

ARIZONA DEPARTMENT OF EDUCATION
VOCATIONAL TECHNOLOGICAL EDUCATION CURRICULUM SYSTEM

PROGRAM SCOPE AND DOMAIN

SEPTEMBER 1997

PROGRAM: Ag Bus Mgmt - Horticulture
CIP: 01.0600 (Formerly 01.0601)

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DESCRIPTION:

The Agricultural Business Management-Horticulture program is designed to prepare students for employment in various production, sales, and supply positions related to horticulture. Specific careers include: landscape design, installation and maintenance; nursery management; biotechnology; and turf grass management. In addition to required technical skills, students will possess leadership skills, advanced employability skills, applied academics, and life management skills.

CERTIFICATION:

Occupations in this area are generally not licensed, however several professional certifications and licenses are available: Arizona Certified Landscape Professional (ACCP), Arizona Certified Nursery Professional (ACNP), Golf Course Superintendent of America (GCSA), Certified Pesticide Applicators (CPA), and Master Gardener Program sponsored by Cooperative Extension Service.

OCCUPATIONAL CLUSTER (S):

Labor market data is collected and organized in the Arizona Occupational Information System (OIS). The Agricultural Business Management-Horticulture program is aligned with the following OIS clusters:

- 0010 Floriculture, Florestry & Floral Design
- 0210 Agricultural Mechanics & Machinery
- 0250 Crop Production & Range Management
- 0290 Agricultural Supplies/Products Marketing
- 0300 Nursery Operations & Management

Occupations in the above OIS cluster include the following job clusters as reported through the Occupational Employment Statistics (OES) system:

OES CODE	TITLE
34038	Designers, Except Interior Designers
85321	Farm Equipment Mechanics
72000	Supervisors, Farm, Forest, Agriculture
79210	Farm & Ranch Managers
79451	Supervisors, Agriculture-Related
21305	Purchasing Agents and Buyers, Farm Products
49005	Sales Representatives, Science
72000	Supervisors, Farm, Forest, Agriculture
79005	Nursery Workers
79014	Gardeners and Groundskeepers, Except Farm
79211	Managers, Horticultural
79251	Horticultural Specialty Farms

Current employment and employment projections for these occupational clusters are available from the Occupational Information System.

TYPICAL OCCUPATIONS (DOT):

Information on specific jobs is collected and organized using the Dictionary of Occupational Titles (DOT). Following is a listing of some of the jobs related to this instructional program

DOT CODE	TITLE
180.161-014	Superintendent, Horticulture
180.167-058	Superintendent, Production
180.167-022	Group Leader
260.357-026	Salesperson, Flowers
272.357-014	Sales Representative, Farm and Garden
272.357-022	Salesperson, Horticultural and Nursery
301.687-018	Yard Worker
402.131-010	Supervisor, Vegetable Farm
402.161-010	Farmer, Vegetable
402.663-010	Farmworker, Vegetable 1
402.687-010	Farmworker, Vegetable 2
402.687-014	Harvest Worker, Vegetable
403.161-010	Farmer, Tree-Fruit-And-Nut
403.161-014	Farmer, Vine-Fruit Crops

403.683-010	Farmworker, Fruit 1
403.687-022	Vine Pruner
403.687-018	Harvest Worker, Fruit
403.687-010	Farmworker, Fruit 2
404.161-010	Farmer, Field Crop
404.663-010	Farmworker, Field Crop 1
404.686-010	Seed Cutter
404.687-010	Farmworker, Field Crop 2
404.687-014	Harvest Worker, Field Crop
405.131-010	Supervisor, Horticultural
405.161-014	Horticultural-Specialty grower, field
405.161-018	Horticultural-Speciality grower, inside
405.684-010	Budder
405.684-014	Horticultural Worker 1
405.687-014	Horticultural Worker 2
406.134-014	Supervisor, Park Workers
406.137-010	Greenskeeper 1
406.683-010	Greenskeeper 2
406.684-014	Groundskeeper, Industrial-Commercial
406.684-018	Garden Worker
406.684-010	Cemetery Worker
406.687-010	Groundskeeper, Parks and Grounds
407.161-010	Farmer, Diversified Crops
407.663-010	Farmworker, Diversified Crop
407.687-010	Farmworker, Diversified Crops
408.161-010	Landscape Gardener
408.364-010	Plant-Care Worker
408.381-010	Scout
408.664-010	Tree Trimmer
408.667-010	Tree-Trimner Helper
408.684-010	Lawn-Service worker
408.684-018	Tree Pruner
408.684-014	Sprayer, Hand
408.687-014	Laborer, Landscape
408.687-018	Tree-Surgeon Helper 2
409.117-010	Harvest Contractor
409.131-010	Supervisor, Picking Crew
409.137-010	Irrigator, Head
409.685-014	Irrigator, Sprinkler system
409.683-014	Field Hauler

409.683-010	Farm-Machine Operator
409.685-010	Farm-Machine Tender
409.686-010	Farmworker, Machine
409.687-018	Weeder-Thinner
421.161-010	Farmer, General
421.683-010	Farmworker, General 1
421.687-010	Farmworker, General 2
624-281-010	Farm-Equipment Mechanic 1
624.281-014	Farm-Equipment Mechanic Assistant
624.361-014	Sprinkler-Irrigation-Equipment
624.381-018	Farm-Machinery Set-Up Mechanic
624.381-014	Farm-Equipment Mechanic 2
630.684-018	Pump Installer

RECOMMENDED INSTRUCTIONAL SEQUENCE:

The following components of the Arizona Model for Vocational Technological Education will provide students with a coherent sequence of instruction for this program.

Level I Grades 7 - 8

Students should complete a minimum of one year of instruction in Technological Exploration and Foundations and/or attain the competencies identified for that experience.

Level II Grades 9 - 10

Students should complete a minimum of one year of instruction in Applied Biological Systems and/or attain the competencies identified for that experience.

Students may choose to complete one year of instruction in Business Management Technology. Business Management Technology is recommended for students who have a special interest in the management of agricultural business management systems.

Students may (at their option) complete experiences in any of the other Level II clusters.

Human Services Technology is recommended for students who have a special interest in agricultural service occupations.

Industrial Technology is recommended for students who have a special interest in technological applications in agriculture.

Information Technology is recommended for students who wish to emphasize computer systems in such areas as accounting, desktop publishing and database management occupations as they relate to agriculture.

Level III Grades 11 - 12

The Agricultural Business Management-Horticulture program will be based on the competencies developed and validated by the Curriculum Design Team. In addition to knowledge of agricultural business management in the area of horticulture, students should have the opportunity to place special emphasis on more specific horticultural crops and services, and occupations in which they have an interest. The instructional program will also include a Supervised Experience (SE) component to provide the student with occupational experience.

Level IV Post-Secondary and Advanced Instruction

A Tech-Prep articulated sequence of instruction between Level III (grades 11 and 12) and Level IV (post-secondary) provides the student with the skills associated with a variety of agricultural business management and horticultural positions. The typical post-secondary programs include:

Associate Arts, Agriculture

Completion of these post-secondary programs, or a baccalaureate degree, and additional on-the-job experiences may lead to one of the following positions:

DOT CODE	TITLE
013.151.010	Sales Engineer, Agriculture Equipment
013.161-010	Agricultural Engineering
180.167-042	Manager, Nursery
180.167-018	General Manager, Farm
251.357.026	Sales Representative, Herbicide Services
251.357-018	Sales Agent, Pest Control Service
406.137-014	Superintendent, Greens
406.381-010	Gardener, Special Effects
408.181-010	Tree Surgeon

CURRICULUM DESIGN TEAM:

The members of the Curriculum Design Team for this program were:

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CURRICULUM REVIEWER:

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