

01.0601

Horticulture Services Operations and Management Cluster

This instructional program prepares individuals to produce, process, and market plants, shrubs, and trees used principally for ornamental, recreational, and aesthetic purposes and to establish, maintain, and manage horticultural enterprises such as floriculture, greenhouse operation and management, landscaping, nursery operation and management, and turf management. Instruction in machinery and equipment necessary for each horticultural enterprise is included.

Emphasis within the program should be on developing competencies in, the following areas

<i>Propagating plants, seeds and cuttings</i>	<i>Storing, shipping and taking inventory</i>
<i>Preparing soils and planting media</i>	<i>Designing/installing landscapes</i>
<i>Controlling plant environment</i>	<i>Maintaining and improving grounds</i>
<i>Cultivating and irrigating vegetable and fruit crops</i>	<i>Servicing and maintaining equipment and facilities</i>
<i>Applying fertilizer and chemicals</i>	<i>Performing general office work</i>
<i>Harvesting plants</i>	<i>Performing sales duties</i>
<i>Harvesting vegetable crops</i>	<i>Performing sales-related duties</i>
<i>Grading and packaging fruit and vegetable crops</i>	<i>Maintaining and constructing structures</i>
<i>Maintaining and protecting fruit trees</i>	<i>Managing the business</i>

The following are examples of occupations for which instruction may be provided at the secondary level

<i>Landscape Laborer</i>	<i>Lawn Service Worker</i>
<i>Retail Florist Worker</i>	<i>Salesperson, Lawn and Garden Equipment and Supplies</i>
<i>Greenhouse/Nursery Worker</i>	<i>Horticultural Worker</i>
<i>Salesperson, Horticulture/Nursery Products</i>	

A regional delivery system should offer training for occupations in this field as determined by employment opportunities and the needs of the students.

The following occupational listing shows examples of occupations that are available to students who advance and successfully complete a specialized program at the postsecondary level.

<i>Landscaper</i>	<i>Greenhouse Manager</i>
<i>Retail Florist</i>	<i>Garden Center Manager</i>
<i>Nursery Manager</i>	<i>Greens Superintendent</i>

Training received in this program may be used as a basis for entry level into the labor market or for further training at a postsecondary agency. Articulation between the secondary and postsecondary programs will be a part of the regional delivery systems.

In addition to those occupations already noted, there are many agricultural occupations of a professional nature requiring a baccalaureate degree and beyond.

Workplace skills such as 1) those skills used in work performance that are transferable across jobs and occupations and that are instrumental to job and classroom success, 2) skills used to manage life's transitions and 3) skills employed in the resolution of interpersonal, information or task-related problems or problems related to behavior in cooperative group settings should be included in this curriculum. Leadership skill development is an integral part of this program and is delivered through career and technical student organization (FFA) activities. Individualized instruction and learning reinforcement are provided through supervised agricultural experience programs (SAEPS) maintained by each student.

Employment opportunities are available to workers with competencies in the field of horticulture in both semiskilled and skilled areas of employment. Employment centers around the production, processing and merchandising of ornamentals, fruits and vegetables. Employment is available in such diverse fields as greenhouse and nursery operations and management, landscaping, floral design, development and maintenance of turf, and sales.

HORTICULTURE SERVICES OPERATIONS AND MANAGEMENT COURSE SEQUENCE

Course Title	Credits per Semester	Length in Semesters	Grade Level
<u>Orientation</u>			
Introduction to the Agricultural Industry	.5	2	9
Basic Agricultural Science	.5	2	10
Basic Horticultural Science	.5	2	10
Supervised Agricultural Experience Program I	*variable	2	9, 10
<u>Preparation</u>			
Greenhouse Production and Floral Design	.5	2	11, 12
Landscaping and Turf Management	.5	2	11, 12
Horticultural Production and Management	.5	2	11, 12
Agricultural Leadership	.5	1	11, 12
Agricultural Communications	.5	1	11, 12
Agricultural Business Management	.5	2	11, 12
Biological Science Applications in Agriculture (Plants)	.5	1	11, 12
Biological Science Applications in Agriculture (Animals)	.5	1	11, 12
Physical Science Applications in Agriculture I	.5	1	11, 12
Physical Science Applications in Agriculture II	.5	1	11, 12
Supervised Agricultural Experience Program II	*variable	2	11, 12
Agricultural Cooperative Education	*variable	2	12

* As determined at the regional system level.