

Course: DIES 141 Fundamentals of Standby Power

Department: Diesel Technology

Course Description:

This course introduces the student to a number of specialized areas that a diesel technician will encounter. Through classroom lecture and lab application, the student learns maintenance and repair procedures for Standby and prime power generation components. Specialized areas of study include Engine protection controls, load banks, generator switchgear. The lab provides practical experience in troubleshooting and maintenance of these components. Safety in all areas is constantly stressed as well as the development of correct work habits, attitudes, and interest for each student.

Three lecture and two laboratory hours per week.

*COURSE OUTCOMES	OUTCOMES ACTIVITIES	ASSESSMENT TOOLS
Students will be conversant with the most common Heavy Duty Truck terminology	Analyze truck chassis components and schematics CT, QS, OC, TS, R	1. Quizzes 2. Troubleshooting and repair of truck components in the lab. TS, QS, OS, R
Develop an understanding of the relationships between the different components on a Heavy Duty Truck Chassis	Read handouts, listen to lectures and videos, participate in team troubleshooting exercises CT, TS, OC, QS, R	Practical exams requiring troubleshooting, quizzes, written exams TS, QS, OS, R

*COURSE OUTCOMES	OUTCOMES ACTIVITIES	ASSESSMENT TOOLS
Analyze simple DC circuits on truck chassis, analyze air brake problems, analyze suspension problems	Analyze chassis manuals and schematics CT, QS, OC, TS, R	1. Quizzes 2. Troubleshooting live circuits in the lab. TS, QS, OS, R
Understand basic cab components	Read handouts, listen to lectures and videos, participate in team troubleshooting exercises. Analyze cab manuals and schematics CT, TS, OC, QS, R	Practical exams requiring troubleshooting, quizzes, written exams TS, QS, OS, R