WELDING BLUEPRINTS
Course Syllabus

Course Number: WELD-0760  
OHLAP Credit: No

OCAS Code: None

Course Length: 15 Hours

Career Cluster: Manufacturing

Career Pathway: Welding and Metal Fabrication

Career Major(s): Combination Welder, Welding Fabricator

Pre-requisite(s): This course is an introduction to basic blueprint terms, components and symbols, types of blueprint drawings (civil, architectural, structural, mechanical, plumbing/piping and electrical), and interpretation of drawing dimensions and specifications.

Textbooks/Materials:
- Math for Welders, Marion and Nino, GoodHeart-Willcox (2001)
- Symbols for Welding / by Hobart Institute of Welding Technology
- Blueprint Reading for Welders and Fitters / by Hobart Institute of Welding Technology

Course Objectives:

A. Demonstrate an Understanding of Welding Symbols.
   1. Identify and explain the various parts of a welding symbol.
   2. Identify and explain fillet and groove weld symbols.
   3. Read welding symbols on drawings, specifications, and welding procedure specifications (WPSs).
   4. Interpret welding symbols from a print.
   5. Draw welding symbols.

B. Demonstrate an Understanding of Welding Detail Drawings.
   1. Identify and explain a welding detail drawing.
   2. Identify and explain lines, material fills, and sections.
   3. Identify and explain object views.
   4. Identify and explain dimensioning.
   5. Identify and explain notes and bill of materials.
   6. Interpret basic elements of a welding detail drawing.
   7. Develop basic welding drawings.

C. Fabricate Parts From a Drawing or a Sketch.

1  Welding Skills, National Center for Construction Education and Research (NCCER)
American Welding Society, Module 3 and ODCTE Duty B

Teaching Methods: The class will primarily be taught by the lecture and demonstration method and supported by various media materials to address various learning styles. There will be question and answer sessions over material covered in lecture and media presentations. Supervised lab time is provided for students to complete required projects.

Grading Procedures: 1. Students are graded on theory and shop practice and performance.
2. Each course must be passed with seventy (70%) percent or better.
3. Grading scale: A=90-100%, B=80-89%, C=70-79%, D=60-69%, F=50-59%.

Description of Classroom, Laboratories, and Equipment: Tulsa Technology Center campuses are owned and operated by Tulsa Technology Center School District No. 18. All programs provide students the opportunity to work with professionally certified instructors in modern, well-equipped facilities.

Available Certifications/College Credit: The student may be eligible to take state, national or industry exam after completion of the program. College credit may be issued from Oklahoma State University-Okmulgee or Tulsa Community College. See program counselor for additional information.

College Credit Eligibility: The student must maintain a grade point average of 2.0 or better.