# PLUMBING TECHNOLOGY COURSE SYLLABUS 2020-2021 Instructor: Jimmy Halstead jlhalstead@mail.kana.k12.wv.us (304) 348-1965

#### **Carver Mission Statement:**

The mission of Carver Career and Technical Education Center is to provide certificate and short term education programs designed to prepare secondary students from Kanawha County and adult students from Kanawha and surrounding counties for employment, career advancement, and/or continued education and to assist employers in meeting their employment and training needs.

#### **Plumbing Technology Mission Statement:**

To provide quality entry level training in the plumbing profession, as well as teaching students how to be more professional, safe and productive members of the workforce.

#### **Plumbing Technology Course Description:**

This two year program (1080 hours) is designed to provide the knowledge and skills necessary to assemble, install and repair pipes, fittings and fixtures of heating, water and drainage systems using building plans and working drawings and hand and power tools; cut, thread and bend pipe; assemble and install valves, pipe fittings, and pipes composed of metals and nonmetals; join pipes; caulk joints; use pressure gauges to determine whether system is leaking; install and repair plumbing fixtures such as sinks, commodes, bathtubs, water heaters, hot water tanks, garbage disposal units, and dishwashers; repair and maintain plumbing by replacing washers, mending burst pipes and opening clogged drains. Students are able to work as plumber's helpers upon graduation.

Potential Certifications;

- 1. International Code Council Building Code Specialist (Plumbing Option)
- 2. Carver Career Center Plumbing Certification (1080 Hours)
- 3. OSHA 10 Hour Construction Card
- 4. Skills U.S.A. Participation

#### **Daily Grade**

The daily grade is determined as follows:

Classroom Instruction/Participation	40%
Lab Participation	40%
Work Area Clean-up	10%
Safety Procedures	10%

#### Nine Weeks Grade

The nine weeks' grade is determined as follows:

Tests (Written and Performance)	20%
Daily Grade	40%
Lab or Oral Presentation	40%

#### Grading Scale (Per KCS Policy) Grades will be posted weekly on Schoology

A = 90 - 100 = Earns Credits B = 80 - 89 = Earns Credits C = 70 - 79 = Earns Credits D = 60 - 69 = Earns Credits 69 and below = No Credit

The Plumbing Technology Class uses The Modern Plumbing (8<sup>th</sup> Edition) Textbook and the International Plumbing Code Book.

<u>All of our textbooks require a 70% or better grade average to receive credit for their respective</u> courses, therefore if a student receives a 60 to 69 % grade they will have a passing grade on the report card but not receive the associated plumbing certificate.

#### GENERAL INSTRUCTIONAL OBJECTIVES (Applicable to all Career and Technical Areas of Study)

#### Simulated Workplace

- 1. Students will call in when they are to be absent from class
- 2. Students will track their hours while in the plumbing program
- 3. Weekly safety meetings.
- 4. Random drug testing
- 5. Job site simulations
- 6. Students will have input into class discussions and training

#### Workplace Skills

- 1. Match terms associated with applying for a job with correct definitions.
- 2. List sources for locating job openings.
- 3. List steps to applying for a job.
- 4. Distinguish between employer and employee expectations.
- 5. Select attributes and attitudes desired by employers during personal interviews.
- 6. Prepare a resume.
- 7. Write a letter of application.
- 8. Complete an application form for a job in the plumbing profession.
- 9. Participate in a mock job interview, as both employer and prospective employee.

#### **Student Organization Activities**

- 1. Demonstrate a knowledge of the Skills USA
- 2. Use parliamentary procedures in committee meetings.
- 3. Demonstrate knowledge of etiquette.
- 4. Describe the duties of Skills USA officers.
- 5. Participate in the professional development program of Skills USA.
- 6. Serve on one or more section or chapter committees.

### **Computer Literacy Skills**

- 1. Properly use the computer lab and all hardware devices in the lab.
- 2. Demonstrate knowledge of the keyboard.
- 3. Identify the components in the computer lab.
- 4. Demonstrate knowledge of the Internet.
- 5. Use word processing software to create, save, retrieve, and modify documents such as reports, letters and resumes.
- 6. Use application software related to Plumbing Technology.

#### Plumbing 1st Semester; 1st year students (270 Hours)

- 1. Become acquainted with plumbing trade.
- 2. Introduction to Construction Safety
- 3. Basic plumbing tools.
- 3. Plumbing Math.
- 4. Blueprint reading

### Plumbing 2<sup>nd</sup> Semester; 1<sup>st</sup> year students (270 Hours)

- 1. Introduction to Plastic Pipe and Fittings
- 2. Copper Pipe and Fittings
- 3. Carbon Steel Pipe
- 4. Flexible Gas Pipe
- 5. Fuel Gas Systems

### Plumbing 3<sup>rd</sup> Semester; 2<sup>nd</sup> year students (270 Hours)

- 1. Introduction to Plumbing Codes.
- 2. Drain Waste and Vent Systems.
- 3. Cast-Iron Pipe and Fittings.
- 4. Water Distribution Systems.

### Plumbing 4<sup>th</sup> Semester; 2<sup>nd</sup> year students (270 Hours)

- 1. Introduction to Fixtures and Faucets
- 2. Hot Water Tanks
- 3. Portfolios
- 4. International Code Council Plumbing Exam
- 5. NOCTI Exam

By signing bellow, both the parent and student acknowledge that they have reviewed the Plumbing Technology course syllabus

Parent Name:	Date:
Parent Signature:	
Student Name:	Date:
Student Signature:	

# **Plumbing Class Rules**

# 2019/2020

# 1. All students will Participate =

Everyone in the class must "pitch in" whether it is a class discussion or a hands- on project.

# 2. All students will keep the shop organized=

Everyone must help with clean up duties, even if you didn't make the mess.

Pick up all loose items from the floor and put them back where they go.

# 3. All students will finish what they started=

Complete all assignments, if you need extra time, that's ok. If you need help, just ask.

### 4. All students will use professional language=

No cursing in the shop, in the hall or in another classroom.

### 5. All students will be respectful=

Be quiet when someone else is talking

Be polite to visitors in the classroom

Be polite to other people when you are out in the building

### 6. Students will not take shortcuts=

Each step of a process is important. Do them all.

### 7. Students will not waste materials=

Use only what you need to complete a project.

### 8. There will not be any scheduled breaks during class

Breaks are not automatic

# (sometimes we will be able to take one at the Instructors discretion)

9. All students will use tools properly=

Take care of your tools and they will take care of you.

### 10. All students must call in when absent or tardy=

Call, text or E-Mail Mr. Halstead if you are not going to be here or are going to be late. (304)550-9560

### 11. Dress Code =

Pants and shoes are required for the Plumbing class (no flipflops or sandals)

Even if we are doing book-work, we need to be ready to work at any time.

(We have emergency service calls come in frequently)

### 12. Safety=

Safety glasses will be worn any time we are working whether in the shop or out in the building.

### 13. No Horseplay =

We are adults in this class, Act like it.

### 14. All students must report safety concerns=

Report any safety problems to the instructor Report damaged or broken tools to the instructor

### 15. Have Fun=

By signing and dating Both parent and student agree to follow the rules for the Plumbing Technology class

Student

Name	Signature	Date
Parent		
Name;	Signature;	Date: