MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE

COURSE OUTLINE

DEPT. Automotive                                COURSE NUMBER: Auto 2155
NUMBER OF CREDITS: 4

COURSE TITLE: Intro to Diesel Electronics

CATALOG DESCRIPTION:

Introduces the computer system used in the diagnostics of today's electronic controlled engines, and transmissions. Students will develop reports from the programs and store them for future reference. From this information they will learn to diagnose and make repairs to the unit being tested. This course will cover basic Windows operations and scanner diagnostics needed to operate the computerized systems.

AUDIENCE: Automotive Students

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: LENGTH OF COURSE: 4 cr I 96 hr

THIS COURSE IS USUALLY OFFERED:

Every other year D fall D spring X summer O undetermined 0

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

1) ACADEMIC CONTENT: The academic objectives of this course are:

a. Demonstrate basic understanding of the automotive/diesel internet sites.

b. Demonstrate basic understanding use of e-mail related to the web sites.

c. Demonstrate diesel engine/transmission data acquisition.
d. Diagnose electronic diesel problems

e. Troubleshoot diesel engine problems

f. Create diagnostic reports.

2) THINKING SKILLS: This course will help students improve the effectiveness of their thinking skills through:

a. By thinking through the data and information the computer is giving

b. How they will use the data to make a logical decision for repair

c. Use of different computer programs and using them together.

3) COMMUNICATIONS SKILLS: This course will help students improve their oral and written communication skills through:

a. Electronic form of e-mail, power point, and written reports.

b. By participation in class with the instructor and classmates.

4) HUMAN DIVERSITY: This course will help students recognize, understand, and appreciate human diversity through:

a. Understanding the roles of the Technician in communicating with a diverse population.

b. Working effectively in teams comprised of diverse backgrounds.

c. Express personal philosophies on diverse issues.

TOPICS TO BE COVERED:

a. Windows program

b. Power point

c. E-mail/internet use

d. Factory/aftermarket scanner usage
LIST OF EXPECTED COURSE OUTCOMES:

a. Interpret the use of computers and how they will use them within the Industry. The required outcomes follow the Auto Service Technician (AST) model of the National Automotive Technical Education Foundation (NATEF) certification program.

LEARNING/TEACHING TECHNIQUES USED IN THIS COURSE:

X Collaborative Learning X Problem Solving
Student Presentations X Interactive Lectures
Creative Projects Individual Coaching
X Lecture X Films/Videos/Slides
X Demonstrations X Other (describe below)
X Lab Periodical Research and Summary

ASSIGNMENTS AND ASSESSMENTS FOR THIS CLASS INCLUDE:

X Reading X Tests X Individual Projects
X Oral Presentations X Worksheets X Collaborative Projects
X Textbook Problem X Papers Portfolio
X Group Problems Term Paper
X Other: NATEF Tasks

EXPECTED STUDENT LEARNING OUTCOMES:

A. The student will gain a 2.0 or higher GPA after completing this course of study.

STUDENTS NEEDING ACCOMMODATIONS FOR A DISABILITY MUST NOTIFY THE INSTRUCTOR.
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 for individuals with disabilities by contacting the Student Services Advisor or by calling 8111).658-2330 or via your preferred Telecommunications Relay Service.

7/30/13

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