Colorado State University

Pueblo Academic Program Assessment Report for AY 2015-16

Due: June 1, 2016

Program: Automotive Industry Management (AIM)

Date: May 30, 2016

Completed by: Cathi J. Robbe, Program Coordinator- Associate Professor

Assessment contributors: William Bencini- Assistant Professor

Please complete this form for each undergraduate, minor, certificate, and graduate program (e.g., B.A., B.S., and M.S.) in your department. Please copy any addenda (e.g., rubrics) and paste them in this document, and submit it to the dean of your college/school as per the deadline established. The dean will forward it to me as an email attachment before June 1, 2015. You'll also find the form at the assessment website at: http://www.colostate-pueblo.edu/Assessment/ResultsAndReports/Pages/default.aspx.

Please describe the 2015-16 assessment activities for the program in Part I. Use Column H to describe improvements planned for 2015-2016 based on the assessment process. In Part II, please describe activities engaged in during 2014-2015 designed to close-the-loop (improve the program) based on assessment activities and the information gathered in 2013-2014. Thank you.

I. Program student learning outcomes (SLOs) assessed in this cycle, processes, results, and recommendations.

A. Which of the program SLOs were assessed during this cycle? **Please include the outcome(s) verbatim from the assessment plan.**	B. When was this SLO last assessed? Please indicate the semester and year.	C. What method was used for assessing the SLO? **Please include a copy of any rubrics used in the assessment process.**	D. Who was assessed? Please fully describe the student group(s) and the number of students or artifacts involved.	E. What is the expected achievement level and how many or what proportion of students should be at it?	F. What were the results of the assessment?	G. What were the department's conclusions about student performance?	H. What changes/improvements to the program are planned based on this assessment?
Student Learning Outcome (SLO) #2 will be addressed several times in required AIM courses The Business Contact and Case Study Report will be evaluated against a specific rubric to evaluate the effectiveness, comprehension and competence level. The results will be	Not previously used in AIM Assessment.	Oral presentation rubric and essays were used for assessment evaluation from several AIM courses.	Fifteen (15) students from AIM 425 Auto Financial Mgmt addressed managerial techniques, business control elements and dealership operation though arranged business	Expected 80% achievement level for oral presentation evaluated by a standard rubric.	Results varied: Some students took extra steps in preparing and researching the case study. About 65% of the students went above and beyond. The remaining 35 % was very lacks and did	While a more acceptable/ achievable result of a junior class would be around 80%--- the 65% level will need to be evaluated in comparisons to future AIM 305 courses. A better	A standardized rubric will be used in all AIM courses for student presentation reviews.

shared with the AIM faculty and others involved in AIM Assessment during the cycle year. Upon the evaluation of the SLO any changes or updates will be discussed and if necessary revision will be implemented to the AIM Assessment Plan.			contacts. Overall l review of the dealership operation provides students with a real world experience and the opportunity to make decision regarding the daily operations. Eighteen (18) students from 2015 AIM 305 Regulatory and Environmental Issues were given case studies to present in a group. The overall awareness of environmental concerns		not put forth any extra effort.	measure perhaps will be following a freshman class from AIM 155 thru and including AIM 425 in their college career.	

			related to and outside of the automotive industry were reviewed. Overall feedback from students in this course was very positive.				

Comments: The Student Exit Survey (SES) was made available for students to pick up, fill out and return to our CEEPS Administrative Assistant so students could remain anonymous. ZERO SES were filled out. Since the response rate from students is extremely low and unacceptable the AIM faculty will require graduates to take the Student Exit Survey when filling out the Graduation Planning Sheet.

II. Follow-up (closing the loop) on results and activities from previous assessment cycles. In this section, please describe actions taken during this cycle that were based on, or implemented to address, the results of assessment from previous cycles.

A. What SLO(s) did you address? Please include the outcome(s) verbatim from the assessment plan.	B. When was this SLO last assessed? Please indicate the semester and year.	C. What were the recommendations for change from the previous assessment?	D. Were the recommendations for change acted upon? If not, why?	E. What were the results of the changes? If the changes were not effective, what are the next steps or the new recommendations?
SLO # 4	Spring 2014 Spring 2015 Spring 2016	Difficulty in understanding ASE Assessment table. Improvement in some areas of automotive servicing.	Yes, used ASE Certification format provided.	Yes, this year the students were tested over a period of weeks and not one long-haul session.
SLO # 2	2014-2015	Clarification of rubric. Previous report did not indicate Percent of achievement goals which is 80% for all SLO in AIM.	Yes, rubric was reviewed with student weeks prior to presentation and additional comments were added for clarification.	Results and comments from students in AIM 305 suggested the need for a wider range of topics. Case studies focused on "other industries and the effect on the environment" students commented they would like to have more case studies involving the automotive industry impact.
SLO # 5	Not assessed	n/a	n/a	n/a

Comments: SLO #4 Demonstrate critical thinking and problem solving skills in the diagnosis and service of automobiles was evaluated again this year to determine a consistency of student test results and learning outcomes. ASE Test results are provided starting on page 7 of this assessment.

* AIM Presentation Rubric

Assessing Presentations				
	Below Expectation	**Needs Improvement**	**Satisfactory**	**Exemplary**
Organization	No apparent organization.	Some organization Speaker occasionally goes off topic. Conclusions is weak.	Presentation provides some reasonable evidence of research to support conclusions.	Presentation is carefully organized. Evidence of research to support conclusions is evident.
Content	Content is inaccurate or overly general. Listeners are unlikely to learn anything or may be misled.	Content is sometimes inaccurate or incomplete. Listeners may learn some isolated facts, but they are unlikely to gain new insights about the topic.	Content is generally accurate and reasonably complete. Listeners may develop a few insights about the topic.	Content is accurate and comprehensive. Listeners are likely to gain new insights about the topic.
Delivery	Speaker appears anxious and uncomfortable and reads notes, rather than speaks.	Speaker occasionally appears anxious or uncomfortable, and may occasionally read notes, rather than speak.	Speaker is generally relaxed and comfortable.	Speaker is professional, relaxed, and comfortable and interacts effectively with listeners.

ASE Student Certification Initiative
Assessment Report
2016

Introduction

Spring 2016 is the 3rd test cycle (2014, 2015, and 2016) using ASE Automotive Student Certifications Exams as the assessment instrument for **AIM SLO #4; Demonstrate critical thinking and problem solving skills in the diagnosis and service of automobiles.** As AIM program SOP the exams were administered to 13 students enrolled in AIM 335 Shop Practices. The exam battery consisted of 10 tests, all eight of the ASE/NATEF automotive technical areas in addition to MLR (Maintenance & Light Repair) and AST (Automotive Service Technician).

This report is based on 2015 statistics as the 2016 numbers were not available by the due date of June 1, 2016 of this assessment report.

Assessment Methods

Since this is the 3rd exam cycle a standard method of analyzing performance, comparing this year's results to previous cycles has been developed. AIM now has a two year average with which to compare this year's test results. The 2016 results will then be compared to the previous two year cycle and a new three year average calculated. Next year's cycle, 2017, will then be analyzed compared to the previous three year average and so on for each annual test cycle.

The three main statistics used to analyze test results include;

1. Percentage of exams passed for the entire cohort
2. Average Raw Score for the entire cohort
3. Average National Percentile Rank for the entire cohort
4. Identification of content (technical areas). Relative to #1,2,3 above, that perform below and above the averages

Table I appearing below tabulates this year's results based on items 1, 2, 3 stated above.

Table I
Summary of Results Relative to Assessment Methods #s 1-3

	% of Exams with Passing Raw Score	Average Raw Score %	Average National Percentile Rank
2014	105 /127 = 85%	66%	66th
2015	94/134 = 70%	57%	57th
Two Year Average	78%	67%	67th
2016	122/134 = 95%	74%	81st
Change Relative to 2-year Average	+22%	+10%	+21%
Three Year Average	83%	69%	68th

Percentage of Exams Passed

Initially in 2014 AIM arbitrarily set a program goal of 80% exam pass rate average. The 2016 cohort passed 122 of 129 exams for a 95 % pass rate. This exceeds the previous two year average of 84%.The arbitrary program goal pass rate, 80%, initially established in 2014 was shattered by this cohort (+13%)! Five of the failed tests were by one student and two other students failed one per person.

The three year pass rate average is now 83% and has surpassed the original program goal.

Raw Score

The 2016 cohort raw score average of 74% surpassed the previous two year average of 67% by 7 percentage points which is a 10% increase.

The three year average raw score has increased to 69%.

National Percentile Rank

The 2016 cohort national percentile rank averaged 81st which greatly exceeds (+33%) the previous two year average of 61st percentile.

The three year national percentile rank average is now 68th percentile.

The 2016 cohort raw score average also surpassed the previous two year average of 67% by 13 points which is a 21% increase.

The three year average raw score has increased to 68%.

Improvement in Traditional Problem Areas

The four technical areas of A1- Suspension & Steering, A2- Brakes, A6-Automatic Transmission and A7- Manual Transmission, have traditionally been low performers within the program. The 2016 exam cohort experienced significantly greater performance, relative to Average Raw Score and National Percentile Rank, in all four of these technical areas

The 2016 cohort A1-Steering and Suspension Exam average raw score of 60% surpassed by +5 percentage points the 55% two year average. The 2016 A2-Brakes Raw Score average of 68% surpassed by the two year average of 64% by +4 percentage points. The 2016 A6- Automatic Trans average Raw score of 72% surpassed the 2-year average of 61% by 11 percentage points. The 2016 A7-Manual Trans Raw score average was 71% and exceeded the 2-year average by +20 percentage points.

Table II

Traditional Sub-Performance Technical Areas

	2014 NPR/Raw Score	2015 NPR/Raw Score	2-Year Average NPR/Raw Score	2016 NPR/Raw Score	Relative Change	3-Year Average
A1 Steering & Suspension	60th 60%	50th 50%	55th 55%	72nd 60%	+17th +31%	61st 57%
A2 Brakes	75th 75%	58th 56%	67th 64%	80th 68%	+13th +19%	71st 66%
A6 Automatic Transmission	65th 65%	50th 57%	58th 61%	78th 72%	+20th +34%	63rd 65%
A7 Manual Trans & Clutch	52nd 52%	42nd 50%	47th 51%	72nd 71%	+25th +39%	55th 58%

Table II
Tests A1-5

Student	Individual Average All Tests	A1 Steer/Susp	A2 Brakes	A3 Electrical	A4 Engine Perf	A5 Engine Rpr
Cohort Averages> NPR Raw Score%	81st **74% Cohort Overall**	72nd **60%**	80th **68%**	84th **77%**	89th **77%**	89th **82%**
1) Barowski	76	66	62	92	94	83
% Score	**70**	**55**	**55**	**80**	**82.5**	**80**
2) DeGraff	97	96	98	97	98	96
% Score	**87**	**77.5**	**85**	**87.5**	**90**	**90**
3) Evans, N	81	66	71	87	90	96
% Score	**76**	**55**	**60**	**75**	**77.5**	**90**
4) Garza, T	71	60	57	47	90	74
% Score	**66**	**50**	**52.5**	**50**	**77.5**	**72.5**
5)Haning, A	81	66	62	92	86	89
% Score	**72**	**55**	**55**	**80**	**72.5**	**82.5**
6)Knappe	82	**47**	96	90	98	83
% Score	**75**	**47.5**	**82.5**	**78.5**	**90**	**80**
7)Leffengre	Did not	take test				
% Score						
8)Mack, J	79	60	93	84	62	74
% Score	**70**	**52.5**	**77.5**	**72.5**	**57.5**	**72.5**
9)Merten, I	80	76	75	75	90	83
% Score	**70**	**60**	**62.5**	**65**	**77.5**	**80**
10)Runes, J	49	**32**	**52**	47	79	66
% Score	**53**	**42.5**	**50**	**50**	**67.5**	**67.5**
11) Skaff, E	81	93	91	84	82	92

% Score	**77**	**72.5**	**75**	**72.5**	**70**	**85**
#12)Vigil, V	96	91	96	98	98	94
% Score	**86**	**70**	**82.5**	**90**	**90**	**87.5**
13)Willyard	97	98	95	99	97	99
% Score	**88**	**80**	**80**	**95**	**87.5**	**95**
14)Zarnoch	81	87	88	97	92	94
% Score	**79**	**67.5**	**72.5**	**87.5**	**80**	**87.5**
Student		A1 Steer/Susp	A2 Brakes	A3 Electrical	A4 Engine Perf	A5 Engine Rpr

Table III
Tests A1-5

Student	Individual Averages All Tests	A6 Auto trans	A7 Manual Trans	A8 HVAC	MLR	AST
Cohort Averages> NPR Raw Score%	Cohort Overall 81st **74%**	78th **72%**	72nd **71%**	78th **76%**	90th **80%**	86th **80%**
1) Barowski		84	**46**	96	75	79
% Score		**75**	**50**	**85**	**63.3**	**73.7**
2) DeGraff		96	98	91	99	97
% Score		**85**	**90**	**80**	**95**	**88.7**
3) Evans, N		80	79	68	80	88
% Score		**72.5**	**70**	**85**	**95**	**80**
4) Garza, T		63	76	80	89	76
% Score		**62.5**	**67.5**	**77.5**	**73.3**	**71.2**
5) Haning		72	86	80	94	81
% Score		**67.5**	**75**	**77.5**	**78.3**	**75**
6) Knappe		**76**	91	64	95	
% Score		**70**	**80**	**62.5**	**80**	
7)Leffengre	Did not	take test				
% Score						
8) Mack, J		72	64	94	95	88
% Score		**67.5**	**62**	**82.5**	**80**	**80**
9) Merten		91	68	68	85	88
% Score		**80**	**62.5**	**65**	**70**	**80**
10) Runes		**32**	**37**	**32**	64	49

% Score		**45**	**45**	**45**	**58.3**	**56.3**
11) Skaff, E		80	86	94	95	93
% Score		**72.5**	**75**	**82.5**	**80**	**83.7**
#12) Vigil,		99	91	99	99	98
% Score		**90**	**80**	**90**	**88.3**	**90**
13)Willyard		94	98	91	99	99
% Score		**82.5**	**90**	**80**	**93.3**	**95**
14)Zarnoch		80	83	80	98	97
% Score		**72.5**	**72.5**	**77.5**	**85**	**87.7**
Student	Individual Average	A6 Auto trans	A7 Manual Trans	A8 HVAC	MLR	AST