I. GENERAL COURSE INFORMATION

Subject and Number: Noncredit Construction Technology 1

Course Disciplines: Fundamentals of Construction

Course Discipline: Construction Technology
Division: Industry and Technology

Catalog Description:

In this noncredit course, students learn all the skills necessary to complete a specific construction application. Students also learn safety, tool operation, material handling, and math applications.

Conditions of Enrollment:

None

Course Length: 1 to 4 weeks
Hours Lecture: 3.00 hours
Hours Laboratory: 9.00 hours
Total Hours: 12.00

Course Units: 0.00

Grading Method: Pass/No Pass Course Type: Noncredit

Transfer CSU: No Transfer UC: No

General Education: El Camino College

CSU GE:

IGETC:

II. OUTCOMES AND OBJECTIVES

A. COURSE STUDENT LEARNING OUTCOMES (The course student learning outcomes are listed below, along with a representative assessment method for each. Student learning outcomes are not subject to review, revision or approval by the College Curriculum Committee)

SLO #1 Safety Procedures

Upon completion of this course, students will be able to list safety procedures relevant to the construction process covered in the course.

SLO #2 Tool Usage

Upon completion of this course, students will be able to demonstrate proper usage of tools used in the construction process covered in the course.

SLO #3 The Construction Process

Upon completion of this course, students will be able to perform the construction process.

- B. COURSE OBJECTIVES (The major learning objective for students enrolled in this course are listed below)
 - 1. Identify proper safety equipment and situations when the equipment are appropriate.
 - 2. Create a materials list for a construction project.
 - 3. Accurately estimate the cost of a construction project.
 - 4. Properly utilize tools for a construction project.
 - 5. Handle materials safely and properly.
- **III. OUTLINE OF SUBJECT MATTER** Topics should be detailed enough to enable a qualified instructor to determine the major areas that should be covered as well as ensure consistency from instructor to instructor and semester to semester.

Lecture or Lab	Approximate	Topic	Major Topic
	Hours	Number	
Lecture	1	1	Safety
			A. Personal Protective Equipment (PPE)
			B. Occupational Safety and Health
			Administration (OSHA) standards
Lecture	1	II	Work Preparation
			A. Materials list
			B. Estimating cost
Lecture	1	III	Construction Processes
			A. Preparing the job site
			B. Tool usage
			C. Handling materials
			D. Math application
Lab	9	IV	Construction Processes
			A. Preparing the job
			B. Handling materials
			C. Using tools

		D. Math application E. Complete a construction project
Total Lecture Hours	3	
Total Laboratory Hours	9	
Total Hours	12	

IV. PRIMARY METHODS OF EVALUATION AND SAMPLE ASSIGNMENTS

A. PRIMARY METHOD OF EVALUATION

Skills demonstrations

B. TYPICAL ASSIGNMENT USING PRIMARY METHOD OF EVALUATION

Measure, cut, and install underlayment for ceramic tile in an 8' x 5' space. Consult your instructor for evaluation.

C. COLLEGE LEVEL CRITICAL THINKING ASSIGNMENTS – ADD ASSIGNMENTS.

- 1. In the construction yard dig a 3' x 3' square plot ensuring you have 90 degree angles by using the 3-4-5 method. Once you are finished, your instructor will check to see if your plot is square.
- 2. You need to plan the installation of a sprinkler system in the front yard of a residential property. The yard is a rectangle measuring 20' x 43'. Indicate on the sheet provided the number of sprinkler zones needed. Be sure to consider the flow rate in gallons per minute.

D. OTHER TYPICAL ASSESSMENT AND EVALUATION METHODS:

Class Performance Performance Exams Matching Items Multiple Choice

V. INSTRUCTIONAL METHODS:

Lecture
Lab
Demonstration
Group Activities
Role play/simulation

Note: In compliance with Board Policies 1600 and 3410, Title 5 California Code of Regulations, the Rehabilitation Act of 1973, and Sections 504 and 508 of the Americans with Disabilities Act, instructional delivery shall provide access, full inclusion, and effective communication for students with disabilities.

VI. WORK OUTSIDE OF CLASS:

Skill practice Problem solving activity

Estimated Study Hours Per Week: 1 hour

VII. TEXTS AND MATERIALS

A. UP-TO-DATE REPRESENTATIVE TEXTBOOKS

Not Applicable

B. REQUIRED TEXTS (title, author, publisher, year)

None

- C. REQUIRED SUPPLEMENTARY READINGS
- D. OTHER REQUIRED MATERIALS

Instructor-created materials and handouts

VIII. CONDITIONS OF ENROLLMENT

A. Requisite/s (Course and Non-Course Prerequisite/s and Corequisite/s).

_				•	
		Requisites		Category and Justification	

B. Requisite Skills

Requisite Skills – Matching	
reduisite skiis – wattiilig	

C. Recommended Preparations (Course and Non-Course)

Recommended Preparation	Category and Justification

D. Recommended Skills

Recommended Skills
Recommended Skills

E. Enrollment Limitations

Enrollment Limitations and Category	Enrollment Limitations Impact

Course created by: ROSS DURAND on 03/01/2020

BOARD APPROVAL DATE: 05/18/2020

LAST BOARD APPROVAL DATE:

Last Reviewed and/or Revised by