SOUTHEAST COMMUNITY COLLEGE
MANUFACTURING DIVISION
WELDING TECHNOLOGY
COURSE SYLLABUS
February 7, 2024

I. CALOG DESCRIPTION

Course Number: WELD1540
Course Title: Special Welding Applications
Prerequisite(s): Complete or be currently enrolled in any two of the following four courses: WELD1101, WELD1107, WELD 1109, WELD1123. Dual credit high school student.

Catalog Description: Intermediate welding. Course requirements, pre-requisites and objectives to be arranged with program director with collaboration with TCA personnel. This special welding applications course is a 1 credit hour course designed primarily for students to complete a capstone short course project while taking dual credit classes at The Career Academy. Course reserved for high school students.

Credit Hours: 1.0
Class Hours: 8.0
Lab Hours: 23
Total Contact Hours: 31

II. COURSE OBJECTIVES: *Course will:*

A. Provide a flexible base to meet a variety of training project objectives.
B. Allow for intermediate training in specific areas primarily capstone projects at the TCA done for dual credit.
C. Provide dual credit students a method of fulfilling elective requirements within the department.

III. STUDENT LEARNING OUTCOMES AND GENERAL EDUCATION LEARNING OUTCOMES:

A. STUDENT LEARNING OUTCOMES: *The student will be able to:*

1. Demonstrate the ability to define a problem, develop a plan to solve the problem, collect and analyze information, solve the problem, evaluate results, and define any need for further work.

B. GENERAL EDUCATION LEARNING OUTCOMES:
GELO # 3: Critical Thinking & Problem Solving
Outcomes:

1. Collect, identify, interpret and analyze data.
2. Synthesize information to arrive at reasoned solutions to problems.
3. Evaluate ideas presented in writing, medial, speech, or artistic presentations.
4. Evaluate the validity of arguments, alternatives, data, outcomes, and/or impacts of actions.
5. Acquire and integrate knowledge and construct relationships across disciplines.

IV. CONTENT/UNIT OF INSTRUCTION

A. Course content will vary depending on the pre-arranged goals and requirements.

V. INSTRUCTIONAL MATERIALS

Required Text(s): See Course Information Document for current textbook.

Other Recourses: Audio-visual aids

Equipment: Appropriate welding equipment for objectives
Parent metals/consumables/material list
Electrodes and other filler materials

VI. METHODS OF PRESENTATION/INSTRUCTION

A. Methods of presentation typically include a combination of the following:

1. Lecture
2. Lab demonstration/fabrication of project
3. Audio-visuals

VII. METHODS OF EVALUATION

A. Methods of evaluation typically include a combination of the following:

1. Visual inspection of lab work/project completed.
2. Destructive tests for qualification, when necessary.
3. Written quiz, when appropriate.

Letter grades will be based on the SCC Standard Grade Scale Policy. **Note:** See course information document for specific details on how the course grades will be calculated.

VIII. SPECIFIC COURSE REQUIREMENTS

A. Complete prearranged objectives on Goal Sheet.