

Course discipline/number/title: FST 1510: Welding Theory and Safety

- A. CATALOG DESCRIPTION
1. Credits: 1
 2. Hours/Week: 1
 3. Prerequisites (Course discipline/number): None
 4. Other requirements: None
 5. MnTC Goals (if any): NA
- B. COURSE DESCRIPTION: This course covers actual use of arc, gas, M.I.G, and T.I.G. welding along with proper safety and equipment care. Recommended Skills/Knowledge: Basic technical skills/knowledge: High School Diploma or GED.
- C. DATE LAST REVISED (Month, year): December, 2021
- D. OUTLINE OF MAJOR CONTENT AREAS:
1. Welding and shop safety
 2. Identify various weld joints
 3. Basic welding theory
 4. Safe practices, quality, PPE (personal protections equipment) and unsafe conditions.
- E. LEARNING OUTCOMES (GENERAL): The student will be able to:
1. Identify various welding electrodes.
 2. Explain Weld joints.
 3. Explain GTAW systems.
 4. Explain GMAW systems.
 5. Explain oxy-acetylene systems.
 6. Explain welding safety.
- F. LEARNING OUTCOMES (MNTC): NA
- G. METHODS FOR EVALUATION OF STUDENT LEARNING: Methods may include but are not limited to:
1. Daily Lab Assignments
 2. Exams
- H. RCTC CORE OUTCOME(S). This course contributes to meeting the following RCTC Core Outcomes(s): Critical Thinking. Students will think systematically and explore information thoroughly before accepting or formulating a position or conclusion.
- I. SPECIAL INFORMATION (if any): None