

Basic Course Information			
Semester:	FALL 2021	Instructor Name:	Humberto Montiel
Course Title & #:	BLDC 150 Carpentry Methods, Materials, and Tools	Email:	humberto.montiel@imperial.edu
CRN #:	10922	Webpage (optional):	
Classroom:	3117	Office #:	
Class Dates:	AUGUST 16 – DECEMBER 11	Office Hours:	
Class Days:	MONDAYS & WEDNESDAYS	Office Phone #:	
Class Times:	6:00PM – 9:50 PM	Emergency Contact:	
Units:	3.0	Class Format:	Lecture / Lab

## **Course Description**

Carpentry construction methods require the use of construction methods, materials, and tools to achieve a completed structure. Use and operation of hand and power tools used for a variety of construction materials will be studied and applied during this course. Application of materials and execution of construction methods will be guided by building codes, and in compliance with, safety regulations. (CSU)

# Course Prerequisite(s) and/or Corequisite(s)

Recommended but not required: MATH 091, ENGL 009, BLDC 145, BLDC 101

#### **Student Learning Outcomes**

Upon course completion, the successful student will have acquired new skills, knowledge, and or attitudes as demonstrated by being able to:

- 1. Construct a 2X4X10 standard wall in accordance with the California Building Code and the California Building Standards Commission under chapter 23 Section 2308. (ILO1, ILO2, ILO3, ILO4)
- 2. Different angles on a pivot square will be analyzed and transferred onto a 2X4 with a pencil line in order to cut a piece of lumber safely using OSHA standards. (ILO1, ILO2, ILO3)
- 3. Create a wall with three rough openings of different sizes and be able to determine the right size of the header for each rough opening. (ILO1, ILO2, ILO3)
- 4. Determine the slope and ratio of rise and run of a roof by checking with a level. (ILO2, ILO5)



## **Course Objectives**

Upon satisfactory completion of the course, students will be able to:

- 1. Demonstrate safe work practices.
- 2. Identify, properly use and maintain carpentry hand and power tools.
- 3. Discuss the materials used in carpentry construction and explain their applications.
- 4. Use a selection of tools to work a variety of materials to construct rough and finished products.
- 5. Interpret sections of building codes and apply this information to planning, layout, and construction.
- 6. Explain the safety regulations that are the responsibility of the employee, those that are supervisor controlled, and those that are mandated of the employer.

## **Textbooks & Other Resources or Links**

- Wagner and Smith, H. B. 2016. *Modern Carpentry* 12th. Tinley Park, Illinois. Goodhearth-Willcox Company, Inc ISBN: 978-1-63126-083-4.
- DEWALT CONSTRUCTION MATH: ISBN-13: 978-1-111-12857-9, ISBN-10: 1-111-12857-X

# **Course Requirements and Instructional Methods**

#### Core content to be covered in all sections:

Lecture Outline;

- A. Construction Safety
- B. Common and Specialty Tools
- C. Structural, Joining, and Finish Materials
- D. Rough Construction and Finishing Techniques
- E. Building Codes
- F. Workplace Safety Regulations (29-CFR-1926)



# Lab Outline

A. Measuring and cutting wood materials and other building materials while demonstrating safe use of tools.

B. Safely use common and specialty tools for various construction trades.

C. Install rough carpentry and finish carpentry. Install structural framing members, Joining, and fastening of various

building materials.

D. Install and finish drywall on walls and ceilings including taping, texturing and painting using various techniques and

applications.

E. Installation of exterior wall finishes such as siding, lath, stucco and plaster over foam while following building codes.

# Method of evaluation to determine if objectives have been met by students:

Class Activity

Essay

Mid-Term/Final Exam(s)

Objective

Problem Solving Exercise

Quizzes

**Skill Demonstration** 

Written Assignments



# **Instruction Methodology:**

Audio Visual

Computer Assisted Instruction

Demonstration

Discussion

Group Activity

Individual Assistance

Lab Activity

Lecture

Distance Learning Hybrid Only

#### **Out-of-class assignments:**

Visit a building supply center and obtain descriptive literature about floor and roof decking that can be used in post-and-beam construction. Include both solid and laminated planks and composition panels. Be sure to obtain price. Thoroughly study these materials for qualities, characteristics, and installation procedures.

# **Reading and Writing**

Write a 2000-word report that will be shared and discussed in class.



#### **Course Grading Based on Course Objectives**

A= 90% -100% Excellent

B= 80% - 89% Good

C= 70% -79% Satisfactory

D= 60% - 69% Pass, less than satisfactory

F= 59% & Below

The course grade will be determined by various factors such, as class participation, Lab projects, prompt attendance, classroom assignments, midterm and final exams. The grading range is as follows:

Class Participation and attendance / Homework Assignments 25%

Projects 25%

Midterm 25%

Final Exam 25%

#### **Attendance and Late Assignments:**

Absences and tardiness provide an opportunity to miss valuable instruction presented by the instructor, guest speakers, and site administrators. Tardiness will contribute to lower scores on assignments and subsequently a lower course grade. All assignments are due on the specified completion dates and all students have the same and equal time to complete all assignments as per the course calendar. Considerations will be given to those late assignments accompanied by a written medical statement from a physician. 20% of possible points will be penalized for late work. Any assignment can be turned in prior to the due date.

## **Course Policies**

#### Attendance:

• Students are to come prepared and on time for class just as if you were to be employed by a building contractor. Work Clothing should be long sleeves, denim or canvas pants, and good quality work boots. No shorts, tennis shoes, skirts, leggings etc. No open chest clothing. No loose clothing. No tight clothing. Work clothing should be worn so that it does not restrict body movement and loose clothing does not snag on power tools or building materials.

• A student who fails to attend the first meeting of a class or does not complete the first mandatory activity of an online class will be dropped by the instructor as of the first official meeting of that class. Should readmission be desired, the student's status will be the same as that of any other student who desires to add a class. It is the student's responsibility to drop or officially withdraw from the class. See General Catalog for details.

• Regular attendance in all classes is expected of all students. A student whose continuous, unexcused absence exceed the number of hours the class is scheduled to meet per week may be dropped. (Total hours are accumulative and are not allowed to exceed these for the semester). For online courses, students who fail to complete required activities for two consecutive weeks may be considered to have excessive absences and may be dropped.



• Absences attributed to the representation of the college at officially approved events (conferences, contests, and field trips) will be counted as 'excused' absences.

• Electronic Devices: Cell phones and electronic devices must be turned off and put away during class, unless otherwise directed by the instructor.

• Food and Drink are prohibited in all classrooms. Water bottles with lids/caps are the only exception. Additional restrictions will apply in labs. Please comply as directed by the instructor.

• Disruptive Students: Students who disrupt or interfere with a class may be sent out of the room and told to meet with the Campus Disciplinary Officer before returning to continue with coursework. Disciplinary procedures will be followed as outlined in the General Catalog.

• Children in the classroom: Due to college rules and state laws, only students enrolled in the class may attend; children are not allowed.

• What is netiquette? Netiquette is internet manners, online etiquette, and digital etiquette all rolled into one word. Basically, netiquette is a set of rules for behaving properly online.

• Students are to comply with the following rules of netiquette: (1) identify yourself, (2) include a subject line, (3) avoid sarcasm, (4) respect others' opinions and privacy, (5) acknowledge and return messages promptly, (6) copy with caution, (7) do not spam or junk mail, (8) be concise, (9) use appropriate language, (10) use appropriate emoticons (emotional icons) to help convey meaning, and (11) use appropriate intensifiers to help convey meaning [do not use ALL CAPS or multiple exclamation marks (!!!!)].

Academic honesty in the advancement of knowledge requires that all students and instructors respect the integrity of one another's work and recognize the important of acknowledging and safeguarding intellectual property. There are many different forms of academic dishonesty. The following kinds of honesty violations and their definitions are not meant to be exhaustive. Rather, they are intended to serve as examples of unacceptable academic conduct.

• Plagiarism is taking and presenting as one's own writings or ideas of others, without citing the source. You should understand the concept of plagiarism and keep it in mind when taking exams and preparing written materials. If you do not understand how to "cite a source" correctly, you must ask for help.

• Cheating is defined as fraud, deceit, or dishonesty in an academic assignment, or using or attempting to use materials, or assisting others in using materials that are prohibited or inappropriate in the context of the academic assignment in question. Anyone caught cheating or plagiarizing will receive a zero (0) on the exam or assignment, and the instructor may report the incident to the Campus Disciplinary Officer, who may place related documentation in a file. Repeated acts of cheating may result in an F in the course and/or disciplinary action. Please refer to the General Catalog for more information on academic dishonesty or other misconduct. Acts of cheating include, but are not limited to, the following: (a) plagiarism; (b) copying or attempting to copy from others during an examination or on an assignment; (c) communicating test information with another person during an examination; (d) allowing others to do an assignment or portion of an assignment; (e) using a commercial term paper service



# **Other Course Information**

# **Distance Education Addendum**

Delivery Method:

• Online Hybrid (51% or more of course is held on-campus)

Contact Types and Frequency:

This course complies with the <u>IVC Regular Effective and Substantive Contact policy</u> by providing the following contact types:

- Orientation at start of course Once
- Announcements/Bulletin Boards Weekly
- Chat Rooms Weekly
- Feedback on Assessments Weekly
- Inbox Weekly
- Discussion Boards Weekly or as needed
- Virtual Office Hours Weekly
- Email Communication As needed
- Teleconferencing As needed
- Online Group Collaboration As needed
- Scheduled Face-to-Face Meetings As needed
- Other (describe) As needed to meet course objectives

This course complies with the Americans with Disabilities Act Section 508 as described in the <u>IVC Distance</u> <u>Education Handbook</u>

#### **IVC Student Resources**

IVC wants you to be successful in all aspects of your education. For help, resources, services, and an explanation of policies, visit <u>http://www.imperial.edu/studentresources</u> or click the heart icon in Canvas.



# Anticipated Class Schedule/Calendar

Date or Week	Activity, Assignment, and/or Topic	Pages/ Due Dates/Tests
August, 16	Syllabus & Introduction	
In between	lab & Lecture	
October, 13	Mid-term exams	October 13 / 2021
In between	Lab & Lecture	
December, 8	Final Exams	December 8 / 2021

\*\*\*Subject to change without prior notice\*\*\*