MESABI RANGE COMMUNITY & TECHNICAL COLLEGE

Course Outline

Course Title: Welding Mathematics
Semester Course Prefix and Number: Weld1255
Old Quarter Course Prefix and Number:
Submitted By: T. Baldwin
Approval Date: Oct 2013
Revision Date: Oct 2013

Number of Credits: 1
Semester(s) Offered: Fall
Class Size: 24
Negotiated by AASC on: (date)
Number of Lecture Credits: 1
Number of Lab Credits: 0
Number of Lab Hours: 0
Number of Studio/Demonstration/Internship Credits:

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 the mathematics involved in typical usage in the field of welding.

Prerequisites and/or recommended entry skills/knowledge:

Course Prerequisite(s): None
Reading Prerequisite:
Composition Prerequisite:
Mathematics Prerequisite:

Career Programs and Transfer Majors Accessing this Course:

Welding and 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:

- Demonstrate measurements using a ruler, tape measure, and protractor
- Demonstrate mathematical functions with numbers, fractions, decimals, and angles in both the US Standard System and the Metric System
- Compute perimeters, areas, and volumes of geometric figures and distances using geometric principles
- Calculate mass (weight) measurements
- Calculate economical layout

Student Assessment Methods:
Quizzes, exams, and observation of practical usage

Use of Instructional Technology: (includes software, interactive video and other instructional technologies):
May use videos and 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