GAVILAN 🔀 COLLEGE

5055 Santa Teresa Blvd Gilroy, CA 95023

# **Course Outline**

COURSE: CARP 220 DIVISION: 50 ALSO LISTED AS:

TERM EFFECTIVE: Fall 2016 **Inactive Course** 

SHORT TITLE: COMMERCIAL DOOR HARDWARE

LONG TITLE: Commercial Door Hardware

<u>Units</u>	Number of Weeks	<u>Type</u>	Contact Hours/Week	Total Contact Hours
1	1	Lecture:	12	12
		Lab:	24	24
		Other:	0	0
		Total:	36	36

#### COURSE DESCRIPTION:

This course teaches apprentices the basic skill necessary to successfully install commercial door hardware.

#### 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. Given a set of drawings determine door hand, interpret door schedules including hardware groups. Measure: Quizzes, Written Exams, Class Performance PLO: 1,2 ILO: 1,2,3,7 12/5/2016

GE-LO: N/A

Anticipated Year of Assessment: Fall 2016 Given a door in a frame, adjust the margins as necessary by shimming the door butts. 2. Measure: Quizzes, Written Exams, Class Performance PLO: 1,3 ILO: 1,2,3,7 GE-LO: N/A Anticipated Year of Assessment: Fall 2016 Given a collection of hardware, correctly identify each piece and describe its function. 3. Measure: Quizzes, Written Exams, Class Performance PLO: 1,3 ILO: 1,2,3,7 GE-LO: N/A Anticipated Year of Assessment: Fall 2016 4. Given a door, cylinder lockset, instructions and tools, prepare the door and install the lockset so that it securely latches and locks the door. Measure: Quizzes, Written Exams, Class Performance PLO: 1,3 ILO: 1,2,3,7 GE-LO: N/A Anticipated Year of Assessment: Fall 2016 5. Given a door, a mortise lockset and instructions, install the lockset so that it securely latches. Measure: Quizzes, Written Exams, Class Performance PLO: 1,3 ILO: 1,2,3,7 GE-LO: N/A Anticipated Year of Assessment: Fall 2016 6. Given a mortise lockset, a cylinder lockset and instructions for each, correctly change the hand of each lockset. Measure: Quizzes, Written Exams, Class Performance PLO: 1,3 ILO: 1,2,3,7 GE-LO: N/A Anticipated Year of Assessment: Fall 2016 Given the tools necessary, drill and hand tap holes for various machine screws. 7. Measure: Quizzes, Written Exams, Class Performance PLO: 1,3 ILO: 1,2,3,7 GE-LO: N/A Anticipated Year of Assessment: Fall 2016 Given a door closer and instructions, install the closer so it moves from 90 degrees open to closed 8. within 7 to 10 seconds. Measure: Quizzes, Written Exams, Class Performance PLO: 1.3

ILO: 1,2,3,7

GE-LO: N/A

Anticipated Year of Assessment: Fall 2016

9. Given a rim exit device and instructions, install the exit device so it securely latches the door and releases with 5 pounds or less of pressure.

Measure: Quizzes, Written Exams, Class Performance

PLO: 1,3

ILO: 1,2,3,7

GE-LO: N/A

Anticipated Year of Assessment: Fall 2016

10. Given a door holder/stop and instructions, install so the door stops at a pre-determined angle without damage to door or jamb.

Measure: Quizzes, Written Exams, Class Performance

PLO: 1,3

ILO: 1,2,3,7

GE-LO: N/A

Anticipated Year of Assessment: Fall 2016

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

2 Hours

Content:

Chapter 1 Introduction to Hardware Chapter 2 Hanging Devices/Door Margins(Lecture)

Student Performance Objectives (SPO): Understanding the content of the course progression Out-of-Class Assignments: Read chapter assignments

2 Hours

Content:

Assemble Student Mockups (Lab)

Student Performance Objectives (SPO): Prepare for MLP in Lab

Out-of-Class Assignments: Read chapter assignments

1 Hours

Content:

Lesson 1 Selecting Hardware (Lab)

Student Performance Objectives (SPO): Demonstrate ability to perform lesson

Out-of-Class Assignments: Read chapter assignments

1 Hours

Content:

Lesson 2- Adjusting Door Margins (Lab)

Student Performance Objectives (SPO): Understand chapter material

Out-of-Class Assignments: Read chapter assignments

1 Hours

Content:

Chapter 3-Locks (Lecture)

Student Performance Objectives (SPO): Demonstrate ability to perform assignment 12/5/2016 3

Out-of-Class Assignments: None 2 Hours Content: Lesson 3A-Installing cylinder locks (Lab) Student Performance Objectives (SPO): Understand chapter material and perform lab assignment Out-of-Class Assignments: None 2 Hours Content: Lesson 3B-Installing mortise locks (Lab) Student Performance Objectives (SPO): Demonstrate the ability to perform the lesson with the tolerances set forth in the grading rubrics Out-of-Class Assignments: None 1 Hours Content: Chapter 4-Drilling and tapping (Lecture) Student Performance Objectives (SPO): Understand the terminology and processes of the chapter and review the MLP for the project Out-of-Class Assignments: Read chapter assignments 1.5 Hours Content: Lesson 4-Drilling and tapping (Lab) Student Performance Objectives (SPO): Demonstrate the ability to perform the lesson with the tolerances set forth in the grading rubrics. Out-of-Class Assignments: None 2 Hours Content: Chapter 5-Codes (Lecture) Student Performance Objectives (SPO): Understand the terminology and process of the chapter and review the MLP for the project Out-of-Class Assignments: None 1 Hours Content: Chapter 6-Door Closures (Lecture) Student Performance Objectives (SPO): Understand the terminology and steps necessary to install a basic pneumatic door closer Out-of-Class Assignments: None 2.5 Hours Content: Lesson 6-install door closers (Lab) Student Performance Objectives (SPO): Understand the terminology and work processes related to the MLP Out-of-Class Assignments: None 2 Hours Content: Chapter 7-Exit Devices (Lecture) Student Performance Objectives (SPO): Understand the terminology and steps necessary to install an exit device to code specifications. Out-of-Class Assignments: None 2 Hours 12/5/2016 4

Content:

Lesson 7A-Installing exit devices

Student Performance Objectives (SPO): Demonstrate the ability to perform the lesson with the tolerances set forth in the grading rubrics.

Out-of-Class Assignments: None

.5 Hours

Content:

Vertical Rod locking mechanisms (Lecture)

Student Performance Objectives (SPO): Understand the terminology and steps necessary to install vertical rod locking mechanisms correctly and to code specifications.

Out-of-Class Assignments: None

2 Hours

Lesson 7B-Installing vertical rod devices

Student Performance Objectives (SPO): Demonstrate the ability to perform the lesson with the tolerances set forth in the grading rubrics.

Out-of-Class Assignments: None

1 Hours

Content:

Chapter 8-Door controls (Lecture)

Student Performance Objectives (SPO): Understand the terminology and steps necessary to install various types of door controls to meet job specifications.

Out-of-class-assignments: None

1 Hours

Content:

Lesson 8-Installing Door controls (Lab)

Student Performance Objectives (SP0): Demonstrate the ability to perform the lesson with the tolerances set forth in the grading rubrics.

1.5 Hours

Content:

Chapter 9-Accessories (Lecture)

Student Performance Objectives (SPO): Understand the terminology and steps necessary to install various types of door coordinators and flush bolts to meet job specifications.

Out-of-class-assignments: None

1 Hours

Content:

Lesson 9-Installing coordinators and flush bolts (Lab)

Student Performance Objectives (SPO): Demonstrate the ability to perform the lesson with the tolerances set forth in the grading rubrics.

3 Hours

Dismantle projects and repackage hardware

2 Hours Final

# **METHODS OF INSTRUCTION:**

Lectures, demonstrations, multimedia presentations, discussions, and hands-on lab activities.

# **METHODS OF EVALUATION:**

Category 1 - The types of writing assignments required: Percent range of total grade: 20 % to 30 % Written Homework

12/5/2016

Reading Reports Other: MLP shop based curriculum performance based

If this is a degree applicable course, but substantial writing assignments are NOT appropriate, indicate reason

Course primarily involves skill demonstration or problem solving

Category 2 - The problem-solving assignments required: Percent range of total grade: 30 % to 40 % Homework Problems Quizzes Exams

Category 3 - The types of skill demonstrations required: Percent range of total grade: 40 % to 50 % Class Performance/s Field Work

Category 4 - The types of objective examinations used in the course: Percent range of total grade: 5 % to 10 % Multiple Choice True/False

### **REPRESENTATIVE TEXTBOOKS:**

Required: CITF. Construction Safety Orders, CAL OSHA current edition CTCNC Commercial Door Hardware, Carpenters International Training Fund, Las Vegas, NV. Carpentry, Leonard Koel, American Technical Publishers Inc., Homewood Illinois (2012). Or other appropriate college level text. Reading level of text, Grade: 10 Verified by: Director of Training

### **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:

12/5/2016

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: 1 Minimum Hours: 1 Course Control Number: CCC000558724 Sports/Physical Education Course: N Taxonomy of Program: 095210