Course Title: Gas Tungsten Arc Welding I
Submitted By: T. Baldwin
Semester Course Prefix and Number: Weld1271
Approval Date: Oct 2013
Old Quarter Course Prefix and Number: 
Revision Date: Oct 2013

Number of Credits: 3
Number of Lecture Credits: 1
Semester(s) Offered: Fall
Number of Lab Credits: 2
Class Size: 24
Number of Lab Hours: 4

Catalog Description:
This course introduces the student to the background information and theory related to the Gas Tungsten Arc Welding Process and the related safety practices. The student will become familiar with GTAW fundamentals, equipment, filler metals and shielding gases related to GTAW. Mild steel will be welded in multiple positions.

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:
- Demonstrate the proper set up of the GTAW equipment and accessories
- Select the proper filler metals and gases
• Troubleshoot equipment problems
• Successfully complete welds with GTAW on gauge sheet steel on Tee and Butt joints in all positions
• Exhibit professionalism

**Student Assessment Methods:**
Quizzes, Exams, written and practical assignments, and class participation

**Use of Instructional Technology:** (includes software, interactive video and other instructional technologies):
May use any of the following: videos, texts, handouts, internet and/or simulators

**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:**

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