

**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 225 Formwork Problems

**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 address form design, material estimating and problems relative to form construction. Related safety, math and blueprint reading will be covered.

**SPECIFIC COURSE OBJECTIVES:**

Students will be able to:

1. Demonstrate the ability to design various form structures.
2. Apply the mathematical calculations required to compute the amount of various materials used in form construction.
3. Explain various sequential and logistical problems involved within the construction, placement, and pouring of concrete forms on job sites.

**CONTENT IN TERMS OF SPECIFIC BODY OF KNOWLEDGE:**

- I. Identify and choose the type of form building techniques to be used.
  - A. Structural requirements
  - B. Area in which the forms are to be placed.
  - C. Architects requirements
- II. Identification of and application of various forming systems
  - A. Use of material and appropriate hardware
  - B. Built in place systems
  - C. Pre-fabricated forms

- III. Design forms for various conditions.  
A. System choose  
B. Materials needed

**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 X

**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 X 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:**

SIGNATURES ON FILE