

Lecture Contact Hours: 32-36; Outside-of-Class Hours: 64-72;  
Laboratory Contact Hours: 48-54; Outside-of-Class Hours: 0;  
Total Student Learning Hours: 144-162

**CUYAMACA COLLEGE**  
**COURSE OUTLINE OF RECORD**

**Ornamental Horticulture 220 – Landscape Construction: Concrete and Masonry**

2 hours lecture, 2 units  
3 hours laboratory, 1 unit  
Total units: 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) General construction 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

**Course Objectives**

Students will be able to:

- 1) Cite specific portions of laws pertaining to general 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.
- 7) Properly grade and install interlocking pavers.

**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, including design projects, exams for comprehension, and skills demonstration

- 1) Lab and activities, quizzes, and exams (including a final exam) which measure the student's ability to:
  - a. Cite general construction law.
  - b. Perform concrete flat work including stamped concrete, brick, block, and stone masonry.
  - c. Properly design and construct retaining and free standing walls.

**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:** course material; other course related multimedia.
- 2) **Writing:** preparation for lab; lab write-ups.
- 3) **Other:** N/A.

**Texts and References**

- 1) Required (representative example):
  - a. Keystone and concrete block manufacturer construction guides such as Keystone Retaining Wall System, LLC. Keystone Construction Manual. 2021, Fendt Products (hosting website), [https://fendtproducts.com/wp-content/uploads/2023/03/KSConstructionManual\\_2021.pdf](https://fendtproducts.com/wp-content/uploads/2023/03/KSConstructionManual_2021.pdf)
  - b. Concrete & Masonry Costs with RSMeans Data 2023. 41st edition. Keller, S. R S Means Co. 2023
- 2) Supplemental:

**Student Learning Outcomes**

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

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