# WE1043, Welding Print Reading

#### Credits 3 Lab Hours 3 Lecture Hours 1 Clinical Hours 0 Course Description

Entry Level occupational Blueprint Reading and Weld Symbol Interpretation for Welders wishing to pursue a career in Welding. Prepare parts from simple sketches or drawings and performs weld operations for the completion of detail assignments. Welders wishing to pursue a career in Welding need follow; safe practices, perform housekeeping duties, and follow verbal, written work instructions for the completion of detail assignments

For each unit of credit, a minimum of three hours per week with one of the hours for class and two hours for studying/ preparation outside of class is expected.

#### Program and/or Department Mission Statement

The Industrial Technology Division is a committed leader in innovative workforce development by meeting the dynamic needs of business and industry through the development of student-centered education, technical excellence, and citizenship.

#### Academic Year AY2024-25

#### SCCC Outcomes

Outcome #6: Exhibit skills in information and technological literacy.

Outcome #9: Exhibit workplace skills to include respect for others, teamwork competence, attendance/punctuality, decision making, conflict resolution, truthfulness/honest, positive attitude, judgment, responsibility.

#### **Course Outcomes**

- 1. Interpret basic elements of a drawing or sketch
- 2. Interpret welding symbol information
- 3. Fabricate parts from a drawing or sketch
- 4. Follow verbal, written work instructions for the completion of detail assignments.

# **Course Outline**

Welding print reading book

AWS Sense Blueprint Test

NCCER Blueprint Test

- 1. Ch 1 Prints
- 2. Ch 2 Measurements
- 3. Ch 3 Fractions and decimals
- 4. Ch 4 Alphabet of lines
- 5. Ch 5 Understanding prints
- 6. Ch 6 Types of prints
- 7. Ch 7 Print format
- 8. Ch 8 Basic plane geometry
- 9. Ch 11 Threaded fasteners
- 10. Ch 12 Structural metals
- 11. Ch 13Common types of weld joints
- 12. Ch 14 Welding symbols
- 13. Ch 15 Fillet welds
- 14. Ch 16 Groove welds
- 15. Ch 17 Plug and slot welds
- 16. Ch 18 Spot, Seam, and Projection welds
- 17. Ch 19 Surfacing welds
- 18. Ch 20 Edge welds

- 19. Ch 21 pipe welds
- 20. Ch 22 Brazed joints
- 21. Ch 23 Basic metalworking
- 22. Ch 24 Examining and testing welds
- 23. Ch 25 Print reading activities

#### Instructional Methods

- 1. Lecture
- 2. Class Discussions
- 3. Homework

#### Instructional Resources and Materials

- 1. Classroom handouts
- 2. Blueprint textbook

#### Methods of Assessment

- 1. Outcome 6 is assessed by homework and completion of AWS level 1 Blueprint test 70% minimum.
- 2. Outcome 9 is assessed by attendance, class participation, punctuality, demonstrate respect for others, and following directions.

# **SCCC Policy**

# Academic Calendar

View the Academic Calendar

Final Exams View the Final Exam Schedule

Academic Integrity View the Honor Code Policy

**Technical Help** Technical support is available by contacting the SCCC IT Department at <u>itech@sccc.edu</u>

Canvas Help: <a href="mailto:canvashelp@sccc.edu">canvashelp@sccc.edu</a>

View Computer Minimum Requirements

# Americans with Disabilities Act (ADA) Statement

Under the Americans with Disabilities Act, Seward County Community College will make reasonable accommodations for students with documented disabilities. If you need support or assistance because of a disability, you may be eligible for academic accommodations. Students should identify themselves to the Mental Health Counselor at 620-417-1106 or go to the Student Success Center in the Hobble Academic building, room A149.