
COURSE PREFIX/NO:	BCT 150
COURSE TITLE:	Plumbing
LEC HRS/WK:	3.0
LAB HRS/WK:	6.0
CREDIT HRS/SEMESTER:	5.0

[Distance Learning Attendance/VA Statement](#)
[Textbook Information](#)

COURSE DESCRIPTION

This course is a study of skills for the plumbing trade, safe and proper use of plumbing tools, calculations for plumbing, schematics for plumbing, selection and joining of various pipes, selecting and fitting tubing and fillers, cutting and threading carbon steel pipes, and making flare and compression joints.

COURSE COMPETENCIES:

Upon successful completion of this course, the student should be competent to perform the following tasks:

Module 1 - Types of Pipe, Fittings and Valves

- Describe common types of pipe and tubing used in residential plumbing.
- Identify the types and schedules of plastic pipe and describe the applications for each.
- Identify types of fittings and valves used with plastic piping.
- Properly measure, cut and join plastic piping and fittings.
- Identify the types and sizes of copper tubing and describe applications.
- Describe types of fittings and valves used with copper piping.
- Properly measure, cut and join copper piping and fittings.
- Identify the types and sizes of cast iron pipe and describe applications.
- Properly measure, cut and join cast iron piping.
- Identify the types and sizes of steel pipe and describe applications.
- Identify types of fittings and valves used with steel piping.
- Properly measure, cut, thread and connect steel piping.
- Properly measure, cut and connect corrugated stainless steel tube (CSST) for gas distribution systems.

Module 2 – Sizing and Layout of Drainage, Waste and Vent (DWV) systems

- Explain the importance of the different segments of a DWV system.
- Interpret building plans and rough-in sheets to determine the location of fixtures and the routing of piping for a residential DWV system.
- Size the various segments of a DWV system according to plumbing code.
- Correctly modify structural members without weakening the structure.
- Prepare a material takeoff from a given set of plans.
- Properly install a complete DWV system.

Module 3 – Sizing and Layout of Water Distribution Systems

- Compare and contrast the advantages and disadvantages of different pipe layouts (Trunk and Branch, Remote Manifold and Home-Run systems).
- Interpret building plans and rough-in sheets to determine the location of fixtures and the routing of piping for a residential system.
- Select the appropriate pipe material and size the water distribution system according to plumbing code.
- Prepare a material takeoff from a given set of plans.
- Properly install a complete water distribution system.

EVALUATION STRATEGIES/GRADING

Students must complete all modules, including assignments, projects, labs, and tests. Students must earn at least a “C” in order for the course to serve as a prerequisite and for the course to apply towards a certificate.

ATTENDANCE

The College attendance policy in the College handbook will be honored.

ACADEMIC HONESTY

Students are expected to adhere to the College policy regarding student conduct as stated in the College handbook.

ASSIGNMENTS

Students are expected to complete all assignments and any supplementary exercises designated by the instructor.

TEXTBOOK

Students are expected to purchase the required textbook for this course,

EVALUATION CRITERIA/GRADING

The grading scale will be the standard for York Technical College:

Grade Points

- A 90 - 100
- B 80 - 89
- C 70 - 79
- D 60 - 69
- F 0 - 59

Evaluation Method

- | | |
|---------------|-----|
| Module Tests | 50% |
| Lab/Homework | 40% |
| Work Attitude | 10% |

Work Attitude is defined as:

- Participation
- Responsibility
- Cooperation
- Professionalism
- Appearance
- Attendance
- Effort
- Self Motivation
- Safety
- Works Independently

LAB EXERCISES

See addendum and/or instructor for additional details.

ENTRY LEVEL SKILLS

The student must be able to read and solve basic mathematical equations.

PREREQUISITES: RDG 031 or equivalent

CO-REQUISITES: none

METHODS OF INSTRUCTION

Lectures, reading assignments, projects, discussions, video presentations, multimedia presentations, and web content are the major teaching methods used in this course. See instructor for specifics.

Disability Statement: Any student who feels s/he may need an accommodation based on the impact of a disability should contact the Special Resources Office (SRO) at 803-327-8007 in the 300 area of Student Services. The SRO coordinates reasonable accommodations for students with documented disabilities.