

## GUIDELINES -Welding Processes

- A. The student must earn no less than a B for the final grade.
- B. The student must be a junior or senior to receive the Articulation College Credit Certificate.
- C. The student must enroll at the higher education institution within two years of high school graduation.

### **The student must master all of the following to receive 1 of 2 credits of WELD 1312:**

#### STUDENT LEARNING OUTCOMES:

1. Identify welding/joining processes
2. Identify advantages and limitations of welding and brazing processes
3. Describe types and effects of welding/cutting flames
4. Describe oxy-acetylene torch components
5. Describe oxy-fuel regulator operation
6. Describe major arc welding methods
7. Explain relationship of voltage and amperage on welding characteristics
8. Describe SMAW arc welding equipment
9. Explain AC/DC welding power supplies define direct current straight polarity
10. Explain SMAW equipment controls
11. Select size/type electrode
12. Describe electrodes classification system
13. Record proper pressures of gas needed or proper fuel pressures
14. Describe joint preparation techniques
15. Describe proper welding procedures on different types of material
16. Identify characteristics of weld quality
17. Prepare weld joints
18. Set-up and operate arc welding equipment
19. Perform arc welding procedures

**NEXT REVIEW Sept 2023**