

Course Outcome Guide (COG)

Approved April 13, 2015

Course: DTEC 220	Title: Drive Train Systems	Credits: 4	Instructor:			
Course Description:	This course covers principles of component identification, function and testing procedures used in clutch, manual transmission, automatic transmission and differentials found on modern medium and heavy duty trucks.					
Concepts and Issues	Process Skills	Assessment Tasks	Intended Outcomes			
			Course	General Education or Program	Institutional	
<ul style="list-style-type: none"> For the student to develop a basic understanding of clutch, transmission and differential components and their function Develop skills for proper procedures in disassembly and reassembly of components Develop skills for troubleshooting clutch, transmission and differential 	<ul style="list-style-type: none"> Identify and describe the function of components used in clutch, transmission and differentials Demonstrate proper procedure in removing and reinstalling clutches, transmissions and differentials Demonstrate knowledge of basic testing and troubleshooting of drivetrain 	<ul style="list-style-type: none"> Weekly testing Shop performance Demonstration of course specific skills 	<ol style="list-style-type: none"> Demonstrate procedures used in replacing and adjusting a clutch assembly Demonstrate the ability to identify drivetrain components and explain their function Perform skills on disassembly and reassembly of clutch, manual/automatic transmissions and differentials Demonstrate knowledge in performing adjustments and installation of 	<ol style="list-style-type: none"> Make troubleshooting decisions and complete repairs using the proper tools and equipment based on concepts and processes learned in the Transportation program. Be prepared to take NATEF Certification tests. Apply the knowledge acquired for future employment. Apply the knowledge of safety procedures and handling of hazardous material processes to their training and future employment. 	<ol style="list-style-type: none"> Students will demonstrate effective communication skills. Students will use reasoning skills to analyze and solve problems. 	

	components		drivetrain components		
--	------------	--	--------------------------	--	--