

College of Alameda
DIESEL ENGINES I – LECTURE SECTION
DMECH 14 – CODE 42540 – Units: 4

Instructor: Scott Albright
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Office Hours: 12:30 – 1:30 M – Th

Class Meeting Times: Tuesday & Thursday 8:00am – 10:00am

Diesel & Truck Mechanic Programs at College of Alameda are designed to:

- Prepare students to enter the job market as beginning heavy-duty diesel mechanics and heavy-duty truck mechanics or apprentices in these fields, and
- Allow students and mechanics to continue their education in this field of study.

How you will be graded:

Tests	30%	A = 90% and up
Homework	30%	B = 80% - 89%
Notebook	20%	C = 70% - 79%
Attendance	10%	D = 60% - 69%
Class Participation	<u>10%</u>	F = 59% - 01%
	= 100%	

Grades:

- No curve grading – Industry standard established by ASE.
- You **can** pass the class with a “D”; however, you **CANNOT** obtain a degree, certificate or Apprenticeship with a cumulative score below 70%.

Attendance:

- Be here. You can't benefit from instruction when you are not here. Negative attendance will affect your grade.
- Be on time. Begin good habits now. Employers will not tolerate people being late and neither do I. Tardiness will affect your "class participation" grade.

Homework:

- At the end of each chapter are “review questions.” Complete these questions each week for your homework assignments. They vary in number for each chapter. Use complete answers.

Books Required:

- "Medium/Heavy Duty Truck Engines, Fuel & Computerized Management Systems"
2nd edition, by: Sean Bennett ISBN 1-4018-1499-9

Additional Materials:

- School supplied shop manuals; lab handouts; supplemental informational handouts printed & on CD for personal computer use

Student Supplied Materials:

- Writing paper, 3 holed, lined, 8.5" x 11"
- #2 pencils
- Scantron test sheets
- 3 Hole notebook
- Instructor recommends a laptop computer

Tests:

- Weekly quizzes (Scantron fill-in multiple-choice or hands-on)
- Mid-term exam (Scantron fill-in multiple-choice or presentation)
- Final exam (Scantron fill-in multiple-choice)

Class Participation:

- Any positive contribution to class is welcome. Class disruption and arguing will not be tolerated. Any challenges and/or issues affecting instruction or positive classroom continuity will be discussed privately with the instructor. Class participation will affect your grade. Carefully review student responsibilities as published by the college.

Parking:

- Adhere to all college parking rules and regulations. **PARKING IS NOT ALLOWED** in the Diesel yard or the driveway. College Police services issue tickets, regardless of parking areas utilized.

College of Alameda
DIESEL ENGINES I – LECTURE SECTION
Assignment/Lecture Overview

- 1) **Introduction to the Trade & History of the Diesel Engine**
Chapters 1 & 5
- 2) **Personal & Safety Awareness**
Chapter 3
- 3) **Hand & Shop Tools; Precision Tools; Measuring Tools**
Chapter 2
- 4) **Units of Measurement; Fasteners**
Chapter 2
- 5) **Engine Basics; Power Defined**
Chapters 4 & 6
- 6) **Engine Housing Components**
Chapter 9
- 7) **Engine Feedback Assembly**
Chapter 8
- 8) **Engine Powertrain Components I**
Chapter 7
- 9) **Engine Powertrain Components II**
Chapter 7
- 10) **Engine Breathing**
Chapter 12
- 11) **Engine Lube Systems**
Chapter 10
- 12) **Engine Cooling Systems**
Chapter 11
- 13) **Engine Removal, Disassembly, Cleaning, Inspection & Reassembly**
Chapter 14
- 14) **In-frame Engine Overhaul**
Instructor hand-outs
- 15) **Engine Run-in & Performance Testing**
Chapter 15