MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE
COURSE OUTLINE

Faculty is required to have the outline submitted to the Academic Affairs Office. The course outline is the form used for approval of new courses by the Academic Affairs and Standards Council.

DEPT. _____ Diesel  COURSE NUMBER: _____ DSL 1170 _____

NUMBER OF CREDITS: 3cr.

COURSE TITLE: Diesel Welding

CATALOG DESCRIPTION: The student will learn how to: Proper use of oxy/acetylene cutting and using the torch to heat items. Proper welding of oxy/acetylene to join different alloys together. Use of a shielded arc welder. Use of MIG welder.

AUDIENCE: Diesel students (Electrical, Wind)

FULFILLS MN TRANSFER CURRICULUM AREA(S) (Leave blank if not applicable)
Area: by meeting the following competencies:
Area: by meeting the following competencies:
Area: by meeting the following competencies:

PREREQUISITES OR NECESSARY ENTRY SKILLS/KNOWLEDGE:
NA

LENGTH OF COURSE: 1 Lecture 2 Lab

THIS COURSE IS USUALLY OFFERED:
Every other year □ fall □ spring x□ summer □ undetermined □

Four goals are emphasized in course at Minnesota West Community & Technical College:

1) ACADEMIC CONTENT: The academic objectives of this course are:
   a. The student must be able to use an oxy/acetylene cutting torch to cut different metals.
   b. The student must be able to weld using an oxy/acetylene torch.
   c. The student must be able to cut metals with an abrasive wheel, carbide cutting saw or a band type saw.
   d. The student will learn how to weld metals with a flux shielded arc welder.
   e. The student will learn how to weld metals with a MIG (Metal Inert Gas) welder.
   f. The student will learn how to repair cracked or broken metal.
2) THINKING SKILLS: This course will help students improve the effectiveness of their thinking skills through:
   a. Students will be using a textbook and have homework assigned.
   b. Students will apply what they learn in lecture to their lab projects.

3) COMMUNICATIONS SKILLS: This course will help students improve their oral and written communication skills through:
   a. Students will participate in the classroom.
   b. Students will have to explain how they accomplished their completed projects.

4) HUMAN DIVERSITY: This course will help students recognize, understand, and appreciate human diversity through:
   a. Students will work together to gain different perspectives.
   b. Students will have to explain to their classmates how and what they did to achieve their class projects.

TOPICS TO BE COVERED:
   a. Students will learn how to use oxy/acetalene.
   b. Students will learn how to weld.
   c. Students will be able to repair or manufacture projects dependent on materials available.

COURSE LEARNING OUTCOMES (GENERAL): The students will be able to repair or build metal projects at their place of employment.

STUDENT LEARNING OUTCOMES (SPECIFIC): The students will be able to apply what they have learned in this course to what the industry wants for their technicians.

LEARNING/TEACHING TECHNIQUES used in the course are:

- Collaborative Learning
- Student Presentations
- Creative Projects
- Lecture
- Demonstrations
- Lab

- Problem Solving
- Interactive Lectures
- Individual Coaching
- Films/Videos/Slides
- Other (describe below)

ASSIGNMENTS AND ASSESSMENTS FOR THIS CLASS INCLUDE:
Veteran Services: Minnesota West is dedicated to assisting veterans and eligible family members in achieving their educational goals efficiently. Active duty and reserve/guard military members should advise their instructor of all regularly scheduled military appointments and duties that conflict with scheduled course requirements. Instructors will make every effort to work with the student to identify adjusted timelines. If you are a veteran, please contact the Minnesota West Veterans Service Office.

The information in this course outline is subject to revision.

To receive reasonable accommodations for a documented disability, please contact the campus Student Services Advisor or campus Disability Coordinator as arrangements must be made in advance. In addition, students are encouraged to notify their instructor.

This document is available in alternative formats to individuals with disabilities by contacting the Student Services Advisor or by calling 800-658-2330 or via your preferred Telecommunications Relay Service.

A Member of the Minnesota State Colleges and Universities System
An Affirmative Action Equal Opportunity Educator/Employer

Revised 10/1/16