

CNST A240: SPECIALTY TRADES

Item	Value
Curriculum Committee Approval Date	12/02/2020
Top Code	095210 - Carpentry
Units	5 Total Units
Hours	162 Total Hours (Lecture Hours 54; Lab Hours 108)
Total Outside of Class Hours	0
Course Credit Status	Credit: Degree Applicable (D)
Material Fee	Yes
Basic Skills	Not Basic Skills (N)
Repeatable	No
Grading Policy	Standard Letter (S)

Course Description

This introductory course covers interior and exterior building finishes and stairs, including layout fabrication and installation of stairs; an introduction to framing, pre hung door and window installation; drywall, and stucco plastering. Building codes are included. Transfer Credit: CSU.

Course Level Student Learning Outcome(s)

1. Design the layout and construct an open carriage set of wood stairs.
2. Install stucco plaster lathe and apply the plaster coats for residential exterior finishes.
3. Frame exterior window and door openings to comply with code regulations.
4. Install a flange mounted sliding window; and install an exterior prehung door.

Course Objectives

- 1. Recognize/identify different closed, cut, and open stair construction methods.
- 2. Relate the California Residential Code passages pertaining to stairs.
- 3. Calculate, cut out, and install cut carriage wood stairs.
- 4. Identify window types and appraise and performance of each window type
- 5. Perform proper window installation.
- 6. Identify door types and varying door construction and materials.
- 7. Lathe, the exterior of a building per code requirements.
- 8. Properly mix stucco mortar mix per code requirements.
- 9. Properly install scratch and brown coats per code requirements.
- 10. Properly install a finish coat using several textures per industry standards.
- 11. Properly install a ceiling joist and roof rafter per code requirements.

Lecture Content

Lecture/Lab Topics - Introduction Course overview, requirements and objectives Safety Tools, tool checkout procedures Star codes Stair

tread and riser calculations Stair Assembly and Wall Construction Stair layout Stair cutting and assembly Wall construction/window and door framing openings Framing Frame interior and exterior walls Frame ceiling and roof Windows Window types, materials and installation Radius window installation Doors Door types, materials and installation Pre Hung door installation Exterior Wall Finish Systems, Concurrent with Drywall Finishing Building wraps, and stucco types, styles, and materials Building code requirements Building wraps and flashing application Exterior plastic/stucco lathe, corner aids, and flashing application Plaster scratch coat, plaster brown coat, and stucco finish application Exterior plastic/stucco estimating

Lab Content

Lecture/Lab Topics - Introduction Course overview, requirements and objectives Safety Tools, tool checkout procedures Star codes Stair tread and riser calculations Stair Assembly and Wall Construction Stair layout Stair cutting and assembly Wall construction/window and door framing openings Wall Construction Frame walls for window installation Frame walls for door installation Windows Window types, materials and installation Radius window installation Doors Door types, materials and installation Pre Hung Door installation Exterior Wall Finish Systems, Concurrent with Drywall Finishing Building wraps, and stucco types, styles, and materials Building code requirements Building wraps and flashing application Exterior plastic/stucco lathe, corner aids, and flashing application Plaster scratch coat, plaster brown coat, and stucco finish application

Method(s) of Instruction

- Lecture (02)
- DE Live Online Lecture (02S)
- Lab (04)
- DE Live Online Lab (04S)

Instructional Techniques

1. In-depth lectures and in the lab demonstrations of many installation procedures 2. Video tapes on the above 3. Detailed handouts on the assigned projects 4. Text readings (and visits to manufacturers and trade associations websites as computer lab space is available)

Reading Assignments

Students are given a weekly reading assignment - approximately 2- 3 hours per week.

Writing Assignments

The course of study will develop proficiencies in the installation of various building material systems. No writing assignments will be given in this course.

Out-of-class Assignments

Students will be assigned reading assignments as well as worksheets to complete - approximately 2 - 3 hours per week on worksheet assignments.

Demonstration of Critical Thinking

Homework assignments: calculations, estimates, sketches, and problems solving exercises. Examinations: objective quizzes, section exams, mid-term examination, and an objective final examination. Project and lab assignment grades: the instructor will assign grades to all lab assignments.

Required Writing, Problem Solving, Skills Demonstration

The course of study will develop proficiencies in the installation of various building material systems. No writing assignments will be given in this course.

Eligible Disciplines

Construction technology: Any bachelors degree and two years of professional experience, or any associate degree and six years of professional experience. Construction technology: Any bachelors degree and two years of professional experience, or any associate degree and six years of professional experience.

Textbooks Resources

1. Required Koel, Leonard.. Carpentry, 6th ed. American Technical Publishers, 2013 Rationale: latest 2. Required Stevens, J.P. Hodge Podge Lodge Blueprints/Building Plans, ed. . Mouse Graphics Blueprint Services, 1960 Rationale: -

Other Resources

1. Product information videos, training videos and manufacturers product literature (and as more computer lab time is available field trips to manufacturers and trade associations website for information and demonstrations).