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 175 – ADVANCED LANDSCAPE DESIGN

2 hours lecture, 3 hours laboratory, 3 units

Catalog Description
Advanced development, design and presentation of residential landscape projects incorporating slope analysis, codes and ordinances, client or institutional requirements, detail sheets, sections and cost estimates. Client presentation of concept, lighting and planting plans will utilize sketches, demonstration boards and digital presentation techniques.

Prerequisite
"C" grade or higher or "Pass" in OH 173 or equivalent

Entrance Skills
Without the following skills, competencies and/or knowledge, students entering this course will be highly unlikely to succeed:
1) Prepare planting plans with restricted plant pallets and cost estimates for sustainable residential landscape designs.
2) Prepare hand-drawn landscape plans with symbols and notes, incorporating sustainable landscape principles and topographical sections.
3) Explain design concepts, ecological principles used in the design, designer responsibilities and plan components.
4) Explain design elements and characteristics as they pertain to a client's design requirements.

Course Content
1) Principles of slope analysis, cut and fill calculations for grading plans, and drainage patterns for both storm runoff and irrigation runoff
2) Effect of time on plant growth, client needs, and the enjoyment of the garden
3) Residential building codes, laws and ordinances as they pertain to residential landscape design and installation
4) AutoCAD and hand-drawn sketches as drafting and presentation tools
5) Components of landscape detail sheets in residential landscape plans
6) Use principles learned in class to prepare a complete set of construction documents including concept plan, planting plan, lighting plan, and detail sheets
7) Building codes, laws and ordinances for landscape designs
8) Working with client-proposed and institutionally required planting lists
9) Preparing preliminary cost analysis for the major elements in a residential garden
10) Principles of site modification for site grading
11) Symbols and notes for concept landscape plans
12) The effects of time on a residential landscape
13) Residential landscape details, elevations and sections
14) Client presentations with "demonstration boards" of plants and design elements
15) Use of digital presentation tools such as PowerPoint, computer display graphics, video imaging in client presentations
16) Landscape architecture styles in famous gardens and parks
17) Computerized design, word processing and PowerPoint in residential landscape design and presentation

Course Objectives

Students will be able to:

1) Principles of Design
   a. Identify and utilize the principles of slope analysis, cut and fill calculations for grading plans, and drainage patterns for both storm runoff and irrigation runoff to propose site modifications for residential landscape plans.
   b. Analyze the effect of time on plant growth, client needs, and the enjoyment of the garden and utilize the information to produce appropriate landscape plans.
   c. Research residential building codes, laws and ordinances as they pertain to residential landscape design and installation and incorporate these into the residential landscape plans.
2) Drafting Skills
   a. Compare and contrast the use of AutoCAD and hand-drawn sketches as drafting and presentation tools.
   b. Identify the components of landscape detail sheets and explain their use in residential landscape plans.
3) Plan Development and Components
   a. Use principles learned in class to prepare a complete set of construction documents including concept plan, planting plan, lighting plan and detail sheets.
   b. Analyze building codes, laws and ordinances to prepare schematic overlays for client conferences.
   c. Using a client-proposed or institutionally required planting list, develop a planting plan for a residential landscape.
   d. Prepare preliminary cost analysis for the approximate cost of the major elements in a residential garden based on cost estimates developed in class.
   e. Using principles of site modification learned in class, prepare a preliminary site grading analysis.
   f. Using proper symbols and notes learned in class, prepare a concept landscape plan that demonstrates an understanding of the effects of time on a residential landscape.
   g. Compare and contrast residential landscape details, elevations and sections to propose and prepare a collection that can be used on residential landscape plans.
4) Presentation Skills
   a. Demonstrate client presentations with the use of “demonstration boards” of plants and design elements.
   b. Evaluate the use of digital presentation tools such as PowerPoint, computer display graphics, video imaging and demonstrate their appropriate use.
5) Professional Development
   a. Compare and contrast styles of landscape architecture through the study of the history of famous gardens and parks.
   b. Demonstrate the use of computerized design and/or word processing and PowerPoint in residential landscape design and presentation.

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) Quizzes and exams that measure students’ ability to recognize, explain and provide examples of slope analysis, cut and fill calculations, effect of time on plant growth, building codes, laws and ordinances, the history of landscape architecture, and cost analysis for a residential garden.
2) Exercises that measure students’ ability to, individually and in groups, prepare hand-drawn landscape plans and, with symbols and notes learned in class, produce plans with details, elevations and sections including concept plans, planting plans, lighting plans and cost analysis, according to building codes, laws and ordinances, with client-proposed or institutionally required planting lists.

3) Exercises that measure students' ability to explain design concepts, concept plans, planting plans and lighting plans using presentation tools such as PowerPoint, computer display graphics, video imaging and word processing.

Special Materials Required of Student
Drafting pencils, triangles, vellum, scales, templates, miscellaneous drafting supplies

Minimum Instructional Facilities
1) Standard lecture classroom for at least 24 students
2) Lab facility, drafting supplies, tables and space for 24 students

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

Out-of-Class Assignments
1) Reading assignments
2) Work on design projects

Texts and References
1) Required (representative example): Booth, Norman and James Hiss. *Residential Landscape Architecture: Design Process for the Private Residence*. 6th edition. Pearson, 2012.
2) Supplemental: None

Student Learning Outcomes
Upon successful completion of this course, students will be able to:
1) Demonstrate an understanding of advanced principles of landscape design.
2) Demonstrate advanced drafting skills in the development of landscape designs and compare to AutoCAD.
3) Use computerized presentation software to give a presentation that demonstrates knowledge of the basic styles of landscape architecture.