Course Title: Flame Joining Processes
Submitted By: T. Baldwin
Semester Course Prefix and Number: Weld 1232
Approval Date: Oct 2013
Old Quarter Course Prefix and Number: 
Revision Date: Oct 2013
Number of Credits: 1
Number of Lecture Credits: 0
Semester(s) Offered: Fall
Number of Lab Credits: 1
Number of Lab Hours: 2
Class Size: 24
Number of Studio/Demonstration/Internship Credits: 
Negotiated by AASC on: (date)

Course Purpose Code:
0 – Developmental Courses
1 – Non-transferable
X 2 – Technical course related to career programs
3 – College course which has the primary goal of applying certain concepts (e.g. vocal ensemble)
4 – Other college course not considered a part of MNTC (e.g. computer science, health, physical education)
5 – Course which is intended to fulfill the Minnesota Transfer Curriculum (MNTC) requirements or intended for transfer.
9 – Continuing Education/Customized Training specialized credit course (not occurring in 0-5)

Catalog Description:
This course covers the AWS National Skills Standards related to Oxy-fuel welding and brazing processes and the related safety practices. The student will practice the various processes on applicable materials in various positions. Students will be evaluated on their performances in a work-like environment.

Prerequisites and/or recommended entry skills/knowledge:
Course Prerequisite(s): Concurrent enrollment in or previous successful (GPA 2.0) of Weld 1231
Reading Prerequisite:
Composition Prerequisite:
Mathematics Prerequisite:

Career Programs and Transfer Majors Accessing this Course:
Welding, Welding Engineering, any trades/technical area utilizing welding

Minnesota Transfer Curriculum Goal(s) partially met by this course if applicable:
(Notes: No more than two goals may be met by any one course. Curriculum Committee review and the Chief Academic Officer’s approval are required.)
0. X None
1. Communications
2. Critical Thinking
3. Natural Sciences
4. Mathematical/Logical Reasoning
5. History and the Social and Behavioral Sciences
6. The Humanities and Fine Arts
7. Human Diversity
8. Global Perspectives
9. Ethical and Civic Responsibility
10. People and the Environment

Learning Outcomes: (including any relevant competencies listed in the Minnesota Transfer Curriculum)
Upon completion of this course, the student will be able to:
- Use the OFW process to weld gauge mild steel in Butt and Tee joint configurations in various positions
- Use the TB & TBW processes to join gauge mild steel and/or cast iron in Butt and Lap joints
- Join copper tubing and fittings with the Soldering process
- Exhibit professionalism

**Student Assessment Methods:**
Observation of practical skills; Visual Testing to applicable code; Destructive testing of completed welds

**Use of Instructional Technology:** (includes software, interactive video and other instructional technologies):
May use videos and/or Interactive internet

**Additional Special Information:** (special fees, directives on hazardous materials, etc.)

**Transfer Information:** (Please list colleges/majors that accept this course in transfer.)

**Affiliated Mesabi Range College Courses and Programs:**

**Approvals:**

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**Distribution:** Original – Instructional Services

**Copies:** Transfer Specialist, Originating Faculty Member, Records

**Revised:** December 2012