

CUYAMACA COLLEGE
ACADEMIC PROGRAM CHANGES
March 2020
for the
2020-2021 CATALOG

COURSE ADDITIONS

ORNAMENTAL HORTICULTURE 150 – LANDSCAPE ARCHITECTURE I

3 UNITS

Prerequisite: None

2 hours lecture, 3 hours laboratory

The course focuses on principles of landscape architecture for public and residential projects with an emphasis on the creation of usable, pleasant outdoor spaces. Topics include strategies to create cohesive site and planting plans using industry drafting standards. The lab emphasizes hands-on design and drafting exercises.

ORNAMENTAL HORTICULTURE 151 – LANDSCAPE ARCHITECTURE II

3 UNITS

Prerequisite: "C" grade or higher or "Pass" in OH 150 or equivalent

2 hours lecture, 3 hours laboratory

Principles of landscape architecture for public and residential projects with an emphasis on the creation of usable, pleasant outdoor spaces. Focuses on cohesive set of construction drawings (site plan, planting plan, grading plan, lighting plan, and basic construction details) using industry drafting standards. The lab emphasizes hands-on design exercises and drafting of landscape projects using hand graphics and computer-generated drawings.

PHYSICS 201 – MECHANICS AND WAVES

5 UNITS

Prerequisite: "C" grade or higher or "Pass" in MATH 180 or equivalent

4 hours lecture, 3 hours laboratory

This is the first course of a three-semester, calculus level sequence of physics courses designed for engineering, physics, mathematics, and science majors. The course assumes no previous physics study, but makes extensive use of algebra, trigonometry, geometry, and calculus. Topics include linear and rotational kinematics and dynamics, energy and energy conservation, linear and angular momentum and their conservation laws, fluid dynamics, and gravitation, and wave motion.

PHYSICS 202 – ELECTRICITY, MAGNETISM, AND HEAT

5 UNITS

Prerequisite: "C" grade or higher or "Pass" in PHYSICS 201 or equivalent; and "C" grade or higher or "Pass" or concurrent enrollment in MATH 280 or equivalent

4 hours lecture, 3 hours laboratory

This is the second course of a three-semester, calculus level sequence of physics courses designed for engineering, physics, mathematics, and science students. The topics of heat, electricity, and magnetism are introduced at the beginning level with reliance upon students' ability to apply topics introduced in Physics 201. The laboratory provides emphasis on measurements using gas laws and of electric and magnetic fields, DC and AC circuits, and oscilloscope techniques.

PHYSICS 203 – LIGHT, OPTICS, AND MODERN PHYSICS

5 UNITS

Prerequisite: "C" grade or higher or "Pass" in PHYSICS 202 or equivalent; and "C" grade or higher or "Pass" or concurrent enrollment in MATH 281 or equivalent

4 hours lecture, 3 hours laboratory

This is the third course of a three-semester, calculus level sequence of physics courses designed for engineering, physics, mathematics, and science students. The topics of optics, quantum mechanics, special relativity, and atomic and nuclear physics are introduced at the beginning level with reliance upon ability to apply topics introduced in Physics 201 and Physics 202. The laboratory provides experiments in optics, interference and diffraction, and nuclear physics.

COURSE MODIFICATIONS

The following reflect changes in subject designator, course number and/or title, prerequisite/corequisite/recommended preparation, units, hours, and/or course description. Other areas (e.g., course objectives, course content, student learning outcomes, etc.) may also have been modified to meet Title 5 standards (reflected as “*Review and update of course outline*”). These modifications have been carefully reviewed by the Curriculum, General Education and Academic Policies and Procedures Committee.

PRESENT	PROPOSED CHANGES TO AREAS AS INDICATED
CHILD DEVELOPMENT 124 – INFANT AND TODDLER DEVELOPMENT	<i>Review and update of course outline</i>
CENTER FOR WATER STUDIES 106 – ELECTRICAL & INSTRUMENTATION PROCESSES	<i>Review and update of course outline</i>
CENTER FOR WATER STUDIES 112 – WATER TREATMENT PLANT OPERATIONS	<i>Review and update of course outline</i>
CENTER FOR WATER STUDIES 212 – ADVANCED WATER TREATMENT PLANT OPERATIONS	<i>Review and update of course outline</i>
COMPUTER AND INFORMATION SCIENCE 209 – CISCO NETWORKING ACADEMY IX	CISCO CCNA Security
COMPUTER AND INFORMATION SCIENCE 270 – PALO ALTO NETWORK SECURITY I Prerequisite: “C” grade or higher or “Pass” in CIS 201 and CIS 202, or CIS 125 and CIS 263 Recommended Preparation: CCNA 1-4, CCNA Security, Security + 3 hours lecture, 1 hour laboratory, 3 units	Prerequisite: None Recommended Preparation: CCNA 1-4, CCNA Security, Security + 2 hours lecture, 3 hour laboratory, 3 units
COMPUTER SCIENCE 240 – DISCRETE STRUCTURES	<i>Review and update of course outline</i>
ENGLISH 236—CHICANO/CHICANA LITERATURE	CHICANA/O LITERATURE
MATHEMATICS 180 – ANALYTIC GEOMETRY AND CALCULUS I	<i>Review and update of course outline</i>
PERSONAL DEVELOPMENT–SPECIAL SERVICES 080 – EDUCATIONAL ASSESSMENT AND PRESCRIPTIVE PLANNING	PERSONAL DEVELOPMENT–SUCCESS SERVICES 080 – EDUCATIONAL ASSESSMENT AND PRESCRIPTIVE PLANNING
PERSONAL DEVELOPMENT - SPECIAL SERVICES 081 – SELF-ADVOCACY	PERSONAL DEVELOPMENT - SUCCESS SERVICES 081 – SELF-ADVOCACY
PERSONAL DEVELOPMENT – SPECIAL SERVICES 085 – ADAPTED COMPUTER BASICS	PERSONAL DEVELOPMENT – SUCCESS SERVICES 085 – ADAPTED COMPUTER BASICS
PERSONAL DEVELOPMENT – SPECIAL SERVICES 087 – ADAPTED COMPUTER STUDIES	PERSONAL DEVELOPMENT – SUCCESS SERVICES 087 – ADAPTED COMPUTER STUDIES
PERSONAL DEVELOPMENT-SPECIAL SERVICES 090A – LEARNING STRATEGIES PRACTICUM This course is designed for students with specialized learning needs. Emphasis is on the development and implementation of specific learning strategies in a developmental learning environment utilizing specialized software programs to assist students’ academic performance. Pass/No Pass only. Non-degree applicable.	PERSONAL DEVELOPMENT – SUCCESS SERVICES 090 – LEARNING STRATEGIES PRACTICUM This course is designed for students with specialized learning needs. Emphasis is on the development and implementation of specific learning strategies in a developmental learning environment utilizing specialized software programs to assist students’ academic performance. May be taken for a maximum of 4 units. Pass/No Pass only. Non-degree applicable.
PERSONAL DEVELOPMENT–SPECIAL SERVICES 092 – MATH STRATEGIES FOR STUDENTS WITH DISABILITIES	PERSONAL DEVELOPMENT – SUCCESS SERVICES 092 – MATH STRATEGIES FOR STUDENTS WITH DISABILITIES
PERSONAL DEVELOPMENT–SPECIAL SERVICES 096 – COGNITIVE COMMUNICATION SKILLS AND STRATEGIES	PERSONAL DEVELOPMENT – SUCCESS SERVICES 096 – COGNITIVE COMMUNICATION SKILLS AND STRATEGIES

DEACTIVATIONS

Course	Reason For Deletion per Department Faculty and/or Advisory Committee Recommendations
CHINESE 120 – CHINESE I	Recommendation of the department faculty. This course has not been offered in more than five years. There are no plans to offer it in the near future.
CHINESE 121 – CHINESE II	Recommendation of the department faculty. This course has not been offered in more than five years. There are no plans to offer it in the near future.
CHINESE 220 – CHINESE III	Recommendation of the department faculty. This course has not been offered in more than five years. There are no plans to offer it in the near future.
CHINESE 221 – CHINESE IV	Recommendation of the department faculty. This course has not been offered in more than five years. There are no plans to offer it in the near future.
CHINESE 250 – CONVERSATIONAL CHINESE I	Recommendation of the department faculty. This course has not been offered in more than five years. There are no plans to offer it in the near future.
CHINESE 251 – CONVERSATIONAL CHINESE II	Recommendation of the department faculty. This course has not been offered in more than five years. There are no plans to offer it in the near future.
FRENCH 120 – FRENCH I	Recommendation of the department faculty. This course was last offered in spring 2018. There are no plans to offer it in the near future.
FRENCH 121 – FRENCH II	Recommendation of the department faculty. This course was last offered in spring 2017. There are no plans to offer it in the near future.
FRENCH 220 – FRENCH III	Recommendation of the department faculty. This course has not been offered in more than five years. There are no plans to offer it in the near future.
FRENCH 221 – FRENCH IV	Recommendation of the department faculty. This course has not been offered in more than five years. There are no plans to offer it in the near future.
FRENCH 250 – CONVERSATIONAL FRENCH I	Recommendation of the department faculty. This course has not been offered in more than five years. There are no plans to offer it in the near future.
FRENCH 251 – CONVERSATIONAL FRENCH II	Recommendation of the department faculty. This course has not been offered in more than five years. There are no plans to offer it in the near future.
ITALIAN 120 – ITALIAN I	Recommendation of the department faculty. This course has not been offered in more than five years. There are no plans to offer it in the near future.
ITALIAN 121 – ITALIAN II	Recommendation of the department faculty. This course has not been offered in more than five years. There are no plans to offer it in the near future.
ITALIAN 220 – ITALIAN III	Recommendation of the department faculty. This course has not been offered in more than five years. There are no plans to offer it in the near future.

DELETIONS

Course	Reason For Deletion per Department Faculty and/or Advisory Committee Recommendations
PERSONAL DEVELOPMENT-SPECIAL SERVICES 090B – LEARNING STRATEGIES PRACTICUM	Recommendation of the department faculty. Course is being modified to eliminate the 090B of the course title/outline.
PERSONAL DEVELOPMENT-SPECIAL SERVICES 090C – LEARNING STRATEGIES PRACTICUM	Recommendation of the department faculty. Course is being modified to eliminate the 090C of the course title/outline.
PERSONAL DEVELOPMENT-SPECIAL SERVICES 090D – LEARNING STRATEGIES PRACTICUM	Recommendation of the department faculty. Course is being modified to eliminate the 090D of the course title/outline.

DISTANCE EDUCATION

Course	Title
CD 124	Infant and Toddler Development
CWS 106	Electrical & Instrumentation Processes
CWS 112	Water Treatment Plant Operations
CWS 212	Advanced Water Treatment Plant Operations
MATH 180	Analytic Geometry and Calculus
PDSS 090	Learning Strategies Practicum

DEGREE AND CERTIFICATE MODIFICATIONS

BUSINESS OFFICE TECHNOLOGY

OFFICE PROFESSIONAL Certificate of Specialization

This certificate is designed for students interested in entry-level positions in a broad spectrum of office environments. Utilizing a short-term, intensive format, students are provided with the basic skills necessary to be productive employees. The curriculum provides the foundation for further study and advancement in the clerical field, which is one of the largest employment areas in our information processing society.

Program Learning Outcomes

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

- Explain the basic language and concepts within the field of business office technology.
- Use computer input devices (e.g., keyboard and mouse) to properly and efficiently create and edit documents in word processing, spreadsheet, and presentation programs such as Word, Excel, and PowerPoint, and electronic communications such as email.

Certificate Requirements:

<i>Course</i>	<i>Title</i>	<i>Units</i>
BOT 100	Basic Keyboarding	1
or		
BOT 101AB	Keyboarding/Document Processing I-II	3
or		
BOT 102AB	Intermediate Keyboarding/Document Processing I-II	3
BOT 107	Office Systems and Procedures	2
BOT 114	Essential Word	1
BOT 115	Essential Excel	1
BOT 223	Office Work Experience	1
or		
BOT 224	Office Work Experience	2
BUS 110	Introduction to Business	3
BUS 128	Business Communication	3
	Total Required	<u>12-15-11-13</u>

HISTORY FOR TRANSFER (AA-T)

This degree program is useful for students preparing for careers in teaching, the law, government service, and research. The history program offers a diverse transfer curriculum and is committed to equity-minded teaching in an atmosphere of academic excellence. History course offerings focus on global cultures, historically-underrepresented groups in the United States, and the development of American Institutions. History courses also emphasize research, writing, and interpretive skills that are essential to the college's General Education mission. History faculty create a vibrant intellectual campus culture and promote civic engagement through a variety of panels, presentations, and field trips.

The following is required for the AA-T in History for Transfer degree:

1. Minimum of 60 semester or 90 quarter CSU-transferable units.
2. Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework.
3. Minimum of 18 semester or 27 quarter units in the major.
4. A grade of "C" or better in all courses required for the major.
5. Certified completion of the California State University General Education (CSU GE) Breadth pattern OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern; see Degree Requirements and Transfer Information section for more information. Note: If following IGETC, IGETC-CSU must be followed for admission to a CSU.

Program Learning Outcomes

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

- Recognize theories of historical interpretation.
- Describe historical and philosophical underpinnings of government systems and ideologies.
- Demonstrate how literature and the arts help us understand the past.
- Define historical periods and transitions.
- Distinguish between primary and secondary sources.

Associate in Arts Degree Requirements

Core Curriculum:

<i>Course</i>	<i>Title</i>	<i>Units</i>
HIST 108	Early American History	3
HIST 109	Modern American History	<u>3</u>
		6

List A: Select six units:

HIST 100	Early World History	3
or		
HIST 105	Early Western Civilization	3
HIST 101	Modern World History	3
or		
HIST 106	Modern Western Civilization	<u>3</u>
		6

List B: Select one course from each group:

Group 1: Select one of the following diversity courses:

HIST 114, 115 , 118, 119, 130, 131, 132, 133, 148 , 180, 181, or HIST 100 or 101 if not selected above	3
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Group 2: Select one course related to history:

ANTH 120, 140	
ART 100, 140, 141, 143, 144, 145	
ENGL 122, 221, 222, 231, 232, 236, 238	
HIST 122, 123, 124, or any history course not selected above	
HUM 110, 115, 116, 120, 140, 155	
MUS 110, 111, 116	
PHIL 160, 170	
POSC 120, 121, 124, 130, 140	
RELG 120	<u>3</u>
	6

Total Units for Major (18 units may be double-counted with GE)	18
Total Units for CSU GE Breadth or IGETC CSU	39-37
Total Transferable Elective Units	3-5
Total Units for Degree	60

Please note: SDSU accepts this degree for students transferring into History B.A.

ORNAMENTAL HORTICULTURE

I. ARBORICULTURE Associate in Science Degree

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 in Science Degree Requirements:

<i>Course</i>	<i>Title</i>	<i>Units</i>
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 260	Arboriculture	3
OH 290*	Cooperative Work Experience Education	<u>3</u>
		18

Select two 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	<u>1</u>
		2

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	<u>3</u>
		3

Select nine units from the following:

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	<u>3</u>
OH 275	Diagnosing Horticultural Problems	3
OH 278	Business Management for Ornamental Horticulture	3
SPAN 120	Spanish I	<u>5</u>
		9
	Total Required	32
	Plus General Education Requirements	

*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 Arboriculture. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

(Ornamental Horticulture continued)

V. LANDSCAPE ARCHITECTURE DESIGN
Associate in Science Degree

The Landscape Architecture major provides students with a multi-disciplined, project-based approach to landscape architecture for residential, public, and commercial sites. The curriculum covers the current trends in design and technologies in construction of the projects. Course work is designed to provide employable technical skill training in the field and provides foundation for students who plan to transfer to four-year degree programs in Landscape Architecture. Students earning an associate degree in Landscape Architecture are eligible to take the Landscape Architecture Registration Exam to achieve state licensure after completing requisite apprenticeship. Graduates may be employed by landscape architects, landscape contractors, public agencies, or may be self-employed.

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:

- Use hand-drawn and computer-generated graphics that are industry standards to produce accurate landscape plans that reflect sustainable, functional and aesthetic principles.
- Communicate design ideas with clients and contractors 1) verbally, 2) with hand drawings, and 3) computer-generated drawings.
- Integrate plants as well as construction methods and materials indicative of the Southern California region.
- 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 palette 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	Units
CADD 120	Introduction to Computer-Aided Drafting and Design	3
OH 102	Xeriscape: Water Conservation in the Landscape	2
OH 120	Fundamentals of Ornamental Horticulture	3
OH 150	Landscape Architecture I	3
OH 151	Landscape Architecture II	3
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
		<u>27</u>

Select one of the following:

ART 140	Survey of Western Art I: Prehistory through Middle Ages	3
ART 141	Survey of Western Art II: Renaissance through Modern	3
ART 144	Architecture of the 20 th Century	3
		<u>3</u>

Select four units (minimum) from the following:

OH 180	Plant Materials: Annuals and Perennials	3
OH/CADD 201	Advanced Computer-Aided Landscape Design	3
OH 221	Landscape Construction: Irrigation and Carpentry	3
OH 222	Japanese Garden Design and Construction	1

(Ornamental Horticulture continued)

OH 225	Landscape Contracting	3
OH 255	Sustainable Urban Landscape Principles and Practices	2
OH 263	Urban Forestry	1
		<u>4-6</u>
	Total Required	<u>37-34-36</u>
	Plus General Education Requirements	

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

~~**May also be offered at Southwestern College as LA 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 Architecture Design. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

(Ornamental Horticulture continued)

VI. LANDSCAPE TECHNOLOGY
Associate in Science Degree

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:

<i>Course</i>	<i>Title</i>	<i>Units</i>
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	4
OH 250	Landscape Water Management	2
OH 290*	Cooperative Work Experience Education	<u>3</u>
		24

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	<u>3</u>
		3

Select five units from 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	1
OH 172	Introduction to Landscape Design	3
OH 173	Intermediate 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 222	Japanese Garden Design and Construction	1
OH 225	Landscape Contracting	3
OH 255	Sustainable Urban Landscapes Principles and Practices	3 <u>2</u>
OH 260	Arboriculture	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	<u>5</u>
		5-5.5
	Total Required	32-32.5
	Plus General Education Requirements	

*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.

(Ornamental Horticulture continued)

VIII. SUSTAINABLE URBAN LANDSCAPES

Associate in Science Degree

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 self-employed.

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 Requirements:

<i>Course</i>	<i>Title</i>	<i>Units</i>
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 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	<u>3</u>
		<u>24</u> 20

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	<u>3</u>
		3

Select a minimum of eight units from the following:

OH 102	Xeriscape: Water Conservation in the Landscape	2
OH 105	Edibles in Urban Landscapes	1.5
OH 172	Introduction to Landscape Design	3
OH 180	Plant Materials: Annuals and Perennials	3
OH 220	Landscape Construction: Concrete and Masonry	3
OH 221	Landscape Construction: Irrigation and Carpentry	3
OH 235	Principles of Landscape Irrigation	4
OH 260	Arboriculture	3
OH 266	Science in Practice for Arboriculture	1
OH 278	Business Management for Ornamental Horticulture	<u>3</u>
		8
	Total Required	<u>3231-31.5</u>
	Plus General Education Requirements	

*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.