

SOUTHEAST COMMUNITY COLLEGE
TRANSPORTATION OCCUPATIONS
WELDING TECHNOLOGY
COURSE SYLLABUS
January 24, 2023

I. CATALOG DESCRIPTION

Course Number: WELD1291
Course Title: M214 Structural Solid Wire
Prerequisite: Approval of BNSF Training Director

Course Description: Theory and practice of GMAW welding with qualification test in two positions. Equipment setup, safety and safe operation are stressed.

Credit Hours: 1.5
Classroom Hours: 15
Lab Hours: 25
Total Contact Hours: 40

II. COURSE OBJECTIVES: *Course will cover:*

III. STUDENT LEARNING OUTCOMES AND GENERAL EDUCATION LEARNING OUTCOMES

A. STUDENT LEARNING OUTCOMES: *Students will be able to:*

1. Understand the theory and safe operation of the GMAW short circuiting process.
2. Demonstrate the skills and technique necessary to pass AWS D15 2G and 3G short circuiting welder performance testing on 3/8" material.

B. GENERAL EDUCATION LEARNING OUTCOMES:

IV. INSTRUCTIONAL MATERIALS

Required Text(s): Pocket Welding Guide, 31st Edition, Hobart Institute of Welding Technology, Copyright 2015; ISBN978-1-936058-28-0

Required Material(s): All required PPE for BNSF employees, all required tools for the welding program, notebook, writing utensil. *Failure to bring required materials will result in a deduction of Attendance & Participation Credit

V. METHODS OF PRESENTATION/INSTRUCTION

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

VI. METHODS OF EVALUATION

A. Methods of evaluation typically include the following:

1. Final quiz
2. Attendance and participation
3. Welding lab units
4. 2G Code weld test
5. 3G Code weld test

Grade Scale:

A = 100-95%

B = 94-90%

C = 89-80% (BNSF Minimum Grade is 80%)

D = 79-70%

*There is no opportunity for extra credit in this class

*Late assignments will not be accepted

VII. SPECIFIC COURSE REQUIREMENTS

A. ATTENDANCE/ATTENTION:

1. Regular, punctual attendance and participation is required in all credit courses and all absences will be recorded.
2. Being absent for more than 20% of class will subject student to failure of class.

B. MISSING ACTIVITIES, ASSIGNMENTS AND LATE ASSIGNMENTS

1. Missed classroom exams:
 - a. Ten points per day will be deducted for unexcused absences.
 - b. Students with excused absences must take the exam upon return.
2. Lab quizzes:
 - a. Lab quizzes must be taken by the second to last day of the semester (2 quizzes max) and/or before starting the next lab class.

C. WITHDRAWAL/DROP/INCOMPLETE:

1. Instructors do not initiate drops/withdrawals. It is the student's responsibility to notify registration and records of your intent to drop or withdraw from a class.
2. An incomplete will only be considered under extenuating circumstances and the student must have good attendance to be considered for an incomplete.
3. Extra credit may be offered at the instructor's discretion.

D. PLAGIARISM/ACADEMIC DISHONESTY:

1. Cheating, plagiarism, or other forms of academic dishonesty are monitored and subject to disciplinary action.
2. Academic dishonesty will result in a student receiving a grade of "F" for the course.