

_____SOUTH SEATTLE COMMUNITY COLLEGE_____

Technical Education Division

COURSE OUTLINE

Revision: Doug Clapper-2012

DEPARTMENT:	Heavy Duty Diesel Technology
CURRICULUM:	Diesel and Heavy Duty Equipment Technology
COURSE TITLE:	Advanced Special Topics H.D. Mechanical Repair
COURSE NUMBER:	HDM 298
TYPE OF COURSE:	Trade Extension
COURSE LENGTH:	11 Weeks Max
CREDIT HOURS:	Variable 1 to10
LECTURE HOURS:	Variable
LAB HOURS:	Variable
CLASS SIZE:	1 to 18 Maximum
PREREQUISITES:	Instructor's permission

COURSE DESCRIPTION:

Advanced study of selected procedures and skill tasks for truck and heavy equipment technicians as considered appropriate by the instructor. Prior work site experience is required of students enrolling in this course. Course content, format, and projects vary depending on topics.

STUDENT LEARNING OUTCOMES ADDRESSED:

1. Personal Responsibility - Take personal responsibility to plan, schedule, implement and evaluate mechanical procedures necessary to make repairs to trucks and equipment Observe all safety procedures.
2. Communication - Clearly define specific objectives for special topics/projects

GENERAL COURSE OBJECTIVES:

At the end of the course the student will:

1. Perform individualized in-depth research
2. Build on skill development
3. Be prepared for appropriate testing

TOPICAL OUTLINE:

Determined by individual arrangement with instructor.

Program Outcomes

1. Identify function, read diagrams and manufacturer specifications, inspect, diagnose problems, replace/repair, and service all major components of heavy duty equipment and vehicles. (SLO 1.1 & 7.2)
2. Using IVISDS sheets, OSHA and WISHA standards, demonstrate safety procedures relating to equipment, personal safety, and safety of others. (SLO 6.4)
3. Demonstrate proficiency in using hand and electronic testing and repair equipment. (SLO 6.3)
4. Consistently apply standards and guidelines for safe work procedures. (SLO 6.4 & 6.5)
5. Work independently and in groups to service, complete repairs, test, and maintain heavy duty vehicles to meet industry standards. (SLO 3.1)
6. Use industry tools to measure service. (SLO 2.2)
7. Use technology to test and repair equipment. (SLO 5.1)
8. Identify and strategize own career plans within the field. (SLO 6.2)
9. Practice good customer service. (SLO 3.2)
10. Work with accuracy, dependability, proficiency and speed when servicing equipment. (SLO 6.1)

11. Explain the expectations of employers for employees within the diesel industry. (SLO 7.1)
12. Communicate and document service records. (SLO 1.2)
13. Demonstrate basic competency in use of computers to access repair/replacement data and to document service. (SLO 5.1 & 7.1)

Student Learning Outcomes (SLO)

STUDENT LEARNING OUTCOMES are the knowledge and abilities every student graduating with a certificate or degree from South Seattle Community College will have. Students will achieve these outcomes as well as the specific curriculum outcomes for their academic or technical area of study.

1. Communication

- 1.1 Read and listen actively to learn and communicate.
- 1.2 Speak and write effectively for personal, academic and career purposes.

2. Computation

- 2.1 Use arithmetic and other basic mathematical operations as required by program of study.
- 2.2 Apply quantitative skills for personal, academic, and career purposes.
- 2.3 Identify, interpret and utilize higher level mathematical and cognitive skills (for those students who choose to move beyond the minimum requirements are stated above).

3. Human Relations

- 3.1 Use social interactive skills to work in groups effectively.
- 3.2 Recognize the diversity of cultural influences and values.

4. Critical Thinking and Problem-Solving

- 4.1 Think critically in evaluating information, solving problems and making decisions.

5. Technology

- 5.1 Select and use appropriate technological tools for personal, academic and career tasks.

6. Personal Responsibility

- 6.1 Be motivated and able to continue learning and adapt to change.
- 6.2 Value one's own skills, abilities, ideas and art.
- 6.3 Manage personal health and safety.
- 6.4 Be aware of civic and environmental issues.

7. Information Literacy

- 7.1 Access and evaluate information from a variety of sources and contexts, including technology.

7.2 Use information to achieve personal, academic, and career goals, as well as to participate in a democratic society.

REVISED BY: Doug Clapper
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