

ACT 323A: CONSTRUCTION FRAMING - WALLS LAB

New Course Proposal

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Originator

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Co-Contributor(s)

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Justification / Rationale

Construction is one of the top employment opportunities in the Coachella Valley and with the new Title 24 requirements for Zero Net Energy construction, there is a need for a more educated construction workforce. This course is one of four modules of a non-credit overlay version of ACT 023 Construction Framing Essentials. Module 1 provides the understanding of framing systems and the practical framing techniques used to construct the floor, walls, and roof of a simple structure. Topics include the fundamentals of wood, lumber, fasteners, adhesives, layout, assembly, bracing, sheathing, and truss identification. Modules 2, 3 and 4 are practical labs to demonstrate the ability to construct walls, floors and ceilings and roofs. Providing this non-credit version allows those currently unemployed or underemployed to gain the skills and knowledge required to obtain and succeed in construction jobs; providing the modules as a credit overlay allows students to qualify for credit by exam and move into a credit pathway to continue education. Modules ACT323A, ACT323B and ACT 323C will need to be repeated to qualify for ACT 023 credit by exam.

Effective Term

Fall 2020

Credit Status

Noncredit

Subject

ACT - Applied Construction Technolog

Course Number

323A

Full Course Title

Construction Framing - Walls Lab

Short Title

CONST FRAMING WALLS LAB

Discipline

Disciplines List

Construction Technology

Modality

Face-to-Face

Catalog Description

This course provides the practical lab required to demonstrate understanding of framing systems and the practical framing techniques used to construct the walls of a simple structure. Topics include the fundamentals of wood, lumber, fasteners, adhesives, layout, assembly, bracing, sheathing, and truss identification. Students will demonstrate appropriate use of tools and equipment and awareness of construction safety issues.

Schedule Description

Practical lab to demonstrate understanding of construction framing systems for walls; appropriate use of tools and equipment; awareness of construction safety issues. Prerequisite: ACT 320A and ACT 323 or concurrent enrollment

Non-credit Hours

24

Lecture Units

0

Lecture Semester Hours

0

Lab Units

0

In-class Hours

24

Out-of-class Hours

0

Total Course Units

0

Total Semester Hours

24

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)

ACT 320A and ACT 323 or concurrent enrollment

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

Book

Author

National Center for Construction Education and Research

Title

Construction Technology-Trainee Guide

Edition

4th

City

Gainesville, FL

Publisher

Pearson Prentice Hall

Year

2016

College Level

Yes

Flesch-Kincaid Level

12

ISBN #

0134130391

Resource Type

Instructional Materials

Title

Career Connections Project Book 3

Edition

Most recent

Publisher

Carpenters International Training Fund

Year

2018

Description

CC0003RG

Class Size Maximum

20

Entrance Skills

Understand common safety hazards for construction sites.

Requisite Course Objectives

ACT 320A-Discuss common safety hazards on construction sites.

Entrance Skills

Identify various hand and power tools used in the construction industry.

Requisite Course Objectives

ACT 320A-Identify various hand tools used in the construction industry.
ACT 320A-Utilize various hand tools.
ACT 320A-Identify various power tools used in the construction industry.
ACT 320A-Utilize various power tools.

Entrance Skills

Describe basic inspection techniques and rejection criteria used in the construction industry.

Requisite Course Objectives

ACT 320A-Describe basic inspection techniques and rejection criteria used for slings and hardware.

Entrance Skills

Demonstrate proper use of American National Standards Institute (ANSI) hand signals.

Requisite Course Objectives

ACT 320A-Demonstrate proper use of American National Standards Institute (ANSI) hand signals.

Entrance Skills

Describe the different types of wall framing systems.

Requisite Course Objectives

ACT 323-Identify the different types of framing systems.

Course Content

1. Overview of framing simple structures.
2. Building working drawings and specifications.

3. Components of a wall.
4. Measuring and cutting studs.
5. Laying out, assembling, and erecting a wall.
6. Estimating wall materials.
7. Steel studs in framing.
8. Installing sheathing.

Course Objectives

Objectives	
Objective 1	Identify the different types of framing systems.
Objective 2	Describe the basic content of framing drawings and specifications.
Objective 3	Identify the components of a wall layout.
Objective 4	Describe the procedure for laying out a wood frame wall, including plates, corner posts, door and window openings, partition Ts, bracing, and firestops.
Objective 5	Describe the correct procedure for assembling and erecting an exterior wall.
Objective 6	Identify the common material and methods used for installing sheathing on walls.
Objective 7	Describe proper bracing for exterior walls.
Objective 8	Explain the use of metal studs in wall framing.
Objective 9	Describe the procedure for estimating materials required to frame walls.

Student Learning Outcomes

Upon satisfactory completion of this course, students will be able to:	
Outcome 1	Outline the procedure for estimating the materials used for walls in wood frame construction.
Outcome 2	Identify the procedure and construction of different types of wall framing systems including the various members and fasteners used.
Outcome 3	Construct the walls of a simple structure.

Methods of Instruction

Method	Please provide a description or examples of how each instructional method will be used in this course.
Demonstration, Repetition/Practice	Construct a variety of wall sections that meet standards.
Participation	Individual and group participation in constructing a variety of wall sections.
Discussion	Evaluate wall sections.
Other (Specify)	Review framing concepts, alternatives and estimation.

Methods of Evaluation

Method	Please provide a description or examples of how each evaluation method will be used in this course.	Type of Assignment
Written homework	Field notes following approved construction management format.	In Class Only
Other	Evaluation of wall structures completed during class.	In Class Only
Student participation/contribution	Individual participation in planning, constructing and evaluating wall sections.	In Class Only
Group activity participation/observation	Group participation in planning, constructing and evaluating wall sections.	In Class Only

Assignments

Other In-class Assignments

1. Plan wall construction.
2. Determine materials for wall construction.

3. Participate as individual and member of group/team in constructing wall sections.
4. Evaluate wall sections after construction.

Grade Methods

Pass/No Pass Only

MIS Course Data**CIP Code**

46.0412 - Building/Construction Site Management/Manager.

TOP Code

095700 - Civil and Construction Management Technology

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 achieve the skills and knowledge required to meet the objectives and outcomes 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

12/22/2019

Course Control Number

CCC000610831

Programs referencing this courseConstruction Technology Framing Carpentry Certificate of Completion (<http://catalog.collegeofthedesert.eduundefined?key=279/>)