Course Title: Advanced Blueprint Reading  
Submitted By: D. Mroz

Semester Course Prefix and Number: Weld 2242  
Old Quarter Course Prefix and Number: Weld 2242

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

Catalog Description: This course covers mechanical drafting and welding symbols, sketching and drawing of simple assemblies and subassemblies, and applied metrics dimensioning and testing. This course will also cover the principles and methods of layout fabrication by means of scaling and modeling.

Prerequisites and/or recommended entry skills/knowledge:
Course Prerequisite(s): A 2.5 average or better in Weld 1241 or consent of instructor.
Reading Prerequisite: 
Composition Prerequisite: 
Mathematics Prerequisite: 

Career Programs and Transfer Majors Accessing this Course:
Any career program utilizing welding: IT Degree, IT Management, Welding Management, Non Destructive Testing.

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:

Students will:

- Be able to read and interpret blueprints and drawings.
- Demonstrate knowledge in advanced blueprint symbols and instructions.
- Communicate ideas by means of sketches and instructions.
- Estimate materials.
- Layout parts necessary for welding fabrication.
- Calculate dimensions, volumes, and weights.
- Demonstrate craftsmanship and precision in layout.
- Learn special perception and relationship.
- Use tables and charts in calculations.

**Student Assessment Methods:**

Students will be assessed by class participation, quizzes, tests, and assignments.

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

**Additional Special Information:** (special fees, directives on hazardous materials, etc.)

**Transfer Information:** (Please list colleges/majors that accept this course in transfer.)

**Course Outline Revision History:**

Last revised May 2005.

**Approvals:**

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**Distribution:** Original – Instructional Services

**Copies:** Transfer Specialist, Originating Faculty Member, Records

**Revised:** March 2010