

MESABI RANGE COMMUNITY & TECHNICAL COLLEGE

Course Outline

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
Class Size: 24	Number of Lab Hours: 2
Negotiated by AASC on: (date)	Number of Studio/Demonstration/Internship Credits:

Course Purpose Code:

- 0 – Developmental Courses
 1 – Non-transferable
 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.)

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| 0. <input checked="" type="checkbox"/> None | 6. <input type="checkbox"/> The Humanities and Fine Arts |
| 1. <input type="checkbox"/> Communications | 7. <input type="checkbox"/> Human Diversity |
| 2. <input type="checkbox"/> Critical Thinking | 8. <input type="checkbox"/> Global Perspectives |
| 3. <input type="checkbox"/> Natural Sciences | 9. <input type="checkbox"/> Ethical and Civic Responsibility |
| 4. <input type="checkbox"/> Mathematical/Logical Reasoning | 10. <input type="checkbox"/> People and the Environment |
| 5. <input type="checkbox"/> History and the Social and Behavioral Sciences | |

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:

Body	Representative Signatures	Date
Faculty Association		
Academic Affairs Standards Committee		
Chief Academic Officer		

Distribution: Original – Instructional Services
Copies: Transfer Specialist, Originating Faculty Member, Records
Revised: December 2012