WELD QUALITY
Course Syllabus

Course Number: WELD-0382  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):

Course Description: This course is an introduction to codes that govern welding. The course identifies and explains weld imperfections and causes, examination practices, qualification tests and the importance of quality welds.

Modern Welding, GoodHeart-Willcox (2004)
Math for Welders, Marion and Nino, GoodHeart-Willcox (2001)

Course Objectives: A. Demonstrate an Understanding of the Characteristics of a Quality Weld.
   1. Identify and explain codes governing welding. 1
   2. Identify and explain weld imperfections and their causes. 1
   3. Identify and explain nondestructive examination practices. 1
   4. Identify and explain welder qualification tests. 1
   5. Explain the importance of quality workmanship. 1
   6. Identify common destructive testing methods. 1

   B. Examine tack, intermediate layers, and completed welds. 2

   1  Welding Skills, National Center for Construction Education and Research (NCCER)
   2  American Welding Society, Module 9 and ODCTE Duty K.01

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.