ORNAMENTAL HORTICULTURE

This degree program provides students with entry level skills, upgrading of existing skills, and preparation for further training. It is designed for those interested in careers in nursery and greenhouse management, landscape design and construction, grounds management, retail nursery operations, irrigation system design, installation and maintenance of interior plantscaping, arboriculture and other related fields. Students will learn modern horticultural methods and procedures as well as the use of tools and equipment common to the field.

CAREER OPPORTUNITIES

†Agricultural Inspector

* Agricultural Researcher

†Arboretum/Park Director

Arboriculture Technician Botanical Illustrator

†County/State Agricultural Advisor

Environmental Designer

Floral Designer

Flower Shop Manager

Golf Course Superintendent

Golf Course Worker

Greenhouse Manager

Grounds Maintenance Manager

Grower/Production Manager

+Horticultural Journalist

Irrigation Consultant

†Landscape Architect

Landscape Contractor

Landscape Designer Landscape Technician

Nursery/Garden Center Manager

†Park Planner/Manager

Plant Breeder/Propagator

Sports Field Manager

Turf Manager

Urban Forester Water Auditor

†Water Conservationist

*Bachelor Degree or higher required.

†Bachelor Degree normally recommended.

I. ARBORICULTURE

This major encompasses urban forestry, professional tree care, and tree trimming. Students will learn care and pruning of landscape trees, palms and related plants as well as common fruit trees. Course work includes skill development in tree climbing and pruning techniques, basic tree maintenance, and principles of urban forestry. Graduates are employed by private tree care companies, public agencies, landscape contractors, wholesale and retail nurseries, or may be self-employed.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Describe proper and safe principles and practices of tree climbing.
- · Describe the principles of tree biology and physiology for growth management.
- · Demonstrate proper tree pruning procedures per industry standards.
- Identify common biotic and abiotic problems for trees common to Southern California landscapes and list appropriate control measures.
- · Conduct a visual tree assessment for tree risk or value appraisal.
- Draft a tree preservation plan for a construction site.

Associate	e in Science Degree Requiren	nents:
Course	Title	Units
OH 120	Fundamentals of Ornamental	_
	Horticulture	3
OH 130	Plant Pest Control	3
OH 140	Soils	3
OH 170	Plant Materials: Trees and Shrub	
OH 260	Arboriculture	3
OH 290*	Cooperative Work Experience	
	Education	3
		18
Select tw	o of the following:	
OH 263	Urban Forestry	1
OH 264	Safe Work Practices in Tree	
	Climbing and Arboriculture	1
OH 266	Science in Practice for	
	Arboriculture	1
		2
Select or	e of the following:	
BUS 110	Introduction to Business	3
BUS 111	Entrepreneurship: Starting and	
	Developing a Business	3
BUS 125	Business Law: Legal Environme Business	ent of 3
	Duoinicoo	

Select nine units from the following:

3

OH 102	Xeriscape: Water Conservation	
	in the Landscape	2
OH 172	Introduction to Landscape Design	3
OH 174	Turf and Ground Cover	
	Management	3
OH 221	Landscape Construction: Irrigation	
	and Carpentry	3
OH 235	Principles of Landscape Irrigation	4
OH 250	Landscape Water Management	2
OH 255	Sustainable Urban Landscapes	
	Principles and Practices	3
OH 275	Diagnosing Horticultural Problems	3
OH 276	Horticultural Equipment Repair	
	and Maintenance	3
OH 278	Business Management for	
	Ornamental Horticulture	3
SPAN 120	Spanish I	5
	•	9
	Total Required	32

*Student must complete six units within the major at Cuyamaca College to be eligible for this course.

Plus General Education Requirements

Certificate of Achievement

Students who complete only the major requirements above qualify for a Certificate in Arboriculture. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

II. FLORAL DESIGN

This degree program is designed for those individuals seeking careers in the floral industry, or for those seeking to upgrade their existing skills and prepare for further training. Course work is directed toward skills, concepts and practices used in the commercial floral industry with an emphasis in hands-on training. There is also an emphasis on the business skills needed to succeed as a floral industry entrepreneur.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

· Identify and explain the principles and elements of design common to the retail floral industry and utilize these guidelines in the reproduction and construction of independent floral arrangements, events and

- · Identify, evaluate and discuss in correct industry vocabulary fresh floral product and permanent botanical materials, hard goods, and trends in European and Asian design influence.
- Prepare an original event proposal based on site analysis for a special occasion to include an appropriate wholesale budget, estimate design recipes, fresh and hard goods product.
- Compare and contrast retail florist businesses in shop operations, workstations, sales and consultation areas, visual displays, customer relations, and typical business practices including labor relations, insurance, advertising, accounting and license requirements.

Associate in Science Degree Requirements:

Course	Title	Units	
OH 114	Floral Design I	3	
OH 116	Floral Design II	3	
OH 117	Wedding Design I	3	
OH 118	Special Occasion Floral Design	3	
OH 120	Fundamentals of Ornamental		
	Horticulture	3	
OH 180	Plant Materials: Annuals and		
	Perennials	3	
OH 290*	Cooperative Work Experience		
	Education	3	
		21	
Select one of the following:			
BUS 110	Introduction to Business	3	
BUS 111	Entrepreneurship: Starting and		
	Developing a Business	3	

of Business

Business Law: Legal Environment

3

BUS 125

Select nin	e units from the following:	
ART 120	Two-Dimensional Design	3
ART 124	Drawing I	3
BUS 111	Entrepreneurship: Starting and	
	Developing a Business	3
BUS 128	Business Communication	3
OH 121	Plant Propagation	3
OH 170	Plant Materials: Trees and Shrubs	3
OH 240	Greenhouse Plant Production	3
OH 278	Business Management for	
	Ornamental Horticulture	3
		9
	Total Required	33

*Student must complete six units within the major at Cuyamaca College to be eligible for this course.

Plus General Education Requirements

Certificate of Achievement

Students who complete only the major requirements above qualify for a Certificate in Floral Design. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

III. GOLF COURSE AND SPORTS TURF MANAGEMENT

Students in this major pursue careers as golf course superintendents or sports turf managers. The program is intended for those individuals wishing to enter the field as well as those who desire to upgrade their existing skills. Students may also transfer to a four-year degree program in agronomy, turf management, or related field. Course work is designed to study environmentally sound solutions for the efficient production and management of golf and sports turf.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- · Demonstrate and practice standardized safety procedures as they apply to golf and sports turf management.
- · Identify warm and cool season turf cultivars common to Southern California.
- · Identify and manage primary and secondary noxious weeds.
- · Identify and manage common biotic and abiotic problems associated with turf management in Southern California.
- Demonstrate knowledge of appropriate use and maintenance of equipment common to golf and sports turf management.
- · Identify 88 trees and shrubs common to Southern California.
- · Identify water quality impact on turfgrass and plant material species and the relationship to soil conditions.
- Demonstrate the impact of various water sources on golf course maintenance budgets.
- · Using principles of irrigation hydraulics, calculate friction loss in pipe, determine proper pipe sizing using the friction factor and velocity limit method, and determine appropriate component sizing.
- · Identify and describe the proper installation of irrigation system components.
- · Using standard industry practices, develop guidelines and demonstrate the ability to perform proper fertilizing, pruning, mulch application and irrigation of Southern California landscapes.
- · Identify and explain labor relations, business plans, and licensure requirements for the golf and sports turf industry.
- · Demonstrate the ability to install concrete, masonry and plant material.

Associate in Science Degree Requirements:

Title U	nits
Fundamentals of Ornamental	
Horticulture	3
Plant Pest Control	3
Soils	3
	3
	4
Education	3
Total Required	22
	3
	Ŭ
	3
	-
	3
_	<u>3</u>
ven units from the following:	
	2
	_
	3
•	
Irrigation and Carpentry	3
Landscape Water Management	2
Golf Course and Sports Turf	
Management	3
Diagnosing Horticultural Problems	3
Horticultural Equipment Repair	
and Maintenance	3
Business Management for	
Ornamental Horticulture	3
Spanish I	<u>5</u> 7
equired	32
eneral Education Requirements	
	Fundamentals of Ornamental Horticulture Plant Pest Control Soils Plant Materials: Trees and Shrubs Turf and Ground Cover Managemen Principles of Landscape Irrigation Cooperative Work Experience Education Total Required e of the following: Introduction to Business Entrepreneurship: Starting and Developing a Business Business Law: Legal Environment of Business ven units from the following: Xeriscape: Water Conservation in the Landscape Landscape Construction: Concrete and Masonry Landscape Construction: Irrigation and Carpentry Landscape Water Management Golf Course and Sports Turf Management Diagnosing Horticultural Problems Horticultural Equipment Repair and Maintenance Business Management for Ornamental Horticulture Spanish I equired

*Student must complete six units within the major at Cuyamaca College to be eligible for this course.

Certificate of Achievement

Students who complete only the major requirements above qualify for a Certificate in Golf Course and Sports Turf Management. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

IV. IRRIGATION TECHNOLOGY

This specialized field focuses on the design, installation and management of landscape irrigation systems. The program is designed for entry level students, those seeking to upgrade existing skills, or those wishing to transfer to a four-year degree program at Cal Poly or other institution. The use of current design theory, installation techniques, and management programs form the heart of the curriculum. Graduates are employed by landscape architects. irrigation consultants, landscape contractors, public agencies or may be self-employed.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- · Explain the relationships between plants and their soil and water environment including the use of recycled water.
- Demonstrate an understanding of landscape irrigation hydraulics.
- · Identify irrigation system components and demonstrate their proper installation.
- · Demonstrate a basic understanding of irrigation design principles.
- Demonstrate the ability to calculate an irrigation schedule.
- Demonstrate the ability to diagnose irrigation system problems related to valves, wiring and hydraulics.
- Explain the importance of, and best practices for, water conservation in regards to water sources, water quality and regulations.
- · Gain practical experience working in the landscape industry.

Associate in Science Degree Requirements:

Course	Title	Units
OH 102	Xeriscape: Water Conservation	
	in the Landscape	2
OH 120	Fundamentals of Ornamental	
	Horticulture	3
OH 140	Soils	3
OH 221	Landscape Construction:	
	Irrigation and Carpentry	3
OH 235	Principles of Landscape Irrigatio	n 4
OH 250	Landscape Water Management	2
OH 290*	Cooperative Work Experience	
	Education	3
		20
Select on	e of the following:	

Select on	ie of the following:	
BUS 110	Introduction to Business	3
BUS 111	Entrepreneurship: Starting and	
	Developing a Business	3
BUS 125	Business Law: Legal Environment	
	of Business	3

Select nine units from the following:

00100111111	o unite nom the femouring.	
OH 130	Plant Pest Control	3
OH 170	Plant Materials: Trees and Shrubs	s 3
OH 171	Landscape Drafting	1
OH 172	Introduction to Landscape Desig	n 3
OH 174	Turf and Ground Cover	
	Management	3
OH/CADD 200**	Introduction to Computer-Aided	
	Landscape Design	3
OH 225	Landscape Contracting	3
OH 238	Irrigation System Design	3
OH 276	Horticultural Equipment Repair	
	and Maintenance	3
OH 278	Business Management for	
	Ornamental Horticulture	3
SPAN 120	Spanish I	5
	_	9
	Total Required	32
	Divo Conoral Education Descripes	

Plus General Education Requirements *Student must complete six units within the major at Cuyamaca College to be eligible for this course

**May also be offered at Southwestern College as LA 200.

Certificate of Achievement

Students who complete only the major requirements above qualify for a Certificate in Irrigation Technology. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

V. LANDSCAPE DESIGN

This major provides students with a systematic. process-oriented approach to landscape design for residential landscapes. The curriculum is designed to investigate the current trends in landscape design and the technologies used in the construction of the projects. Course work is designed for entry level skills, upgrading of existing skills, and for transfer to four-year degree programs. Graduates are employed by landscape architects, landscape contractors, public agencies or may be self-employed.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- · Prepare conceptual landscape plans for residential clients.
- · Measure a site then draft a site plan using hand drafting and computer aided drafting.
- · Analyze project sites for assets and constraints
- · Create an aesthetically pleasing, sustainable, and feasible landscape design.
- Produce graphically pleasing landscape concept plans, elevations, and sections using both hand drafting and computer aided drafting techniques.
- · Analyze site topography (including relief, slope and aspect) as required to prepare fine grading plans.
- · Identify and describe the palate of materials used in landscape construction.
- · Identify at least 250 trees, shrubs, annuals, and perennials used in Southern California landscaping.
- Demonstrate the ability to locate plants appropriately on a planting plan.
- · Apply water conserving and sustainable landscape ideas to designs.
- Quantify the irrigation needs of the specified plants and prepare effective irrigation plans.
- · Identify and explain business practices and legal considerations associated with a developing a landscape business.
- · Gain practical experience working in the landscape industry.

Associate in Science Degree Requirements:

Course	Title U	nits
OH 102	Xeriscape: Water Conservation	
OTTTOL	in the Landscape	2
OH 170	Plant Materials: Trees and Shrubs	3
OH 171	Landscape Drafting	1
OH 172	Introduction to Landscape Design	3
OH 173	Intermediate Landscape Design	3
OH 175	Advanced Landscape Design	3
OH 180	Plant Materials: Annuals and	
	Perennials	3
OH/CADD 200*	Introduction to Computer-Aided	
	Landscape Design	3
OH/CADD 201**	Advanced Computer-Aided	
	Landscape Design	3
OH 220	Landscape Construction: Concrete	:
	and Masonry	3
OH 235	Principles of Landscape Irrigation	4
OH 278	Business Management for	
	Ornamental Horticulture	3
OH 290***	Cooperative Work Experience	
	Education	3
	Total Required	37
	Plus General Education Requireme	nts

- *May also be offered at Southwestern College as LA 200.
- **May also be offered at Southwestern College as LÁ 201.
- ***Student must complete six units within the major at Cuyamaca College to be eligible for this course.

Certificate of Achievement

Students who complete only the major requirements above qualify for a Certificate in Landscape Design. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

VI. LANDSCAPE TECHNOLOGY

Landscape installation and management forms the focus of this program. Students will learn the latest methods, materials and techniques in the landscape industry. Those seeking careers in landscape technology are entering a challenging career field that requires knowledge of plant material, turfgrass, landscape and irrigation design, soils, pest control and landscape construction. A professional in the field has the opportunity to be involved in working with people as well as plants as the manager must direct and supervise employees, deal with clients and suppliers, and may become involved in professional organizations. Students entering the landscape industry, those already employed but seeking to upgrade their skills, and those wishing to transfer to Cal Poly or other four-year degree programs will benefit from the curriculum. Graduates are employed by landscape contractors, public agencies or may be self-employed.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Understand the principles of plant structure function and plant growth.
- Identify 175 trees, shrubs, annuals, perennials and turf grass species commonly used in Southern California landscapes.
- Using standard industry practices, develop guidelines and demonstrate the ability to perform proper fertilizing, pruning, mulch application and irrigation of Southern California landscapes.
- Understand the elements of water management of a large landscape site.

- · Identify common biotic and abiotic problems common to Southern California landscapes and list appropriate control measures.
- · Gain practical experience working in the landscape industry.

Associate in Science Degree Requirements:

Course	Title	Jnits
OH 120	Fundamentals of Ornamental	
	Horticulture	3
OH 130	Plant Pest Control	3
OH 140	Soils	3
OH 170	Plant Materials: Trees and Shrubs	3
OH 180	Plant Materials: Annuals and	
	Perennials	3
OH 235	Principles of Landscape Irrigation	1 4
OH 250	Landscape Water Management	2
OH 290*	Cooperative Work Experience	
	Education	3
		24
0-14	a a f Alais f a Harristonia	

Select one of the following:

BUS 110	Introduction to Business	3
BUS 111	Entrepreneurship: Starting and	
	Developing a Business	3
BUS 125	Business Law: Legal Environmer	nt of
	Business	3

Select five units from the following:

Select IIV	e units ironi the following.	
OH 102	Xeriscape: Water Conservation	
	in the Landscape	2
OH 105	Edibles in Urban Landscapes	1.5
OH 125	Landscape Technician Principles 1	1
OH 126	Landscape Technician Principles 2	1
OH 127	Landscape Technician Principles 3	
OH 172	Introduction to Landscape Design	3
OH 173	Intermediate Landscape Design	3
OH 174	Turf and Ground Cover Management	t 3
OH 220	Landscape Construction: Concrete and Masonry	3
OH 221	Landscape Construction:	
	Irrigation and Carpentry	3
OH 222	Japanese Garden Design and	
	Construction	1
OH 225	Landscape Contracting	3
OH 255	Sustainable Urban Landscapes	
	Principles and Practices	3
OH 260	Arboriculture	3
OH 276	Horticultural Equipment Repair	
	and Maintenance	3
OH 278	Business Management for	
	Ornamental Horticulture	3
SPAN 120	Spanish I	5
		5
	Total Required	32
	Plus General Education Requireme	nts

*Student must complete six units within the major at Cuyamaca College to be eligible for this course.

Certificate of Achievement

Students who complete only the major requirements above qualify for a Certificate in Landscape Technology. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

VII. NURSERY TECHNOLOGY

Students enrolled in this major pursue careers in the wholesale production and retail sales of horticultural crops. Course work will focus on plant propagation, greenhouse plant production, and horticultural practices related to production and sales of landscape and greenhouse plant material. Students entering the nursery industry, those already employed but seeking upgraded skills, and those wishing to transfer to Cal Poly or other four-year degree programs will benefit from the curriculum. Graduates are employed by wholesale and retail nurseries, public agencies or may be self employed.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Identify 250 trees, shrubs, annuals, perennials and turf grass species commonly used in Southern California landscapes.
- · Explain the principles of plant structure function and plant growth.
- Demonstrate an understanding of common plant propagation practices.
- Cultivate horticultural crops in both natural and artificial environments common in the horticulture industry.
- Demonstrate an understanding of soil principles.
- · Explain how to produce a business plan for the nursery industry.
- · Gain practical experience working in the landscape industry.

Associate in Science Degree Requirements:

ASSOCIAL	Associate in ocience begies risquirements.			
Course	Title	Units		
OH 120	Fundamentals of Ornamental			
	Horticulture	3		
OH 121	Plant Propagation	3		
OH 130	Plant Pest Control	3		
OH 140	Soils	3		
OH 170	Plant Materials: Trees and Shrubs	3		
OH 180	Plant Materials: Annuals and			
	Perennials	3		
OH 290*	Cooperative Work Experience			
	Education _	3		
		21		
Select one of the following:				

Select one of the following:

BUS 110	Introduction to Business	3
BUS 111	Entrepreneurship: Starting and	
	Developing a Business	3
BUS 125	Business Law: Legal Environment	
	of Business	3

Select eight units from the following:		
BIO 122	The Secret Life of Plants	4
OH 102	Xeriscape: Water Conservation	
	in the Landscape	2
OH 114	Floral Design I	3
OH 172	Introduction to Landscape Design	3
OH 240	Greenhouse Plant Production	3
OH 276	Horticultural Equipment Repair	
	and Maintenance	3
OH 278	Business Management for	
	Ornamental Horticulture	3
SPAN 120	Spanish I	5
		8
	Total Required	32
	Plus General Education Requirement	ents

*Student must complete six units within the major at Cuyamaca College to be eligible for this course.

Certificate of Achievement

Students who complete only the major requirements above qualify for a Certificate in Nursery Technology. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

VIII. SUSTAINABLE URBAN LANDSCAPES

This curriculum is designed to investigate the current trends and provide practical experience in sustainable landscape design, construction and maintenance. Students will use technology, materials and methods that enhance the urban landscape with minimal input of labor and materials while reducing negative environmental impacts. Students entering the landscape industry, those already employed but seeking upgraded skills, and those wishing to transfer to four-year degree programs will benefit from the curriculum. Graduates are employed by

landscape contractors, landscape architects and designers, public agencies, or are selfemployed.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- · Use industry accepted standards to conduct site evaluations and determine site assets and constraints for the development of aesthetically pleasing and sustainable landscapes.
- · Identify common biotic and abiotic problems common to Southern California landscapes and list appropriate control measures.
- · Utilize standard industry practices and principles of plant structure, function and plant growth to develop guidelines for the proper maintenance of Southern California landscapes.
- · Demonstrate the ability to calculate an irrigation schedule.
- · Explain the elements of water management of a large landscape site.
- · Gain practical experience working in the landscape industry.

CAREER OPPORTUNITIES

Irrigation Manager Landscape Design Consultant Landscape Maintenance Supervisor Landscape Manager Landscape Water Auditor Water Conservation Specialist

Associate in Science Degree Peguirements:

Associate	In Science Degree Requirem	ents:	
Course	Title	Units	
OH 120	Fundamentals of Ornamental		
	Horticulture	3	
OH 130	Plant Pest Control	3	
OH 140	Soils	3	
OH 170	Plant Materials: Trees and Shrub	s 3	
OH 250	Landscape Water Management	2	
OH 255	Sustainable Urban Landscape		
	Principles and Practices	3	
OH 263	Urban Forestry	1	
OH 290*	Cooperative Work Experience		
	Education	3	
		21	
Select one of the following:			

BOS 110	Introduction to Business	3
BUS 111	Entrepreneurship: Starting and	
	Developing a Business	3
BUS 125	Business Law: Legal Environment	of
	Business	3
	-	

Select a minimum of eight units from the

) :	
Xeriscape: Water Conservation	
in the Landscape	2
Edibles in Urban Landscapes	1.5
Introduction to Landscape Design	3
Plant Materials: Annuals and	
Perennials	3
Landscape Construction: Concrete	
and Masonry	3
Landscape Construction: Irrigation	
and Carpentry	3
Principles of Landscape Irrigation	4
Arboriculture	3
Science in Practice for Arboriculture	e 1
Business Management for	
Ornamental Horticulture	3
	8
Total Required	32
Plus General Education Requireme	nts
	Xeriscape: Water Conservation in the Landscape Edibles in Urban Landscapes Introduction to Landscape Design Plant Materials: Annuals and Perennials Landscape Construction: Concrete and Masonry Landscape Construction: Irrigation and Carpentry Principles of Landscape Irrigation Arboriculture Science in Practice for Arboricultur Business Management for Ornamental Horticulture Total Required

^{*}Student must complete six units within the major at Cuyamaca College to be eligible for this course.

Certificate of Achievement

Students who complete only the major requirements above qualify for a Certificate in Sustainable Urban Landscapes. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

CERTIFICATE OF ACHIEVEMENT:

VITICULTURE TECHNICIAN APPRENTICE

This certificate is designed for students participating in the State of California approved Viticulture Technician Apprenticeship Program. The curriculum is required as part of the standards in this industry developed apprenticeship program. Apprentices completing the program will be prepared for employment in all aspects of the viticulture and winery industries.

Program Learning Outcomes

Upon successful completion of this certificate, students will be able to:

- · Understand the basic principles of the growth of plants including cultivated grapes.
- · Understand the basic principles of soil science, soil fertility and water as it applies to plant growth and health of grapes in production.
- Understand the basic principles of integrated pest management.
- · Identify the principle insect orders.
- · Identify 10 common landscape and vineyard weeds
- Understand the basic principles of irrigation system hydraulics in landscapes and vineyards.
- Understand the basic principles of irrigation
- · Demonstrate the basic principles of irrigation construction in landscapes and vineyards.

Career Opportunities

Tasting Room Management Vineyard Design & Installation Vineyard Maintenance Technician Vineyard Management Wine Cellar Assistant Wine Cellar Master Wine Steward Winemaker Winery Production Management

Certificate Requirements

Course	Title	nits
OH 105A	Edibles in Urban Landscapes for	
	Apprentices	1.5
OH 120A	Fundamentals of Ornamental	
	Horticulture for Apprentices	3
OH 130A	Plant Pest Control for Apprentices	3
OH 235A	Principles of Landscape Irrigation	for
	Apprentices	4
	- -	11.5

Select one of the following:

OH 140A	Soils for Apprentices	3
OH 221A	Landscape Construction: Irrigation	า
	and Carpentry for Apprentices	3
		3
	Total Required	14.5

Students who complete the requirements above qualify for a Certificate in Viticulture Technician Apprentice. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

CERTIFICATE OF SPECIALIZATION:

BASIC ORNAMENTAL HORTICULTURE

This certificate prepares students to work in the horticulture industry at an entry or intermediate level by providing them with basic knowledge of horticultural principles and practices. Upon completion, students will be prepared to work in one of many fields of horticulture, or choose to continue their studies and apply their earned credits to a degree or certificate of achievement.

Program Learning Outcomes

Upon successful completion of this certificate, students will be able to:

- · Understand the basic principles of plant growth.
- Identify 125 trees and shrub species commonly used in Southern California landscapes.
- · Understand the basic principles of soil science as they relate to plant growth and plant nutrition.
- Apply basic horticultural knowledge to specific field of study in ornamental horticulture.
- · Understand business principles as they apply to working in ornamental horticulture.

Certificate Requirements:

Outside and addition full analysis			
		6	
OH 170	Plant Materials: Trees and Shrubs	s 3	
	Horticulture	3	
OH 120	Fundamentals of Ornamental		
Course	Title	Units	

Select one of the following:

OH 130	Plant Pest Control	3
OH 140	Soils	3
OH 180	Plant Materials: Annuals and	
	Perennials	3
		3

Select one of the following:

BUS 110	Introduction to Business	3
BUS 111	Entrepreneurship: Starting and	
	Developing a Business	3
BUS 125	Business Law: Legal	
	Environment of Business	3
		3

Select at least three units from the following:

OH 114	Floral Design I	3
OH 121	Plant Propagation	3
OH 125	Landscape Technician Principles 1	1
OH 126	Landscape Technician Principles 2	1
OH 127	Landscape Technician Principles 3	1
OH 172	Introduction to Landscape Design	3
OH 174	Turf and Ground Cover	
	Management	3
OH 220	Landscape Construction:	
	Concrete and Masonry	3
OH 221	Landscape Construction:	
	Irrigation and Carpentry	3
OH 260	Arboriculture	3
		3
	Total Required	15

Students who complete the requirements above qualify for a Certificate in Basic Ornamental Horticulture. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.