CNST A100: PRINCIPLES OF CONSTRUCTION

Item	Value
Curriculum Committee Approval Date	12/02/2020
Top Code	095200 - Construction Crafts Technology
Units	1.5 Total Units
Hours	27 Total Hours (Lecture Hours 27)
Total Outside of Class Hours	0
Course Credit Status	Credit: Degree Applicable (D)
Material Fee	No
Basic Skills	Not Basic Skills (N)
Repeatable	No
Grading Policy	Standard Letter (S), • Pass/No Pass (B)

Course Description

An introductory course to construction covering, hand and power tools, building code development and applications, blueprints, license and contract law, jobsite safety and construction trades. Transfer Credit: CSU.

Course Level Student Learning Outcome(s)

1. The students will be able to identify all the parts of Title 24 (California construction codes).
2. The students will be able to explain the state requirements for receiving a contractor'r license.
3. The students will be able to properly identify phases of construction when building a house.

Course Objectives

- 1. Identify common hand tools and their usage.
- 2. Identify a variety of power tools and proper use.
- 3. Gain an understanding of model codes and the way they are adopted.
- 4. Read a basic set of blueprints.
- 5. Gain an understanding of license and contract law.
- 6. Have an understanding of safety on the job.
- 7. Identify the different stages of construction for building a house.

Lecture Content

HAND TOOLS HAMMERS LEVELS SQUARES MISCELLANEOUS HAND TOOLS POWER TOOLS CIRCULAR SAWS RECIPROCATING SAWS CHOP SAWS DRILLS DEMOLITION HAMMERS COMPRESSORS PNEUMATIC TOOLS HEAVY EQUIPMENT BUILDING CODES CODE DEVELOPMENT MODEL CODES TITLE 24 LOCAL AMMENDMENTS LICENSE LAW WHEN A LICENSE IS REQUIRED EDUCATIONAL REQUIREMENTS EXPERIENCE REQUIREMENTS CLASSIFICATIONS AVAILABLE TESTING PROCEDURES CONTRACT LAW WRITTEN CONTRACTS MECHANICS LIEN DOWN PAYMENTS PAYMENT SCHEDULES JOBSITE SAFETY OSHA SAFETY EQUIPMENT SAFETY TRAINING PERSONAL RESPONSIBILITY BLUEPRINTS SCALE SUBMITTAL/ APPROVAL PROCESS SITE AND FOUNDATION PLAN FLOOR AND FRAMING PLAN DETAIL AND SPECIFICATIONS SECTIONS AND ELEVATIONS PHASES OF CONSTRUCTION TRADES FOUNDATION FRAMING UTILITIES LATH AND INSULATION INTERIOR FINISHES EXTERIOR FINISHES

Method(s) of Instruction

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

Instructional Techniques

1. Detailed multimedia/lectures of each topic covered. 2. Student feedback during each lecture. 3. Detailed illustrative discussion of lecture handout and textbook information. 4. Building plan reading.

Reading Assignments

The students will be assigned a weekly reading assignment - approximately 1-2 hours per week.

Writing Assignments

The students will be assigned a research papers on the phases of home construction and the adoption of building codes - approximately 1-2 hours per week.

Out-of-class Assignments

The students will need to complete worksheets from the assigned reading as homework - approximately 1-2 hours per week.

Demonstration of Critical Thinking

1. Tests and quizzes 2. Building code development assignment 3. Phases of construction assignment

Required Writing, Problem Solving, Skills Demonstration

Students must show proficiency in building plan reading, identification of residential construction components, and understanding of the International Residential Code.

Eligible Disciplines

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, L.. Carpentry, Sixth ed. Orland Park: American Technical Publishers, 2013