# **PROGRAM REVIEW – CURRICULUM PACKET**

2018-2019

## **AUTOMOTIVE TECHNOLOGY**

This report includes course student learning outcome (cSLO) assessment summaries from 2015-16 to 2017-18.

Table 1. Course offerings per academic year from 2015-16 to 2018-19

Table 2. Course assessment status between 2015-16 and 2017-18

Table 3. cSLOs that were not assessed between 2015-16 and 2017-18

Table 4. cSLOs assessed and corresponding Data Evaluation

Table 5. cSLOs assessed and corresponding Data Planning

### **COURSE OFFERINGS**

Table 1. Course offerings per academic year from 2015-16 to 2018-19

Course Name	2015-2016	2016-2017	2017-2018	2018-2019
AUTO G101	х	х	х	х
AUTO G102N				х
AUTO G103N				х
AUTO G104N				х
AUTO G110	х	Х	Х	х
AUTO G120	х	х	x	х
AUTO G121	х	х	x	х
AUTO G130	х	х	x	х
AUTO G131	х	х	x	х
AUTO G140	х	х	x	х
AUTO G141	х	х	x	х
AUTO G150	х	х	x	х
AUTO G151	х	х	x	х
AUTO G160	х	х	x	Х
AUTO G170	x	x	x	x
AUTO G173		х	x	х
AUTO G181	х	х	х	х

#### COURSE ASSESSMENT STATUS

Fully Assessed

↑

Partially Assessed

No Assessment

Table 2. Course Assessment Status between 2015-16 and 2017-18 \*No enrollment data between 2013-14 and 2018-19

Course Name	Total cSLOs	No. cSLOs Assessed	Assessment Statu	s	Last Term Offered
AUTO G101	5	2 out of 5	Partially Assessed	↔	Spring 2019
AUTO G102N	3	0 out of 3	No Assessment	Ļ	*
AUTO G103N	3	0 out of 3	No Assessment	Ļ	*
AUTO G104N	4	0 out of 4	No Assessment	Ļ	*
AUTO G110	4	3 out of 4	Partially Assessed	↔	Spring 2019
AUTO G120	4	1 out of 4	Partially Assessed	↔	Spring 2019
AUTO G121	4	1 out of 4	Partially Assessed	↔	Spring 2019
AUTO G130	4	2 out of 4	Partially Assessed	↔	Spring 2019
AUTO G131	4	0 out of 4	No Assessment	Ļ	Spring 2019
AUTO G140	4	1 out of 4	Partially Assessed	↔	Fall 2018
AUTO G141	4	1 out of 4	Partially Assessed	↔	Spring 2019

Course Name	Total cSLOs	No. cSLOs Assessed	Assessment Stat	us	Last Term Offered
AUTO G150	4	2 out of 4	Partially Assessed	$\leftrightarrow$	Fall 2018
AUTO G151	4	3 out of 4	Partially Assessed	↔	Spring 2019
AUTO G160	4	0 out of 4	No Assessment	Ļ	Spring 2019
AUTO G170	4	0 out of 4	No Assessment	$\downarrow$	Fall 2016
AUTO G173	3	0 out of 3	No Assessment	$\downarrow$	*
AUTO G175	4	0 out of 4	No Assessment	$\downarrow$	*
AUTO G181	5	1 out of 5	Partially Assessed	↔	Fall 2017
AUTO G183	3	0 out of 3	No Assessment	Ļ	*

Table 3. cSLOs that were not assessed between 2015-16 and 2017-18

Course Name	cSLO Name	cSLO to Assessed
AUTO G101	cSLO 1	Demonstrate an ability to self-assess progress and development in a specific area and to further design and pursue a course of action based on the self-assessment.
AUTO G101	cSLO 2	Analyze and diagnose automotive engines and related components for correct system operation.
AUTO G101	cSLO 5	Perform accurate vehicle safety inspections.
AUTO G102N	cSLO 1	Demonstrate safe lifting practices outlined by manufacturer service information.
AUTO G102N	cSLO 2	Demonstrate a comprehensive understanding of automotive safety by passing an industry recognized safety test (S/P2).
AUTO G102N	cSLO 3	Demonstrate proper storage of hazardous materials related to the automotive industry.
AUTO G103N	cSLO 1	Demonstrate safe lifting practices outlined by manufactureres service information.
AUTO G103N	cSLO 2	Perform multipoint vehicle inspection, identifying and documenting faulty components and systems.
AUTO G103N	cSLO 3	Perform a oil maintenance service on a vehicle based on manufacturer's specifications.
AUTO G104N	cSLO 1	Perform accurate tire safety inspections.
AUTO G104N	cSLO 2	Perform precision torque applications.
AUTO G104N	cSLO 3	Perform correct tire mounting and balancing techniques.
AUTO G104N	cSLO 4	Demonstrate safe tire repair practices as outlined by industry standards.
AUTO G110	cSLO 1	Demonstrate an ability to self-assess progress and development in a specific area and to further design and pursue a course of action based on the self-assessment.
AUTO G120	cSLO 1	Demonstrate an ability to self-assess progress and development in a specific area and to further design and pursue a course of action based on the self-assessment.
AUTO G120	cSLO 2	Analyze and diagnose automotive engines and related components for correct system operation.
AUTO G120	cSLO 3	Demonstrate mastery of diagnostic tools and equipment used for automotive repair.
AUTO G121	cSLO 1	Demonstrate an ability to self-assess progress and development in a specific area and to further design and pursue a course of action based on the self-assessment.
AUTO G121	cSLO 2	Analyze and diagnose automotive engines and related components for correct system operation.
AUTO G121	cSLO 3	Demonstrate mastery of diagnostic tools and equipment used for automotive repair.
AUTO G130	cSLO 1	Demonstrate an ability to self-assess progress and development in a specific area and to further design and pursue a course of action based on the self-assessment.
AUTO G130	cSLO 3	Demonstrate mastery of diagnostic tools and equipment used for automotive repair.
AUTO G131	cSLO 1	Demonstrate an ability to self-assess progress and development in a specific area and to further design and pursue a course of action based on the self-assessment.
AUTO G131	cSLO 2	Analyze and diagnose automotive engines and related components for correct system operation.
AUTO G131	cSLO 3	Demonstrate mastery of diagnostic tools and equipment used for automotive repair.
AUTO G131	cSLO 4	Summarize and interpret complex engine performance concerns through advanced measurement and diagnosis.

Course Name	cSLO Name	cSLO to Assessed
AUTO G140	cSLO 1	Demonstrate an ability to self-assess progress and development in a specific area and to further design and pursue a course of action based on the self-assessment.
AUTO G140	cSLO 2	Analyze and diagnose automotive engines and related components for correct system operation.
AUTO G140	cSLO 3	Demonstrate mastery of diagnostic tools and equipment used for automotive repair.
AUTO G141	cSLO 1	Demonstrate an ability to self-assess progress and development in a specific area and to further design and pursue a course of action based on the self-assessment.
AUTO G141	cSLO 2	Analyze and diagnose automotive engines and related components for correct system operation.
AUTO G141	cSLO 3	Demonstrate mastery of diagnostic tools and equipment used for automotive repair.
AUTO G150	cSLO 1	Demonstrate an ability to self-assess progress and development in a specific area and to further design and pursue a course of action based on the self-assessment.
AUTO G150	cSLO 2	Analyze and diagnose automotive engines and related components for correct system operation.
AUTO G151	cSLO 3	Demonstrate mastery of diagnostic tools and equipment used for automotive repair.
AUTO G160	cSLO 1	Demonstrate an ability to self-assess progress and development in a specific area and to further design and pursue a course of action based on the self-assessment.
AUTO G160	cSLO 2	Analyze and diagnose automotive engines and related components for correct system operation.
AUTO G160	cSLO 3	Demonstrate mastery of diagnostic tools and equipment used for automotive repair.
AUTO G160	cSLO 4	Evaluate system pressures and discriminate between mechanical and/or electrical faults.
AUTO G170	cSLO 1	Demonstrate an ability to self-assess progress and development in a specific area and to further design and pursue a course of action based on the self-assessment.
AUTO G170	cSLO 2	Analyze and diagnose automotive engines and related components for correct system operation.
AUTO G170	cSLO 3	Demonstrate mastery of diagnostic tools and equipment used for automotive repair.
AUTO G170	cSLO 4	Identify high voltage systems and components.
AUTO G173	cSLO 1	Analyze and diagnose battery storage condition.
AUTO G173	cSLO 2	Perform precision measurements of electrical charge components to assess efficiency.
AUTO G173	cSLO 3	Identify High Voltage systems and components.
AUTO G175	cSLO 1	Compare precision measurements against factory specifications.
AUTO G175	cSLO 2	Analyze automotive diesel fuel systems and related components for correct system operation.
AUTO G175	cSLO 3	Identify system defects and employ strategy based diagnostics to solve problems.
AUTO G175	cSLO 4	Prepare students for industry standard evaluation testing (ASE) A9.
AUTO G181	cSLO 1	Demonstrate an ability to self-assess progress and development in a specific area and to further design and pursue a course of action based on the self-assessment.
AUTO G181	cSLO 2	Analyze and diagnose automotive engines and related components for correct system operation.
AUTO G181	cSLO 4	Perform accurate vehicle safety inspections.
AUTO G181	cSLO 5	Perform precision torque applications.
AUTO G183	cSLO 1	Demonstrate an ability to self-assess progress and development in a specific area and to further design and pursue a course of action based on the self-assessment.
AUTO G183	cSLO 2	Analyze and diagnose automotive engines and related components for correct system operation.
AUTO G183	cSLO 3	Demonstrate mastery of diagnostic tools and equipment used for automotive repair.

## DATA EVALUATION

Table 4. cSLOs assessed and corresponding Data Evaluation. \*Denotes historical cSLOs.

Course Name	cSLO	Semester Assessed	cSLO Data Evaluation
AUTO G101	cSLO 3	Fall 2015	This assessment showed excellent results as every student managed at least a "C." I feel that the low number of students was a factor here as I had more time with each student than I would have with a full class. The tools chosen for the test were those that will be essential as a foundation for future auto tech classes throughout the program. Competency at this stage will hopefully result in better learning outcomes for students when they move up into more advanced classes.
AUTO G101	cSLO 4	Spring 2016	This assessment showed excellent results. The only student who did not complete the assignment failed to turn in assignment paperwork resulting in lack of completion. The student did, however, demonstrate proper lifting safety in class.
AUTO G110	cSLO 2	Fall 2015	This class did not have as much time to practice. This resulted in student success being less than other classes. Students who did complete the task successfully generally took longer as well. This class was given more time to practice prior to the final than in previous years. This was deliberate based on the previous year's assessment.
AUTO G110	cSLO 2	Fall 2015	The results indicate that most students were able to master the set-up and calibration portion of the task. The issue lies with interpreting the results. This semester, I placed a high emphasis on setting up the tool, by incorporating more examples for measurement.
AUTO G110	cSLO 3	Spring 2016	All students successfully demonstrated that they could install the cylinder leak-down tester and accurately analyzed the results on the first attempt.No review was necessary.
AUTO G110	cSLO 3	Spring 2017	While 88% completed the assessment, 7 of the students needed remediation to achieve success. The five students who needed remediation were the last to test and subjected to an extended amount of time between presentation and assessment. Limited quantities of usable vehicles restricts the number of students that can test at one time which delays assessment on the entire class. Poor attendance and participation were factors in the five students who were not successful.
AUTO G110	cSLO 4	Fall 2016	Due to the limited amount of Dial bore gauges in the department, some students have less of a chance to achieve mastery. Although the task is incorporated into a bigger assignment, the skill development takes longer than necessary. Student who are not using the bore gauges are working on other parts of this assignment. However, there is a time restriction based on the midterm date.
AUTO G110	cSLO 4	Spring 2018	On the first attempt,15 of the students were not successful.I individually assessed their process and found that 12 of the students used the correct method to measure the supplied piston, however, their measurements were off.Upon further inspection, It was discovered that the micrometers that were used to perform the measurement were not accurate.Some of the micrometer were so far out of specification that they could not be calibrated.Once given accurate micrometers, 12 students provided correct answers.The remaining three students chose not to complete the assessment.
AUTO G120	cSLO 4	Spring 2017	The results indicate the objective was met and the class was very successful, but I feel it would have been better to test the students on a car. The circuit boards are very controlled and provide a very efficient test

Course Name	cSLO	Semester Assessed	cSLO Data Evaluation
			environment that really focuses on single-student assessment, but testing on a car would include so many other skills: navigating through service material to find diagnostic resources, tracing wiring diagrams, locating fuse panels, back-probing connectors, etc. But the management and allocation of resources and cars is dismal and unorganized. General supplies are not adequate (i.e.: too many students scheduled on too few of cars).
AUTO G120	cSLO 4	Spring 2017	The results indicate the objective was met and the class was very successful, but I feel it would have been better to test the students on a car. The circuit boards are very controlled and provide a very efficient test environment that really focuses on single-student assessment, but testing on a car would include so many other skills: navigating through service material to find diagnostic resources, tracing wiring diagrams, locating fuse panels, back-probing connectors, etc. But the management and allocation of resources and cars is dismal and unorganized. General supplies are not adequate (i.e.: too many students scheduled on too few of cars).
AUTO G121	cSLO 4	Spring 2017	While grading the exam I noticed that 14 out of 17 successfully diagnosed the station 2 circuit fault (voltage drop testing using a DMM). I felt that this was a success both in application of theory and proper tool use. Station 1 was interesting in that 16 out of 17 students obtained the proper measurements needed to diagnose the concern. What was interesting was that only 10 of the students formulated the proper diagnosis even though the measurements were correct. This showed me that the students did not understand the testing theory well enough to apply it correctly despite acquiring the necessary skills to obtain the measurements. I feel that students were successful with proper tool use, yet lacked necessary understanding of the theory behind amperage measurements.
AUTO G130	cSLO 2	Fall 2015	16 of the students who took the test scored above 70% which is satisfactory.The 8 students who scored less than 59% had poor attendance up to the 4th week of the semester.Most of those students had 50% or lower attendance at the time of the exam.Those students missed key discussions and demonstrations which would have supported and reinforced their textbook reading.Missing out on that instruction definitely affected their ability to assess proper engine operation.
AUTO G130	cSLO 2	Fall 2015	13 of the students who took the test scored above 70% which is satisfactory.Only 59% of the students earned a satisfactory grade on this assessment.75% of those students who failed to meet satisfactory performance standards had not completed workbook assignments based on textbook readings, and had not even attempted to take the chapter assessments prior to this practical assessment.
AUTO G130	cSLO 4	Fall 2017	Students were graded for the completeness and accuracy of their diagnosis. Each student was assigned a vehicle and wrote notes on the steps they performed. If students performed the correct steps they received 75% points. If they followed the correct steps and correctly diagnosed the root cause of the fault they received 100% points. If neither were correct, they received under 50% points.
AUTO G140	cSLO 4	Spring 2017	The results indicate the objective was met and the class was very successful, but I feel it would have been better to test the students singularly. Currently, do not have enough cars and lifts available due to inefficient scheduling. We also need to purchase hydraulic test stations to provide testing at the bench. This would be provide a more controlled test environment for a singular student. However, the management and

Course Name	cSLO	Semester Assessed	cSLO Data Evaluation
			allocation of resources and cars is dismal and unorganized. General supplies
			are not adequate (i.e.: too many students scheduled on too few of cars).
			Overall 26 of 32 students passed the assessment with scores above 70%
			which shows a high success. This is looking at the average points acquired
			in both stations. In grading the assessment the majority of the students did
			great in theoretical predictions. The area where students had some trouble
			was during the adjustment in station 2. I attribute this to a lack of practice
AUTO G141	cSLO 4	Spring 2017	on the alignment machines. Of the three pieces of equipment we have, only
			1 is currently operational. This severely impacted instruction on a capstone
			skill set for the class.Adjustments were made to try to get all students
			suitable practice on live alignments, but unfortunately it was still not
			optimum. This was due to our repair and service vendor's inability to get
			approved to work here on campus.
			Data showed that student understood how to perform a gear pattern test,
			however due to the type of grease used to expose the pattern, it was
			difficult to read. Students who did understand had a difficult time with one
			adjustment, pinion depth. This is due to not having the required tools to
	cSI 0 3	Fall 2016	perform this measurement. In addition, students were in groups of 4 to five
//010/0150		10112010	due to the limited amount of differentials available. Purchasing a class set of
			differentials along with holding fixtures, better layout dye, and pinion depth
			checking toolswould allow for smaller groups, a more clarified pattern, and
			a more efficient way of mastering the skills required to correctly install a
			ring and pinion.
			The analysis of the data was based on the time given to learn the task as
			well as the time taken to perform the task.Student should be able to
AUTO G150	cSLO 4	Fall 2015	measure and adjust preload within a five-minute timeframe.Students who
			were given an open-ended time to learn the task completed the adjustment
			in the allotted time.
			23% of the students did not have time to remove and install an automatic
			transmission due to one of the vehicles being used for this process having a
			unplanned "no start" condition.All students were lectured and
AUTO G151	cSLO 1	Spring 2017	demonstrated to regarding the process. However, because of one of the
			vehicle being out of commission, not all cycled through the hands on
			portion. The 23 student who did attempt were all successful (at different
			rates of time)
			For this semester, we utilized three similar vehicles to allow for consistency
			and efficiency. 15% ofstudents could not complete the task due to one
AUTO G151	cSLO 1	Spring 2018	vehicle not starting (starter failure), and another having a damaged Engine
			control module, which would not allow the car to start as well.Even though
			we had enough vehicles, the age and condition did not allow all students to
			Decome successful.
			18 students completed the assignment One of which did not submit a lab
			assignment. Inree student were not present for the assignment and chose
			hou to make it up. mese timee students ended up dropping the class at a
			accurrent on the work sheet what the cause would be if the results
AUTO G151	cSLO 2	Spring 2016	as occurrent, on the work sheet what the cause would be in the fesults were below specifications 14 students answered correctly on the first
			attempt A students, who answered incorrectly were asked to refer to the
			online shop manual for the vehicle being tested to review possible sauces
			has a don their results All A students were successful on the second
			attempt
			attempt.

Course Name	cSLO	Semester Assessed	cSLO Data Evaluation
AUTO G151	cSLO 4	Fall 2015	All 22 students were able to use the dial indicator to measure the clearance.21 students were able to determine if the measurement was within specifications. This was unusual since the most difficult part of the assignment was to set up the measuring tool.
AUTO G181	cSLO 3	Fall 2015	This data shows those students who completed the required Honda training modules and other coursework had successfully attained the skills necessary to perform a Honda Express Service B12 in teams of 2.87.5% of the students who participated in the final exam service were successful in using proper tools and equipment with 100% accuracy. The same course in the Spring of 2015 had fewer students who were eligible to take the test (9) due to incomplete coursework. This class saw over a 50% increase in eligible final exam participants. I attribute this to improvements I made in classroom management. I tightened up assignment deadlines, worked on slower demonstrations of equipment usage, and added more hands on practice with pieces of equipment individually before integrating them into a summative assessment. These changes made a noticeable improvement of student engagement and participation, which ultimately lead to an increase of student success.

## DATA PLANNING

Table 5. cSLOs assessed and corresponding Data Planning. \*Denotes historical cSLOs.

Course Name	cSLO	Semester Assessed	cSLO Data Planning
AUTO G101	cSLO 3	Fall 2015	I will continue to use a similar practical assessment but am considering increasing the number of tools featured in the exam. With such high test results I feel that the students might be better served with a higher degree of complexity. Success at a higher level of complexity should provide even better preparation for future classes.
AUTO G101	cSLO 4	Spring 2016	I will add lifting practices assessments into more activities to stress the importance of safe lifting even further. This will also increase the likelihood that ALL students tested will pass at least one assessment and demonstrate proper lifting. Given the safety critical nature of the assessment a 100% pass rate is important.
AUTO G110	cSLO 2	Fall 2015	In the Spring, I will continue with the amount of time students are given to master the assignment.
AUTO G110	cSLO 2	Fall 2015	Over break, I am going to develop a2 "Job Aid" sheets that will explain the complete process from calibration to interpretation. The calibration job aid will be incorporated into the bore measurements assignment and posted on blackboard. In addition to the job aid, which address interpretation of the measuring tool, being added to the bore measurement worksheet and blackboard, I am also going to add it to any worksheet that includes measurements with dial indicators.
AUTO G110	cSLO 3	Spring 2016	Although results were good, I will create a "job aide" and attach it to the worksheet that will clearly explain the process of testing and how to interpret the results. In addition, I will review my attendance policy outlined in my syllabus to determine an effective way to mitigate situations where students need to drop the class.
AUTO G110	cSLO 3	Spring 2017	Consideration of what results would look like for a class that was at capacity should be first. Having access to more engines or vehicles that run and can be utilized for this task is critical to success. In addition, I will review and

Course Name	cSLO	Semester Assessed	cSLO Data Planning
			revise the task, as necessary, to insure that learning is not superficial and
			time management is as efficient as possible.
			I will continue to give students access to printed and online instruction for
AUTO G110	cSLO 4	Fall 2016	learning how to do this task, as well as giving large group and small group
		2020	demonstrations. In addition, I will put dial bore gauges on the department's
			"wish list" as well including the request in the next program review.
			To insure success and build confidence, we need to replace worn out
AUTO G110	cSLO 4	Spring 2018	micrometers. We should also have a ample supply of micrometers to allow
		1 0	for a higher level of efficiency in completing this task. Student confidence
			would also be bolstered with a third party certification.
			Seek qualified leadership to better address the needs of the program. Utilize
	-0104	Carrie = 2017	the shop space more efficiently by spreading classes out instead of utilizing
AUTO G120	CSLO 4	Spring 2017	only one lab space for three classes simultaneously. Funds should be used to
			purchase batteries and battery chargers instead of Shap-On certificate
			programs.
			the chan space more efficiently by spreading classes out instead of utilizing
		Spring 2017	only one lab space for three classes simultaneously. Funds should be used to
A010 0120	0510 4	5pmg 2017	nurchase batteries and battery chargers instead of Snan-On certificate
			programs.
			One day a week we use factory wiring diagrams with theoretical faults and
			voltage measurements so that students can visually see the circuit layout
			and anticipate proper operation. This has proven to be successful for both
AUTO G121	cSLO 4	Spring 2017	voltage drop testing and voltage available testing. In the future I plan to
			create amperage based scenarios to add to these testing days. It really helps
			tie theory to testing, and they get to practice theoretical troubleshooting.
			In the future I will be using an electronic course delivery method, which will
			be related to the textbook, and will include additional resources for students
AUTO G130	cSLO 2	Fall 2015	to use to reinforce knowledge gained from the textbook reading. I plan to
			incorporate the use of chapter exams delivered through the E-course, as well
			as chapter workbook exercises.
			In the future I will be using an electronic course delivery method, which will
			be related to the textbook, and will include additional resources for students
			to use to reinforce knowledge gained from the textbook reading. Instead of
AUTO G130	cSLO 2	Fall 2015	bi-weekly assignment collection, there will be a weekly schedule for students
			to turn in chapter related assignments (prior to lecture days covering topics).
			Chapter exams will be open longer to add flexibility for the student's
			schedules.
AUTO G130	cSLO 4	Fall 2017	The instruction proved effective for nearly all students. With minor
			improvements, I believe 100% of the students could meet the SLO.
			Seek qualified leadership to better address the needs of the program. Utilize
		6 : 2017	the shop space more efficiently by spreading classes out instead of utilizing
AUTO G140	cSLO 4	Spring 2017	only one lab space for three classes simultaneously. Funds should be used to
			purchase batteries and battery chargers, and bench test equipment instead
			of Snap-On certificate programs.
			instruction of theory appears to be successful and will probably undergo
			department has actively reached out to the Alignment equipment notional
AUTO G141	cSLO 4	Spring 2017	headquarters to try to solve our repeated issues with gotting their convice
			nearguarters to try to solve our repeated issues with getting their service
			the vendor approval process started for all vendors at the fiscal year change
			the venuor approval process started for all venuors at the fiscal year change.

Course Name	cSLO	Semester Assessed	cSLO Data Planning
			This will allow us to get our equipment service as needed so that it is ready
			for our students.
AUTO G150	cSLO 3	Fall 2016	We are not offering this class next semester, therefore, I will be able to research and request the necessary tools for student success. Part of my research will be to reach out to other colleges to find what the best options are for tools and resources. I will include the required tools and resources on our department's list of tools as well as include my finding in our next program review.
AUTO G150	cSLO 4	Fall 2015	Students have access to multiple carrier bearing preload examples. The task in incorporated into a larger task of "differential overhaul". This allows for a longer period of time, for the larger task. This allows students to spend more time mastering aspects of the task that are more difficult. At this point, I would not change the way this task is delivered.
AUTO G151	cSLO 1	Spring 2017	Prior to the next assessment cycle, I will rewrite the assignment to include a time limit to how long the process should take and base my assessment partially on this new aspect. The length of time some students took was magnified by the fact that the class was over the maximum enrollment. In the future I will also limit the number of enrolled students allowing for ample time to complete all tasks.
AUTO G151	cSLO 1	Spring 2018	Option 1: Purchase three to four vehicles between three to four years old that are known to start and operate consistently. Option 2: Purchase a transmission dyno that will allow students to not only install a transmission, but to also to check operation on student built transmissions.
AUTO G151	cSLO 2	Spring 2016	At this time, I do not see a need for change based on the results. However, creating a worksheet where causes and symptoms would be beneficial for understanding results.
AUTO G151	cSLO 4	Fall 2015	Next semester I am going to review where the specifications are located in service information prior to the test. Also I will review worksheets to insure that locating this specification is embedded in them.
AUTO G181	cSLO 3	Fall 2015	For the Spring of 2016 I am planning to continue slower demonstrations. I will also be continuing to allow students to master one part of the service at a time with 100% accuracy prior to moving on. I have already altered the course organization on Blackboard so that the reading and homework assignments will be complete around week 12. This will allow for larger practice blocks for students to master the inspection process and tools and equipment usage.