

BIT 325B: CALIFORNIA RESIDENTIAL CODE FOR CONSTRUCTION

New Course Proposal

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Originator

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Co-Contributor(s)

Name(s)

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Justification / Rationale

This course is a non-credit version of the credit California Residential Code course. The non-credit version provides vocational skills training opportunities to the incumbent workforce and those currently unemployed or underemployed. This course covers administration and planning for residential construction.

Effective Term

Fall 2020

Credit Status

Noncredit

Subject

BIT - Building Inspection Technology

Course Number

325B

Full Course Title

California Residential Code for Construction

Short Title

CA RESIDENTIAL CODE CONST

Discipline

Disciplines List

Building Codes and Regulations (Inspecting of construction, building codes, contractor training)

Modality

Face-to-Face

100% Online

Catalog Description

This course covers information from the most updated version of the California Residential Code and complies with all building, plumbing, mechanical, fuel gas, and electrical requirements for family dwelling from one 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.

Schedule Description

Application of the California Residential Code in one to three story residential structures. Prerequisite: BIT 325A

Non-credit Hours

81

Lecture Units

0

Lab Units

0

In-class Hours

27

Out-of-class Hours

54

Total Course Units

0

Total Semester Hours

81

Override Description

Noncredit courses do not have lecture and lab. The out of class hours were adjusted to provide the same total as the equivalent credit course.

Prerequisite Course(s)

BIT 325A

Required Text and Other Instructional Materials**Resource Type**

Book

Author

California Building Standards Commission

Title

California Residential Code

City

Sacramento, CA

Publisher

International Code Council

Year

2019

College Level

Yes

Flesch-Kincaid Level

12.4

ISBN #

9781609834586

Class Size Maximum

28

Entrance Skills

Apply residential codes to building designs.

Requisite Course Objectives

BIT 325A-Apply codes to building designs.

Course Content

1. Foundations.
 - a. Materials.
 - b. Footings.
 - c. Foundation and Retaining Walls.
 - d. Foundation Drainage.
 - e. Foundation Waterproofing and Dampproofing.
2. Floors.
 - a. Wood Floor Framing.
 - b. Steel Floor Framing.
 - c. Concrete Floors.
 - d. Decks.
3. Wall Construction.
 - a. Wood Wall Framing.
 - b. Steel Wall Framing.
 - c. Wood Structural Panels.
 - d. Particleboard.
 - e. General Masonry Construction.
 - f. Glass Unit Masonry.
 - g. Exterior Concrete Wall Constructions.
 - h. Exterior Doors and Windows.
 - i. Structural Insulated Panel Wall Construction.
4. Wall Covering.
 - a. Interior Covering.
 - b. Exterior Covering.
5. Roof-Ceiling Construction.
 - a. Wood Roof Framing.
 - b. Roof Sheathing.
 - c. Steel Roof Framing.
 - d. Ceiling Finishes.
 - e. Roof Ventilation.
 - f. Attic Access.
6. Roof Assemblies.
 - a. Roof Classification.
 - b. Weather Protection.
 - c. Materials.
 - d. Requirements for Roof Coverings.
 - e. Roof Insulation.
 - f. Reroofing.
 - g. Solar Photovoltaic Panels/Modules.
7. Chimneys and Fireplaces.
 - a. Masonry Fireplaces.
 - b. Masonry Heaters.
 - c. Masonry Chimneys.
 - d. Factory-built Fireplaces.
 - e. Factory-built Chimneys.
 - f. Exterior Air Supply.
8. Plumbing and Ventilation.
9. Mechanical and Ventilation.
10. Electrical.

Course Objectives

Objectives	
Objective 1	Cite and discuss how the residential codes for floors, foundations, wall construction, wall covering, roof-ceiling construction, roof assemblies, chimneys and fireplaces, plumbing and ventilation, mechanical and ventilation and electrical impact construction design. plan check, and construction sites.

Student Learning Outcomes

Upon satisfactory completion of this course, students will be able to:	
Outcome 1	Apply the residential codes for floors, foundations, wall construction, wall covering, roof-ceiling construction, roof assemblies, chimneys and fireplaces, plumbing and ventilation, mechanical and ventilation and electrical to evaluation of construction design. plan check, and construction sites.

Methods of Instruction

Method	Please provide a description or examples of how each instructional method will be used in this course.
Discussion	Classroom and group discussion of code application examples.
Demonstration, Repetition/Practice	Classroom discussion of additional code examples applied to construction design, plan check and actual construction.
Participation	Class discussion and questions.
Lecture	Presentation of topic in context.

Methods of Evaluation

Method	Please provide a description or examples of how each evaluation method will be used in this course.	Type of Assignment
Presentations/student demonstration observations	Research applicable code for several different construction designs out-of-class and prepare an in-class 10-minute presentation on the results of your research.	In and Out of Class
Student participation/contribution	Participation in class and group discussions.	In Class Only
Mid-term and final evaluations	Comprehensive exams covering the content of the course. Exams may be project based and completed out-of-class or multiple choice completed in-class.	In Class Only
Tests/Quizzes/Examinations	Timed quizzes completed out-of-class and in-class discussion of answers.	In and Out of Class
Group activity participation/observation	Evaluate instructor and peer presentations on code application examples, prepare a written critique out-of-class and participate verbally in-class.	In and Out of Class
Other	Out-of-class hours will be accounted for electronically through the learning management system.	Out of Class Only

Assignments
Other In-class Assignments

1. Presentation of class subjects and materials.
2. Review code sections.
3. Present code application examples.
4. Evaluate code application presentations and examples.

Other Out-of-class Assignments

1. Reading assignments of codes and handouts.
2. Visit construction sites either in-person or virtually.
3. Review code sections presented in class.
4. Research and prepare code application examples to be presented in class.

Grade Methods

Pass/No Pass Only

Distance Education Checklist

Instructional Materials and Resources

If you use any other technologies in addition to the college LMS, what other technologies will you use and how are you ensuring student data security?

The college LMS will be the only technology used to hold student data.

Effective Student/Faculty Contact

Which of the following methods of regular, timely, and effective student/faculty contact will be used in this course?

Within Course Management System:

Timely feedback and return of student work as specified in the syllabus
Discussion forums with substantive instructor participation
Chat room/instant messaging
Regular virtual office hours
Online quizzes and examinations
Weekly announcements

External to Course Management System:

Direct e-mail
Posted audio/video (including YouTube, 3cm mediasolutions, etc.)

Briefly discuss how the selected strategies above will be used to maintain Regular Effective Contact in the course.

Timely feedback and return of student work as specified in the syllabus
Discussion forums with substantive instructor participation
Online quizzes and examinations
Weekly announcements

If interacting with students outside the LMS, explain how additional interactions with students outside the LMS will enhance student learning.

Direct e-mail

Other Information

Provide any other relevant information that will help the Curriculum Committee assess the viability of offering this course in an online or hybrid modality.

Class presents online California Construction Codes that students will need to read and reference online throughout careers in the construction industry.

MIS Course Data

CIP Code

46.0403 - Building/Home/Construction Inspection/Inspector.

TOP Code

095720 - Construction Inspection

SAM Code

C - Clearly Occupational

Basic Skills Status

Not Basic Skills

Prior College Level

Not applicable

Cooperative Work Experience

Not a Coop Course

Course Classification Status

Other Non-credit Enhanced Funding

Approved Special Class

Not special class

Noncredit Category

Short-Term Vocational

Funding Agency Category

Not Applicable

Program Status

Program Applicable

Transfer Status

Not transferable

Allow Audit

No

Repeatability

Yes

Repeatability Limit

NC

Repeat Type

Noncredit

Justification

Noncredit courses are repeatable until students are comfortable they have achieved the skills and knowledge required to achieve the outcomes and objectives of the course.

Materials Fee

No

Additional Fees?

No

Approvals**Curriculum Committee Approval Date**

10/17/2019

Academic Senate Approval Date

10/24/2019

Board of Trustees Approval Date

11/13/2019

Chancellor's Office Approval Date

01/10/2020

Course Control Number

CCC000611552

Programs referencing this course

California Residential Codes Certificate of Completion (<http://catalog.collegeofthedesert.eduundefined?key=254/>)