

BELLINGHAM TECHNICAL COLLEGE

DIESEL EQUIPMENT TECHNOLOGY

COURSE NUMBER: DET 208

COURSE TITLE: PREVENTIVE MAINTENANCE

CREDITS: 6cr

COURSE DESCRIPTION: This course covers how to set up a PM program, arrange PM scheduling, keep vital records, and winterize heavy duty vehicles. It also discusses when to place a vehicle out of service or deadline it.

OUTCOME: Systematically summarize various drive train systems and logically troubleshoot problems within those systems.

OUTLINE:

1. Setting up a PM Program
2. Out of service or Deadlining a Vehicle
3. PM Scheduling
4. Lubricants
5. Winterizing

STUDENT PERFORMANCE OBJECTIVES:

Given, reference materials, tools of the trade and following industry approved safety procedures the student will:

1. identify characteristics and benefits of PM
2. List and describe the steps of a pretrip inspection with 100% accuracy
3. Describe with 100% accuracy the criteria for deadlining a vehicle
4. select lubricants for components with 100% accuracy
5. prepare a piece of heavy equipment for cold weather through winterizing procedures with 100% accuracy

METHOD OF INSTRUCTION:

1. demonstration
2. discussion
3. interactive software
4. lecture
5. field trips
6. audio/visual

Provide opportunity for disadvantaged or disabled students by providing alternate modes of learning.

STUDENT ASSIGNMENTS/REQUIREMENTS:

The following must be completed before a grade can be given:

1. 90% class attendance required
2. completion of assigned competencies and tasks required
3. completion of self evaluation forms required
4. completion of Cat Basics Library, All components required

EVALUATION AND GRADING:

1. Assigned competencies, tasks, 90% attendance, and chapter questions are 100 points each and the combined average is **75%** of the final grade.
2. Attendance below 90% **will** receive an incomplete grade.
3. Letter grades:
0 - 61 = F 62 - 65 = D- 66 - 68 = D 69 - 71 = D+ 72 - 75 = C- 76 - 78 = C
79 - 81 = C+ 82 - 85 = B- 86 - 88 = B 89 - 91 = B+ 92 - 95 = A- 96 - 100 = A

REQUIRED STUDENT SUPPLIES AND MATERIALS:

HEAVY DUTY TRUCK SYSTEMS

DELMAR

OPTIONAL TEXT: MODERN DIESEL TECHNOLOGY

PRENTICE HALL

ADDITIONAL INSTRUCTIONAL RESOURCES:

1. "**VICKERS** INTRODUCTION TO HYDRAULICS" 8 videos
2. "**VICKERS** TECHNICAL REBUILD" 10 videos
3. "HYDRAULICS HEADACHES" **JOHN DEERE**
4. "THE HOW AND WHY OF HYDRAULICS COMPONENTS" slide set
5. CONCRETE CONSTRUCTION trade magazine
6. CRANE WORKS trade magazine
7. CONSTRUCTION EQUIPMENT trade magazine
8. NATIONAL FISHERMAN trade magazine
9. HYDRAULICS AND PNEUMATICS trade magazine