

CATALOG INFORMATION

Dept and Nbr: APED 359      Title: APP PLUMBERS,10TH SEM  
Full Title: Apprentice Plumbers, Tenth Semester  
Last Reviewed: 5/14/2018

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	2.00	Lecture Scheduled	0	18	Lecture Scheduled	0
Minimum	2.00	Lab Scheduled	6.00	8	Lab Scheduled	108.00
		Contact DHR	0		Contact DHR	0
		Contact Total	6.00		Contact Total	108.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 0.00

Total Student Learning Hours: 108.00

Title 5 Category: AA Degree Non-Applicable  
Grading: Grade Only  
Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP  
Also Listed As:  
Formerly:

Catalog Description:  
Related supplemental instruction for apprentice plumbers and pipefitters

Prerequisites/Corequisites:

Recommended Preparation:

Limits on Enrollment:  
Indentured apprentice

Schedule of Classes Information:  
Description: Related supplemental instruction for apprentice plumbers and pipefitters (Grade Only)  
Prerequisites/Corequisites:  
Recommended:  
Limits on Enrollment: Indentured apprentice  
Transfer Credit:  
Repeatability: Two Repeats if Grade was D, F, NC, or NP

## **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

**AS Degree:**      **Area**  
**CSU GE:**        **Transfer Area**

Effective:      Inactive:  
Effective:      Inactive:

**IGETC:**        **Transfer Area**

Effective:      Inactive:

**CSU Transfer:**                      Effective:

Inactive:

**UC Transfer:**                      Effective:

Inactive:

**CID:**

**Certificate/Major Applicable:**  
Certificate Applicable Course

## **COURSE CONTENT**

### **Student Learning Outcomes:**

At the conclusion of this course, the student should be able to:

1. Describe and demonstrate plumbing principles and regulations related to the plumbing and pipefitting trade.
2. Apply best practices in practical environment related to the plumbing and pipefitting trade.

### **Objectives:**

At the conclusion of this course, the student should be able to:

1. Describe the various components of gas installations
2. Describe the procedures for service work
3. Read and interpret advanced building plans
4. Describe the functions of refrigeration controls

### **Topics and Scope:**

1. Gas installations
2. Service work
3. Plan reading
4. Refrigeration controls

### **Assignment:**

1. Homework assignments (1 to 2 sets per week)
2. Quizzes and examinations (4 to 6 per semester)
3. Class performances and field work (on-the-job demonstrations) of skill development, safety practices, equipment, and material handling.

### **Methods of Evaluation/Basis of Grade:**

**Writing:** Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

None	Writing 0 - 0%
<b>Problem Solving:</b> Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.	
Homework assignments; field work	Problem solving 10 - 25%
<b>Skill Demonstrations:</b> All skill-based and physical demonstrations used for assessment purposes including skill performance exams.	
Class performances; field work	Skill Demonstrations 50 - 65%
<b>Exams:</b> All forms of formal testing, other than skill performance exams.	
Quizzes and examinations to include multiple choice, true/false, matching items, and completion	Exams 10 - 20%
<b>Other:</b> Includes any assessment tools that do not logically fit into the above categories.	
Attendance and participation	Other Category 5 - 10%

### **Representative Textbooks and Materials:**

Hydronic Heating and Cooling. International Pipe Trades Joint Training Committee. 2009 (classic)

Medical Gas Systems, Installers and Brazers. International Pipe Trades Joint Training Committee. 2009 (classic)