Course Title: Intro to Thermal Cutting Processes
Submitted By: T. Baldwin
Semester Course Prefix and Number: Weld 1231
Approval Date: Oct 2013
Old Quarter Course Prefix and Number: 
Revision Date: Oct 2013
Number of Credits: 1
Number of Lecture Credits: 1
Number of Lab Credits: 0
Number of Lab Hours: 0
Class Size: 24
Number of Studio/Demonstration/Internship Credits: 
Negotiated by AASC on: (date)

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 Thermal Cutting Processes and the related safety practices. The student will become familiar with process components, limitations, advantages and disadvantages of the OFC, PAC, CAC-A, and other various types of thermal cutting processes.

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, 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. 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:
• Describe the theory and practical use of the OFC Process, equipment, and procedures
Describe the theory and practical use of the PAC Process, equipment, and procedures
Describe the theory and practical use of the CAC-A Process, equipment, and procedures
List and implement all pertinent safety rules concerning thermal cutting processes
Communicate with typical industry vocabulary

**Student Assessment Methods:**
Written and oral examinations

**Use of Instructional Technology:** (includes software, interactive video and other instructional technologies):
May use any or all of the following: Videos, PowerPoint presentations, and/or 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