FCAW PIPE
Course Syllabus

Course Number: FPW-0405
OHLAP Credit: No
OCAS Code: None
Course Length: 45 Hours
Career Cluster: Manufacturing
Career Pathway: Welding and Metal Fabrication
Career Major(s): Combination Welder

Pre-requisite(s): This course is an introduction in how to set up FCAW equipment, the procedures and techniques used to make V-groove pipe welds with FCAW in the 1G-ROTATED, 2G, 5G, and 6G positions.

Textbooks/Materials:
- Math for Welders, Marion and Nino, GoodHeart-Willcox (2001)

Course Objectives:
A. Sets Up for FCAW-G/Gm Operations on Carbon Steel Pipe.
B. Demonstrate an Understanding of FCAW – Pipe Welding
   1. Operates FCAW-G/GM equipment on carbon steel pipe.
   2. Perform FCAW multipass fillet welds on pipe in multiple positions using flux cored wire and, if required, shielding gas.
   3. Perform FCAW multipass groove welds on pipe in multiple positions using flux cored wire and, if required, shielding gas.
C. Passes FCAW-G/Gm Welder Performance Qualification Test on Carbon Steel Pipe.
D. Passes FCAW-S Welder Performance Qualification Test on Carbon Steel Pipe.

1 Welding Skills, National Center for Construction Education and Research (NCCER)
2 Level I, Entry Level Welder, Module 6, American Welding Society (AWS)

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.