

Assessment Impact by Course Objectives
Palau Community College
Program (AM) - Automotive Mechanics Technology

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CLO: AM 226 - Electronically Controlled Transmission: CLO 1

Service ETC Planetary Gears

CLO Assessment Cycle: 2014-2015 (Spring 2015)

CLO Status: Active

Means of Assessment			
Means of Assessment	Expected Student Performance	Notes	Active
Explain Planetary gear unit functions and the operating principle and their specifications, differentiate Gear box clutches and brakes assembly, and explain clutches operating principle and Gear box brakes. Signature assignment: Written Test	70% of the students assessed will perform at the proficiency level.		Yes
Service front planetary gears, service rear planetary gears, service over-drive planetary gears, service front and rear clutch, service over-drive clutch, service one-way clutch, and/or service brakes number 1, 2, & 3. Signature assignment: Practical Application Skill Test	70% of the students assessed will perform at the proficiency level.		Yes

Results			
Summary of Data Collected	Use of Results	Follow-Up	Semester Assessed
Written Test - 06/04/2015 - 80% of the students assessed performed at the proficiency level. Expected Student Performance Met: Yes Related Documents: AM-226 final exam knowledge spring 2015.pdf	07/07/2015 - Actual results: 8 out of 10 students are proficient; 8 are competent and none is highly competent. Therefore, 80% of the students assessed passed the knowledge test. Analyzed results: Logically, the knowledge test result was good, but the highly competent students are less than the number of competent students. Recommendations: 1.) Set-up film showing to help the students understand the principles of operation of automatic transmission gear box. 2.) Add repair manuals to help the students know the concepts and specifications of automatic transmission gear box. Action plan: Improve the passing rate and the numbers of highly competent students by next semester offering		2014 - 2015 (Spring 2015)

Results

Summary of Data Collected	Use of Results	Follow-Up	Semester Assessed
	<p>spring 2016, and to make this happened we need to:</p> <ol style="list-style-type: none"> 1.) Purchase repair manuals (e-copy and in print) before December 2015. 2.) Purchase a DVD movie that correlates to servicing automatic transmission gear box, before December 2015. <p>Extended services offered; to produce more highly competent students in knowledge and skills for the next semester (spring 2016).</p> <ol style="list-style-type: none"> 1.) Tutorial services (assistant instructor will give additional lecture and hands-on practice on CLO #1; students are encourage to come in the shop on their free time for knowledge and skills enhancement. 2.) Auto club will offer car servicing (the students approved by Federal Work study will be employed in Auto Club). 3.) Set-up work stations for all the CLOs of AM-226 4.) Set-up film viewing 		
<p>Practical Application Skill Test - 06/04/2015 - 90% of the students assessed performed at the proficiency level.</p> <p>Expected Student Performance Met: Yes</p> <p>Related Documents: AM-226 skills assessment spring 2015.pdf</p>	<p>07/07/2015 - Actual results: 9 out of 10 students are proficient; 7 are competent and 2 are highly competent. Therefore, 90% of the students assessed passed the skills assessment.</p> <p>Analyzed results: Logically, the skills assessment result was good, but the highly competent students are less than the competent students.</p> <p>Recommendations:</p> <ol style="list-style-type: none"> 1.) Purchase video cam, to record laboratory activities and review their performance and technique in servicing ECT Planetary Gears. 2.) Add repair manuals to allow the students to access the correct specification of ECT Planetary Gears. 3.) Produce more mock-ups for CLO #2. <p>Action plan:</p> <ol style="list-style-type: none"> 1.) Purchase repair manuals (e-copy and in print) before December 2015. 2.) Purchase video cam before December 2015. 3.) Produce more Mock-ups for CLO #2 and must be ready on December 2015. <p>Extended services offered; to produce more highly competent students in knowledge and skills for the next semester (spring 2016).</p> <ol style="list-style-type: none"> 1.) Tutorial services (assistant instructor will give additional lecture and hands-on practice on CLO 		<p>2014 - 2015 (Spring 2015)</p>

Results			
Summary of Data Collected	Use of Results	Follow-Up	Semester Assessed
	#1; students are encourage to come in the shop on their free time for knowledge and skills enhancement. 2.) Auto club will offer car servicing (the students approved by Federal Work study will be employed in Auto Club). 3.) Set-up work stations for all the CLOs of AM-226 4.) Set-up film viewing 5.) Conduct in-house Skills Olympic		

CLO: AM 226 - Electronically Controlled Transmission: CLO 2

Service Electronically Controlled Transmission ECU (Electronic Control Unit)

CLO Assessment Cycle: 2014-2015 (Spring 2015)

CLO Status: Active

Means of Assessment			
Means of Assessment	Expected Student Performance	Notes	Active
Explain the function of ECU of Electronically controlled transmission, and differentiate shift timing control, Driving select pattern, Control of lock-up, and Squad control and explain Driving pattern select switch, Neutral start switch, Throttle position sensor, water temperature sensor, speed sensor, stop light switch, and Overdrive main switch Signature assignment: Written Test	70% of the students assessed will perform at the proficiency level.		Yes
Measure electronically controlled transmission ECU power supply, measure electronically controlled transmission input supply, and/or measure electronically controlled transmission output supply. Signature assignment: Practical Application Skill Test	70% of the students assessed will perform at the proficiency level.		Yes

Results			
Summary of Data Collected	Use of Results	Follow-Up	Semester Assessed
Written Test - 06/04/2015 - 90% of the students assessed performed at the proficiency level. Expected Student Performance Met: Yes Related Documents: AM-226 final exam knowledge spring 2015.pdf	07/07/2015 - Actual results: 9 out of 10 students are proficient; 9 are competent and none is highly competent. Therefore, 90% of the students assessed passed the knowledge test. Analyzed results: Logically, the knowledge test result was good, but no student reaches the highly competent level. Recommendations: CLO #2 must be changed into a comprehensive topic that will equip the students to service a new		2014 - 2015 (Spring 2015)

Results

Summary of Data Collected	Use of Results	Follow-Up	Semester Assessed
	<p>type of Electronically Controlled Transmission gear box.</p> <p>Action Plan: CLO #2 must be revised before September 2015 to Service Continuously Variable Transmission gear box.</p> <p>Extended services offered; to produce more highly competent students in knowledge and skills for the next semester (spring 2016).</p> <ol style="list-style-type: none"> 1.) Tutorial services (assistant instructor will give additional lecture and hands-on practice on CLO #2; students are encourage to come in the shop on their free time for knowledge and skills enhancement. 2.) Auto club will offer car servicing (the students approved by Federal Work study will be employed in Auto Club). 3.) Set-up work stations for all the CLOs of AM-226 4.) Set-up film viewing 		
<p>Practical Application Skill Test - 06/04/2015 - 50% of the students assessed performed at the proficiency level.</p> <p>Expected Student Performance Met: Yes</p> <p>Related Documents: AM-226 skills assessment spring 2015.pdf</p>	<p>07/07/2015 - Actual results: 5 out of 10 students are proficient; 5 are competent and none is highly competent. Therefore, 50% of the students assessed passed the skills assessment.</p> <p>Analyzed results: Students are lack of practice in servicing Full Time Four Wheel Drive Components for we only have one mock-up.</p> <p>Recommendations: CLO #2 must be changed into a comprehensive learning outcome that will equip the students to service a new type of Electronically Controlled Transmission gear box.</p> <p>Action Plan: CLO #2 must be revised before September 2015 to Service Continuously Variable Transmission gear box.</p> <p>Extended services offered; to produce more highly competent students in knowledge and skills for the next semester (spring 2016).</p> <ol style="list-style-type: none"> 1.) Tutorial services (assistant instructor will give additional lecture and hands-on practice on CLO #2; students are encourage to come in the shop on their free time for knowledge and skills enhancement. 2.) Auto club will offer car servicing (the students approved by Federal Work study will be employed 		<p>2014 - 2015 (Spring 2015)</p>

Results			
Summary of Data Collected	Use of Results	Follow-Up	Semester Assessed
	in Auto Club). 3.) Set-up work stations for all the CLOs of AM-226 4.) Set-up film viewing 5.) Conduct in-house Skills Olympic		

CLO: AM 226 - Electronically Controlled Transmission: CLO 3

Service Full Time Four Wheel Drive Components

CLO Assessment Cycle: 2014-2015 (Spring 2015)

CLO Status: Active

Means of Assessment			
Means of Assessment	Expected Student Performance	Notes	Active
Explain full time four wheel drive operating principle and the functions of full time four wheel drive sensors, full time four wheel drive actuator, and full time four wheel drive ECU. Signature assignment: Written Test	70% of the students assessed will perform at the proficiency level.		Yes
Measure vehicle speed sensor, measure engine speed sensor, measure throttle valve sensor. Signature assignment: Practical Application Skill Test	70% of the students assessed will perform at the proficiency level.		Yes

Results			
Summary of Data Collected	Use of Results	Follow-Up	Semester Assessed
Written Test - 06/04/2015 - 70% of the students assessed performed at the proficiency level. Expected Student Performance Met: Yes Related Documents: AM-226 final exam knowledge spring 2015.pdf	07/07/2015 - Actual results: 7 out of 10 students are proficient; 7 are competent and none is highly competent. Therefore, 70% of the students assessed passed the knowledge test. Analyzed results: Logically, the knowledge test result was good, but no student reaches the highly competent level. Recommendations: CLO #3 must be changed into a comprehensive topic that will equip the students to service a system of Electronically Controlled Transmission that controls the gear shifting. Action Plan: CLO #3 must be revised before September 2015 to Service ECT shifting control (planetary gear type). Extended services offered; to produce more highly		2014 - 2015 (Spring 2015)

Results

Summary of Data Collected	Use of Results	Follow-Up	Semester Assessed
	<p>competent students in knowledge and skills for the next semester (spring 2016).</p> <ol style="list-style-type: none"> 1.) Tutorial services (assistant instructor will give additional lecture and hands-on practice on CLO #3; students are encourage to come in the shop on their free time for knowledge and skills enhancement. 2.) Auto club will offer car servicing (the students approved by Federal Work study will be employed in Auto Club). 3.) Set-up work stations for all the CLOs of AM-226 4.) Set-up film viewing 		
<p>Practical Application Skill Test - 06/04/2015 - 80% of the students assessed performed at the proficiency level.</p> <p>Expected Student Performance Met: Yes</p> <p>Related Documents: AM-226 skills assessment spring 2015.pdf</p>	<p>07/07/2015 - Actual results: 8 out of 10 students are proficient; 8 are competent and none is highly competent. Therefore, 80% of the students assessed passed the skills assessment.</p> <p>Analyzed results: Logically, the knowledge test result was good, but there is no highly competent student, all are competent students.</p> <p>Recommendations: CLO #3 must be changed into a comprehensive topic that will equip the students to service the shifting control of ECT planetary gear set type shifting control.</p> <p>Action Plan: CLO #3 must be revised before September 2015 to Service ECT shifting control (planetary gear type). Extended services offered; to produce more highly competent students in knowledge and skills for the next semester (spring 2016).</p> <ol style="list-style-type: none"> 1.) Tutorial services (assistant instructor will give additional lecture and hands-on practice on CLO #3; students are encourage to come in the shop on their free time for knowledge and skills enhancement. 2.) Auto club will offer car servicing (the students approved by Federal Work study will be employed in Auto Club). 3.) Set-up work stations for all the CLOs of AM-226 4.) Set-up film viewing 5.) Conduct in-house Skills Olympic 		<p>2014 - 2015 (Spring 2015)</p>

CLO: AM 226 - Electronically Controlled Transmission: CLO 4

Service Electronic Controlled Transmission Valve Body

CLO Assessment Cycle: 2014-2015 (Spring 2015)

CLO Status: Active

Means of Assessment			
Means of Assessment	Expected Student Performance	Notes	Active
Explain the operating principle of electronically controlled valve body, and the fluid circuitry of electronically controlled transmission, differentiate main valves and auxiliary valves operation, explain the operating principle of torque converter, and hydraulic control system. Signature assignment: Written Test	70% of the students assessed will perform at the proficiency level.		Yes
Remove electronic controlled transmission valve body, overhaul electronic controlled transmission valve body, and/or install electronic controlled transmission valve body. Signature assignment: Practical Application Skill Test	70% of the students assessed will perform at the proficiency level.		Yes

Results			
Summary of Data Collected	Use of Results	Follow-Up	Semester Assessed
Written Test - 06/04/2015 - 80% of the students assessed performed at the proficiency level. Expected Student Performance Met: Yes Related Documents: AM-226 final exam knowledge spring 2015.pdf	07/07/2015 - Actual results: 8 out of 10 students are proficient; 3 are competent and 5 are highly competent. Therefore, 80% of the students assessed passed the knowledge test. Analyzed results: The result of skills assessment was good. Recommendations: CLO #4 must be changed into a comprehensive course learning outcome that will equip the students to service ECT shifting control for CVT type transmission. Action Plan: CLO #4 must be revised before September 2015 to service ECT shifting control for CVT type transmission Extended services offered; to produce more highly competent students in knowledge and skills for the next semester (spring 2016). 1.) Tutorial services (assistant instructor will give additional lecture and hands-on practice on CLO #3; students are encourage to come in the shop on their free time for knowledge and skills enhancement. 2.) Auto club will offer car servicing (the students approved by Federal Work study will be employed in Auto Club). 3.) Set-up work stations for all the CLOs of AM-		2014 - 2015 (Spring 2015)

Results			
Summary of Data Collected	Use of Results	Follow-Up	Semester Assessed
Practical Application Skill Test - 06/04/2015 - 80% of the students assessed performed at the proficiency level. Expected Student Performance Met: Yes Related Documents: AM-226 skills assessment spring 2015.pdf	227 4.) Set-up film viewing 5.) Conduct in-house Skills Olympic		2014 - 2015 (Spring 2015)
	07/07/2015 - Actual results: 8 out of 10 students are proficient; 3 are competent and 5 are highly competent. Therefore, 80% of the students assessed passed the skills assessment. Analyzed results: The result of skills assessment was good. Recommendations: CLO #4 must be changed into a comprehensive course learning outcome that will equip the students to service ECT shifting control for CVT type transmission. Action Plan: CLO #4 must be revised before September 2015 to service ECT shifting control for CVT type transmission Extended services offered; to produce more highly competent students in knowledge and skills for the next semester (spring 2016). 1.) Tutorial services (assistant instructor will give additional lecture and hands-on practice on CLO #3; students are encourage to come in the shop on their free time for knowledge and skills enhancement. 2.) Auto club will offer car servicing (the students approved by Federal Work study will be employed in Auto Club). 3.) Set-up work stations for all the CLOs of AM-227 4.) Set-up film viewing 5.) Conduct in-house Skills Olympic		

CLO: AM 226 - Electronically Controlled Transmission: CLO 5

Service Electronic Controlled Transmission Solenoid Valves

CLO Assessment Cycle: 2014-2015 (Spring 2015)

CLO Status: Active

Means of Assessment			
Means of Assessment	Expected Student Performance	Notes	Active

Means of Assessment

Means of Assessment	Expected Student Performance	Notes	Active
Differentiate the forward shifting solenoid valve, reverse shifting solenoid valve, and overdrive select solenoid valve. Signature assignment: Written Test	70% of the students assessed will perform at the proficiency level.		Yes
Remove electronic controlled transmission solenoid valves, measure electronic controlled transmission solenoid valves power supply, and/or install electronic controlled transmission solenoid valves. Signature assignment: Practical Application Skill Test	70% of the students assessed will perform at the proficiency level.		Yes

Results

Summary of Data Collected	Use of Results	Follow-Up	Semester Assessed
Written Test - 06/04/2015 - 90% of the students assessed performed at the proficiency level. Expected Student Performance Met: Yes Related Documents: AM-226 final exam knowledge spring 2015.pdf	<p>07/07/2015 - Actual results: 9 out of 10 students are proficient; 5 are competent and 4 are highly competent. Therefore, 90% of the students assessed passed the knowledge test.</p> <p>Analyzed results: Logically, the knowledge test result was good, but the highly competent students are less than the competent students.</p> <p>Recommendations: CLO #5 must be changed into a comprehensive course learning outcome that will equip the students to diagnose electronically controlled transmission failure using the diagnostic tool or an OBD-2 (On-board generation 2) scanner.</p> <p>Action Plan: CLO #5 must be revised before September 2015 to Diagnose Electronically Controlled Transmission Failure will be the new description for CLO #5. Extended services offered; to produce more highly competent students in knowledge and skills for the next semester (spring 2016). 1.) Tutorial services (assistant instructor will give additional lecture and hands-on practice on CLO #5; students are encourage to come in the shop on their free time for knowledge and skills enhancement. 2.) Auto club will offer car servicing (the students approved by Federal Work study will be employed in Auto Club). 3.) Set-up work stations for all the CLOs of AM-226 4.) Set-up film viewing</p>		2014 - 2015 (Spring 2015)

Results

Summary of Data Collected	Use of Results	Follow-Up	Semester Assessed
<p>Practical Application Skill Test - 06/04/2015 - 80% of the students assessed performed at the proficiency level.</p> <p>Expected Student Performance Met: Yes</p> <p>Related Documents: AM-226 skills assessment spring 2015.pdf</p>	<p>07/07/2015 - Actual results: 8 out of 10 students are proficient; 8 are competent and none is highly competent. Therefore, 80% of the students assessed passed the knowledge test.</p> <p>Analyzed results: The skills assessment result was good, but none of the student has reached the level of highly competent.</p> <p>Recommendations: CLO #5 must be changed into a comprehensive course learning outcome that will equip the students to diagnose electronically controlled transmission failure using the diagnostic tool or an OBD-2 (On-board generation 2) scanner.</p> <p>Action Plan: CLO #5 must be revised before September 2015 to Diagnose Electronically Controlled Transmission Failure will be the new description for CLO #5. Extended services offered; to produce more highly competent students in knowledge and skills for the next semester (spring 2016). 1.) Tutorial services (assistant instructor will give additional lecture and hands-on practice on CLO #5; students are encourage to come in the shop on their free time for knowledge and skills enhancement. 2.) Auto club will offer car servicing (the students approved by Federal Work study will be employed in Auto Club). 3.) Set-up work stations for all the CLOs of AM-226 4.) Set-up film viewing 5.) Conduct in-house Skills Olympic</p>		<p>2014 - 2015 (Spring 2015)</p>

CLO: AM 226 - Electronically Controlled Transmission: CLO 6

Service Electronic Controlled Transmission Actuators

CLO Assessment Cycle: 2014-2015 (Spring 2015)

CLO Status: Active

Means of Assessment			
Means of Assessment	Expected Student Performance	Notes	Active

Means of Assessment

Means of Assessment	Expected Student Performance	Notes	Active
<p>Explain the function of Electronically Controlled Transmission Actuators, differentiate diagnostic code, troubleshooting chart, and fail safe function.</p> <p>Signature assignment: Written Test</p>	70% of the students assessed will perform at the proficiency level.		Yes
<p>Remove electronic controlled transmission actuators, check electronic controlled transmission actuators operation, and/or install electronic controlled transmission actuators.</p> <p>Signature assignment: Practical Application Skill Test</p>	70% of the students assessed will perform at the proficiency level.		Yes

Results

Summary of Data Collected	Use of Results	Follow-Up	Semester Assessed
<p>Written Test - 06/04/2015 - 90% of the students assessed performed at the proficiency level.</p> <p>Expected Student Performance Met: Yes</p> <p>Related Documents: AM-226 final exam knowledge spring 2015.pdf</p>	<p>07/07/2015 - Actual results: 9 out of 10 students are proficient; 5 are competent and 4 are highly competent. Therefore, 90% of the students assessed passed the knowledge test.</p> <p>Analyzed results: Logically, the knowledge test result was good, but the highly competent students are less than the competent students.</p> <p>Recommendations: CLO #6 must be merged to CLO #5</p> <p>Action Plan: CLO #6 must be merged before September 2015 to CLO #5.</p>		2014 - 2015 (Spring 2015)
<p>Practical Application Skill Test - 06/04/2015 - 80% of the students assessed performed at the proficiency level.</p> <p>Expected Student Performance Met: Yes</p> <p>Related Documents: AM-226 skills assessment spring 2015.pdf</p>	<p>07/07/2015 - Actual results: 8 out of 10 students are proficient; 8 are competent and none is highly competent. Therefore, 80% of the students assessed passed the skills assessment.</p> <p>Analyzed results: The skills assessment result was good, but none of the student has reached the level of highly competent.</p> <p>Recommendations: CLO #6 must be merged to CLO #5.</p> <p>Action Plan: CLO #6 must be merged before September 2015 to CLO #5. Extended services offered; to produce more highly competent students in knowledge and skills for the next semester (spring 2016). 1.) Tutorial services (assistant instructor will give</p>		2014 - 2015 (Spring 2015)

Results

Summary of Data Collected

Use of Results

Follow-Up

Semester Assessed

additional lecture and hands-on practice on CLO #5; students are encourage to come in the shop on their free time for knowledge and skills enhancement.
2.) Auto club will offer car servicing (the students approved by Federal Work study will be employed in Auto Club).
3.) Set-up work stations for all the CLOs of AM-226
4.) Set-up film viewing
5.) Conduct in-house Skills Olympic