Lecture Contact Hours: 32-36; Homework Hours: 64-72; Total Student Learning Hours: 96-108
Laboratory Contact Hours: 48-54; Homework Hours: 0; Total Student Learning Hours: 48-54

CUYAMACA COLLEGE
COURSE OUTLINE OF RECORD

ORNAMENTAL HORTICULTURE 201 – ADVANCED COMPUTER-AIDED LANDSCAPE DESIGN

2 hours lecture, 3 hours laboratory, 3 units

Catalog Description
Use of computer-aided landscape design software for the application of graphics, symbols, patterns, layouts, text and scales for the development of design drawings, concept plans, construction documents and cost estimates for residential landscape projects. *Also listed as CADD 201. Not open to students with credit in CADD 201.*

Prerequisite
"C" grade or higher or "Pass" in CADD/OH 200 or equivalent

Entrance Skills
Without the following skills, competencies and/or knowledge, students entering this course will be highly unlikely to succeed:
1) Utilize the functions of AutoCAD to prepare a series of landscape plans which would include decks, slopes and irrigation layout for a residential landscape.
2) Prepare a cost estimate of a residential landscape project using AutoCAD.
3) Use AutoCAD in preparation of a contour and slope plan on a landscape project.
4) Use editing tools in AutoCAD to edit a landscape design project.

Course Content
1) Introduction to AutoCAD functions for symbols and graphic patterns
2) Use of AutoCAD object placement, rotation and scaling
3) AutoCAD environments and use in landscape design
4) Components of landscape drawing packages
5) AutoCAD and client presentation
6) Alternative and supplemental software for landscape design and presentation

Course Objectives
Students will be able to:
1) Demonstrate the use of AutoCAD symbols and graphic patterns in landscape designs; complete residential landscape plans including hardscape features, irrigation, drainage and planting plans.
2) Identify AutoCAD objects and demonstrate the ability to scale, rotate and place design components for landscape designs.
3) Explain and demonstrate the use of multiple design environments in AutoCAD.
4) Use AutoCAD to design and produce a graphic presentation of a landscape plan for a client presentation.
5) Compare and contrast alternative software and supplemental design and presentation software for residential landscape design and client presentations.

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) Exercises that measure students' ability to:
   a. Use AutoCAD to prepare landscape plans which include hardscape features, irrigation, drainage and planting plans.
   b. Use AutoCAD to rotate, scale and place objects.
   c. Explain design concepts, concept plans, planting plans and AutoCAD graphics and presentation tools.
2) Quizzes and exams that measure students' ability to:
   a. Select the appropriate design and presentation software for use in landscape design and client presentations.
   b. Recognize, explain and provide examples of AutoCAD symbols, graphic patterns and multiple design environments.
3) Participation in class activities that measures students' ability to articulate the fundamental CADD applications in landscaping architecture.

Special Materials Required of Student
1 GB USB flash drive

Minimum Instructional Facilities
CAD computer lab

Method of Instruction
1) Lecture and demonstration
2) Lab activities

Out-of-Class Assignments
Weekly group landscaping projects

Texts and References
1) Required (representative example): Shrock. Beginning AutoCAD® 2019 Exercise Workbook. Industrial Press, Inc. 2018.
2) Supplemental: None

Student Learning Outcomes
Upon successful completion of this course, students will be able to:
1) Use AutoCAD, LandFX, and SketchUp software to create industry recognized landscape design plans.
2) Identify, create, and properly use landscape design industry recognized symbols in AutoCAD, LandFX, and SketchUp.
3) Use AutoCAD, LandFX, and SketchUp to create landscape design client presentations.
4) Use AutoCAD, LandFX, and SketchUp to prepare landscape design drawings.