

Vision: To create an environment where our learners grow as individuals while gaining professional expertise and skills.

Mission: To offer inspiration through advanced instruction and authentic experiences.

**Instructor:** Christopher Popham.

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response.

Conferences can be scheduled via the counselors between 7:45 and 8:15 am.

## Carpentry/Electrical/Masonry/Plumbing

This course is preceded by the Occupational Safety and Fundamentals course. This course offers an opportunity for students to build on their knowledge and skills developed in Industry Fundamentals and Occupational Safety. It introduces them to four construction craft areas and is also the second step towards gaining a Level One Industry Certification in one of the craft areas. The goal of this course is to introduce students to the history and traditions of the carpentry, masonry, plumbing, and electrical craft trades. Students will explore how the various crafts have influenced and been influenced by history. The student will also learn and apply knowledge of the care and safe use of hand and power tools as related to each trade. In addition, students will be introduced to and develop skills to differentiate between blueprints related to each individual craft area.

This course is preceded by Introduction to Construction and is the third of three courses that provides the student a solid foundation in electrical skills and knowledge. As the third step in gaining a Level One Industry Certification in Electrical, the course builds on the concepts of electrical safety introduced in Occupational Safety and provides knowledge and basic skills of the hardware and systems used by an electrician. The course incorporates general knowledge of the National Electrical Code and electrical systems, including series, parallel, and seriesparallel circuits. In additional, students will be provided an introduction to the skills and knowledge of conduit bending and installation

As the third course in the Masonry Pathway, this course provides students with a solid foundation in masonry skills and knowledge and is the third step in gaining a Level One Industry Certification in Masonry. The course provides knowledge and skills related to types and properties of mortar and concrete mixtures, as well as skills needed to operate hand tools, power tools, and equipment used in mixing mortar. Additional course components include knowledge and skills related to cutting, laying, and finishing of masonry units. The prerequisite for this course is Introduction to Construction.

As the third course in the Plumbing Pathway, the course provides students with a solid foundation in plumbing and is the third step in gaining a Level One Industry Certification in

Plumbing. This course provides basic skills and knowledge needed to apply Occupational Safety and Health Administration (OSHA) and Environmental Protection Agency (EPA) safety concepts and practices relating to the plumbing trade. The student is introduced to the basic knowledge and application of plumbing codes, as well as the handling, estimating, and storing of materials used in the plumbing trade. Involved in this process is the correct interpretation and application of architectural and construction drawings, related to plumbing installation. The prerequisite for this course is Introduction to Construction.

## **Course Objectives**

AAS associates will

- Build on knowledge and skills from Industry Fundamentals and Occupational Safety.
- Introduce four construction craft areas: carpentry, masonry, plumbing, and electrical.
- Explore the history and traditions of each craft trade and their historical influences.
- Learn and apply safe use of hand and power tools relevant to each trade.
- **Develop skills to differentiate** between blueprints related to each craft area.
- **Provide a solid foundation** in electrical skills and knowledge, building on electrical safety concepts.
- Prepare for Level One Industry Certification in Electrical by covering hardware, systems, and National Electrical Code.
- Introduce conduit bending and installation skills.
- Provide a solid foundation in masonry skills, including mortar and concrete mixtures.
- Gain skills in operating tools and equipment used in masonry, as well as cutting, laying, and finishing masonry units.
- Prepare for Level One Industry Certification in Masonry.
- Provide a solid foundation in plumbing, including OSHA and EPA safety concepts and practices.
- Introduce plumbing codes, material handling, estimating, and storage.
- Interpret and apply architectural and construction drawings related to plumbing.
- Prerequisite for each course is Introduction to Construction.

# **Required Supplies**

- Fully charged Chromebook
- Chromebook charger
- Steel-toe boots/ close toe shoes
- Work clothes/ Belts/ Appropriate shirts/ Jeans(no holes)
- Writing utensil
- Notebook paper and folder
- DOT Safety glasses
- Hearing protection
- Hat/ Head Covering

No cell phones

# **Expectations for Academic Success**

- Attend class daily.
- Be prepared for class.
- Respect yourself and others.
- Ask questions.
- Contribute new ideas.
- Work hard, and give your best effort.

#### **Grade Calculation**

Summative Assessments = 40%	Formative Assessments = 40%
<ul> <li>Authentic learning projects, exams, presentations, essays, labs</li> </ul>	<ul> <li>Practice Work: classwork, homework, quizzes, labs, employability skills</li> </ul>
Culminating Final Exam/Project = 20%	

All courses will have a culminating exam or project that assesses associate learning of the semester's course content. This exam/project will be 20% of the overall course grade.

#### **Attendance**

Your presence in class matters.

### Make-up Work

Absent associates are required to contact the instructor for make-up work. The associate will have the same number of days as they were absent to complete the make-up work.

# **Late Work Policy**

I give a 5 day grace period. After day five you get a 0

# **Career and Technical Student Organizations [CTSOs]**

In addition to course integration, we will have a once-per-month activity schedule where associates can participate in their CTSOs. What can associates and their parents expect will occur during this time? In what competitions can associates participate?