					
<b>HORT 46 Pest Control: SLO #1 Basic Concepts</b> The successful Pest Control student will be able to describe the basic concepts of pest control.	X		X			
<b>HORT 46 Pest Control: SLO #2 Orders of Pests</b> The successful pest control student will be able to determine the different orders of the various pests found in landscapes.	X					
<b>HORT 46 Pest Control: SLO #3 Modes of Action</b> The successful pest control student will be able to discuss the modes of action of various pesticides.	X					

SLOs	SLO to PLO Alignment <i>(Mark with an X)</i>		COURSE to ILO Alignment <i>(Mark with an X)</i>			
	P1	P2	1	2	3	4
<b>HORT 53 Soils and Fertilizers: SLO #1 Soil Textures</b> The successful Soils & Fertilizers student will be able to determine soil textures through the use of soil settling analysis and 'in the hand' analysis; recognize basic soil structures; and calculate bulk densities, soil porosity, soil permeability, and soil pH.		X	X			
<b>HORT 53 Soils and Fertilizers: SLO #2 Nutrients</b> The successful Soils & Fertilizers student will be able to list the nutrients essential to plant growth and explain how the nutrients contribute to plant growth.		X				
<b>HORT 53 Soils and Fertilizers: SLO #3 Soil Amendments</b> The successful Soils & Fertilizers student will be able to select proper soil amendments for a given soil.		X				
<b>HORT 54 Landscape Design: SLO #1 Working Drawings</b> The successful Landscape Design student will be able to design and draft a working landscape drawing using proper plant symbols to represent various plant materials of various sizes.	X		X			
<b>HORT 54 Landscape Design: SLO #2 Sustainable Methods</b> The successful Landscape Design student will be able to create a working landscape using sustainable methods including plant and material selections.	X					
<b>HORT 55 Plant Identification - Trees: SLO #1 Common Plants</b> The successful Plant ID-Tree student will be able to identify approximately 150 commonly used landscape plants.	X		X			
<b>HORT 55 Plant Identification - Trees: SLO #2 Selecting Trees</b> The successful Plant ID-Tree student will be able to select trees based on environmental conditions, space constraints and design needs.		X				
<b>HORT 56 Plant Identification – Shrubs, Vines, and Groundcovers: SLO #1 Identify Landscape Plants</b> The successful Plant ID student will be able to correctly identify approximately 150 commonly used landscape plants.	X		X			
<b>HORT 56 Plant Identification – Shrubs, Vines, and Groundcovers: SLO #2 Environmental Conditions</b> The successful Plant ID-SVG student will be able to select shrubs, vines and ground covers based on environmental conditions, space constraints and design needs.		X				

SLOs	SLO to PLO Alignment <i>(Mark with an X)</i>		COURSE to ILO Alignment <i>(Mark with an X)</i>			
	P1	P2	1	2	3	4
<b>HORT 60 Basic Landscape Irrigation: SLO #1 Water Flow</b> The successful basic landscape irrigation student will be able to determine water flow through given pipe based on pipe types and diameters.		X	X			
<b>HORT 60 Basic Landscape Irrigation: SLO #2 Sprinkler Heads</b> The successful basic landscape irrigation student will be able to select suitable sprinkler heads and nozzles based on a given landscape area.		X				
<b>HORT 60 Basic Landscape Irrigation: SLO #3 Irrigation Pipe Types</b> The successful basic landscape irrigation student will be able to select the proper irrigation pipe types and diameters based on the flow demand to a given area.		X				