

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 200 – Introduction to Computer-Aided Landscape Design

2 hours lecture, 2 units,
3 hours laboratory, 1 unit
Total units: 3 units

Catalog Description

Learn to create stunning landscape plans and detailed construction documents using the latest AutoCAD software. Design beautiful landscapes by selecting and placing hardscape materials and plants, and preparing conceptual plans with elevations, imagery, legends, and title blocks. Enhance visuals using color and plotting techniques to bring your designs to life. Develop professional documents that include detailed planting, irrigation, and lighting plans. Perfect for beginners and those looking to refine their skills. Enroll now and start transforming outdoor spaces with confidence! *Also listed as CADD 200. Not open to students with credit in CADD 200.*

Prerequisite

None

Course Content

- 1) Introduction to computer-aided drafting using AutoCAD software
- 2) Master foundation AutoCAD commands
- 3) Create conceptual landscape plans using AutoCAD
- 4) Develop Landscape construction drawings
- 5) Establish planting plans for clients and incorporate them into AutoCAD
- 6) Design irrigation plans and incorporate them into AutoCAD
- 7) Learn to use industry-standard plotter to print landscape designs

Course Objectives

Students will be able to:

- 1) Explain the functions of AutoCAD terminology learned in class and use these functions to prepare landscape plans for a residential landscape.
- 2) Explain menu selections in AutoCAD and demonstrate their use in preparation of residential landscape plans.
- 3) Propose and develop a library of symbols appropriate for use in landscape design and utilize them in a landscape design project.
- 4) Use AutoCAD tools to quantify landscape materials for budgets and cost estimates.
- 5) Demonstrate the use of AutoCAD in preparation of an irrigation plan on a landscape project.
- 6) Describe AutoCAD editing tools and demonstrate their use on a landscape design project.

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 projects demonstrating the student's ability to utilize AutoCAD tools to prepare industry recognized landscape plans

- 1) Projects that measure students' ability to recognize, explain and provide examples of AutoCAD terminology, menu selections and AutoCAD symbols.

- 2) Projects that measure students' ability to utilize AutoCAD functions to develop and edit residential landscape plans
- 3) Participation in class activities that demonstrate the student's ability to use AutoCAD commands to prepare drawings for landscape architecture and landscape design.

Special Materials Required of Student

None

Minimum Instructional Facilities

CAD computer lab

Method of Instruction

- 1) Drawing exercises, projects
- 2) Participation

Out-of-Class Assignments

- 1) **Reading:** lecture notes, course materials, digital resources, and related references.
- 2) **Writing:** reflections or reports explaining AutoCAD terminology, menu selections, and design concepts; preparation of legends, project notes, and related documentation.
- 3) **Other:** AutoCAD practice exercises reinforcing commands, editing tools, and design applications; quantification of landscape materials for project budgets and cost estimates; projects developing conceptual landscape designs, planting plans, irrigation plans, and lighting plans.

Texts and References

- 1) Required (representative example): Beginning AutoCAD 2024 Exercise Workbook: For Windows, Cheryl R. Shrock, Steve Heather 978-0831136864.
- 2) Supplemental: None

Exit Skills

Students having successfully completed this course exit with the following skills, competencies and/or knowledge:

- 1) Utilize the functions of AutoCAD to prepare a series of landscape plans which would include hardscape, planting, lighting, slopes, and irrigation for a residential landscape.
- 2) Calculate quantities of materials needed for construction using AutoCAD tools.
- 3) Use AutoCAD in preparation of an irrigation plan.
- 4) Use editing tools in AutoCAD to edit a landscape design project.

Student Learning Outcomes

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

- 1) Use AutoCAD to prepare a series of landscape plans for a residential landscape.
- 2) Develop and utilize a library of symbols appropriate for landscape design projects.
- 3) Calculate quantities of materials needed for construction using AutoCAD tools.
- 4) Use AutoCAD in preparation of an irrigation plan.