22. +Geology of Monterey Bay – Big Sur Area  
1 unit
3 hours lecture for 2 weeks, 16 term hours lecture in the field for one weekend
Acceptable for credit: CSU
Geology of the Monterey Bay-Big Sur area: Monterey Submarine Canyon, Point Lobos State Reserve, and coastal geology from Monterey to south of Big Sur.
1914.00

48NA-TZ. +Selected Topics in Geology  
.5-5 units
See section on Selected Topics.
1914.00

49. +Independent Study in Geology  
.5-5 units
Course study under this section may be repeated three times.
See section on Independent Study.
1914.00

248NA-TZ. +Selected Topics in Geology  
.5-5 units
See section on Selected Topics.

HEALTH EDUCATION

1. +Exploring Health Issues  
3 units
3 hours lecture
Acceptable for credit: CSU, UC
Examines current problems related to individual and community health: Sexual behavior, birth control, sexually-transmitted diseases, drugs, consumerism, environment, psychosomatic health, nutrition, physical fitness and preventive medicine.
0837.00
AA/AS area 2; CSU area E

11. +Cardiopulmonary Resuscitation  
.5 unit
0.5 hours lecture
Meets American Red Cross CPR/Professional Rescuer certification requirements.
Acceptable for credit: CSU
Development of skills and knowledge for administering emergency first aid for respiratory failure and cardiac arrest.
0837.00

48NA-TZ. +Selected Topics in Health Education  
.5-5 units
See section on Selected Topics.
0837.00

HEALTH PROFESSIONS & OCCUPATIONS

HEALTHCARE INTERPRETER

Certificate of Achievement Requirements:

First semester (Summer Session):
HLTOC 210 Survey of Healthcare Interpreting  
5

Second semester:
HLTOC 211 Interpreting in Health Care I  
6

Third semester:
HLTOC 212 Interpreting in Health Care II  
6
HLTOC 213 Interpreting in Health Care III  
5
HLTOC 214 Occupational Work Experience in Healthcare Interpreting (1-4)  
2
Total required units: 15

12. Calculation of Drug Dosages for Health Professionals  
1 unit
1 hour lecture
Prerequisite: Math 201 or 210D or (204B)
Also offered as Nurs 12. Not open for credit to students who have completed or are currently enrolled in Nurs 12.
Acceptable for credit: CSU
Calculation of the correct amount of prescribed medication and fluids to be given to patients: Weights and measures used in the prescription and administration of medication, and the ability to use mathematical skills in calculating medication dosages.
1299.00

48NA-TZ. +Selected Topics in Health Professions and Occupations  
.5-9 units
See section on Selected Topics.
1299.00
201. +Medical Terminology I 2 units
2 hours lecture
Study of basic structure of medical words, including prefixes, suffixes, word roots, combining forms, plurals and abbreviations, pronunciation, spelling, and definition of medical terms. 1299.00

210. +Survey of Healthcare Interpreting .5 unit
.5 hour lecture
Course provides an opportunity for students to become familiar with the requirements for the healthcare interpreter certificate: Focus on details regarding application, admission requirements, and language fluency. 1299.00

211. +Interpreting in Health Care I 6 units
6 hours lecture
Prerequisite: Hltoc 210
Training for bilingual individuals to develop awareness, knowledge, and skills necessary for effective language interpretation in healthcare settings: Emphasis on the roles and responsibilities of a healthcare interpreter, basic knowledge of common medical conditions, treatment and procedures, and insight into language and cultural nuances for specific communities necessary in the art of interpretation. 1299.00

212. +Interpreting in Health Care II 6 units
6 hours lecture
Prerequisite: Hltoc 211
Training for bilingual individuals to be an integral member of the healthcare team in bridging the language and cultural gap between clients and providers: Further enhancement of interpreting skills learned in Interpreting in Health Care I, covering specialized healthcare service areas such as genetics, mental health, and death and dying. Emphasis also on the development of cultural competency in the community and workplace, and careers in interpretation. 1299.00

213. +Interpreting in Health Care III .5 unit
.5 hours lecture
Prerequisite: Hltoc 211
Corequisite: Hltoc 214
Professional behavior and situational management for the healthcare interpreter; accompanies the fieldwork class, Hltoc 214. 1299.00

214. +Occupational Work Experience in Healthcare Interpreting 1-4 units
0-15 hours lecture
Corequisite: Hltoc 213
Course study under this section may be repeated one time. Training of interpreters to facilitate linguistic and cultural communication between clients and healthcare providers: Fieldwork experience in application of knowledge and technical interpreting skills learned in Hltoc 211, 212 and 213. 175 hours of verified, supervised field experience in healthcare settings is required. 1299.00

248NA-TZ. +Selected Topics in Health Professions and Occupations .5-9 units
See section on Selected Topics. 1299.00

250. ++Fluid and Electrolyte Workshop .5 units
.5 hours lecture
Academic and clinical approach to fluid and electrolytes and the application to nursing care; interactive discussions involving seminar, computer-assisted instruction and case study. 1299.00

HEALTH SCIENCES

The AS degree in Health Sciences will be awarded upon satisfactory completion of the Major course requirements and the General Education requirements.

Degree Major Requirements:
Completion of at least one course from each of the following four groups, for a minimum of 18 units:

1. **Group A:**  
   - Biol 1A General Biology (5)  
   - Biol 3 Microbiology (5)  
   - Biol 10 Introduction to Biology (4)

2. **Group B:**  
   - Biol 2 Human Anatomy (5)  
   - Biol 4 Human Physiology (5)  
   - Biol 20A Human Anatomy and Physiology (5)
3. **Group C:**
   - Biol 20B Human Anatomy and Physiology (5)
   or
   - Biol 24 Basic Human Anatomy and Physiology (4)

4. **Group D:**
   - Chem 1A General Chemistry (5)
   or
   - Chem 12A Organic Chemistry (5)
   or
   - Chem 30A Introductory Inorganic Chemistry (4)

7. **Group D:**
   - Hist 7A Exploring Health Issues (3)
   or
   - Nutr 10 Nutrition (4)
   or
   - Nutr 12 Medical Nutrition (3)

   Total required units: 18

---

**HISTORY**

2A-B. **+History of European Civilization**

*3-3 units*

**3 hours lecture**

Hist 2A is not prerequisite to Hist 2B

Acceptable for credit: CSU, UC

[Hist 2A: CAN Hist 2], [Hist 2B: CAN Hist 4]

[Hist 2A+Hist 2B: CAN Hist Seq A]

2A: Western civilization: Prehistoric, Ancient, Medieval and Renaissance period to 1660.

2B: Rise of nations, revolutionary eras, European expansion and decline; Europe and its impact on the world; emphasis on ideas and institutions rather than national histories.

AA/AS area 2; CSU area C2, D; IGETC area 3, 4 2205.00

7A. **+History of the United States to 1877**

*3 units*

**3 hours lecture**

Acceptable for credit: CSU, UC

[CAN Hist 8]

[Hist 7A+Hist 7B: CAN Hist Seq B]

Survey and interpretation of political, social, and economic factors contributing to the growth of the nation from colonial days to Reconstruction (1877).

AA/AS area 2; CSU area C2, D; IGETC area 3, 4 2205.00

7B. **+History of the United States Since 1865**

*3 units*

**3 hours lecture**

Hist 7A is not prerequisite to Hist 7B

Acceptable for credit: CSU, UC

[CAN Hist 10]

[Hist 7A+Hist 7B: CAN Hist Seq B]

Survey and interpretation of political, social, and economic factors contributing to the growth of the nation from the end of the Civil War to the present.

2205.00

AA/AS area 2; CSU area C2, D; IGETC area 3, 4

8A-B. **+History of Latin-American Civilization**

*3-3 units*

**3 hours lecture**

Hist 8A is not prerequisite to Hist 8B

Acceptable for credit: CSU, UC

8A: Latin America from pre-Columbian times to the outbreak of the wars for independence: The formative period and impact of Spanish civilization upon native societies.

8B: 19th and 20th centuries: Changing patterns of political, social, and cultural life in Latin America.

2205.00

AA/AS area 2; CSU area C2, D

14. **+San Francisco Bay Area from Discovery to Present**

*3 units*

**3 hours lecture**

Acceptable for credit: CSU

History of San Francisco Bay Area: Social, economic, environmental, political, and cultural factors which have influenced the development of this region.

2205.00

CSU area C2, D

15. **Twentieth Century America**

*3 units*

**3 hours lecture**

Acceptable for credit: CSU, UC

Not open for credit to students who have completed or are enrolled in History 7B.

This century’s history of the people of the United States and their society: The principle historical, literary, artistic, political, economic, and social developments since 1898.

2205.00

AA/AS area 2; CSU area C2, D, IGETC area 3, 4

19. **+History of California**

*3 units*

**3 hours lecture**

Acceptable for credit: CSU, UC

California’s multi-ethnic history from the pre-Spanish California period to the present: Emphasis on the social and ethnic diversity of past and present California.

2205.00

AA/AS area 2; CSU area C2, D; IGETC area 3, 4
27. +The Age of World War II 3 units
3 hours lecture
Acceptable for credit: CSU, UC
Causes, events, and consequences of the Second World War: Pre-war breakdown in international relations and the role of the United States in the conflict. 2205.00
AA/AS area 2; CSU area C2, D; IGETC area 3, 4

30A-B. +History of England 3-3 units
3 hours lecture
Hist 30A is not prerequisite to Hist 30B
Acceptable for credit: CSU, UC
30A: England and the British Isles from earliest recorded times to the 17th century: Political, social, and cultural institutions and their development relating to England and to the early United States.
30B: England and the Commonwealth Empire since 1603: Emergence of British democratic institutions and the dissemination of these institutions, cultural and political, to the New World and the Commonwealth. 2205.00
AA/AS area 2; CSU area C2, D; IGETC area 3, 4

32. +The United States Since 1945 3 units
3 hours lecture
Acceptable for credit: CSU, UC
Recent history of the United States: Social and political developments and the changing role of the United States in modern world relations. 2205.00
AA/AS area 2; CSU area C2, D; IGETC area 3, 4

48NA-TZ. +Selected Topics in History .5-5 units
See section on Selected Topics. 2205.00

49. +Independent Study in History .5-5 units
Course study under this section may be repeated three times.
See section on Independent Study. 2205.00

HUMANITIES

The AA degree in Humanities will be awarded upon satisfactory completion of the Major course requirements and the General Education requirements.

Degree Major Requirements:
Completion of at least 18 units in courses from the Humanities (Area 3 of the General Education Course List):
AFRAM: 21, 22A, 22B, 22C, 22D, 28*, 41, 42, 43, 45
ANTHR: 7, 8
ART: 1, 2, 3, 4, 9, 10, 11, 12, 15
ASAME: 1, 30
CHIN: 1, 2
FREN: 1A, 1B, 2A, 2B, 30A, 30B
HUMAN: 2
M/LAT: 28*, 30A, 30B
MUSIC: 1A, 9, 10, 11, 12A, 12B, 13A, 13B
PHIL: 1, 2, 10, 20A, 20B, 30
SPAN: 1A, 1B, 2A, 2B, 22A, 22B, 30A, 30B, 31A, 31B, 38, 40
SWAHI: 1A, 1B 18
Total required units: 18
*Afram 28 is the same as M/Lat 28; maximum credit: one course.

2. +Human Values 3 units
3 hours lecture
Acceptable for credit: CSU, UC
Study of human values: The individual in relation to the environment as it affects conduct among diverse cultures, past and present. 4903.00
AA/AS area 3; CSU area C2; IGETC area 3

48NA-TZ. +Selected Topics in Humanities .5-5 units
See section on Selected Topics. 4903.00

49. +Independent Study in Humanities .5-5 units
Course study under this section may be repeated three times.
See section on Independent Study. 4903.00

248NA-TZ. +Selected Topics in Humanities .5-5 units
See section on Selected Topics. 4903.00
LANDSCAPE HORTICULTURE

The horticulture facility at Merritt College is one of the largest in northern California. Housed on seven and one-half acres, the facility includes 5,000 square feet of greenhouses, a 5,000 square-foot lath house, drafting and floral design labs and the Emile L. Labadie Arboretum. This two-year program is designed to prepare students for employment in the field of Landscape Horticulture. One or more certificates in Landscape Horticulture will be awarded upon satisfactory completion of the requirements listed below. Certificates at the Basic, Intermediate, and Specialist/Professional levels are available. This program is designed to lead to a vocational competency-based Associate in Science degree or transfer to a four-year institution. Graduates can find employment in landscape design and construction, landscape maintenance, nurseries, and golf and sports turf-related fields. Courses are offered during both the day and evening.

The AS degree in Landscape Horticulture will be awarded upon satisfactory completion of the General Education requirements and the Major course requirements of one of the Level C programs. Certificates of Completion will be awarded for satisfactory completion of Level C requirements. Certificates only (and not the AS degree) are awarded for completion of the Level A and Level B requirements.

The following curriculum patterns include revised certificate and degree requirements for the Landscape Design and Construction program, effective for the Fall 2003 semester. Students who started the program prior to Fall 2003 have the option of completing the requirements under the previous plan effective Fall 2001 provided they have been continuously enrolled (see Catalog Rights).

The Certificate of Completion and AS degree programs in Professional Turf and Landscape Management and Horticultural Therapy are new and state approval is pending. A separate Certificate of Achievement in Horticultural Therapy will be awarded upon satisfactory completion of the certificate requirements, effective as of the Spring 2002 semester.

Course offerings are indicated by the following codes:
S = Spring
F = Fall
SO = Spring of odd years
SE = Spring of even years
FO = Fall of odd years
FE = Fall of even years

The Certificates available include the following:
Level A: Basic Landscape Horticulture Certificate
Level B: Intermediate Landscape Horticulture Certificate:
  1. Intermediate Landscape Design and Construction

2. Intermediate Landscape and Parks Maintenance
3. Intermediate Nursery Management
4. Turf and Landscape Management Specialist

Level C: Landscape Horticulture Specialist or Professional Certificates:
  1. Landscape Design and Construction Specialist
  2. Landscape and Parks Maintenance Specialist
  3. Nursery Management Specialist
  4. Turf and Landscape Management Professional

The certificate in Basic Landscape Horticulture is intended for those students who are limited to a one-year program. Graduates with this certificate can find employment at the basic or entry level in grounds maintenance, or as a park worker or gardener. An advanced certificate in Landscape Design and Construction enables students to find employment with landscape design and construction firms, as independent landscape designers, or, with state certification, as landscape contractors. Students with a certificate in Nursery Management can find employment in local retail and wholesale nurseries. Students have also successfully started their own specialty nurseries. Students who successfully complete the advanced certificate in Landscape and Parks Maintenance can find employment with city parks or other municipal departments, or with commercial landscape firms. Many students work either independently or with landscape maintenance companies. Lastly, students who successfully complete the advanced certificate in Turf and Landscape Management Professional can find employment in golf and sports turf-related fields. Potential careers are available with agencies such as parks and recreation departments, golf courses, landscape contractors, sports facilities, as well as in the retail and wholesale turf-related products field.

A. BASIC LANDSCAPE HORTICULTURE

Certificate Requirements:
LANHT 1  Introduction to Landscape Horticulture with Lab (Day) (F, S)
  or
LANHT 1E Introduction to Landscape Horticulture (Evening) (F, S)  3
LANHT 23 Plant Terminology (F, S)  2.5
LANHT 26 Pruning (F)  0.5
Select one plant ID course from the following:
LANHT 2  Plant Materials: Trees with Lab (Day) (F)
LANHT 2E Plant Materials: Trees (Evening) (SO)
LANHT 3  Plant Materials: Ground Covers and Vines with Lab (Day) (S)
LANHT 3E Plant Materials: Ground Covers and Vines (Evening) (FO)
LANHT 4  Plant Materials: Shrubs with Lab (Day) (F)
LANHT 4E Plant Materials: Shrubs (Evening) (SE)
LANHT 5  Plant Materials: Native Plants with Lab (Day) (S)
LANHT 5E Plant Materials: Native Plants (Evening) (FE)
LANHT 6 Plant Materials: Herbaceous Plants with Lab (Day) (S02, S05)  
LANHT 6E Plant Materials: Herbaceous Plants (Evening) (F03, F06) 3

Select one course from the following:
LANHT 8 Turf Management with Lab (Day) (S)  
LANHT 8E Turf Management (Evening) (SE)  
LANHT 13 Arboriculture with Lab (Day) (F)  
LANHT 13E Arboriculture (Evening) (FO) 4

Select one course from the following:
LANHT 10 Insect Pests (S)  
LANHT 11 Plant Diseases and Their Control (F)  
LANHT 12 Weeds in the Urban Landscape (S) 3

Select one course from the following:
LANHT 16 Soil Management (F)  
LANHT 19 Plant Nutrition (S) 3

Level A total required units: 19

B1. INTERMEDIATE LANDSCAPE DESIGN AND CONSTRUCTION

Certificate Requirements:
Level A Requirements:
LANHT 1 Introduction to Landscape Horticulture with Lab (Day) (F, S)  
LANHT 1E Introduction to Landscape Horticulture (Evening) (F, S) 3
LANHT 23 Plant Terminology (F, S) 2.5

Select one plant ID course from the following:
LANHT 2 or 2E or 3 or 3E or 4 or 4E or 5 or 5E or 6 or 6E 3

Level A required units: 8.5

Plus Level B1 Requirements:
LANHT 14 Landscape Construction with Lab (Day) (F)  
LANHT 14E Landscape Construction (Evening) (FO) 4  
LANHT 18A Landscape Design (F) 3  
LANHT 18B Landscape Design (S) 3  
LANHT 22A Landscape Design Laboratory (F) (.5-1) 1  
LANHT 22B Landscape Design Laboratory (S) (.5-1) 1  
LANHT 29 Planting Design (F) 4

One additional plant ID course from the following:
LANHT 2 or 2E or 3 or 3E or 4 or 4E or 5 or 5E or 6 or 6E 3*

Select courses from the following for a minimum of three units:
LANHT 8 Turf Management with Lab (Day) (S) (4)  
LANHT 8E Turf Management (Evening) (SE) (4)  
LANHT 13 Arboriculture with Lab (Day) (F) (4)  
LANHT 13E Arboriculture (Evening) (FO) (4)  
LANHT 30 Practical Applications of Landscape Design (F) (3)  
LANHT 31 Site Operations for Landscape Designers and Builders (S) (4)  
LANHT 32 Designing with Native Plants (F) (3)  
LANHT 33A-B Design Evaluation of Bay Area Landscapes (S) (3-3)  
LANHT 34 Computer-Assisted Landscape Design (F) (2)  
LANHT 35 Advanced Landscape Design (S) (5) 3

Level B1 additional required units: 22
Level B1 total required units: 30.5

*Select a course not previously taken.

C1. LANDSCAPE DESIGN AND CONSTRUCTION SPECIALIST

Degree Major/Certificate Requirements:
Level A Requirements: 8.5
Plus Level B1 Additional Requirements: 22
Level B1 total required units: 30.5

Plus Level C1 Requirements:
LANHT 17 Irrigation with Lab (Day) (S)  
LANHT 17E Irrigation (Evening) (SE) 4
One additional plant ID course from the following:
LANHT 2 or 2E or 3 or 3E or 4 or 4E or 5 or 5E or 6 or 6E 3*

Select courses from the following for a minimum of six units:
LANHT 8 Turf Management with Lab (Day) (S) (4)  
LANHT 8E Turf Management (Evening) (SE) (4)  
LANHT 13 Arboriculture with Lab (Day) (F) (4)  
LANHT 13E Arboriculture (Evening) (FO) (4)  
LANHT 30 Practical Applications of Landscape Design (F) (3)  
LANHT 31 Site Operations for Landscape Designers and Builders (S) (4)  
LANHT 32 Designing with Native Plants (F) (3)  
LANHT 33A-B Design Evaluation of Bay Area Landscapes (S) (3-3)  
LANHT 34 Computer-Assisted Landscape Design (F) (2)  
LANHT 35 Advanced Landscape Design (S) (5) 6

Level C1 additional required units: 13
Level C1 total required units 43.5

** Select a course not previously taken.

B2. INTERMEDIATE LANDSCAPE AND PARKS MAINTENANCE

Certificate Requirements:
Level A Requirements:
LANHT 1 Introduction to Landscape Horticulture with Lab (Day) (F, S)  
LANHT 1E Introduction to Landscape Horticulture (Evening) (F, S) 3
LANHT 26 Pruning (F) 0.5

Select one plant ID course from the following:
LANHT 2 or 2E or 3 or 3E or 4 or 4E or 5 or 5E or 6 or 6E 3

Select courses from the following for a minimum of five units:
LANHT 8 Turf Management with Lab (Day) (S) (4)  
LANHT 8E Turf Management (Evening) (SE) (4)  
LANHT 13 Arboriculture with Lab (Day) (F) (4)  
LANHT 13E Arboriculture (Evening) (FO) (4)  
LANHT 30 Practical Applications of Landscape Design (F) (3)  
LANHT 31 Site Operations for Landscape Designers and Builders (S) (4)  
LANHT 32 Designing with Native Plants (F) (3)  
LANHT 33A-B Design Evaluation of Bay Area Landscapes (S) (3-3)  
LANHT 34 Computer-Assisted Landscape Design (F) (2)  
LANHT 35 Advanced Landscape Design (S) (5) 6

Level B1 additional required units: 22
Level B1 total required units: 30.5

*Select a course not previously taken.
C2. LANDSCAPE AND PARKS MAINTENANCE SPECIALIST

Degree Major/Certificate Requirements:
Level A Requirements: 16
Plus Level B2 Additional Requirements: 16
Level B2 total required units: 32

Plus Level C2 Requirements:
LANHT 21 Horticultural Equipment Operation/ Maintenance/Repair 2
One additional plant ID course from the following: LANHT 2 or 2E or 3 or 3E or 4 or 4E or 5 or 5E or 6 or 6E 3**
One additional course from the following: LANHT 10 Insect Pests (S) and LANHT 11 Plant Diseases and Their Control (F) and LANHT 12 Weeds in the Urban Landscape (S) 3**
One additional course from the following: LANHT 16 Soil Management (F) and LANHT 19 Plant Nutrition (S) 3**
Level C2 additional required units: 11
Level C2 total required units: 43

**Select the course not previously taken.

C3. NURSERY MANAGEMENT SPECIALIST

Degree Major/Certificate Requirements:
Level A Requirements: 15
Plus Level B3 Additional Requirements: 15
Level B3 total required units: 30

Plus Level C3 Requirements:
One additional plant ID course from the following: LANHT 2 or 2E or 3 or 3E or 4 or 4E or 5 or 5E or 6 or 6E 3**
One additional course from the following: LANHT 10 Insect Pests (S) and LANHT 11 Plant Diseases and Their Control (F) and LANHT 12 Weeds in the Urban Landscape (S) 3**
Electives: 6**
**B4. TURF AND LANDSCAPE MANAGEMENT SPECIALIST**

Add Certificate of Completion
(Pending State Approval)

**Certificate Requirements:**

**Level A Requirements:**

- **LANHT 1** Introduction to Landscape Horticulture with Lab (Day) (F, S)
- **LANHT 1E** Introduction to Landscape Horticulture (Evening) (F, S) 3
- **LANHT 23** Plant Terminology (F, S) 2.5
- **LANHT 8** Turf Management with Lab (Day) (S)
- **LANHT 8E** Turf Management (Evening) (SE) 4
- **LANHT 11** Plant Diseases and Their Control (F)
- **LANHT 12** Weeds in the Urban Landscape (S) 3
- **LANHT 16** Soil Management (F)
- **LANHT 19** Plant Nutrition (S) 3

Select one plant ID course from the following:

- **LANHT 2, 2E, 3, 3E, 4, 4E, 5, 5E, 6, 6E** 3

**Level A required units:** 18.5

**Level B4 Requirements:**

- **LANHT 11** Plant Diseases and Their Control (F)
- **LANHT 12** Weeds in the Urban Landscape (S) 3*
- **LANHT 16** Soil Management (F)
- **LANHT 19** Plant Nutrition (S) 3*
- **LANHT 17** Irrigation with Lab (Day) (S)
- **LANHT 17E** Irrigation (Evening) (SE) 4

One additional plant ID course from the following:

- **LANHT 2, 2E, 3, 3E, 4, 4E, 5, 5E, 6, 6E** 3*
- **LANHT 43** Introduction to Recreational and Sports Turf Management (S) 1

**Level B4 additional required units:** 14

**Level B4 total required units:** 32.5

**Recommended:**

- **LANHT 52A-C** Advanced Plant Propagation (SE) (2-2-2)
- **LANHT 202A-D** Soil Management Lab (FE) (.5 each level)
- **LANHT 203** Greenhouse Operations and Management (F02, F04) (3)
- **LANHT 204** Floriculture and Crop Production (S04, S06) (2)

**C4. TURF AND LANDSCAPE MANAGEMENT PROFESSIONAL**

Add AS Degree and Certificate of Completion
(Pending State Approval)

**Degree Major/Certificate Requirements:**

**Level A Requirements:**

- **LANHT 10** Insect Pests (S) 3
- **LANHT 21** Horticultural Equipment Operation, Maintenance, and Repair 2
- **LANHT 44** Recreational and Sports Turf Management (F) 3
- **BUS 10** Introduction to Business 3
- **CIS 205** Computer Literacy 1

**Level C4 additional required units:** 12

**Level C4 total required units:** 44.5

**Recommended:**

- **BIOL 5** Plant Biology (4)
- **BUS 5** Human Relations in Business (3)
- **BUS 52** Psychology and Human Relations (3)
- **SPAN 30A-B** Beginning Conversational Spanish (3-3)

**HORTICULTURAL THERAPY**

**Certificate of Achievement Requirements:**

- **LANHT 1** Introduction to Landscape Horticulture with Lab (Day) (F, S)
- **LANHT 1E** Introduction to Landscape Horticulture (Evening) (F, S) 3
- **LANHT 24** Plant Propagation (S) 3
- **LANHT 70** Introduction to Horticultural Therapy (F) 3
- **LANHT 71** Horticultural Crafts (F or S) 1
- **LANHT 72** Adaptive Horticulture (S) 2
- **LANHT 73** Horticulture for Special Populations (S) 3
- **LANHT 74** Therapeutic Landscape Design (F or S) (2)
- **LANHT 75** Occupational Work Experience in Horticultural Therapy (S, I, M) (1-2)

**Total required units:** 16-17

**Recommended:**

- **LANHT 18A** Landscape Design (F) (3)
- **LANHT 23** Plant Terminology (F, S) (2.5)
- **LANHT 220** The Edible Landscape (F or S) (2)

Any related course in Herbs, Psychology, Sociology, Nursing, Occupational Therapy, Recreational Therapy, etc.
Add AS Degree and Certificate of Completion (Pending State Approval)

This program provides a comprehensive study of the field of Horticultural Therapy and includes a balance of horticultural knowledge, understanding of the different special populations served by the field of horticultural therapy, and the learning of therapeutic and adaptive techniques that meet the needs of special populations. Graduates can find employment as horticultural, recreational, or occupational therapists at day and residential programs for clients with physical, developmental and mental disabilities; activities director at seniors, independent living, or skilled nursing facilities; community or vocational garden teacher at schools, correctional facilities, and programs for homeless and substance abusers; and in therapeutic landscape design. Occupational competencies include adaptive gardening techniques and program development, implementation, assessment, and evaluation. The program also prepares students to transfer to a four-year institution specializing in Horticultural Therapy.

The AS degree in Landscape Horticulture with a specialization in Horticultural Therapy will be awarded upon satisfactory completion of the General Education requirements and the Major course requirements. A Certificate of Completion will be awarded for satisfactory completion of all Major course requirements. State approval for this program is pending.

Degree Major/Certificate Requirements:

**LANHT 1**  Introduction to Landscape Horticulture with Lab (Day) (F, S) (3)

**LANHT 1E**  Introduction to Landscape Horticulture (Evening) (F, S) (3)

**LANHT 23**  Plant Terminology (F, S) 2.5

**LANHT 24**  Plant Propagation (S) 3

**LANHT 70**  Introduction to Horticultural Therapy (F) 3

**LANHT 71**  Horticultural Crafts (F or S) 1

**LANHT 72**  Adaptive Horticulture (S) 2

**LANHT 73**  Horticulture for Special Populations (S) 3

**LANHT 74**  Therapeutic Landscape Design (F or S) 2

**LANHT 75**  Occupational Work Experience in Horticultural Therapy (S, I, M) 1-4

Total required units: 20.5–23.5

**Recommended:**

**COSER 43A**  Introduction to Counseling Skills for Paraprofessionals I (3)

**LANHT 220**  The Edible Landscape (F or S) (2)

**PSYCH 1A**  Introduction to General Psychology (3)

**RECSE 50**  Introduction to Recreation and Leisure Services (3)

1. +Introduction to Landscape Horticulture with Lab (Day) 3 units

2 hours lecture, 3 hours laboratory

**Not open for credit to students who have completed or are currently enrolled in Lanht 1E.**

**Acceptable for credit: CSU, UC**

Principles and practices of basic landscape horticulture: Brief history of horticulture, landscape planting and transplanting, soils, soil water, water quality, watering, overview of structure of higher plants, plant metabolism, vegetative/reproductive growth and development, plant propagation, hormones and plant growth, climate, light and plant growth, fertilizers and mineral nutrition; brief review of organic gardening, biological competitors of useful plants, gardening maintenance and long-term care options, branches of horticulture, and job opportunities. The lab includes planting, garden renovation, classroom demonstrations, and field trips to prominent Bay Area landscapes. 0109.00

AA/AS area 1

1E. +Introduction to Landscape Horticulture (Evening) 3 units

3 hours lecture

**Not open for credit to students who have completed or are currently enrolled in Lanht 1.**

**Acceptable for credit: CSU, UC**

Principles and practices of basic landscape horticulture: Brief history of horticulture, landscape planting and transplanting, soils, soil water, water quality, watering, overview of structure of higher plants, plant metabolism, vegetative/reproductive growth and development, plant propagation, hormones and plant growth, climate, light and plant growth, fertilizers and mineral nutrition; brief review of organic gardening, biological competitors of useful plants, gardening maintenance and long-term care options, branches of horticulture, and job opportunities. Slide presentations substituted for lab. 0109.00

2. +Plant Materials: Trees with Lab (Day) 3 units

2 hours lecture, 3 hours laboratory

**Recommended preparation: Lanht 1 or 1E, and 23**

**Not open for credit to students who have completed or are currently enrolled in Lanht 2E.**

**Acceptable for credit: CSU, UC**

Identification and culture of trees used in the landscape (emphasis on Bay Area): Climate, soil, and water preferences, garden culture; pest and disease problems; and pruning and propagation. The lab includes planting, garden renovation, classroom demonstrations, and field trips to prominent Bay Area landscapes. 0109.00
2E. +Plant Materials: Trees (Evening)  3 units
3 hours lecture
Recommended preparation: Lanht 1 or 1E, and 23
Not open for credit to students who have completed or are currently enrolled in Lanht 2.
Acceptable for credit: CSU, UC
Identification and culture of trees used in the landscape (emphasis on Bay Area): Climate, soil, and water preferences, garden culture; pest and disease problems; and pruning and propagation. Slide presentations substituted for lab.
0109.00

3. +Plant Materials:  Ground Covers and Vines with Lab (Day)  3 units
2 hours lecture, 3 hours laboratory
Recommended preparation: Lanht 1 or 1E, and 23
Not open for credit to students who have completed or are currently enrolled in Lanht 3E.
Acceptable for credit: CSU, UC
Identification and culture of ground covers and vines used in the landscape: Vegetative, flower, and fruit characteristics; climates tolerated; pest and disease problems; and pruning and propagation. The lab includes planting, garden renovation, classroom demonstrations, and field trips to prominent Bay Area landscapes.
0109.00

3E. +Plant Materials:  Ground Covers and Vines (Evening)  3 units
3 hours lecture
Recommended preparation: Lanht 1 or 1E, and 23
Not open for credit to students who have completed or are currently enrolled in Lanht 3.
Acceptable for credit: CSU, UC
Identification and culture of ground covers and vines used in the landscape: Vegetative, flower, and fruit characteristics; climates tolerated; pest and disease problems; and pruning and propagation. Slide presentations substituted for lab.
0109.00

4. +Plant Materials:  Shrubs with Lab (Day)  3 units
2 hours lecture, 3 hours laboratory
Recommended preparation: Lanht 1 or 1E, and 23
Not open for credit to students who have completed or are currently enrolled in Lanht 4E.
Acceptable for credit: CSU, UC
Identification and culture of shrubs used in Bay Area landscapes: Climate, soil, and water preferences; garden culture; pest and disease problems; and pruning and propagation. The lab includes planting, garden renovation, classroom demonstrations, and field trips to prominent Bay Area landscapes.
0109.00

4E. +Plant Materials:  Shrubs (Evening)  3 units
3 hours lecture
Recommended preparation: Lanht 1 or 1E, and 23
Not open for credit to students who have completed or are currently enrolled in Lanht 4.
Acceptable for credit: CSU, UC
Identification and culture of shrubs used in Bay Area landscapes: Climate, soil, and water preferences; garden culture; pest and disease problems; and pruning and propagation. Slide presentations substituted for lab.
0109.00

5. +Plant Materials:  Native Plants with Lab (Day)  3 units
2 hours lecture, 3 hours laboratory
Recommended preparation: Lanht 1 or 1E, and 23
Not open for credit to students who have completed or are currently enrolled in Lanht 5E.
Acceptable for credit: CSU, UC
Identification and culture of native plants used in the landscape: Climate, soil, and water preferences; garden culture; pest and disease problems; and pruning and propagation. The lab includes planting, garden renovation, classroom demonstrations, and field trips to prominent Bay Area landscapes.
0109.00

5E. +Plant Materials:  Native Plants (Evening)  3 units
3 hours lecture
Recommended preparation: Lanht 1 or 1E, and 23
Not open for credit to students who have completed or are currently enrolled in Lanht 5.
Acceptable for credit: CSU, UC
Identification and culture of native plants used in the landscape: Climate, soil, and water preferences; garden culture; pest and disease problems; and pruning and propagation. Slide presentations substituted for lab.
0109.00

6. +Plant Materials:  Herbaceous Plants with Lab (Day)  3 units
2 hours lecture, 3 hours laboratory
Recommended preparation: Lanht 1 or 1E, and 23
Not open for credit to students who have completed or are currently enrolled in Lanht 6E.
Acceptable for credit: CSU, UC
Identification and culture of annuals, biennials and herbaceous plants: Design and maintenance of flower borders and beds for seasonal color in the landscape. The lab includes planting, garden renovation, classroom demonstrations, and field trips to prominent Bay Area landscapes.
0109.00
6E. +Plant Materials: Herbaceous Plants  (Evening)  3 units  
3 hours lecture  
Recommended preparation: Lanht 1 or 1E, and 23  
Not open for credit to students who have completed or are currently enrolled in Lanht 6.  
Acceptable for credit: CSU, UC  
Identification and culture of annuals, biennials and herbaceous plants: Design and maintenance of flower borders and beds for seasonal color in the landscape. Slide presentations substituted for lab.  
0109.00

8. +Turf Management with Lab (Day)  4 units  
3 hours lecture, 3 hours laboratory  
Recommended preparation: Lanht 1 or 1E, and 23  
Not open for credit to students who have completed or are currently enrolled in Lanht 8E.  
Acceptable for credit: CSU  
Identification of turf plants, their role in the landscape, and turf management: Plant selection, establishment and maintenance; identification of common problems and their treatments. The lab includes turf establishment, turf renovation, turf equipment, and field trips to locations using turf such as golf courses, athletic fields and sports complexes.  
0109.00

8E. +Turf Management (Evening)  4 units  
4 hours lecture  
Recommended preparation: Lanht 1 or 1E, and 23  
Not open for credit to students who have completed or are currently enrolled in Lanht 8.  
Acceptable for credit: CSU  
Identification of turf plants, their role in the landscape, and turf management: Plant selection, establishment and maintenance; identification of common problems and their treatments. Slide presentations and field lectures substituted for lab.  
0109.00

10. +Insect Pests  3 units  
2.5 hours lecture, 1.5 hours laboratory  
Recommended preparation: Lanht 1 or 1E  
Acceptable for credit: CSU  
Identification and management of local arthropod pests and beneficial populations peculiar to ornamental plants: Emphasis on non-chemical methods of control; integration of methods used, and development of approaches best suited to controlling pests.  
0109.00

11. +Plant Diseases and Their Control  3 units  
3 hours lecture  
Recommended preparation: Lanht 1 or 1E  
Acceptable for credit: CSU  
Identification and control of diseases of landscape plants.  
0109.00

12. +Weeds in the Urban Landscape  3 units  
3 hours lecture  
Recommended preparation: Lanht 1 or 1E, and 23  
Acceptable for credit: CSU  
Study of nature of weeds and their interactions in the environment: Emphasis on identification and characteristics of various central California weeds, including preventive, biological, and chemical methods of weed control.  
0109.00

13. +Arboriculture with Lab (Day)  4 units  
3 hours lecture, 3 hours laboratory  
Recommended preparation: Lanht 1 or 1E, and 23  
Not open for credit to students who have completed or are currently enrolled in Lanht 13E.  
Acceptable for credit: CSU  
Principles and practices in the management of trees and shrubs in the landscape: Planting concerns (structural and environmental), pruning and its applications, grafting and budding applications, tree-hazard management, preventive maintenance and repair, diagnosing plant problems, preserving existing plants, tree valuation and tree maintenance businesses. The lab includes pruning, staking, fruit-tree twig identification, and field trips to perform tree-hazard evaluations, tree valuations, and to diagnose tree problems.  
0109.00

13E. +Arboriculture (Evening)  4 units  
4 hours lecture  
Recommended preparation: Lanht 1 or 1E, and 23  
Not open for credit to students who have completed or are currently enrolled in Lanht 13.  
Acceptable for credit: CSU  
Principles and practices in the management of trees and shrubs in the landscape: Planting concerns (structural and environmental), pruning and its applications, grafting and budding applications, tree-hazard management, preventive maintenance and repair, diagnosing plant problems, preserving existing plants, tree valuation and tree maintenance businesses. Slide presentations substituted for lab.  
0109.00

14. +Landscape Construction with Lab (Day)  4 units  
3 hours lecture, 3 hours laboratory  
Recommended preparation: Lanht 1 or 1E  
Not open for credit to students who have completed or are currently enrolled in Lanht 14E.  
Acceptable for credit: CSU  
Principles and practices of landscape construction: Construction of fences, gates, decks, patios, walkways, retaining walls; construction tools, equipment, and hardware; concrete and masonry work: laws and regulations. The lab includes construction of the above-mentioned structures.  
0109.00
14E. +Landscape Construction (Evening)  
4 hours lecture  
Recommended preparation: Lanht 1 or 1E  
Not open for credit to students who have completed or are currently enrolled in Lanht 14.  
Acceptable for credit: CSU  
Principles and practices of landscape construction: Construction of fences, gates, decks, patios, walkways, retaining walls; construction tools, equipment, and hardware; concrete and masonry work; laws and regulations. Slide presentations, tool demonstrations, site analysis and model building substituted for lab.  
0109.00

16. +Soil Management  
2.5 hours lecture, 1.5 hours laboratory  
Recommended preparation: Lanht 1 or 1E  
Acceptable for credit: CSU, UC  
Origin of soils, rocks and minerals: Physical and chemical properties; water relations of plants and soils; soil fertility and fertilizers; organic matter; soil amendments for clay soils and for acid, alkali, and serpentine soils; and the cycling of nutrients in nature and composting.  
0109.00

17. +Irrigation with Lab (Day)  
3 hours lecture, 3 hours laboratory  
Recommended preparation: Lanht 1 or 1E  
Not open for credit to students who have completed or are currently enrolled in Lanht 17E.  
Acceptable for credit: CSU  
Principles and practices of irrigation design and installation: Irrigation system components, layout, hydraulics, automatic controllers, solid-state controllers, drip irrigation and pumps. The lab includes the installation of irrigation systems.  
0109.00

17E. +Irrigation (Evening)  
4 hours lecture  
Recommended preparation: Lanht 1 or 1E  
Not open for credit to students who have completed or are currently enrolled in Lanht 17.  
Acceptable for credit: CSU  
Principles and practices of irrigation design and installation: Irrigation system components, layout, hydraulics, automatic controllers, solid-state controllers, drip irrigation and pumps. Slide presentations, tool demonstrations and site analysis substituted for lab.  
0109.00

18A-B. +Landscape Design  
3-3 units  
3 hours lecture  
Recommended preparation for Lanht 18A: Lanht 1 or 1E, and 23; and 2/2E or 3/3E or 4/4E or 5/5E or 6/6E or 8/8E  
Prerequisite for Lanht 18B: Lanht 18A  
Acceptable for credit: CSU, UC  
18A: Introduction to the principles of landscape design: Design process, site analysis, aesthetics, ethical and legal considerations.  
18B: Graphic communication: Aesthetics and design execution of residential gardens, pocket parks, and urban courtyards, including visual ordering principles, and communication and representations.  
0109.00

19. +Plant Nutrition  
3 units  
2.5 hours lecture, 1.5 hours laboratory  
Prerequisite: Lanht 1 or 1E, and 23  
Acceptable for credit: CSU  
Structure and functions of cells and tissues in plants: Elements and their functions; recognition of deficiency symptoms; sources of nutrients, organic and inorganic; absorption of water and minerals; translocation; photosynthesis; respiration and transpiration; nitrogen and carbon cycling; and application to composting.  
0109.00

20. +Interior Horticulture  
3 units  
3 hours lecture  
Recommended preparation: Lanht 1 or 1E, and 23  
Acceptable for credit: CSU  
Introduction to identification and culture of interior plants: Planting, soils, environmental control, pests and diseases, and propagation.  
0109.00

21. +Horticultural Equipment Operation, Maintenance, and Repair  
2 units  
2 hours lecture, 1 hour laboratory  
Acceptable for credit: CSU  
Basic principles of small engine operation: Engine parts, scheduling maintenance, troubleshooting engine problems, performing repairs, and safety; use of tools powered by small gas engines: lawn mowers, edgers, blowers, tillers, brush cutters, lawn aerators, chainsaws, tractors, trenchers, weed eaters, and others.  
0109.00

22A-B. +Landscape Design Laboratory  
.5-1 unit each level  
2-3 hours laboratory  
Prerequisite for Lanht 22B: Lanht 18B and 22A  
Acceptable for credit: CSU  
22A: Practical experience designing and drawing landscape plans: Site analysis, preliminary landscape plans, and basic graphic and drafting technique.  
22B: Design and production of planting plans: Detail plans, and theory and practice of graphic presentation.  
0109.00
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Time Allocation</th>
<th>Prerequisites</th>
<th>Acceptable for credit: CSU</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>23.</td>
<td>+Plant Terminology</td>
<td>2.5</td>
<td>2.5 hours lecture</td>
<td></td>
<td>Acceptable for credit: CSU</td>
<td>Terminology used in identification of plants: Terms relating to roots, stems, leaves, flowers and fruit used in all plant identification courses and in Introduction to Landscape Horticulture.</td>
</tr>
<tr>
<td>24.</td>
<td>+Plant Propagation</td>
<td>3</td>
<td>2.5 hours lecture, 1.5 hours laboratory</td>
<td>Prerequisite: Lanht 1 or 1E, and 23</td>
<td>Acceptable for credit: CSU</td>
<td>Survey of plant propagation: Seeds, transplants, cuttings, layering, division, and micro-propagation; and theory and practical experience producing plants from their beginnings to marketing.</td>
</tr>
<tr>
<td>25.</td>
<td>+Nursery Management</td>
<td>3</td>
<td>3 hours lecture</td>
<td>Prerequisite: Lanht 1 or 1E, and 23</td>
<td>Acceptable for credit: CSU</td>
<td>Management of retail and wholesale nurseries in relation to sales, marketing, operation, layout, and production: Principles and practices of soil mixes, fertilization, watering, and scheduling.</td>
</tr>
<tr>
<td>26.</td>
<td>+Pruning</td>
<td>.5</td>
<td>.5 hour lecture, .5 hour laboratory</td>
<td></td>
<td>Acceptable for credit: CSU</td>
<td>Basic pruning techniques: Emphasis on pruning landscape plants; and increasing awareness and appreciation of good pruning of landscape trees, shrubs, conifers, roses, fruit and nut trees, and berries and grapes.</td>
</tr>
<tr>
<td>27A-D.</td>
<td>+Botanical Drawing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Offered as Art 65A-D.</td>
</tr>
<tr>
<td>28.</td>
<td>+Permaculture Fundamentals</td>
<td>2</td>
<td>1 hour lecture, 3 hours laboratory</td>
<td></td>
<td>Acceptable for credit: CSU</td>
<td>Strategies and techniques for basic permaculture design including observation of natural patterns and applications to design for human communities: Water in the landscape, water conservation, flood and erosion control, soil evolution, soil fertility with on-site materials, siting buildings, designing for long-term use and recognizing patterns of use, gardening in urban situations and protecting sites from wind and fire damage; making small structures from low-cost materials, reducing waste and developing super efficient systems; brief review of permaculture’s short history and its commonalities with the practices of traditional cultures.</td>
</tr>
<tr>
<td>29.</td>
<td>+Planting Design</td>
<td>4</td>
<td>3 hours lecture, 3 hours laboratory</td>
<td></td>
<td>Acceptable for credit: CSU</td>
<td>Plants as landscape design elements: Ecological design criteria, functional use of plants in design, plants as spatial delineators, visual and aesthetic qualities of plants, and planting design styles.</td>
</tr>
<tr>
<td>30.</td>
<td>+Practical Applications of Landscape Design and Builders</td>
<td>3</td>
<td>2.5 hours lecture, 1.5 hours laboratory</td>
<td>Recommended preparation: Lanht 22B</td>
<td>Acceptable for credit: CSU</td>
<td>Intermediate-level course in site planning and planting design for landscape design students: Expansion of technical skills and aesthetic abilities and the design of lab drawings through the analysis and solution of actual residential, public and commercial projects.</td>
</tr>
<tr>
<td>31.</td>
<td>+Site Operations for Landscape Designers and Builders</td>
<td>4</td>
<td>3 hours lecture, 3 hours laboratory</td>
<td></td>
<td>Acceptable for credit: CSU</td>
<td>Site operations and procedures common to both landscape designers and builders: Site analysis techniques, layout and staking procedures, measuring techniques, operating a transit level, cost estimating, and other tasks required to adapt a design to a site.</td>
</tr>
<tr>
<td>32.</td>
<td>+Designing with Native Plants</td>
<td>3</td>
<td>3 hours lecture</td>
<td>Prerequisite: Lanht 5 or 5E</td>
<td>Acceptable for credit: CSU</td>
<td>Comprehensive study of the use of native plants for landscape design: Residential and commercial design applications as well as plant communities and local native plant requirements.</td>
</tr>
<tr>
<td>33A-B.</td>
<td>+Design Evaluation of Bay Area Landscapes</td>
<td>3</td>
<td>2 hours lecture, 3 hours laboratory</td>
<td></td>
<td>Acceptable for credit: CSU</td>
<td>Investigation of selected landscapes around the San Francisco Bay area: Planting plans and visual principles; history and conditions under which they were designed; field experience, observation, and evaluation of their success.</td>
</tr>
</tbody>
</table>
34. +Computer-Assisted Landscape Design  
   2 units  
   1 hour lecture, 3 hours laboratory  
   Prerequisite or corequisite: Lanht 18A and 22A  
   Acceptable for credit: CSU  
   Principles and techniques of 2D computer-assisted landscape design: Layering, dimensioning, technical computations, free-hand techniques, symbol libraries, and preparation of completed designs. 0109.00

35. +Advanced Landscape Design  
   5 units  
   4 hours lecture, 3 hours laboratory  
   Prerequisite: Lanht 22B  
   Acceptable for credit: CSU  
   Principles and practices of advanced landscape design: Site analysis, designing small public and private spaces, aesthetics, topography, and detailing of structures; builds on the principles and techniques covered in Landscape Design (Lanht 18A-18B) and Landscape Design Laboratory (Lanht 22A-22B). 0109.00

43. +Introduction to Recreational and Sports Turf Management  
   1 unit  
   1 hour lecture  
   Acceptable for credit: CSU  
   Turf design and management at golf courses, sports fields, and parks: History, evaluation and evolution of construction practices, environmental considerations in design and management, and industry trends and career opportunities. 0109.00

44. +Recreational and Sports Turf Management  
   3 units  
   2.5 hours lecture, 1.5 hours laboratory  
   Prerequisite: Lanht 8 or 8E, and 43 or (48OF)  
   Acceptable for credit: CSU  
   Advanced study of turf management techniques and specialized equipment for golf courses, sports fields, and parks: Annual budget development and preparation of agronomic schedules and personnel management strategies and administrative issues. 0109.00

48NA-TZ. +Selected Topics in Landscape Horticulture  
   .5-9 units  
   See section on Selected Topics. 0109.00

49. +Independent Study in Landscape Horticulture  
   .5-5 units  
   Course study under this section may be repeated three times.  
   See section on Independent Study. 0109.00

50. +Plant Taxonomy  
   3 units  
   3 hours lecture  
   Acceptable for credit: CSU  
   Techniques taught to recognize and properly explain the variation of plants and to systematically organize this information: Involves the processes of cataloging, identifying, and classifying species used in horticulture, exotic and native. 0109.00

50L. +Plant Taxonomy Lab  
   1 unit  
   3 hours laboratory  
   Recommended preparation: Lanht 50  
   Acceptable for credit: CSU  
   Practical field experience in naming, describing and classifying plants: Plant classification system used as a tool in collecting, cataloging, identifying and classifying species used in horticulture, native and naturalized; vegetation patterns and component species. 0109.00

51A-D. +Natural Landscape Interpretation  
   .5 unit each module/level  
   32 term hours laboratory each module/level  
   Open-entry/open-exit course: Four-day field studies trip to each different locale.  
   Acceptable for credit: CSU  
   Course study under this section may be repeated three times.  
   Dominant and typical plant constituents of each vegetation unit in California focusing on those species currently used in the nursery industry: Merging of habitat, soil and climatic factors with plant species to establish appropriate natural and horticultural context.  
   51A: Maritime Provinces: Outer coastal ranges, low elevation.  
   51B: Steppe Provinces: Inner coastal ranges, low-intermediate elevations, foothills.  
   51C: Continental Provinces: Warm interior, lower latitude and altitude.  
   51D: Continental Provinces: Cold interior, high latitude and altitude. 0109.00

52A-C. +Advanced Plant Propagation  
   2 units each level  
   2 hours lecture, 1 hour laboratory  
   Prerequisite: Lanht 24  
   Acceptable for credit: CSU  
   Course study under this section may be repeated two times.  
   In-depth study of concepts in plant propagation: Seeds, cuttings, layering, and grafting; highlighted by field trips and guest speakers. 0109.00
53A-D. +Alpines Lab 2 units each level
6 hours laboratory
Acceptable for credit: CSU
Course study under this section may be repeated three times.
Observation of nature’s effect on natural rock-garden formation and application of these principles in the design and installation of local artificial rock gardens: Discussion of native and exotic alpine species, natural rock-garden environments, and plant habitat composition.

70. +Introduction to Horticultural Therapy 3 units
3 hours lecture
Exploration of the field of horticultural therapy and its use in the treatment, rehabilitation and/or training of individuals with special needs: Physical and mental benefits of gardening; programs and settings designed for specific populations, such as seniors, hospitalized patients, and special needs students; and application in nursing homes, hospitals, schools, community gardens, healing gardens and wellness communities; includes field trips.

71. +Horticultural Crafts 1 unit
1 hour lecture
Use of flowers, foliage and herbs by horticultural therapists to create specialized craft projects for special populations: Creation of crafts and adaptive craft activities to meet the special needs and capabilities of seniors, hospitalized patients, children, disabled, developmentally disabled and others.

72. +Adaptive Horticulture 2 units
1 hour lecture, 3 hours laboratory
Clinical experience working with special populations in horticultural therapy settings: Planning, implementing, and evaluating horticultural therapy sessions; use of modified tools, enabling gardens and healing gardens.

73. +Horticulture for Special Populations 3 units
3 hours lecture
Design of horticultural therapy programs for a wide range of settings and populations: Focus is on adaptive services provided to special populations, accessible gardening and grant writing.

74. +Therapeutic Landscape Design 2 units
2 hours lecture
Introduction to therapeutic landscape design: Enabling and healing gardening in a wide range of medical and senior-care facilities (hospitals, hospices, nursing homes and senior centers); garden placement and adaptive tools for the physically disabled.

75. +Occupational Work Experience in Horticultural Therapy 1-4 units
0-15 hours lecture
Prerequisite or corequisite: Lanht 70 or (48NL)
Course study under this section may be repeated three times.
Occupational work experience in horticultural therapy under supervision in community settings: Therapeutic work with clients in various settings, determination of specific needs of the special client population and planning appropriate horticultural activities, use of adaptive tools, and professional behavior and ethics in the field.

201. +Landscape Maintenance Practices 3 units
3 hours lecture
Day-to-day aspects of maintenance gardening such as: Organizational skills, advertising, tool selection, generating business, estimating strategies, setting rates, client relations, efficiency strategies, and good maintenance habits.

202A-D. +Soil Management Lab .5 unit each level
1.5 hours laboratory
Course study under this section may be repeated three times.
Laboratory experiments based on the principles and techniques of soil management: Soil analysis, soil reports, and field tests; plant and soil relationships explored through experiments which range from simple texture tests to complex water/soil tests.

203. +Greenhouse Operations and Management 3 units
3 hours lecture
In-depth study of greenhouse operations and management: Construction of greenhouse structures for specific crops such as mums, cyclamen, poinsettias and azaleas; greenhouse growing media; irrigation systems; heating and cooling; and fertilization programs.
204. +Floriculture and Crop Production 2 units
2 hours lecture, 1 hour laboratory
Principles and practical applications of commercial plant and flower production in the greenhouse industry: Emphasis on crop scheduling, greenhouse soils, watering, fertilizers, pest control and identification, post-harvest handling and marketing, as well as the greenhouse environment and how it pertains to the growing of plants for profit.

205. +All About Roses 1 unit
1 hour lecture
In-depth study of the growing of roses, from planting bare-root roses to blooming: Old garden varieties to the latest modern hybrids; rose selection, planting, pruning, diseases and insect control.

206. +Landscape Maintenance Business Practices 3 units
3 hours lecture
Business aspects of maintenance gardening: Bookkeeping, tax records, licenses, and legal matters such as contract law in preparation for the landscape contractors examination; also covers small claims court procedures.

220. +The Edible Landscape 2 units
2 hours lecture
Study of fruits, nuts, citrus, vegetables and herbs in an edible landscape: Selecting, growing, harvesting and using these edible plants; garden design using ornamental edibles; includes field trips to organic and community gardens.

LEARNING RESOURCES

24. +Learning to Learn 3 units
3 hours lecture
Acceptable for credit: CSU
High-performance learning utilizing a stress-free method for accelerating the learning and thinking process: Information organization and management, creative and critical thinking skills, effective time management, high-achiever learning strategies, and memory training.

48NA-TZ. +Selected Topics in Learning Resources .5-5 units
See section on Selected Topics.

52. +Introduction to American Culture and Colleges 3 units
3 hours lecture
Acceptable for credit: CSU
Introduces foreign-born students to expectations of American collegiate life and the surrounding environment: Interferences resulting from contact with American culture and reduction of such, improvement of scholastic performance skills, opportunities for cross-cultural communication, and career exploration.

57. +Career/Life Planning 3 units
3 hours lecture
Acceptable for credit: CSU
In-depth career and life planning: Self-exploration identifying values, interests, needs and goals; development of skills for assuming careers and lifestyles.

72. +Successful Student Skills and Behavior 2 units
2 hours lecture
Acceptable for credit: CSU
Examination of services, techniques, and attitudes which contribute to a successful collegiate experience: College resources, study skills, learning styles, effective communication skills, and psychological awareness.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>Orientation to College</td>
<td>.5</td>
<td>Provides new students with information about college programs, policies and</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>procedures, campus resources, and assessment. Students select from a variety</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>of workshops scheduled throughout the semester.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4930.10</td>
</tr>
<tr>
<td>211A-B</td>
<td>Computer Access</td>
<td>1.5</td>
<td>1 hour lecture, 1.5 hours laboratory each module</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Open-entry/open-exit, modular course</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Recommended for students with disabilities.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>No prior computer experience necessary.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Formerly offered as Lrnre 271A-B.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Course study under this section may be repeated one time.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Word processing for individuals with visual, physical, or learning disabilities: Writing essays, business letters, resumes, and reports using adaptive programs as appropriate.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4930.30</td>
</tr>
<tr>
<td>213A-B</td>
<td>Improving Cognitive Skills</td>
<td>1-3</td>
<td>2 hours lecture, 3 hours laboratory each level</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Open-entry/open-exit</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Recommended for students with acquired brain injuries and/or learning disabilities.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Formerly offered as Lrnre 270A-B.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Computer-assisted instruction designed for individuals with learning disabilities or acquired brain injuries utilizing material appropriate for all learners: How to improve learning skills by analyzing how learning takes place and investigating individual learning styles.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>213A: Focuses on cognitive skills such as attention, memory, sequencing, and pattern identification; investigation of brain-based learning theory.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>213B: Focuses on logical reasoning and strategies for critical thinking, problem solving and information management. Internet utilized in applying these skills with emphasis on application of new skills in school and job-based environments.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4930.30</td>
</tr>
<tr>
<td>248NA-TZ</td>
<td>Selected Topics in Learning</td>
<td>.5-5</td>
<td>See section on Selected Topics.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4930.00</td>
</tr>
<tr>
<td>251A-D</td>
<td>Peer Supportive Services</td>
<td>1</td>
<td>1 hour lecture</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Non-degree applicable</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Course study under this section may be repeated three times.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Designed to acquaint the peer advisor with the rudiments of counseling information and techniques.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2107.00</td>
</tr>
<tr>
<td>257A</td>
<td>Career/Life Planning</td>
<td>1</td>
<td>1 hour lecture</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Non-degree applicable</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Exploration of one’s needs and values to make an objective career choice: Identification/analysis of personal and work goals and marketable skills as they relate to different working environments.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4930.12</td>
</tr>
<tr>
<td>257B</td>
<td>Career/Life Planning</td>
<td>1</td>
<td>1 hour lecture</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Non-degree applicable</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Practice in networking and informational interviewing, research on local employment opportunities, and identification of community contacts/resources in the job search.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4930.12</td>
</tr>
<tr>
<td>257C</td>
<td>Career/Life Planning</td>
<td>1</td>
<td>1 hour lecture</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Non-degree applicable</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Development of effective resumes and cover letters, completion of typical job applications, and preparation for successful job interviews.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4930.12</td>
</tr>
<tr>
<td>272A-B</td>
<td>Computer Access Projects</td>
<td>.5-2</td>
<td>2-6 hours laboratory</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Recommended for students with disabilities.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Students who have completed Computer Access, and who need to use adaptive computer equipment, can enroll in Computer Access Projects to prepare papers for mainstream classes.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Non-degree applicable</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Course study under this section may be repeated one time.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Designed for students who require access to specialized adaptive computer technologies in order to complete assignments for other classes in which they are enrolled, including Computer Access: Improvement of basic writing/editing skills through computer-aided instruction.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4930.30</td>
</tr>
<tr>
<td>275</td>
<td>Basic Skills: Computer-Assisted Instruction</td>
<td>.5-3</td>
<td>1.5-9 hours laboratory</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Recommended for students with learning disabilities.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Non-degree applicable</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Computer-based instruction in the following skill areas:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Reading (comprehension, vocabulary, word knowledge); language (grammar, spelling, punctuation); mathematics (computation, concepts, word problems); and writing (mechanics, word usage, sentences, paragraphs). Uses the “Skills Bank” computer program or the equivalent.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4930.30</td>
</tr>
</tbody>
</table>
280A-C. ++Study Skills .5-3 units each level
0-3 hours lecture, 0-9 hours laboratory
Non-degree applicable
Course study under this section may be repeated two times.
Systematic approach to understanding principles of learning for all academic disciplines: Effective study techniques to give confidence in coping with the college environment; psychological awareness and self-esteem. 4930.00

282A-C. +Test-Taking Skills
1-3 units each level
1-3 hours lecture
Non-degree applicable
Course study under this section may be repeated two times.
Prepares students to pass employment tests and vocational placement exams: Review of math skills, language skills, logical/analytical thinking skills, speed drills, and general test-taking strategies. 4930.00

295A-C. +Diagnostic Learning
1 unit each module
1-3 hours lecture
Recommended for students with learning disabilities.
Non-degree applicable
Course study under this section may be repeated two times.
Individual assessment of learning strengths and weaknesses to determine eligibility for certification as a learning disabled adult; development of an Individualized Education Plan (IEP).
295A: Mandated tests (Woodcock-Johnson Psychoeducational Battery, Parts I and II, and/or Wechsler Adult Intelligence Scale, Revised, together with Wide Range Achievement Test) and samples of reading, writing/spelling, mathematics, and additional tests as required.
295B: Diagnostically-oriented work in targeted academic skills areas.
295C: Diagnostically-oriented work in use of adaptive strategies and use of appropriate support services and class accommodations. 4930.32

348NA-TZ. +Selected Topics in Learning Resources .5-5 units
Non-degree applicable
See section on Selected Topics 4930.00

501. ++Supervised Tutoring (Non-Credit)
0 units
1-15 hours laboratory
Course study under this section may be repeated as necessary.
Students may enroll for assistance in more than one college course per semester.
Individualized tutoring designed to assist students in increasing their success in college courses. 4930.09

LIBRARY INFORMATION STUDIES

48NA-TZ. +Selected Topics in Library Information Studies .5-5 units
See section on Selected Topics. 1699.00

85. Introduction to Library Resources 2 units
2 hours lecture
Recommended preparation: Engl 1A
Acceptable for credit: CSU, UC
Exploration of the variety of resources available in libraries: Emphasis on forms of general and subject resource materials (encyclopedias, dictionaries, indexes, abstracting services, handbooks, bibliographies); and understanding of the online catalog and other online resources. 1699.00

MATHEMATICS

The AS degree in Mathematics will be awarded upon satisfactory completion of the Major course requirements and the General Education requirements.

Degree Major Requirements:
Completion of at least 18 units in Mathematics courses selected from the following list:

Must choose one course from MATH 1 or 3A:
MATH 1 Pre-Calculus (4)
MATH 3A Calculus I (5) 4-5

Plus remaining units selected from the following list:
MATH 2 Precalculus with Analytic Geometry (5)
MATH 3B Calculus II (5)
MATH 3C Calculus III (5)
MATH 3D Linear Algebra and Differential Equations (5)
MATH 13 Introduction to Statistics (4)
MATH 15 Mathematics for Liberal Arts Students (3)
MATH 16A Calculus for Business and Life/Social Sciences (3)
MATH 16B Calculus for Business and Life/Social Sciences (3)
MATH 50 Trigonometry (3)
MATH 201 Elementary Algebra (4)
MATH 202 Geometry (3)
MATH 203 Intermediate Algebra (4)

Total required units: 18

1. Pre-Calculus 4 units

4 hours lecture

Prerequisite: Math 203 or 211D or (204C)
Acceptable for credit: CSU, UC
[CAN Math 10]

Preparation for the calculus sequence or other courses requiring a sound algebraic background: Inequalities, theory of equations, sequences and series, matrices, functions and relations, logarithmic and exponential functions; function concept used as a unifying notion.

AA/AS area 4b; CSU area B4; IGETC area 2

1701.00

2. Precalculus with Analytic Geometry 5 units

5 hours lecture

Prerequisite: Math 50 or 52C
Acceptable for credit: CSU, UC
[CAN Math 16]

Advanced algebra and analytic geometry: Linear, quadratic, polynomial, rational, exponential and logarithmic functions; inverse functions; determinants, matrices and linear systems; zeros of polynomials, arithmetic and geometric sequences, mathematical induction; permutations and combinations, binomial theorem; vectors, conic sections, translation and rotation of axes, polar coordinates, lines and surfaces in space, and quadric surfaces.

AA/AS area 4b; CSU area B4; IGETC area 2

1701.00

3A. Calculus I 5 units

5 hours lecture

Prerequisite: Math 2; or Math 1, and 50 or 52C
Acceptable for credit: CSU, UC
[CAN Math 18]
[Math 3A+Math 3B: CAN Math Seq B]
[Math 3A+Math 3B+Math 3C: CAN Math Seq C]

Theorems on limits and continuous functions, derivatives, differentials and applications: Fundamental theorems of calculus and applications; properties of exponential, logarithmic, and inverse trigonometric functions, and hyperbolic functions.

AA/AS area 4b; CSU area B4; IGETC area 2

1701.00

3B. Calculus II 5 units

5 hours lecture

Prerequisite: Math 3A or (4B)
Acceptable for credit: CSU, UC
[CAN Math 20]
[Math 3A+Math 3B: CAN Math Seq B]
[Math 3A+Math 3B+Math 3C: CAN Math Seq C]

Applications of the definite integral: Methods of integration, polar coordinates, parametric equations, infinite series and power series.

AA/AS area 4b; CSU area B4; IGETC area 2

1701.00

3C. Calculus III 5 units

5 hours lecture

Prerequisite: Math 3B or (4C)
Acceptable for credit: CSU, UC
[CAN Math 22]
[Math 3A+Math 3B+Math 3C: CAN Math Seq C]

Partial differentiation, Jacobians, transformations, multiple integrals, theorems of Green and Stokes, differential forms, vectors and vector functions, geometric coordinates, and vector calculus.

AA/AS area 4b; CSU area B4; IGETC area 2

1701.00

3D. Linear Algebra and Differential Equations 5 units

5 hours lecture

Prerequisite: Math 3B or (4C)
Acceptable for credit: CSU, UC
[CAN Math 24]


AA/AS area 4b; CSU area B4; IGETC area 2

1701.00

13. Introduction to Statistics 4 units

4 hours lecture

Prerequisite: Math 203 or 211D or (204C)
Acceptable for credit: CSU, UC
[CAN Stat 2]


AA/AS area 4b; CSU area B4; IGETC area 2

1701.00
### 15. Mathematics for Liberal Arts Students

**3 hours lecture**

**Prerequisite:** Math 203 or 211D or (204C)

**Acceptable for credit:** CSU, UC

**[CAN Math 2]**

Fundamental ideas underlying modern mathematics: Elements from logic, sets, and number systems; concepts of elementary algebra, geometry, topology, and combinatorics. 1701.00

AA/AS area 4b; CSU area B4

### 16A. Calculus for Business and Life/Social Sciences

**3 units**

**3 hours lecture**

**Prerequisite:** Math 1 or 2

**Acceptable for credit:** CSU, UC

**[CAN Math 30]**

**[Math 16A+Math 16B: CAN Math Seq D]**

Introduction to analytic geometry, and differential and integral calculus of algebraic functions: Particular attention paid to simple applications. 1701.00

AA/AS area 4b; CSU area B4; IGETC area 2

### 16B. Calculus For Business and Life/Social Sciences

**3 units**

**3 hours lecture**

**Prerequisite:** Math 16A or 3A or (4B)

**Acceptable for credit:** CSU, UC

**[CAN Math 32]**

**[Math 16A+Math 16B: CAN Math Seq D]**

Continuation of differential and integral calculus: Transcendental functions, methods of integration, partial differentiation, and multiple integration; particular attention to applications. 1701.00

AA/AS area 4b; CSU area B4; IGETC area 2

### 48NA-TZ. +Selected Topics in Mathematics

**.5-5 units**

See section on Selected Topics. 1701.00

### 49. Independent Study in Mathematics

**.5-5 units**

**Course study under this section may be repeated three times.**

See section on Independent Study. 1701.00

### 50. Trigonometry

**3 units**

**3 hours lecture**

**Prerequisite:** Math 202, and 203 or 211D or (204C)

**Acceptable for credit:** CSU

**[CAN Math 8]**

Introduction to functional trigonometry: Basic definitions, identities, graphs, inverse functions, trigonometric equations and applications, and solution of triangles and applications. 1701.00

AA/AS area 4b; CSU area B4

### 201. Elementary Algebra

**4 units**

**5 hours lecture**

**Prerequisite:** Math 250 or 251D or 225 or 253 or appropriate placement through multiple-measures assessment

Basic algebraic operations: Linear equations and inequalities, relations and functions, factoring quadratic polynomials, solving quadratic equations, fractions, radicals and exponents, word problems, and graphing and number systems. 1701.00

AA/AS area 4b

### 202. Geometry

**3 units**

**3 hours lecture**

**Prerequisite:** Math 201 or 210D or (204B) or appropriate placement through multiple-measures assessment

Introduction to plane geometry: Emphasis on mathematical logic and proofs; geometric constructions, congruent triangles, parallel lines and parallelograms, proportions, similar triangles, circles, polygons, and area. 1701.00

AA/AS area 4b

### 203. Intermediate Algebra

**4 units**

**5 hours lecture**

**Prerequisite:** Math 201 or 210D or (204B) or appropriate placement through multiple-measures assessment

**Recommended preparation:** Math 202

Real number properties and operations; solutions and graphs of linear equations in one and two variables; absolute value equations, advanced factoring, complex numbers, quadratic equations and systems of quadratic equations, conic sections, determinants; solutions and graphs of first-degree, quadratic and rational inequalities; exponential and logarithmic functions, and sequences and series. 1701.00

AA/AS area 4b

### 248NA-TZ. +Selected Topics in Mathematics

**.5-5 units**

See section on Selected Topics. 1701.00
250. Arithmetic  
3 units  
3 hours lecture  
Not open for credit to students who have completed or are concurrently enrolled in Math 251A-D.  
Non-degree applicable  
Refresher course in fundamental processes: Whole numbers, fractions, decimals and percents; metric system incorporated throughout arithmetic material.  
4930.41

251A-D. +Arithmetic [Self-Paced]  
1 unit each module  
4 hours lecture  
Prerequisite for Math 251B: Math 251A or appropriate placement through multiple-measures assessment  
Prerequisite for Math 251C: Math 251B or appropriate placement through multiple-measures assessment  
Prerequisite for Math 251D: Math 251C or appropriate placement through multiple-measures assessment  
Not open for credit to students who have completed or are currently enrolled in Math 250.  
Open-entry/open-exit, modular course  
Non-degree applicable  
Course study under this section may be repeated three times.  
251A: Arithmetic of whole numbers and fractions.  
251B: Arithmetic of decimals and percents.  
251C: Ratio, proportion, arithmetic of measures, including the English and Metric Systems.  
251D: Application to consumer-oriented problems and introduction to the solution of equations and formulas.  
4930.41

253. Pre-Algebra  
3 units  
3 hours lecture  
Recommended preparation: Math 250 or 251D or appropriate placement through multiple-measures assessment  
Non-degree applicable  
Properties of real numbers; factoring and multiples, ratio and proportion, signed numbers, linear equations and formulas, powers and roots, percents and averages, and English and metric measurements.  
4930.41

348NA-TZ. +Selected Topics in Mathematics  
.5-5 units  
Non-degree applicable  
See section on Selected Topics.  
4930.40

MEXICAN AND LATIN-AMERICAN STUDIES

6. +Racism in America: Latin-American Perspective  
3-4 units  
3-4 hours lecture  
Also offered as Afram 19. Not open for credit to students who have completed or are currently enrolled in African-American Studies 19.  
Acceptable for credit: CSU, UC  
Explores psychological, sociological, and economic implications and etiology of racism.  
AA/AS area 2, 5; CSU area D; IGETC area 4

12. +United States Relations with Mexico and Latin America  
3 units  
3 hours lecture  
Acceptable for credit: CSU, UC  
Analysis of United States involvement with Mexico and Latin America from colonial times to the present as it relates to the economic, cultural, and political situations of Mexico and Latin America through the years.  
AA/AS area 2, 5; CSU area D; IGETC area 4

19. +History of the Mexican-American  
3 units  
3 hours lecture  
Not open for credit to students who have completed or are currently enrolled in History 17.  
Acceptable for credit: CSU, UC  
People of Mexican descent from colonial times to the present: Contemporary status and problems of Mexican-Americans in the United States.  
AA/AS area 2, 5; CSU area D; IGETC area 4

23. +Introduction to Psychology of the Mexican-American  
3 units  
3 hours lecture  
Acceptable for credit: CSU, UC  
Principles of psychology as they relate to the Mexican-American community: Selected social problems such as prejudice, racial conflict, and deviancy in the Mexican-American community from a Mexican-American perspective.  
AA/AS area 2, 5; CSU area D; IGETC area 4
28. +Survey of Third World through Films  
   3 units
   3 hours lecture
   Also offered as Afram 28. Not open for credit to students who have completed or are currently enrolled in African-American Studies 28.
   Acceptable for credit: CSU, UC
   Emphasizes themes that are related to the Mexican/Latin-American experiences from Latin-Americans in the U.S. and Latin-Americans in the Caribbean to the Americas; films viewed as to their content, artistic quality, and relevance for Mexican/Latin-Americans in the modern world. AA/AS area 2, 3, 5; CSU area D

30A. +Survey of Latin-American Films  3 units
   3 hours lecture
   Acceptable for credit: CSU, UC
   Critical examination of historical and contemporary film images of Latinos/Americanos as a result of cultural encounters within the United States; traditional and emerging objectives of film makers and producers; and common themes and cultural elements in films by and about Latinos in the United States. AA/AS area 2, 3, 5

30B. +Survey of Latin-American Films  3 units
   3 hours lecture
   Acceptable for credit: CSU, UC
   Critical examination of cinema from throughout Latin America and Spain that relate to Latino cultural experiences, and especially those films that educate viewers about Latino encounters with majority and minority cultures within Latin America.

48NA-TZ. +Selected Topics in Mexican/Latin-American Studies .5-5 units
   See section on Selected Topics.

49. +Independent Study in Mexican/Latin-American Studies .5-5 units
   Course study under this section may be repeated three times.
   See section on Independent Study.

248NA-TZ. +Selected Topics in Mexican/Latin-American Studies .5-5 units
   See section on Selected Topics.

MUSIC

1A. +Musicianship  3 units
   3 hours lecture
   Acceptable for credit: CSU, UC
   Study of music theory: Clefs, key signatures, scales, intervals (diatonic and chromatic) and chord structures (triads and dominant sevenths), and rhythm.
   AA/AS area 3; CSU area C1

9. +Introduction to World Music  3 units
   3 hours lecture
   Acceptable for credit: CSU, UC (pending)
   Understanding and appreciation of world music through informed listening, analysis and discernment of musical elements, form and repertoire: Covers a rich diversity of styles (popular, folk, classical), periods and cultures.
   AA/AS area 3; CSU area C1

10. +Music Appreciation  3 units
    3 hours lecture
    Acceptable for credit: CSU, UC
    Survey designed to enhance the enjoyment of music with emphasis on listening: Historical overview of the development of musical form through the centuries.
    AA/AS area 3; CSU area C1; IGETC area 3

11. +American Vernacular Music  3 units
    3 hours lecture
    Acceptable for credit: CSU, UC
    Survey of all the vernacular forms of American music, including jazz, blues, folk, rock, rap, country, gospel, ragtime, blue grass and musical theater: Focus on the history and development of these various forms, the essentials of the music theory behind them, and how this musical synthesis reflects social issues in American society.
    AA/AS area 3; CSU area C1; IGETC area 3

12A. +Introduction to Music Literature: Birth of Christ to 1827  3 units
    3 hours lecture
    Acceptable for credit: CSU, UC
    Chronological survey of various phases of stylistic growth in Western music: Early Christian beginnings to Beethoven.
    AA/AS area 3; CSU area C1; IGETC area 3