Course Outline

Course Title: Basic Maintenance Welding & Cutting I

Submitted By: Waldorf
Semester Course Prefix and Number: IMT 1251
Old Quarter Course Prefix and Number:

Approval Date: 
Revision Date: 11-23-16

Number of Credits: 3
Number of Lecture Credits: 1
Number of Lab Credits: 2
Number of Lab Hours: 4
Number of Studio/Demonstration/Internship Credits:

Class Size: 35

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:
The main purpose of this course is to introduce the student to welding and flame cutting. The student will learn how to weld and flame cut as in used in industry. The student will also learn the match required to do welding and cutting. Also to allow the student the opportunity to learn and practice Arc and Oxy-Acetylene welding techniques as is often found in industry and required of a Maintenance Mechanics.

Prerequisites and/or recommended entry skills/knowledge:
Course Prerequisite(s):
Reading Prerequisite:
Composition Prerequisite:
Mathematics Prerequisite:

Career Programs and Transfer Majors Accessing this Course:

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. AASC review and the Chief Academic Officer’s approval are required.)

0. 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:

- Run continuous beads
- Oxy-acetylene welding/cutting safety
- Straight-line cutting
- 6010 single V-flat weld
- 6010 single V-vertical weld
- Identify arc-welding safety

**Student Assessment Methods:**

Visual inspection of lab assignments
Tests/quizzes

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

video

**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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**Copies:** Transfer Specialist, Originating Faculty Member, Records
**Revised:** December 2012