



COURSE SYLLABUS
DIESEL TECHNOLOGY I
Fall 2021

PROGRAM TITLE: Diesel Technology I

DOE CODE: 5620

RECOMMENDED GRADE LEVELS: 11, 12

PREREQUISITES: None

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

INSTRUCTOR: Zachary Glover
zglover@fayette.k12.in.us
(765) 825-0521 x22104

PROGRAM DESCRIPTION: The program is designed to provide hands-on training related to modern diesel engines in tractor trailers, electric generators, farm and construction equipment, and diesel-fueled cars and trucks. Students learn engine operating principles and theories as well as diesel-fuel systems. Topics covered include inspection, troubleshooting, overhaul, and engine replacement procedures. The typical school day is divided between classroom and laboratory experiences concerned with all phases of repair work. Instruction and practice is provided in the diagnostics and repair of engines. The use of technical manuals, hand and power tools, and testing and diagnostic equipment is also studied in the program.

MAJOR LEARNING OBJECTIVES:

1. Develop employability skills to be successful in placement of a postsecondary institution and/or career related area.
2. Construct personal goals to structure successful paths recognized by business and industry.
3. Analyze diesel engine operations to diagnose and repair malfunctions.
4. Examine various systems to diagnose and repair malfunctions.
5. Evaluate fuel and other fluids used in diesel engines to perform appropriate maintenance and optimization procedures.

TEXTBOOK/CURRICULUM MATERIALS:

- Fundamentals of Medium/Heavy Duty Diesel Engines; 1st Edition; CDX Learning
- Fundamentals of Medium/Heavy Duty Diesel Systems; 2nd Edition; CDX Learning
- All-Data Online System
- SP2 Online Safety Training System
- Truck Series Online System

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
- Participation and attendance

GRADING SCALE:

A+ 99-100%
A 92-98%
A- 90-91%
B+ 88-89%
B 82-87%
B- 80-81%
C+ 78-79%

C 72-77%
C- 70-71%
D+ 68-69%
D 62-67%
D- 60-61%
F 59% and below

REQUIRED CONSUMABLE MATERIALS AND EQUIPMENT:

- Student kit

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.