

**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 205 Foundations

**UNIT VALUE:** 1.5

**MINIMUM NUMBER OF SEMESTER HOURS:** 40

**BASIC SKILLS REQUIREMENTS:** Appropriate language and computational skills.

**ENTRANCE REQUIREMENTS**

**PREREQUISITE:**

**COREQUISITE:**

**RECOMMENDED PREPARATION:**

**SCOPE OF COURSE:**

This course will focus on the use of concrete in the construction industry. Basic layout techniques will be studied and applied for foundations. Related safety, math and blueprint reading will be covered.

**SPECIFIC COURSE OBJECTIVES:**

Students will be able to:

1. Explain the development of the use of concrete in construction
2. Demonstrate the basic layout techniques for foundations
3. Analyze foundation blueprints for location of special hardware place
4. Demonstrate the ability to calculate the required concrete for a foundation

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

- I. Uses of concrete in construction
  - A. From Roman times to present
  - B. Various design applications
  - C. Form designs
- II. Mathematical calculations
  - A. Material take-off and usage
  - B. Calculation for concrete use

- III. Foundations locations and dimensions
  - A. Locations and specifications on blueprints
  - B. Building code
- IV. Various types of foundations
  - A. Spread footing
  - B. Basement foundations
  - C. Monolithic pours
- V. Laying out and erecting foundations forms
  - A. Blueprint take-offs
  - B. Design and placement of forms
- VI. Use of the builders level in the setting of foundations forms
  - A. Use of datum point
  - B. Job site elevations and form placement

**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.

**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 on File