

Course Outline of Record

1. Course Code: BIT-020
2.
  - a. Long Course Title: California Mechanical Codes
  - b. Short Course Title: CA MECHANICAL CODES
3.
  - a. Catalog Course Description:  
 This course covers California Mechanical Codes used for construction, maintenance, and use of buildings and grounds within the State. It emphasizes an understanding and application of code sections and provisions and the relationships between building and mechanical codes.
  - b. Class Schedule Course Description:  
 This course covers California Mechanical Codes used for construction, maintenance, and use of buildings and grounds within the State.
  - c. Semester Cycle (if applicable): Once every year
  - d. Name of Approved Program(s):
    - BUILDING INSPECTION TECHNOLOGY Certificate of Achievement
4. Total Units: 2.00      Total Semester Hrs: 36.00  
 Lecture Units: 2      Semester Lecture Hrs: 36.00  
 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: RDG 061 and  
 Advisory: MATH 060
6. Textbooks, Required Reading or Software: (List in APA or MLA format.)
  - a. California Building Standards Commission (2016). California Mechanical Code (latest/e). Sacramento International Association for Plumbing and Mechanical Officials.  
 College Level: Yes  
 Flesch-Kincaid reading level: 12.4
7. Entrance Skills: *Before entering the course students must be able:*
  - a. 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.
  - b.  
Use various reading strategies to prepare, read and comprehend expository text.
    - RDG 061 - Use SQ3R &/or SOAR along with outlining, note-taking, mapping summarizing and other strategies to prepare, read, & comprehend expository text.
  - c.  
Read a variety of texts fluently.
    - RDG 061 - Read a variety of texts fluently.
  - d.

# BIT 020-California Mechanical Codes

Write organized summaries & reactions that capture main idea and supporting details.

- RDG 061 - Write organized summaries & reactions that capture main idea and supporting details.

e.  
Understand multiple word meanings, uses & synonyms.

- RDG 061 - Understand multiple word meanings, uses & synonyms

## 8. Course Content and Scope:

### Lecture:

- Introduction
- General code requirement provisions for Mechanical Codes
- Requirements for types of construction
- Occupancies Building and Fire Code requirements and applications of the Mechanical Code
- Combustion and circulation air codes provisions
- Appliances regulated by the Mechanical Code and relationships in the Building Code
- Gas systems for mechanical code systems and Building Code priorities
- Handling and Classification of Hazardous Materials
- Responsibilities under Mechanical Codes
- Construction Materials Use in Mechanical Codes
- Maintenance of Buildings and Property
- Building Construction Processes
- Types of Construction

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

## 9. Course Student Learning Outcomes:

1.

Cite code sections with relation to mechanical codes in construction, regulation and design.

2.

Apply provisions with relation to mechanical codes in construction, regulation and design.

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

- Apply the codes in construction, regulation, and design.
- Discuss administered examination used to gain professional certification in the building inspection field.
- Discuss skills for employment in private or public construction fields as an inspector or plans examiner.

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

- Discussion
- Lecture
- 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: 36.00

Outside Class Hours: 72.00

### a. Out-of-class Assignments

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

b. In-class Assignments

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

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

- Group activity participation/observation  
Participation in class and group discussions
- True/false/multiple choice examinations
- Mid-term and final evaluations
- 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:

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18. Materials Fees:  Required Material?

| Material or Item | Cost Per Unit | Total Cost |
|------------------|---------------|------------|
|------------------|---------------|------------|

19. Provide Reasons for the Substantial Modifications or New Course:

Change the advisory and entrance skills to Reading 061 and periodic review.

20. a. Cross-Listed Course (*Enter Course Code*): N/A  
 b. Replacement Course (*Enter original Course Code*): BIT-002

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

22. MIS Course Data Elements

- a. Course Control Number [CB00]: CCC000579049
- 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

# BIT 020-California Mechanical Codes

- 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 11/06/17