2022/2023

Plumbing and Pipefitting Syllabus

Woodside Lane



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1. Course Description

A. Aim: To prepare students for the NCCER Exam and obtain an entry level position in the plumbing and pipefitting industry. This program consists of clearly defined expectations in theory and performance in entry level standards of plumbing and pipefitting. Students are expected to sit for the NCCER exam at the completion of the program. Students will receive An NCCER Card with an identifying number specific to the student. This allows potential employers to see the level of training competencies that have been achieved.

B. Topics to be covered:

Introduction to the Plumbing Profession

Plumbing Safety Tools of the Plumbing Trade

Introduction to Plumbing Math Introduction to Plumbing Drawings

Introduction to Plumbing Fixtures Pipe and Fittings

Introduction to Pipefitting

Introduction to Water Distribution Systems

Introduction to Drain, Waste, and Vent (DWV) Systems

- C. **Program of Study**: Successful Completion of Plumbing and Pipefitting will result when all levels of training have been completed and competencies have been successfully demonstrated by students.
- **D.** Length: Plumbing and Pipefitting is a one year program. Students are required to attend and complete virtual, hybrid and conventional instruction as governed by NHREC and it's current policy in this fluid time. Students are also required to adhere to the New Horizons attendance policy as stated in the Student Handbook to maintain good standing in the class.

E. Prerequisites:

- 1. Must be a minimum of a Junior in High School.
- 2. Basic math skills that include addition, subtraction, and simple fractions.
- 3. Ability to follow instructions, both oral and written, is a must.
- 4. Manual dexterity.
- 5. Hand/eye coordination.
- 6. The ability and stamina to spend long hours standing, crawling, and kneeling.
- 7. Ability to function in small spaces.
- 8. Skills in human relations.
- 9. A student email address.

F. Class Fees

Activity Fee - \$17 <u>Uniform Shirt \$48</u> Total Cost. \$65 1. *Instructional Philosophy*: I believe in a learning-centered classroom and lab.

In this course we will be utilizing the following forms of instruction:

Classroom Lecture and discussions

Lab with hands - on activities

Quizzes and tests

Videos and powerpoint presentations

Internet research

Guest Speakers from the Industry

2. *Grading*: In the plumbing and pipefitting programs, theory work will account for 33% of the total grade. Employability skills will account for 34%. The remaining 33% will be determined by the student's workplace skills grade.

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

70 and above is required to pass the NCCER Exam

G. Classroom rules and regulations:

Follow the Students code of conduct (Students Rights and Responsibilities Handbook).

Students should be on time.

No talking during the teacher or guest speaker's presentation.

No cell phones or other electronic devices used in the classroom (unless given explicit approval by the instructor).

Students will be required to maintain a binder as part of their grade.

Students will be respectful to others at all times.

Students will be required to wear PPEs while working in the Lab.

Students will be required to provide and wear standard work shoes (leather sides, steel toe and sturdy soles) when working in the Lab.

Students will be required to wear long – sleeved, non-flammable shirts on appropriate lab days.

Long – sleeved coveralls strongly recommended to protect clothing and bare skin from potential hazards while working in the lab and can be used in lieu of long – sleeved shirts.

Career Opportunities*:

Plumber; Commercial, Residential and Industrial

Plumbing Inspector

Plumbing Designer/Engineer

Plumbing Maintenance and Repair Technician

Pipefitter; Marine and Industrial

*The above is just a short list of examples of the advanced career fields that you can pursue with further education and training.