



**COURSE OUTLINE**  
**Palo Verde College**  
 One College Drive, Blythe, CA 92225  
 (760) 921-5500

Latest Revision: 5/14/04

Board Approval: 6/22/04

**1. Completed by the Course Initiator: Rhonda Entwistle**

Subject Area and Course Number: <b>NBE 071</b>		Course Title: <b>Basic Plumbing</b>			
New Course <input type="checkbox"/> Revised <input checked="" type="checkbox"/> Updated <input type="checkbox"/>		Static ID <b>CO7198</b>	TOP Code <b>095230</b>	Credit Status Request <b>Noncredit</b>	
Classification Code <b>I=Occupational Education</b>		SAM Code <b>C=Clearly occupational</b>		Course prior to college level <b>Y=Not applicable</b>	
Noncredit category <b>I=Short-term vocational</b>		Meets a unique need: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Course duplicated: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Demand/Enrollment Potential: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Transfer request <b>C=Non-transferable</b>		Articulation request: UC <input type="checkbox"/> CSU <input type="checkbox"/> CSU-GE <input type="checkbox"/> IGETC <input type="checkbox"/> CAN <input type="checkbox"/>			

**2. Curriculum Committee Approval Date: 5/20/04**

**3. After Curriculum Committee approval, to be completed by the Office of Instruction:**

TRANSFER APPROVAL STATUS	ARTICULATION APPROVAL STATUS					
		Not Requested	Date of Submission	Approval Pending	Approval Denied	Date Approved
N/A						
	UC	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	
	CSU	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	
	CSU-GE	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	
	IGETC	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	
	CAN	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	

**CATALOG DESCRIPTION:**

**Basic Plumbing.** Sizing pipes and fittings and estimating material for installation of water, sewer, gas, drain, waste and vent piping for structures. Selection and set finishing of plumbing fixtures. Emphasis on plumbing procedures and safe tool and equipment use. Includes code requirements of health and sanitary conditions and blueprint reading. This course is repeatable.

**UNITS:**            **HOURS:** Lecture:            Laboratory: 18    Lecture/Lab:            Clinic/Field:

**ENTRY LEVEL SKILLS, PREREQUISITES, AND/OR COREQUISITES:**

None.

**OBJECTIVES and LEARNING OUTCOMES:**

Upon successful completion of the course the student will be able to:

1. Safely use the tools and equipment used in plumbing installation.
  2. Size piping and fittings used for the installing of water, sewer, gas, drain, waste, and vent piping.
  3. Set fixtures for the plumbing installation.
  4. Estimate materials needed for the completion of residential plumbing.
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**COURSE OUTLINE AND SCOPE:**

**1. Outline of Topics:**

1. Safety
2. Tools
3. Piping
4. Fittings
5. Codes
6. Blueprint reading
7. Setting fixtures
8. Estimating
  - a. Materials
  - b. Costs

**2. Examples of Reading Assignments:**

Blueprint reading.

**3. Examples of Writing Assignments:**

None.

**4. Appropriate Assignments to be completed outside of class:**

None.

**5. Appropriate Assignments that demonstrate critical thinking:**

None.

**6. Other Assignments:**

None.

**METHOD OF EVALUATION:**

1. Exams and Quizzes (oral/written)
2. Class Participation/Discussion
3. Film/Video Response
4. Projects
5. Demonstrations
6. Group Activities

**METHOD OF INSTRUCTION:**

1. Lecture
2. Demonstration
3. Videotape
4. Residential wiring project
5. Group projects
6. Community Service Project

**TEXTS, OTHER READINGS AND MATERIALS:**

(List typical or required primary sources, texts, and other materials; or reference college bookstore computerized listings, etc.)

Blankenbaker, E. Keith. Modern Plumbing. Goodheart Wilcox, 1997., **teacher handouts.**

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**SIGNATURES:**

**COURSE INITIATOR:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

**LIBRARY:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

**CHAIR OF CURRICULUM COMMITTEE:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

**SUPERINTENDENT/PRESIDENT:** \_\_\_\_\_ **DATE:** \_\_\_\_\_