

Course Outline of Record

1. Course Code: BIT-025
2.
 - a. Long Course Title: California Residential Codes
 - b. Short Course Title: CA Residential Codes
3.
 - a. Catalog Course Description:
 This course covers information from the most updated version of the California Residential Code and compiles all building, plumbing, mechanical, fuel gas, and electrical requirements for one- and two-family dwellings up to three stories as mandated by the California Building Standards Commission. Topics under Title 24, Part 2.5 include Scope and Application, Administration, Definitions, Building Planning, Foundations, Floors, Wall Construction, Wall Covering, Roof-Ceiling Construction, Roof Assemblies, and Chimneys and Fireplaces.
 - b. Class Schedule Course Description:
 This course covers information from the most updated version of the California Residential Code and compiles all building, plumbing, mechanical, fuel gas, and electrical requirements for one- and two-family dwellings up to three stories as mandated by the California Building Standards Commission.
 - c. Semester Cycle (*if applicable*): Fall Semester
 - d. Name of Approved Program(s):
 - BUILDING INSPECTION TECHNOLOGY Certificate of Achievement
4. Total Units: 3.00 Total Semester Hrs: 54.00
 Lecture Units: 3 Semester Lecture Hrs: 54.00
 Lab Units: 0 Semester Lab Hrs: 0
 Class Size Maximum: 28 Allow Audit: Yes
 Repeatability No Repeats Allowed
 Justification 0
5. Prerequisite or Corequisite Courses or Advisories:
Course with requisite(s) and/or advisory is required to complete Content Review Matrix (CCForm1-A)
 Advisory: ENG 070 and
 Advisory: MATH 060
6. Textbooks, Required Reading or Software: (*List in APA or MLA format.*)
 - a. California Building Standards Commission (2013). California Residential Code Sacramento, CA International Code Council. ISBN: 9781609834586
 College Level: Yes
 Flesch-Kincaid reading level: 12.4
7. Entrance Skills: *Before entering the course students must be able:*
 - a.
 Develop, organize, and express ideas in paragraph and essay form
 - ENG 070 - Develop and expand vocabulary.
 - ENG 070 - Identify and employ prewriting activities.
 - ENG 070 - Demonstrate the ability to generate, develop and organize ideas into a cohesive essay using multiple paragraphs.
 - ENG 070 - Demonstrate through the writing process the ability to apply standard rules of grammar, punctuation and spelling in academic writing.
 - b.
 Read texts and respond in writing at the literate level

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- ENG 070 - Comprehend and summarize readings.
- ENG 070 - Read and identify main ideas and supporting details.
- ENG 070 - Recognize and explain patterns of idea development in readings.

c.

Demonstrate the ability to participate in class discussions and assigned projects

- ENG 070 - Improve editing and revision strategies both individually and in peer review.

d.

Apply the basic operations appropriately to solve application problems that involve their use

- MATH 060 - Compute using the four basic operations of addition, subtraction, multiplication, and division on the rational numbers in both fraction and decimal form.
- MATH 060 - Apply methods of conversion between percents, decimals, and fractions.
- MATH 060 - Recognize and convert between units of measurements in the American and metric systems.
- MATH 060 - Use unit measure appropriately in applications.

8. Course Content and Scope:

Lecture:

Lecture:

1. Introduction
2. Scope and Application
3. California Administration
 - Department of Housing Community Development
 - Local Enforcing Agency
 - Permits, Fees, Applications and Inspections
4. Administration
 - Department of Building Safety
 - Duties and Powers of the Building Official
 - Permits
 - Construction Documents
 - Temporary Structures and Uses
 - Fees
 - Inspections
 - Certificate of Occupancy
 - Service Utilities
5. Definitions
6. Building Planning
 - Site Drainage
 - Design Criteria
 - Fire-Resistant Construction
 - Light, Ventilation and Heating
 - Minimum Room Areas
 - Glazing
 - Garages and Carports
 - Means of Egress
 - Automatic Fire Sprinkler Systems
 - Smoke Alarms
 - Accessibility
 - Solar Photovoltaic Panels/Modules
7. Foundations
 - Materials
 - Footings
 - Foundation and Retaining Walls
 - Foundation Drainage
 - Foundation Waterproofing and Dampproofing
8. Floors

- Wood Floor Framing
- Floor Shaething
- Steel Floor Framing
- Concrete Floors
- Decks
- 9. Wall Construction
 - Wood Wall Framing
 - Steel Wall Framing
 - Wood Structural Panels
 - Particleboard
 - General Masonry Construction
 - Glass Unit Masonry
 - Exterior Concrete Wall Construction
 - Exterior Windows and Doors
 - Structural Insulated Panel Wall Construction
- 10. WallCovering
 - Interior Covering
 - Exterior Covering
- 11. Roof-Ceiling Construction
 - Wood Roof Framing
 - Roof Sheathing
 - Steel Roof Framing
 - Ceiling Finishes
 - Roof Ventilation
 - Attic Access
- 12. Roof Assemblies
 - Roof Classification
 - Weather Protection
 - Materials
 - Requirements for roof Coverings
 - Roof Insulation
 - Reroofing
 - Solar Photovoltaic Panels/Modules
- 13. Chimneys and Fireplaces
 - Masonry Fireplaces
 - Masonry Heaters
 - Masonry Chimneys
 - Factory-Built Fireplaces
 - Factory-Built Chimneys
 - Exterior Air Supply
- 14. Plumbing and Ventilation
- 15. Mechanical and Ventilation
- 16. Electrical

Lab: *(if the "Lab Hours" is greater than zero this is required)*

9. Course Student Learning Outcomes:

1.

Describe the history of residential regulation in California and related codes

2.

Cite the California residential codes in construction, regulation, and design

3.

Apply the California residential codes in construction, regulation, and design

10. Course Objectives: *Upon completion of this course, students will be able to:*

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- a. Apply codes in building designs
- b. Apply the codes in construction and regulation
- c. Discuss the professional certification examination process
- d. Discuss skills required for employment opportunities in the private or public sectors

11. Methods of Instruction: *(Integration: Elements should validate parallel course outline elements)*

- a. Demonstration, Repetition/Practice
- b. Discussion
- c. Distance Education
- d. Lecture
- e. Participation

Other Methods:

Presentation of construction materials

12. Assignments: *(List samples of specific activities/assignments students are expected to complete both in and outside of class.)*

In Class Hours: 54.00

Outside Class Hours: 108.00

a. In-class Assignments

1. Presentation of class subjects and materials
2. Review code sections

b. Out-of-class Assignments

1. Reading assignments of codes and handouts
2. Visit construction sites
3. Review code sections presented in class

13. Methods of Evaluating Student Progress: *The student will demonstrate proficiency by:*

- Presentations/student demonstration observations
 - Group activity participation/observation
 - True/false/multiple choice examinations
 - Mid-term and final evaluations
 - Student participation/contribution
 - Other
- Maintenance and use of handout class materials

14. Methods of Evaluating: Additional Assessment Information:

15. Need/Purpose/Rationale -- *All courses must meet one or more CCC missions.*

PO - Career and Technical Education

Fulfill the requirements for an entry- level position in their field.

Apply critical thinking skills to execute daily duties in their area of employment.

Apply critical thinking skills to research, evaluate, analyze, and synthesize information.

Display the skills and aptitude necessary to pass certification exams in their field.

Exhibit effective written, oral communication and interpersonal skills.

IO - Personal and Professional Development

Demonstrate an understanding of ethical issues to make sound judgments and decisions.

Value diverse cultures and populations.

Value the feedback of others.

16. Comparable Transfer Course

University System

Campus

Course Number

Course Title

Catalog Year

17. Special Materials and/or Equipment Required of Students:

18. Materials Fees: Required Material?

Material or Item	Cost Per Unit	Total Cost
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19. Provide Reasons for the Substantial Modifications or New Course:

To remain current with California Code Regulations.

20. a. Cross-Listed Course (*Enter Course Code*): BIT-025
 b. Replacement Course (*Enter original Course Code*): N/A

21. Grading Method (*choose one*): Letter Grade Only

22. MIS Course Data Elements

- a. Course Control Number [CB00]: N/A
- b. T.O.P. Code [CB03]: 95720.00 - Construction Inspection
- c. Credit Status [CB04]: D - Credit - Degree Applicable
- d. Course Transfer Status [CB05]: B = Transfer CSU
- e. Basic Skills Status [CB08]: 2N = Not basic skills course
- f. Vocational Status [CB09]: Clearly Occupational
- g. Course Classification [CB11]: Y - Credit Course
- h. Special Class Status [CB13]: N - Not Special
- i. Course CAN Code [CB14]: N/A
- j. Course Prior to College Level [CB21]: Y = Not Applicable
- k. Course Noncredit Category [CB22]: Y - Not Applicable
- l. Funding Agency Category [CB23]: Y = Not Applicable
- m. Program Status [CB24]: 1 = Program Applicable

Name of Approved Program (*if program-applicable*): BUILDING INSPECTION TECHNOLOGY

Attach listings of Degree and/or Certificate Programs showing this course as a required or a restricted elective.)

23. Enrollment - Estimate Enrollment

First Year: 20
 Third Year: 28

24. Resources - Faculty - Discipline and Other Qualifications:

- a. Sufficient Faculty Resources: Yes
- b. If No, list number of FTE needed to offer this course: N/A

25. Additional Equipment and/or Supplies Needed and Source of Funding.

N/A

26. Additional Construction or Modification of Existing Classroom Space Needed. (*Explain:*)

N/A

27. FOR NEW OR SUBSTANTIALLY MODIFIED COURSES

Library and/or Learning Resources Present in the Collection are Sufficient to Meet the Need of the Students Enrolled in the Course: Yes

28. Originator Donbert M. Bitanga Origination Date 08/02/16