COMMON COURSE OUTLINE: Course discipline/number/title: WELD 1003: Oxy-fuel Welding, Cutting and Brazing

A. CATALOG DESCRIPTION
1. Credits: 1
2. Hours/Week: 2 hours lab
3. Prerequisites (Course discipline/number): MATH 1015 or test into MATH 0098
4. Corequisites (Course discipline/number): WELD 1001, WELD 1002, WELD 1004, WELD 1005, WELD 1006.
5. MnTC Goals (if any): NA

This course is designed to show the student the safety of welding equipment, tank storage and handling. Students will learn the proper way to open, close and maintain tanks, regulators, gauges and/or flow meters. How to safely set-up and create the proper mixture for a neutral flame and understand the importance of it. Welding, cutting, and brazing will be demonstrated in the flat position.

B. DATE LAST REVISED (Month, year): December, 2012

C. OUTLINE OF MAJOR CONTENT AREAS:
1. Oxy-fuel Welding
2. Cutting
3. Brazing
4. Safety
5. Quality Assurance

D. LEARNING OUTCOMES (GENERAL): The student will be able to:
1. Demonstrate set-up, start-up (fuel gas mixtures and flame adjustment), shut-down and storage.
2. Demonstrate proper maintenance of oxy-fuel equipment.
3. Demonstrate welding and brazing welds in flat position.
4. Demonstrate safe practices (PPE—Personal Protection Equipment) around compressed cases and their storage.

E. LEARNING OUTCOMES (MNTC): NA

F. METHODS FOR EVALUATION OF STUDENT LEARNING:
1. Daily Lab Assignments
2. Midterm Exam
3. Final Exam

G. RCTC CORE OUTCOME(S) ADDRESSED:
- Communication
- Critical Thinking
- Global Awareness/Diversity
- Civic Responsibility
- Personal/Professional Accountability
- Aesthetic Response

H. SPECIAL INFORMATION (if any): None