

PALOMAR COLLEGE
COURSE OUTLINE OF RECORD FOR
DEGREE CREDIT COURSE

X Transfer Course X A.A. Degree applicable course
(check all that apply)

COURSE NUMBER AND TITLE: AP C 213 Beam & Deck Forming

UNIT VALUE: 1.5

MINIMUM NUMBER OF SEMESTER HOURS: 40

BASIC SKILLS REQUIREMENTS: Appropriate language and computational skills.

ENTRANCE REQUIREMENTS

PREREQUISITE: None.

COREQUISITE: None.

RECOMMENDED PREPARATION: None.

SCOPE OF COURSE:

This course will introduce the use of various wood and patented forming systems used in the construction of concrete beams and decks. Metal beam forms and capitals will be taught in this class. Layout and builders level skills will be used in this class.

SPECIFIC COURSE OBJECTIVES:

Students will be able to:

1. Explain the various beam and deck forming systems.
2. Demonstrate the ability to identify beam and deck locations on blueprints.
3. Apply the mathematical calculations required to compute the amount of materials and concrete needed for various forms.
4. Demonstrate the ability to assemble a wood beam and deck form.
5. Identify and explain the differences between various patented forming systems.

CONTENT IN TERMS OF SPECIFIC BODY OF KNOWLEDGE:

- I. Identify and explain the various types of beam and deck forms
 - A. Wood built in place
 - B. Pre-fabricated metal forms
 - C. Combinations of metal and wood forms

- II. Identification of and application of various proprietary systems
 - A. Distinguish between wood and pre-fabricated forms
 - B. Manufactures specifications
- II. Mathematical calculations required for computing the amount of material and concrete needed
- IV. Location of beams on blueprints and relationship to columns and decks
- V. Assemble wood beams and deck forms
 - A. Layout column
 - B. Layout deck shoring
 - C. Layout beam pocket

REQUIRED READING:

Koel, Leonard. Carpentry. Homewood: American Technical Publishers, 1991

Koel, Leonard. Concrete Formwork. Chicago: American Technical Publisher, 1990

Carpenters 46 Northern California Counties JATC. Construction Mathematics. Oakland: Self-published, 1991

Carpenters 46 Northern California Counties JATC. Introduction to Working Drawings. Oakland: Self-published, 1991

SUGGESTED READING:

None.

REQUIRED WRITING:

Completion of written assignments in student workbook, consisting of ten to twelve pages in length.

OUTSIDE ASSIGNMENTS:

Students are expected to spend a minimum of three hours per unit per week in class and on outside assignments, prorated for short-term classes.

Students will read assigned text and workbook assignments.

INSTRUCTIONAL METHODOLOGY:

Check all that apply:

- lecture
- laboratory
- lecture-laboratory combination
- directed study

DISTANCE LEARNING:

This course may be offered as a distance learning course and meets Title 5 regulations 55370, 55372, 55374, 55376, 55378, and 55380.

Yes No

If yes, check all that apply:

- Television Course (Video one-way, e.g. ITV, video cassette, etc.)
- Online Course (Text one-way, e.g. newspaper, correspondence, electronic file, etc.)
- Two-Way Video Conferencing (Two-way interactive video and audio)
- One-Way Video Conferencing (One-way interactive video and two-way interactive audio)
- Computer Assisted Instruction (A specialized form of mediated instruction relying primarily on student access to information and prepared lessons or teaching materials through a computer terminal, but not under immediate supervision of a qualified instructor.)

GRADING POLICY AND STANDARDS (include methods of determining whether the stated objectives have been met by students):

Class Participation	10%	A = 100 – 90
Quizzes	20%	B = 89 – 80
Lab/Shop Projects	20%	C = 79 – 70
Workbook	20%	F = Below 70
Final Exam	<u>30%</u>	
	100%	

IS COURSE REPEATABLE FOR REASON(S) OTHER THAN DEFICIENT GRADE?

Yes No Number of times course may be taken for credit: 2

If yes, identify specific provision of Title 5 Division 2 section(s), 55761-55763 and 58161 which qualifies course as repeatable: 58161 Part C 2A

CONTACT PERSON: Director, Vocational Programs, Ext. 2286

SIGNATURES ON FILE