

Course Outline

COURSE: CARP 215 **DIVISION:** 50 **ALSO LISTED AS:**

TERM EFFECTIVE: Fall 2016 **Inactive Course**

SHORT TITLE: STAIR BUILDING

LONG TITLE: Stair Building

<u>Units</u>	<u>Number of Weeks</u>	<u>Type</u>	<u>Contact Hours/Week</u>	<u>Total Contact Hours</u>
1	1	Lecture:	6	6
		Lab:	30	30
		Other:	0	0
		Total:	36	36

COURSE DESCRIPTION:

This course covers types, designs, nomenclature and Uniform Building Codes requirements for building stairs. Topics include mathematical calculations and layout procedures, constructing stairs, landings, newels and handrails.

PREREQUISITES:

COREQUISITES:

CREDIT STATUS: C - Credit - Degree Non Applicable

GRADING MODES

L - Standard Letter Grade

REPEATABILITY: N - Course may not be repeated

SCHEDULE TYPES:

02 - Lecture and/or discussion

03 - Lecture/Laboratory

04 - Laboratory/Studio/Activity

STUDENT LEARNING OUTCOMES:

1. Upon completion of the course the student will be able to perform the following activities/functions at a beginning level:

Determine unit rise and unit run from total rise and total run.

Measure: Class Performance, Quizzes, Written Exams

PLO: 3

ILO: 2, 3, 7

GE-LO:

Year assessed or anticipated year of assessment: 2012-13

2. Layout, cut, and assemble the risers and treads for a quarter-turn winder.

Measure: Class Performance, Quizzes, Written Exams

PLO: 3

ILO: 2, 3, 7

GE-LO:

Year assessed or anticipated year of assessment: 2012-13

PROGRAM LEARNING OUTCOMES:

1. Demonstrate journey level skills, including those skills necessary to build all concrete infrastructures that comprise the California transportation system.
2. Locate on the blueprints and in the specifications, the information needed to construct various types of structures and assemble its various components.
3. Perform horizontal layout and vertical layout of wood framed wall components. Install interior and exterior trims and moldings. Construct various types of roofs and stairs.

CONTENT, STUDENT PERFORMANCE OBJECTIVES, OUT-OF-CLASS ASSIGNMENTS

Inactive Course: 11/28/2016

Out-of class assignments: For each topic, the student will read chapters and do homework assignments at the end of those chapters.

2 lec/10 lab

- a. Basic stairway arrangements
 - A. Straight
 - B. Landing
 - C. Winder
 - D. Geometric
- b. Stair components

SLO: The student will describe the restrictions the Uniform Building Code and other codes place on stair construction. The student will determine unit rise and unit run from total rise and total run. The student will layout a stair stringer with a framing square fitted with stair gauges.

Assignments: Read the chapters covered in the lecture and do the homework exercises at the end of the chapters. Answer the study guide questions on the assigned subject.

Describe the restrictions the Uniform Building Code and other codes place on stair construction. Determine unit rise and unit run from total rise and total run.

Layout a stair stringer with a framing square fitted with stair gauges.

2 lec/10 lab

- b.
 - c. Stringer Layout
 - a. Total rise and total run
 - b. Unit rise and unit run
 - a. Uniform Building Code requirements
 - b. Residential exception

- c. Calculating riser and tread combinations
- d. Story pole
- e. Marking risers and treads
- f. Stringer drop
- g. Stringer attachment at upper floor
- d. Stairway construction
- a. Stairway width
- b. Handrails
- a. Uniform Building Code Requirements
- b. Title 24
- c. Landings
- d. Head room
- e. Stairwell opening
- f. Straight-flight stairs
- g. Stairs with winders

SLO: The student will adjust the top of the stair stringer layout for a variety of upper floor framing conditions. The student will calculate and layouts the “drop” at the bottom of the stair stringer for various treads and finish floor thicknesses.

The student will accurately cut an open stair stringer to establish layout lines with a portable power saw.

Assignments: Read the chapters covered in the lecture and do the homework exercises at the end of the chapters. Answer the study guide questions on the assigned subject.

Adjust the top of the stair stringer layout for a variety of upper floor framing conditions.

Calculate and layout the “drop” at the bottom of the stair stringer for various tread and finish floor thicknesses.

Accurately cut an open stair stringer to established layout lines with a portable power saw.

2 lec/ 10 lab

- g.
- e. Installing prefabricated stairs
- f. Exterior stairs
- a. Wood
- b. Concrete

G. Temporary stairs for construction sites

SLO: The student will accurately locate and build landings and platforms. The student will demonstrate the ability to make a full-size quarter-turn winder layout.

The student will accurately layout and cut job built stringers for a quarter-turn winder.

The student will layout, cut, and assemble the risers and treads for a quarter-turn winder.

Assignments: Read the chapters covered in the lecture and do the homework exercises at the end of the chapters. Answer the study guide questions on the assigned subject.

Accurately locate and build landings and platforms. Demonstrate the ability to make a full-size quarter-turn winder layout. Accurately layout and cut job built stringers for a quarter-turn winder. Layout, cut, and assemble the risers and treads for a quarter-turn winder.

2 hours

Final exam

METHODS OF INSTRUCTION:

- A. Lecture and discussion
- B. Visual aids
- C. Demonstrations
- D. Group hands-on exercise

- E. Individual hands-on exercise
- F. One-on-one hands-on instruction

METHODS OF EVALUATION:

The types of writing assignments required:

- Written homework
- Reading reports
- Lab reports
- Essay exams

The problem-solving assignments required:

- Homework problems
- Field work
- Lab reports
- Quizzes
- Exams

The types of skill demonstrations required:

- Class performance
- Field work
- Performance exams

The types of objective examinations used in the course:

- Multiple choice
- True/false
- Matching items
- Completion

Other category:

None

The basis for assigning students grades in the course:

- Writing assignments: 10% - 30%
- Problem-solving demonstrations: 10% - 40%
- Skill demonstrations: 40% - 80%
- Objective examinations: 10% - 30%
- Other methods of evaluation: 0% - 0%

REPRESENTATIVE TEXTBOOKS:

Required:

Leonard A. Koel, Barclay, Stair Building. Carpentry 6th edition, Construction Safety Orders 1 & 2, Stair Building. American Technical Publishers, Thomas West, CTCNC, 2013. Or other appropriate college level text.

Reading level of text, Grade: 10 Verified by: publisher/dvt

ARTICULATION and CERTIFICATE INFORMATION

Associate Degree:

CSU GE:

IGETC:

CSU TRANSFER:

Not Transferable

UC TRANSFER:

Not Transferable

SUPPLEMENTAL DATA:

Basic Skills: N

Classification: Y

Noncredit Category: Y

Cooperative Education:

Program Status: 1 Program Applicable

Special Class Status: N

CAN:

CAN Sequence:

CSU Crosswalk Course Department:

CSU Crosswalk Course Number:

Prior to College Level: Y

Non Credit Enhanced Funding: N

Funding Agency Code: Y

In-Service: N

Occupational Course: A

Maximum Hours:

Minimum Hours:

Course Control Number: CCC000500348

Sports/Physical Education Course: N

Taxonomy of Program: 095210