COLLEGE OF THE DESERT

Course Code BIT-020

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: ENG 070 and
   Advisory: MATH 060
6. Textbooks, Required Reading or Software: *(List in APA or MLA format.)*
   a. California Building Standards Commision (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. Employ basic vocabulary and style.
   - ENG 070 - Develop and expand vocabulary.

   b. Develop, organize and express ideas in paragraph and essay form.
   - 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.
   - ENG 070 - Introduce basic business writing [letter, resume, email etiquette].

   c. Read texts and respond in writing at the literate level.
   - 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.

   d.
   Demonstrate the ability to participate in class discussions and assigned projects.

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

e. 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:

a. Introduction
b. General code requirement provisions for Mechanical Codes
c. Requirements for types of construction
d. Occupancies Building and Fire Code requirements and applications of the Mechanical Code
e. Combustion and circulation air codes provisions
f. Appliances regulated by the Mechanical Code and relationships in the Building Code
g. Gas systems for mechanical code systems and Building Code priorities
h. Handling and Classification of Hazardous Materials
i. Responsibilities under Mechanical Codes
j. Construction Materials Use in Mechanical Codes
k. Maintenance of Buildings and Property
l. Building Construction Processes
m. 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:*

a. Apply the codes in construction, regulation, and design.
b. Discuss administered examination used to gain professional certification in the building inspection field.
c. 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)*

a. Discussion
b. Distance Education
c. Lecture
d. 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. 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 classes.

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:

18. Materials Fees: ☐ Required Material?

Material or Item	Cost Per Unit	Total Cost

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

    Update course requirements to coincide with CA state standards.

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]: CCC000233701
    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