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WLDG 117.01: Blueprint Reading and Welding Symbols

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**THE UNIVERSITY OF MONTANA
COLLEGE OF TECHNOLOGY
INDUSTRIAL TECHNOLOGY DEPARTMENT**

COURSE SYLLABUS

COURSE NUMBER AND TITLE: WLDG 117, Blueprint Reading and Welding Symbols

DATE REVISED: Spring 2015

SEMESTER CREDITS: 3

PREREQUISITES: Welding 150, Layout

INSTRUCTOR NAME: Zachary Reddig

PHONE NUMBER: 243-7644

OFFICE LOCATION: West Campus, Welding Lab Office

OFFICE HOURS: 12:00pm – 1:00 pm or by appointment

RELATIONSHIP TO PROGRAM(S):

This course contributes to the objectives of the Welding Technology program by providing students the opportunity to develop and demonstrate competency in the critical skills of blueprint reading and the use of interpretation of symbols.

COURSE DESCRIPTION: This class practical experience in reading and drawing orthographic projections, interpreting dimensions, notes, scales, and welding symbols. Isometric projection (pictorial), sections and auxiliary views with practical experience using conventional drafting tools. The use and interpretation of industrial drawings and specifications.

STUDENT PERFORMANCE OUTCOMES:

Upon completion of this course, the student will be able to:

- Recognize shape description through graphic representation.
- Layout and represent objects graphically according to accepted drafting standards.
- Calculate material weights, lengths, hole placement, part placement, etc., mathematically from information given on industrial blueprints.
- Identify and understand material specifications.
- Recognize and interpret welding symbol

STUDENT PERFORMANCE ASSESSMENT METHODS AND GRADING PROCEDURES:

NOTICE! Be aware that each course listed in your degree or certificate program must be completed with a C or better to graduate or receive a certificate.

GRADING:

Written Exam.....	45%	A = 90% - 100%
Lab Experiments.....	35%	B = 89% - 80%
Quizzes.....	10%	C = 79% - 70%
Completed Notebook.....	05%	D = 69% - 60%
Professionalism.....	05%	F = 59% or less

STUDENT PERFORMANCE ASSESSMENT METHODS AND GRADING PROCEDURES Continued:

Written Exam: Exams are derived from reading assignments given in class, homework, notes from class video presentations, etc. No make-up of exams, assignments, or quizzes will be allowed if proper notification wasn't given for absence.

Lab Work: these tests are derived from reading assignments given in class (homework), notes from class lectures, video presentations, etc.

Quizzes are composed of your name/date and three questions. Name and date are worth 25%. Each question is worth 25%. To receive credit for questions they must be written out and correctly answered. Quizzes may be given at any time during the course scheduled meeting time. No make-up of exams, assignments, or quizzes will be allowed if proper notification wasn't given for absence.

Completed Notebook is a compilation of class notes and handouts. To receive the full 5% the notebook must be neat and organized. It must also be contained or be found contiguous within a three ring binder.

Professionalism is defined as a combination of one's attitude, motivation, participation, organization and willingness to maintain a clean work environment in the lab.

No make-up of written tests, written assignments or quizzes.

ATTENDANCE POLICY: Attendance is not taken, although you are required to be in attendance to successfully complete the course.

OTHER POLICIES:

1. **Safety** is required to be practiced at all times. Disregard of safe practices, endangering yourself or others may result in you being denied access to the Lab area.
2. **Eye protection** is mandatory at all times in the Lab area.

ACADEMIC INTEGRITY: All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University. All students need to be familiar with the Student Conduct Code. The Code is available for review online at <http://www.umt.edu/SA/VPSA/index.cfm/page/1321>

DISABILITY ACCOMMODATION: Eligible students with disabilities will receive appropriate accommodations in this course when requested in a timely way. Please contact me after class or in my office as referred to at the beginning of the syllabus. Please be prepared to provide a letter from your DSS coordinator. For more information, visit the Disability Services website at <http://www.umt.edu/dss> or call 406-243

REQUIRED TEXTBOOK: Blueprint Reading for Welders; A.E. Bennett and Louis J. Siy. Delmar Cengage Learning. Eighth Edition.

SUGGESTED REFERENCE MATERIALS:

The Fabricator, Available at the COT library.

SUPPLIES:

1. **Compass (6-inch minimum)**
2. **Eraser Guide**
3. **Pencils #2, #3, and #4**
4. **Quality Eraser**

COURSE OUTLINE:

- A. Conventional Drafting Equipment
- B. Basic Lines and Views
- C. Sketching
- D. Notes and Specifications
- E. Dimensions
- G. Structural Shapes
- H. Other Views
- I. Sections
- J. Detail and assembly drawings / engineering drawings
- K. General abbreviations and symbols
- L. Welding Symbols
- M. Fabricated Project Drawings.