CNST A230: CONSTRUCTION INSPECTION

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

Inspection procedures and techniques of testing. A study of the various building code requirements in the International Residential Code, and Title 24 of the California State Code. Plans, specifications, earthwork, grading foundations, concrete and framing are covered. Transfer Credit: CSU.

Course Level Student Learning Outcome(s)

1. Explain the history of the California Building Code, local building codes, rules, and the regulations governing residential construction in California.
2. Explain the purpose of the enforcement agencies that dictate the methods and materials used in residential construction.
3. Summarize the requirements of the California Building Code, local building codes, rules, and regulations for the inspection of residential construction and the laboratory testing procedures for residential construction materials.

Course Objectives

- 1. Describe the origins, history and objectives of the building code governing residential construction in California.
- 2. Differentiate the various sources of administrative codes and enforcement agencies that dictate the methods and materials used in residential construction.
- 3. describe the engineering principles involved in residential construction.
- 4. interpret the building codes general requirements such as legal requirements, lot location, light, ventilation, and sanitation.
- 5. describe and apply specific building codes for earthwork and grading projects.
- 6. describe and apply specific building codes for foundation and concrete construction.
- 7. identify and apply appropriate inspection and test procedures for residential construction.
- 8. identify appropriate inspector and contractor safety responsibilities.

Lecture Content

Introduction Employment Opportunities Plan Reading Specifications Structural Inspection Introduction Objective History Procedures, Codes Engineering Principles Earthwork, Grading Foundations Concrete Practices Quality Control Reinforced Concrete Pre case Concrete Pre stressed Concrete Gunite Testing Procedures Construction Safety Inspector Responsibility Contractor Responsibility

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 are assigned a weekly reading assignment - approixmately 2-3 hours per week.

Writing Assignments

Student must show proficiency in building plan reading, identification of residential construction components, and interpreting the Uniform Building Code - approximately 2-3 hours per week.

Out-of-class Assignments

Students are assigned written assignments that include research on buildig codes - approximately 2 hours per week.

Demonstration of Critical Thinking

Written exams

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 Building Code, ed. ICC , 2006 Rationale: -

Other Resources

1. Manual of Inspection of Buildings, IC 80 2. A.C.I. Manual of Concrete Inspection.