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**COURSE SYLLABUS**

**DIVISION:** Workforce Services

**Revised:** January 2015

**CURRICULUM IN WHICH COURSE IS TAUGHT:** Welding Technology

**COURSE NUMBER AND TITLE:** WEL 150, Welding Drawing and Interpretation

**CREDIT HOURS:** 3

**HOURS/WEEK LECTURE:** 3

**HOURS/WEEK LAB:** 0

**LECTURE/LAB COMBINATION:** 3

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- I. CATALOG DESCRIPTION:** Teaches fundamentals required for successful drafting as applied to the welding industry. Includes blueprint reading, geometric principles of drafting and freehand sketching, and basic principles of orthographic projection, preparation of drawings and interpretation of symbols.
- II. RELATIONSHIP OF THE COURSE TO CURRICULUM OBJECTIVES IN WHICH IT IS TAUGHT:** Welding Technology
- III. REQUIRED BACKGROUND:**
- IV. COURSE CONTENT**
- Basic lines and views
  - Sketching
  - Notes and specifications
  - Dimensions
  - Bill of material
  - Structural shapes
  - Other views
  - Sections
  - Detail, assembly and subassembly prints
  - Welding symbols and abbreviations
  - Basic joints for weldment Fabrications
  - fillet welds
  - Groove welds
  - Back or backing and melt-thru welds
  - Plug and slot welds
  - Surfacing welds
  - Edge welds
  - Spot welds

- Projections welds
- Seam welds
- Stud welds
- Applied metrics for welders
- Pipe-welding symbols
- Dual dimensioning
- inspection and examination
- International standards symbols for welding
- Introduction to computer aided drafting
- Introduction to geometric dimensioning and tolerance

**V. Learner Outcomes**

**VI. Evaluation**

<p>Understand basic lines and views</p> <p>Basic sketching techniques</p> <p>Interpret working documents</p> <p>Understand how to read welding symbols and abbreviations.</p> <p>Understanding groove and fillet welds</p>	<p>Written quizzes and tests</p>
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**VII. The course supports the following general education goals/objectives:**

DCC Educational Objectives

- Communication
- Critical Thinking
- Cultural and Social Understanding
- Personal Development
- Information Literacy
- Quantitative Reasoning