

APED 345 Course Outline as of Fall 2025

CATALOG INFORMATION

Dept and Nbr: APED 345 Title: APP PLUMBERS, 1ST SEM

Full Title: Apprentice Plumbers, First Semester

Last Reviewed: 5/13/2024

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: APED 245S

Catalog Description:

Students will be introduced to training related to Plumbers and Pipefitters indentured apprenticeship. This is the first semester of a ten-semester program.

Prerequisites/Corequisites:

Recommended Preparation:

Limits on Enrollment:

Indentured apprenticeship

Schedule of Classes Information:

Description: Students will be introduced to training related to Plumbers and Pipefitters indentured apprenticeship. This is the first semester of a ten-semester program. (Grade Only)

Prerequisites/Corequisites:

Recommended:

Limits on Enrollment: Indentured apprenticeship

Transfer Credit:

Repeatability: Two Repeats if Grade was D, F, NC, or NP

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

AS Degree:	Area	Effective:	Inactive:
CSU GE:	Transfer Area	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 the practical environment related to the plumbing and pipefitting trade

Objectives:

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

1. Describe job site safety rules and procedures
2. Qualify for completion of certificate in first aid and cardiopulmonary resuscitation
3. Describe the role of the plumbers and pipefitters union
4. Demonstrate basic drafting techniques
5. Demonstrate the proper care and use of tools
6. Identify various plumbing features and appliances

Topics and Scope:

- I. Safety and First Aid
- II. Trade Unions
- III. Blueprints
- IV. Isometric Drawing
- V. Tools
- VI. Fixtures and Appliances
- VII. Mathematics related to Plumbers and Pipefitting

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%

Problem Solving: Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Homework assignments; field work

Problem solving
10 - 25%

Skill Demonstrations: All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Class performances; field work

Skill Demonstrations
50 - 65%

Exams: All forms of formal testing, other than skill performance exams.

Quizzes and examinations

Exams
10 - 20%

Other: Includes any assessment tools that do not logically fit into the above categories.

Attendance and participation

Other Category
5 - 10%

Representative Textbooks and Materials:

Your Heritage and Future in the Pipe Trades. International Pipe Trades Joint Training Committee. 2020

A Guide to Service Work. International Pipe Trades Joint Training Committee. 2021

Drawing Interpretation and Plan Reading. International Pipe Trades Joint Training Committee. 2021

Use and Care of Tools. International Pipe Trades Joint Training Committee. 2020