

CATALOG INFORMATION

Dept and Nbr: DET 86

Title: PRACTICAL APPLICATIONS

Full Title: Practical Applications

Last Reviewed: 11/26/2001

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	4.00	Lecture Scheduled	2.00	8	Lecture Scheduled	16.00
Minimum	4.00	Lab Scheduled	18.00	6	Lab Scheduled	144.00
		Contact DHR	0		Contact DHR	0
		Contact Total	20.00		Contact Total	160.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 32.00

Total Student Learning Hours: 192.00

Title 5 Category: AA Degree Applicable

Grading: Grade Only

Repeatability: 39 - Total 2 Times

Also Listed As:

Formerly: DET 72

**Catalog Description:**  
The practical application of previous Diesel Equipment Technology course skills to customer repair work. Students will make repairs to vehicles and machinery as per customer repair orders. Classroom study will relate to specific repairs in progress, customer relations and career entry readiness.

**Prerequisites/Corequisites:**  
Course Completion of DET 179 ( or DET 80 or DET 60) and Course Completion of DET 184 ( or DET 84 or DET 63) and Course Completion of DET 181 ( or DET 81 or DET 68) and Course Completion of DET 82 ( or DET 71 or DET 61)

**Recommended Preparation:**

**Limits on Enrollment:**

**Schedule of Classes Information:**  
Description: The practical application of previous Diesel Equipment Technology course skills to customer repair orders. Students will make repairs to vehicles and machinery as per customer repair orders. Classroom study will relate to specific repairs in progress, customer relations and

career entry readiness. (Grade Only)

Prerequisites/Corequisites: Course Completion of DET 179 ( or DET 80 or DET 60) and Course Completion of DET 184 ( or DET 84 or DET 63) and Course Completion of DET 181 ( or DET 81 or DET 68) and Course Completion of DET 82 ( or DET 71 or DET 61)

Recommended:

Limits on Enrollment:

Transfer Credit:

Repeatability: Total 2 Times

## **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

<b>AS Degree:</b>	<b>Area</b>	Effective:	Inactive:
<b>CSU GE:</b>	<b>Transfer Area</b>	Effective:	Inactive:
<b>IGETC:</b>	<b>Transfer Area</b>	Effective:	Inactive:
<b>CSU Transfer:</b>		Effective:	Inactive:
<b>UC Transfer:</b>		Effective:	Inactive:

**CID:**

**Certificate/Major Applicable:**

Certificate Applicable Course

## **COURSE CONTENT**

### **Outcomes and Objectives:**

Upon successful completion of this course the student will be able to:

1. Demonstrate appropriate diagnostic and troubleshooting methods for multiple or specific mechanical problems found in machinery.
2. Evaluate the condition of mechanical components to determine repair or replacement procedures.
3. Disassemble, inspect, adjust, and reassemble machinery as required to complete repairs.
4. Perform maintenance and repair procedures related to engine and fuel system failures.
5. Complete customer repair orders.
6. Document work completed, according to standard repair times.
7. Interpret a repair order and complete work according to instructions.
8. Summarize work completed and write recommendations for further repairs.
9. Develop and produce a resume.
10. Complete a job application.
11. Develop an employment portfolio for the job search/interview process.
12. Demonstrate safe and orderly work practices in a diesel/equipment technology lab.

[Outcomes and objectives meet or exceed NATEF Applied Academic & Workplace Skills for Medium/Heavy Truck Technicians (Reference Standard 6.5, ASE Program Certification Standards manual, 1998).]

**Topics and Scope:**

Unit 1. Customer Relations  
business communications  
the customer repair order  
standard repair time guides  
total project completion

Unit 2: Career Development  
resume preparation  
job search  
interviewing skills  
work readiness

Unit 3: Customer Projects  
work safety  
work efficiency  
cleanliness and order  
documentation  
project completion  
customer satisfaction

### Assignment:

Assignments:

1. Students will be assigned projects with repair orders.
2. Students will complete all phases of work following manufacturer recommended practices.
3. Students will complete a series of career preparation exercises.
4. Students will present oral reports in class on their projects.

### Methods of Evaluation/Basis of Grade:

**Writing:** Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

None, This is a degree applicable course but assessment tools based on writing are not included because problem solving assessments and skill demonstrations are more appropriate for this course.

Writing  
0 - 0%

**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Lab reports, Quizzes

Problem solving  
15 - 30%

**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

STRUCTURED LAB EXERCISES

Skill Demonstrations  
15 - 25%

**Exams:** All forms of formal testing, other than skill performance exams.

Multiple choice

Exams  
45 - 65%

**Other:** Includes any assessment tools that do not logically fit into the above categories.

None

Other Category  
0 - 0%

**Representative Textbooks and Materials:**  
Instructor prepared handouts.