

SOUTHEAST COMMUNITY COLLEGE
ADVANCED TECHNOLOGIES & SKILLED TRADES DIVISION
WELDING TECHNOLOGY
COURSE SYLLABUS
December 10, 2025

I. CATALOG DESCRIPTION

Course Number: WELD2450
Course Title: Welder Pre-Qualification
Pre/Co-requisite(s): WELD2410

Catalog Description: Practice of techniques and procedures within established codes and standards in preparation for taking a qualification test.

Credit Hours: 3.0
Classroom Hours: 15
Lab Hours: 90
Total Contact Hours: 105

II. COURSE OBJECTIVES: *Course will:*

- A.** Cover ANSI/AWS D1.1 Structural Steel Welding Code welder qualification requirements.
- B.** Cover ASME Section IX Boiler & Pressure Vessel Code welder qualification requirements.
- C.** Cover practical lab welding, all position plate for welder qualifications.

III. STUDENT LEARNING OUTCOMES AND GENERAL EDUCATION LEARNING OUTCOMES

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

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.** ANSI / AWS D1.1 interpretation
- B.** ASME Section IX interpretation
- C.** AWS welding symbols and terminology
- D.** Shielded Metal Arc Welding on carbon steel in all positions

V. INSTRUCTIONAL MATERIALS

Required Textbook(s): Refer to the Course Information Document and/or course instructor for required text(s)

Required Resources/Tools: Notebook
Welding Technology Program required tool list

VI. METHODS OF PRESENTATION/INSTRUCTION

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

1. Lecture
2. Group discussions
3. Lab discussions

VII. METHODS OF EVALUATION

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

1. Written tests and quizzes
2. Lab performance

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. Successful completion of all assignments, exams, and weldments.

B. Grading

1. It is the students' responsibility to make up work when absent.
2. All assigned work must be turned in on the day due or a late grade will be given (10% deduction each late day).
3. The instructor reserves the right to revise assignments and/or grading scale in accordance to the progress of the class at any time of the quarter.
4. Minimum course grade of C (70 Percent) is required.