

**Collin College - Continuing Education
COURSE SYLLABUS**

COURSE INFORMATION

Course Number: CBFM-1000

Course Title: Facilities Maintenance

Number of Sessions: 12

Course Description: Basic electrical, plumbing, and general skills required to identify and correct minor problems in building maintenance.

Suggested Course Prerequisite(s): N/A

Course Resources:

Required Apparel:

- ❖ Denim Jeans
- ❖ 100% cotton shirt
- ❖ Safety toed boots or shoes (steel or composite recommend)

Personal Protective Equipment:

- ❖ Hand protection (work gloves)
- ❖ Hearing Protection (ear plugs)
- ❖ Head protection (hard hat)
- ❖ Safety glasses (Ansi standard Z-87)
- ❖ Face shield
- ❖ Respiratory protection (dust mask)

Tools Required (basic tool kit or box to include):

Hammer
Tape Measure
Pliers
Wrench (open / Close Face)
Torpedo Level
Voltmeter or Multi Meter
Wire Strippers
Utility Knife
Phillips Screwdriver
Flathead / Straight Blade Screwdriver
Needle nose pliers

Additional tool (recommended):

Pipe wrench
Basin wrench
Plunger
Hacksaw
Adjustable spanner
Tongue-and-groove pliers
Pipe Cutter
Non-Contact Voltage Tester
Tongue and groove Pliers
Lineman Pliers
Diagonal Cutting Pliers
Fish Tape
Wire Crimpers

Student Learning Outcomes: Demonstrate safety procedures associated with facilities maintenance (General, Plumbing, and Electrical). Students are familiar with the facilities maintenance safety with a focus on electrical and plumbing industries as required. Explain safety procedures for building maintenance and identify the proper use of hand and power tools used in building maintenance. Identify personal protective equipment. Identify common electrical and plumbing hazards. Understand the importance of scaffolding and fall protection for workers in elevated workplaces. Recognize the hazards associated with working in or around excavation sites. Understand the requirements for fire protection in the workplace.

Electrical:

- ❖ The functions of a Fluke Meter
- ❖ Ladder, lockout / tag outs, and power tool use and safety
- ❖ Electrical symbols and reading them on a schematic

Plumbing:

- ❖ Excavation, confined space, ladder, and power tool use and safety
- ❖ Identify and understand the various materials used for plumbing pipe, fittings, and joining methods
- ❖ Basics of water pressurized plumbing systems and gravity flow sanitary sewer system

HVAC:

- ❖ Identify equipment: AHUs, EFs, Condensers, ductwork and controls.
- ❖ Ladder, power tools, Fluke Meter, and pressure gauges use and safety
- ❖ EPA gases and their safer handling, coils and filter systems and their function.

Carpentry

- ❖ Drywall patching and repair.
- ❖ Safe operation of power hand tools.

Certification Notes: We will discuss all of the safety subjects that are outlined in the OSHA 10 course, and this course will help to prepare a student to take the OSHA 10 hr. course.

Instructor Notes: We will discuss and demonstrate how to complete routine maintenance tasks and OSHA requirements for safety to complete those tasks. We will also show and build job safety analysis worksheets for each project completed in class.

Textbooks: n/a

Refund Policy:

Please refer to <https://www.collin.edu/ce/inforegistrar.html> for our refund policy. No refunds after the start time of the first class.

Americans with Disabilities Act: Collin College will adhere to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations as required to afford equal opportunity. It is the student's responsibility to contact the ACCESS office, SCC-D140, or **972.881.5898 (V/TTD: 972.881.5950)** to arrange for appropriate accommodation. See the current [Collin Student Handbook](#) for additional information.