CNST A195: RESIDENTIAL CODE

Item	Value
Curriculum Committee Approval Date	12/02/2020
Top Code	095720 - Construction Inspection
Units	3 Total Units
Hours	54 Total Hours (Lecture Hours 54)
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)

Course Description

A complete analysis of the Residential Code and city and county related building codes. Special ordinances and land usage are also covered. Transfer Credit: CSU.

Course Level Student Learning Outcome(s)

1. Explain the history of the building code governing residential construction in California, the origins of the administrative codes and the purpose of the enforcement agencies that dictate the methods and materials used in residential construction.
2. Summarize the requirements of the California Building Code, local building codes, rules, and regulations for submission and approval of residential building construction plans/documents in California.

Course Objectives

- 1. Differentiate the various sources of administrative codes and enforcement agency that dictate the methods and materials used in residential construction.
- 2. Analyze the history and process of developing the building code governing residential construction in California
- 3. Recognize the approval process for new building materials and construction processes.
- 4. Identify uniform building codes, rules, and regulations for house framing, masonry, foundations, stairs, etc.
- 5. Interpret the building codes general requirements such as legal requirements, lot location, light, ventilation, and sanitation
- 6. Identify the process and submit a building plan design through Plan check
- 7. Distinguish between the various degrees of utilization of mechanical fasteners and wood construction structural connectors
- 8. Restate the basic grading characteristics of dimensional lumber and review the history of the development of lumber grading.
- 9. Implement the basic prescriptive techniques in design value in fiber bending (Fb) and modules of elasticity of dimensional lumber as given in the most recent issue of the Uniform Building Code.
- 10. Identify basic construction and inspection techniques for residential compliance with the Uniform Building Codes.

Lecture Content

Introduction Origin of construction codes Laws affecting building code enforcement Employment opportunities Information on plans and specifications Inspection record card Uniform Building Code General Requirements Legal requirements Lot location Light, ventilation, sanitation Private garages Foundations and retaining walls Chimneys, fireplaces, barbecues Masonry chimneys Separation between dwelling units Ceiling heights and room dimensions Fire warning systems Emergency escape or rescue windows Uniform Building Code House Framing Framing general Roof framing Floor construction Wall framing wood Weather protection Braced wall panels Spacing and penetration of nails Exterior wall coverings Anchored veneer Uniform Building Code Masonry Wall framing masonry Solid masonry Grouted masonry Reinforced grouted masonry Hollow unit masonry Cavity wall masonry Stone masonry Veneered walls Uniform Building Code Misc. Exits Stairs Plastering Installation/wallboard lathing Wallboard Roof coverings Valley fleshing Attic access and ventilation Glass and glazing

Method(s) of Instruction

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

Instructional Techniques

Instruction methodologies will include, but not necessarily be restricted to, the following: Detailed multimedia/lectures of each topic covered Guest speakers Student feedback during each lecture Detailed illustrative discussion of lecture handout and textbook information

Reading Assignments

Students read one to two hours from the code week each week.

Writing Assignments

Student must show proficiency in building plan reading, identification of residential construction components, and interpreting the Uniform Building Code.

Out-of-class Assignments

The students complete a research paper on the building code adoption process.

Demonstration of Critical Thinking

Tests and quizzes with true/false, multiple choice, fill-in, and short answer questions. Also the students will be tested on their ability to identify construction hardware, building materials products, and building construction parts and assemblies.

Required Writing, Problem Solving, Skills Demonstration

Student must show proficiency in building plan reading, identification of residential construction components, and interpreting the Uniform Building 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 International Code Council .), International Residential Code, ed. ICC, 2015 Rationale: -