

CUYAMACA COLLEGE
COURSE OUTLINE OF RECORD

ORNAMENTAL HORTICULTURE 220 – LANDSCAPE CONSTRUCTION: CONCRETE AND MASONRY

2 hours lecture, 3 hours laboratory, 3 units

Catalog Description

Study of landscape construction methods and materials. Topics include: landscape contract law; concrete flat work including stamped concrete; brick, block, and stone masonry; and proper design and construction of retaining and free standing walls. Grading and installation of plant material will also be covered.

Prerequisite

None

Course Content

- 1) Landscape contract law
- 2) Concrete flat work: grading, site preparation, forming, pouring, finishing
- 3) Masonry: footings, materials, construction techniques
- 4) Grading: use of builders levels and transits
- 5) Plant installation: site preparation, installation, staking or guying

Course Objectives

Students will be able to:

- 1) Cite specific portions of laws pertaining to landscape contracting.
- 2) Design and build free standing and retaining walls.
- 3) Analyze and prepare proper concrete mixes.
- 4) Perform concrete finishes including at least two of the following: broom finish, smooth trowel finish, salt finish, stamped concrete.
- 5) Establish proper grading plan for a lawn or concrete surface.
- 6) Perform proper masonry techniques including those for brick, block or stone masonry.

Method of Evaluation

A grading system will be established by the instructor and implemented uniformly. Grades will be based on demonstrated proficiency in subject matter determined by multiple measurements for evaluation, one of which must be essay exams, skills demonstration or, where appropriate, the symbol system.

- 1) Lab and activities, quizzes, and exams (including a final exam) which measure the student's ability to:
 - a. Cite landscape contract law.
 - b. Perform concrete flat work including stamped concrete, brick, block, and stone masonry.
 - c. Properly design and construct retaining and free standing walls.
 - d. Implement proper grading and installation of plant material.

Special Materials Required of Student

None

Minimum Instructional Facilities

- 1) Standard classroom
- 2) Laboratory facility with water and power for common landscape construction equipment
- 3) Concrete and masonry tools, brick saws, concrete stamps, levels and transits, general construction tools

Method of Instruction

- 1) Lecture and demonstration
- 2) Laboratory

Out-of-Class Assignments

- 1) Reading assignments
- 2) Written assignments

Texts and References

- 1) Required (representative example): Keystone and concrete block manufacturer construction guides.
- 2) Supplemental: Black & Decker. The Complete Guide to Concrete & Masonry, 4th Edition: Build with Concrete, Brick, Block & Natural Stone (2015), by Editors of Cool Springs Press (Author).

Student Learning Outcomes

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

- 1) Cite specific portions of laws pertaining to landscape contracting.
- 2) Prepare proper concrete mixes and pour a concrete pad.
- 3) Perform proper masonry techniques including those for brick, block or stone masonry.