



COURSE SYLLABUS
WELDING TECHNOLOGY II
Fall 2021

PROGRAM TITLE: Welding Technology II

DOE CODE: 5778

RECOMMENDED GRADE LEVELS: 12

PREREQUISITES: Welding Technology I

HIGH SCHOOL CREDITS: 3 per semester (6 total per school year)

ELECTIVE INFORMATION: Counts as a Directed Elective or Elective for all diplomas

HOW WCC CAN HELP MEET GRADUATION PATHWAYS:

Pathway 1 High School Diploma = Directed Electives

Pathway 2 Employability Skills = Work-Based Learning

Pathway 3 Postsecondary Ready = CTE Concentrator

Pathway 3 Postsecondary Ready = Dual Credit

Pathway 3 Postsecondary Ready = Industry-Recognized Certification

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PROGRAM DESCRIPTION: Successful students in Welding Technology II complete the AWS Sense Level 1 certification. Welding Technology II builds on the skills covered in Welding Technology I. OSHA standards and guidelines endorsed by the American Welding Society (AWS) are used to emphasize safety at all times. Instructional activities emphasize properties of metals, safety issues, print reading, electrical principles, welding symbols, and mechanical drawing through projects and exercises that teach students how to weld and be prepared for college and career success. Upon completion of this program, students enter full-time employment, enter apprenticeships, and pursue 2 and 4-year postsecondary degrees such as welding technology and welding engineering.

MAJOR LEARNING OBJECTIVES:

1. Create appropriate welds on a variety of industrial metals using flux core welding and cutting processes to meet industry standards.
2. Create appropriate gas tungsten arc welds on a variety of industrial metals to meet industry standards.
3. Create appropriate manual plasma arc cutting and oxyfuel cutting on a variety of industrial metals to meet industry standards.

REQUIRED TEXT/CURRICULUM MATERIALS:

- Welding Skills; American Technical Publishers
- Welding Skills Workbook; American Technical Publishers

EARLY COLLEGE PROGRAM:

Whitewater Career Center is an Early College Career Center. Welding Technology students may earn the Ivy Tech Structural Welding Certificate by completing all dual credit courses available in Welding Technology I and II.

DUAL CREDITS AVAILABLE:

WELD 109 Oxy-Fuel Gas Welding and Cutting
Ivy Tech 3 credits
Qualifies for THD and Pathway Dual Credits.

WELD 207 Gas Metal Arc Welding
Ivy Tech 3 credits
Qualifies for THD and Pathway Dual Credits.

WELD 208 Gas Metal Arc Welding
Ivy Tech 3 credits
Qualifies for THD and Pathway Dual Credits.

WELD 272 Advanced Gas Metal Arc Welding II
Ivy Tech 3 credits
Co-requisite applies. Qualifies for THD and Pathway Dual Credits.

WELD 273 Advanced Gas Tungsten Arc Welding II
Ivy Tech 3 credits
Co-requisite applies. Qualifies for THD and Pathway Dual Credits.

INDUSTRY CERTIFICATION AVAILABLE:

AWS (American Welding Society) Sense Level 1 Certification
Testing required. Fees may apply. Qualifies for THD and Pathway Industry-Recognized Certification.

METHODS OF INSTRUCTIONAL DELIVERY:

This course will be delivered using a variety of delivery methods. Lecture, class discussion, lab work, and individual and group exercises and activities will be used to deliver the class material.

EVALUATION METHODS:

- Classroom work
- Lab work
- Dual credit course projects and exams
- Certification exams
- Participation and attendance

GRADING SCALE:

A+	99-100%	C+	78-79%
A	92-98%	C	72-77%
A-	90-91%	C-	70-71%
B+	88-89%	D+	68-69%
B	82-87%	D	62-67%
B-	80-81%	D-	60-61%
		F	59% and below

REQUIRED CONSUMABLE MATERIALS AND EQUIPMENT:

- Student kit
- Pocket folder with 3-prong fastener

CLASS POLICIES:

1. Attend each day.
2. Communicate with your teacher when needed.
3. Put forth a good effort each day.
4. Stay on task.
5. Work well in assigned teams.
6. Do the work assigned in a timely manner.