Barstow College Course Outline - Course - SLO, Objectives, Methods of Instruction

WELD 56

Dept & Nbr: WELD 56 **Abbrv Title:** Blueprint Reading

Full Title:
Blueprint Reading (Metal Trades)

Title 5 Category:
Associate Degree Applicable

Certificate:
Yes

Units
Max: 3.00
Min: 3.00

Course Hours Per Week
Lecture 2
Lab 3

Number of Weeks
18.0

Course Hours Total
Lecture 36.00
Lab 54.00

Methods of Delivery

Selected Topic
No

Grading
Graded Option (ABCDEF) and Pass/No Pass (P/NP)

Repeat Code

Non Repeatable/Non Activity Course (May be repeated two times with a grade of less than “P” or "C")

Basic Skills

Course is not a basic skills course.

Prerequisites

Corequisites

Recommended Preparation

Catalog Description

Basic techniques of interpreting and using engineering drawings or prints used in the metal trades. Visualization of objects, sectional drawings, orthographic and isometric projections, symbols, scales and practices used in blueprints for the metal trades. Degree Applicable.

Course Content

I. Blue prints as the language of Industry
II. Measurement
III. Fractions
IV. Decimals
V. Dimensions
VI. Alphabet of lines
VII. Print format
VIII. Scaling
IX. Sections
X. Welding prints
XI. Sketching
XII. Lettering
XIII. Fabrication methods
XIV. Materials selection

Methods of Instruction

1. Lecture presentations and class discussion.
   (Satisfies objectives 2, 3, 5, 6)
2. Powerpoint viewing and class discussion.
   (Satisfies objectives 2, 3, 5, 6)
3. Instructor demonstration followed by student demonstration and instructor critique.
   (Satisfies objectives 1, 4, 5, 7, 8)
4. Homework, both reading and writing, assigned by instructor.
   (Satisfies objectives 1, 2, 3, 4, 5, 6, 7, 8)

Course Objectives

A. Define Course Objectives

1. Demonstrate the ability to interpret blueprints
2. Describe manufacturing processes
3. Describe fabrication processes
4. Draw the various lines used on blueprints
5. Use the common symbols and standards used in drafting
6. Recognize various projections used in drafting
7. Produce basic orthographic drawings
8. Produce basic isometric drawings

B. Critical Thinking Tasks/Assignments

Critical thinking assignments include(but are not limited to) the following:

Substantial Writing Assignments Including:

Computational or Non-Computational Problem Solving Demonstrations Including:

Skill Demonstration Including

Objective Examinations Including

C. Methods of Evaluation

Substantial Writing Assignments	None
Computational or Non-Computational Problem Solving Demonstrations	DRAWINGS
Skill Demonstration	Class Performance(s)
Objective Examinations	None
Other	None
Additional assessment information (optional).	ABSENCES AND ATTITUDE

Basis for Grades

Problem Solving Demonstrations	50.0%
Skill Demonstrations	50.0%

Required Reading, Writing and Other Outside of Class Assignments

Required Reading:

Required Writing:

Other Out of Class Assignments:

Texts/Materials

Textbooks

1. Olivo et al. *Basic Blueprint Reading and Sketching*, ed. Delmar Publishers, 1993

Manuals

You have no manuals defined.

Periodicals

You have no periodicals defined.

Software

You have no software defined.

Other

You have no other defined.

Student Learning Outcomes

1. Student is able to read and interpret the lines, symbols, and standards found on metals trade blueprints.
    - Core Competency: Communication and Critical Thinking and Personal/Professional Development
    - Assessment Methods: Demonstration, Multiple Choice, Written quiz/tests.
    - Rubric:
2. Student is able to produce a three view drawing of an existing object.
    - Core Competency: Communication and Critical Thinking and Personal/Professional Development
    - Assessment Methods: Multiple Choice, Demonstration, Instructor observed drawing exercises, blueprint production and written quiz/tests.
    - Rubric:
3. Student can identify the fabrication processes necessary to build an item from a three view metals trade blueprint
    - Core Competency: Communication and Critical Thinking and Personal/Professional Development
    - Assessment Methods: Multiple Choice, Demonstration, Class discussion and written quiz/tests.
    - Rubric:

Curriculum Committee Approval Date: 01/09/1990 **Last Outline Revision Date:** 01/01/2013