

Rio Salado College

Automotive Technology Program Review

Review Period: Academic Years 2016-2018

Review Conducted: AY2018-19

Rio's Academic Program Review Process is an essential component of the College's Strategic Plan. The 2016-2020 work is guided by the goals of Pillar 3: *Accountability, Assessment, and Quality Assurance*, and supports Strategic Pathway 7: *Grow a Culture of Accountability Through College-wide Quality Assurance Processes*. In addition, data relating to student enrollment, learning, persistence, goal attainment, satisfaction, and institutional accountability are aligned with the college-wide Key Performance Indicators that measure progress toward achieving the goals of the College's Strategic Plan.

I. Degrees and Certificates in the Workforce Development and Community Re-entry Program

Program Title: CCL in Workforce Development: Automotive Technology Level I

Major Code: 5594N

Total Credits: 14

Description: The Certificate of Completion (CCL) in Workforce Development: Automotive Technology Level I program is designed to prepare the incarcerated person with skills needed to work in the automotive technology field upon release. Courses focus on basic automotive service skills. Courses also cover automotive components, systems, theories, and testing procedures. Incarcerated students choose one of three areas as an emphasis: internal combustion engines, air conditioning, or braking systems.

Program Notes:

Students must earn a grade of "C" or better for all courses required within the program.

This program is not eligible for Title IV Federal Financial Aid.

+ indicates course has a prerequisite and/or corequisites.

Admission Criteria: Permission of Department or Division is required for admission to the Workforce Development and Community Re-Entry program.

Required Courses:

APT101	Automotive Service Operations	3	14
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	APT161	Auto Electrical/Electronic Systems I	4
+	AUT103BD	Ignition Systems	1
+	AUT210AA	Automotive Emission Systems	3
	AUT101AA	Internal Combustion Engines Theory (3) OR	
	AUT107AA	Automotive Air Conditioning (3) OR	
	AUT109AA	Automotive Brake Systems (3)	3

Program Title: CCL in Workforce Development: Automotive Technology Level II

Major Code: 5597N

Total Credits: 30

Description: The Certificate of Completion (CCL) in Workforce Development: Automotive Technology Level II program is an advanced automotive technology program designed to prepare the incarcerated person with skills needed to work in the automotive technology field upon release. Courses focus on automotive systems and malfunctions as well as procedures for diagnosis and repair.

Program Notes:

Students must earn a grade of "C" or better for all courses required within the program.

This program is not eligible for Title IV Federal Financial Aid.

+ indicates course has a prerequisite and/or corequisites.

Program Prerequisites: 14

CCL in Workforce Development: Automotive Technology Level I (5594N) 14

Required Courses: 16

	APT131	Automotive Manual Power Trains	6
	APT141	Alignment, Steering, and Suspension	6
+	APT262	Auto Electrical/Electronic Systems II	4
	OR		
	APT181	Engine Performance and Diagnosis I	6
+	APT262	Auto Electrical/Electronic Systems II	4
+	APT282	Engine Performance and Diagnosis II	6

Program Title: AAS in Workforce Development and Community Re-Entry

Major Code: 3092

Total Credits: 64-68

Description: The Associate in Applied Science (AAS) in Workforce Development and Community Re-Entry program is designed to provide incarcerated persons with the skills needed to effectively transition from incarceration to the community. Courses in the program will focus on job readiness, job preparation, and job retention skills as well as family reunification, personal and social skill development, and substance abuse education. The program includes a

Certificate of Completion (CCL) in Workforce Development and Community Re-Entry and an Associate in Applied Science (AAS) in Workforce Development and Community Re-Entry, as well as various other Certificates of Completion in the areas of Carpentry, Graphic Arts, Automotive Technology, Furniture Construction/Refinishing, Electrical, Trim Plumbing, Addictions and Substance Use Disorders, and Sustainable Food Systems.

Program Notes:

Students must earn a grade of C or better for all courses required within the program.

+ indicates course has a prerequisite and/or corequisites.

++ indicates any suffixed courses.

Admission Criteria: Permission of Department or Division is required for admission to the Workforce Development and Community Re-Entry program.

Required Courses: **13**

Certificate of Completion in Workforce Development and Community Re-Entry (5581)	13
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Restricted Electives: **26-30**

Students will choose one of the following for a total of 26-30 credits.

Students must choose 26-30 industry/job specific elective credits from the list of Restricted Electives below. These industry/job specific credits must include a minimum of 9 credits with a common prefix.

- ABA+++++ Any ABA Arizona Builders Alliance course
- ABC+++++ Any ABC Associated Builders and Contractors course
- ACC+++++ Any ACC Accounting course
- ADA+++++ Any ADA Advertising Arts course
- AEN+++++ Any AEN Alternative Energy course
- AGB+++++ Any AGB Agribusiness course
- AGL+++++ Any AGL Agricultural Landscape course
- AGS+++++ Any AGS Agricultural Science course
- APT+++++ Any APT Automotive Performance Technology course
- AUT+++++ Any AUT Automotive Technology course
- BLT+++++ Any BLT Building Safety and Construction Technology course
- BPC+++++ Any BPC Business-Personal Computers course
- CIS+++++ Any CIS Computer Information Systems course
- CNS+++++ Any CNS Construction course
- CPD+++++ Any CPD Counseling and Personal Development course
- ELA+++++ Any ELA Electrician: Apprenticeship course
- FON+++++ Any FON Food and Nutrition course
- GTC+++++ Any GTC General Technology course
- IEC+++++ Any IEC Independent Electrical Contractors course
- IMC+++++ Any IMC Interstate Mechanical Contractors course

IND+++++ Any IND Industry course
PRM+++++ Any PRM Property Management course
REC+++++ Any REC Recreation course
SUN+++++ Any SUN Sundtcorp course
WLD+++++ Any WLD Welding Technology course

OR

Certificate of Completion in Workforce Development: Carpentry Level I (5584N) (14)
Students must also choose 12-15 industry/job specific elective credits from the list of Restricted Electives.

OR

Certificate of Completion in Workforce Development: Carpentry Level II (5586N) (27.5)
Students must also choose 0-1.5 industry/job specific elective credits from the list of Restricted Electives.

OR

Certificate of Completion in Workforce Development: Electrical Level I (5588N) (12)
Students must also choose 14-17 industry/job specific elective credits from the list of Restricted Electives.

OR

Certificate of Completion in Workforce Development: Electrical Level II (5590N) (26.5)
Students must also choose 0-2.5 industry/job specific elective credits from the list of Restricted Electives.

OR

Certificate of Completion in Workforce Development: Automotive Technology Level I (5594N) (14)
Students must also choose 12-15 industry/job specific elective credits from the list of Restricted Electives.

OR

Certificate of Completion in Workforce Development: Automotive Technology Level II (5597N) (30)

OR

Certificate of Completion in Workforce Development: Furniture Construction/Refinishing Level I (5603N) (12)
Students must also choose 14-17 industry/job specific elective credits from the list of Restricted Electives.

OR

Certificate of Completion in Workforce Development: Furniture Construction/Refinishing Level II (5604N) (26)
Students must also choose 0-3 industry/job specific elective credits from the list of Restricted Electives.

OR

Certificate of Completion in Workforce Development: Graphic Arts Level I (5605N) (12)
Students must also choose 14-17 industry/job specific elective credits from the list of Restricted Electives.

OR

Certificate of Completion in Workforce Development: Graphic Arts Level II (5606N) (27)
Students must also choose 0-2 industry/job specific elective credits from the list of Restricted Electives.

OR

Certificate of Completion in Workforce Development: Trim Plumbing (5882N) (18)
Students must also choose 8-11 industry/job specific elective credits from the list of Restricted Electives.

OR

Certificate of Completion in Workforce Development: Foundations in Addictions and Substance Use Disorders (5894N) (12-13)
Students must also choose 14-16 industry/job specific elective credits from the list of Restricted Electives.

OR

Certificate of Completion in Workforce Development: Introduction to Sustainable Food Systems (5895N) (12)
Students must also choose 14-17 industry/job specific elective credits from the list of Restricted Electives.

General Education Requirements **25**

General Education Core **15**

First-Year Composition **6**
Any approved general education course from the First-Year Composition area.

Oral Communication **3**
Any approved general education course from the Oral Communication area.

Critical Reading **3**
Any approved general education course from the Critical Reading area.

Mathematics **3**
Any approved general education course in the Mathematics area.

General Education Distribution **10**

Humanities, Arts and Design **3**
Any approved general education course from the Humanities, Arts and Design area.

Social-Behavioral Sciences **3**
Any approved general education course from the Social-Behavioral Sciences area.

Natural Sciences **4**
Any approved general education course from the Natural Sciences area.

II. Program Purpose and Mission

The purpose of this program is to provide currently incarcerated men and women a chance to learn skills in the area of basic automotive service and maintenance. These skills are in high demand in a large number of service shops, including quick lube and quick service shops like Brake Master, Jiffy Lube, Pep Boys, Just Brakes, AAMCO, and many independently-owned neighborhood service shops. Additionally, these skills are transferrable to parts sales such as O'Reilly, Autozone, and NAPA, to name a few of the larger stores. This program was created specifically to meet the needs of the incarcerated population. The courses are District-wide, but the choices and sequence were unique to Rio Salado College, limiting student options and opportunity to continue studies post-release. A recent change now aligns the Rio Salado program with other District programs, providing students enhanced opportunity to complete advanced courses in automotive technology.

This training and education program for the incarcerated population serves the community directly by reducing recidivism through meaningful living-wage employment opportunities upon release. These courses are focused on basic skills and are customized so that all individuals enrolled have a reasonable chance of acquiring the skills due to the hands-on instructional format. Classes are held daily with maximum enrollment of 25 students, assuring more personalized and focused instruction to assist in our goal of all students learning these skills. Finally, these courses are offered at no cost to the incarcerated student, and they are taught on the prison grounds to students not yet released. This approach is relatively unique in the country, and it allows instructors to embed life and work skills into the training, resulting in more complete preparation for re-entry to society. This current state is extremely supportive of the recent changes to the curriculum and District-standard courses, certificates and degrees now offered by Rio Salado.

III. Student Population of the Automotive Technology Program

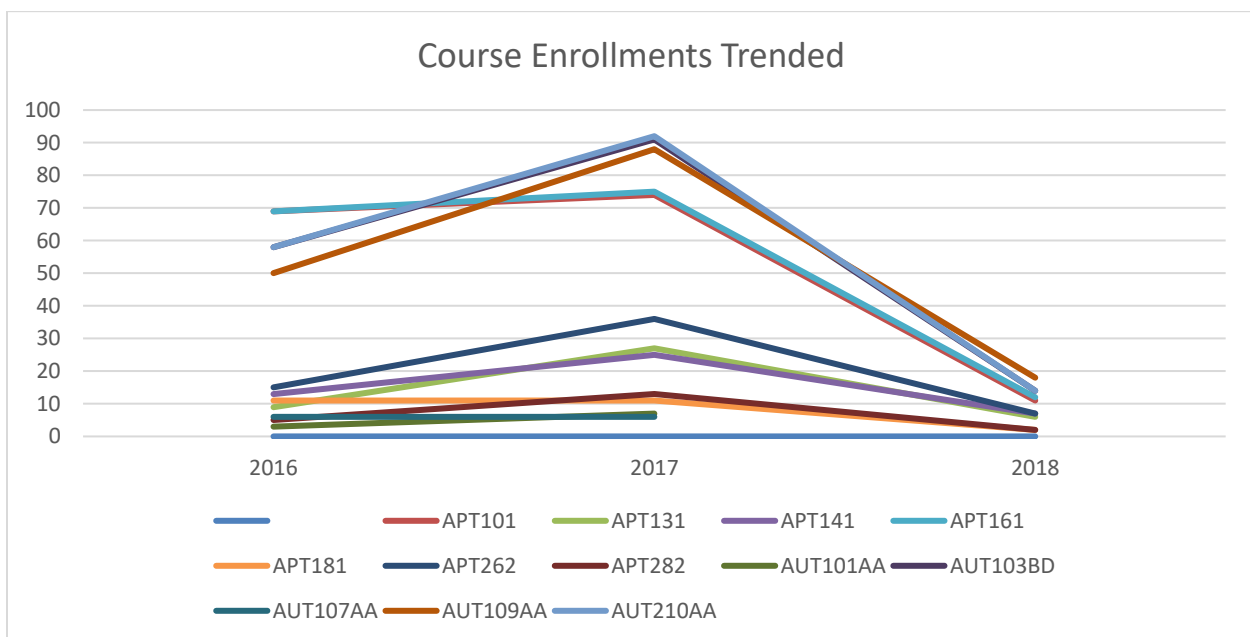
An analysis of disaggregated student enrollment data did not reveal any trends or conditions directly impactable by Rio Salado for several reasons. The entire student population is established by the AZ Dept. of Corrections because students are placed in classes and programs based on internal criteria. In simple terms, students in this program do not self-select or choose to enroll, rather they are told to attend. Because of this, the student demographic is not necessarily representative of the population and is certainly not impacted by specific recruitment strategies used by many college programs. This forced enrollment creates an additional challenge for instructors because most students have neither an interest nor previous experience in automotive repair. Instructors must find ways to engage unwilling

participants in the first few days in order to assure persistence *in the course*, very different from typical persistence measures. Favorably, what typically begins with 80% or more of the class not wanting to attend shifts to almost 25% considering possible employment as automotive service technicians. By the end of the program most students comment favorably on the learning and skill acquisition, a testament to the quality of instructional content and instructor expertise. Data indicates that typically 70% of these students are first-generation college and 30% have had no previous college courses, likely correlated to conditions and factors resulting in their incarceration.

Enrollment Trends

Table 1. FTSE by Year - Automotive Technology			
	2016	2017	2018
C-DAPes (Declared Academic Plan /Enrolled in Core Program Courses)	46.8	57.7	10.3

The data indicate a significant decline in 2018 enrollment. Two factors worked together to negatively impact the FTSE. First was a retirement of the incumbent instructor. Second was a District-wide hiring freeze as system changes and a personnel review were conducted. These impacted both prison locations and all courses in the program.



The impact of the instructor’s retirement is clearly repeated in all courses. However, some interesting conditions in course enrollment are noted. First and most importantly, AUT101AA and AUT107AA are “OR” options for AUT109AA, a course on braking systems. Thankfully, the enrollments favor the more critical course covering maintenance and repair of brakes! However, an equally important course on electrical systems, APT161 shows enrollment decline prior to the retirement. One possibility is that this course is fairly difficult, and the instructor did not actively encourage students to complete the requirements due to his impending retirement. This is a required course in the program and without an opportunity to complete the course, program completion is impossible. This likely accounts for the significant decrease in cohort completion rates from almost 65% in 2016 to less than 15% in 2018. When the inability of a student to be enrolled in a required course is considered in combination with the factors of inmate movement and release, the impact on program completion is profound. The modifications to the program in 2019 not only allow students to complete courses standard to all automotive technology programs in Maricopa District, but have the added benefit of reducing the credits and time to complete the program. This is extremely important due to inmate transfer and re-entry policies that are managed without consideration of the individual’s remaining time to fulfill the program requirements. Additionally, skills-based learning outcomes in the new program are much better aligned with industry hiring requirements and job attainment in livable-wage employment is considered a major factor in reducing recidivism.

Graduation data is shown in the following tables. Over the study period, 147 Level I certificates were awarded while 40 Level 2 certificates were awarded. Due to the nature and composition of the AAS, disaggregated data that includes students with these specific certificates is not available. The notable increase from 2016 to 2017 can be attributed to the Faculty Chair and Supervisors working with instructors in these programs to reduce the time students were taking to complete the courses. Also, a significant number of students who completed the certificate requirements in 2016 were not awarded until 2017. Recent improvements in award processing should prevent this situation from occurring again. The decrease in awards for 2018 is a result of the decline in course enrollment detailed earlier.

Cohort Graduation Rates - Automotive Technology Level I			
	Year Conferred Award		
	2016	2017	2018
Total Graduates¹	21	104	22

Cohort Graduation Rates - Automotive Technology - Level II			
	Year Award Conferred		
	2016	2017	2018
Total Graduates ¹	1	27	12

IV. Student Goals

The achievement of student goals is a tricky situation to address. Students are placed in this program based on a Dept. of Corrections metric called “Priority Ranking,” which has nothing to do with the student’s interest, skills, or ability. Stated simply, priority ranking means they are model inmates who have earned lower custody privilege and are ‘rewarded’ by placement in classes off the custody yard. Most female students have no initial interest in learning about automotive maintenance and passively resist the educational process. Some will refuse to attend, feigning illness, while others are individually more direct and openly complain in order to be removed. The main challenge is to convince these persons that the skills they learn are interesting, important, and offer an opportunity for their future. Once the student recognizes the benefit and ‘buys in’ to the instructional outcomes, their goals are to finish the program! This might seem paradoxical for someone who started out not even wanting to take a class and ends up wanting a certificate. However, the conversion is due to strong applied skills and meaningful assignments where students see the relevance and become convinced of the future opportunity. Instructor passion, knowledge, and creative approach to the educational process, coupled with recent and significant additions and upgrades to materials, equipment and educational setting are contributing factors to this transformation in (female) student attitude. In summary, the student goal changes over the course of the program. In contrast, the attitude of male students is that cars are cool, but most want to focus on how to make them go fast or trick them out and are disappointed when basic maintenance skills are emphasized. In some ways the challenge is more difficult, and the instructor is forced to approach the educational process differently. Again, student goals change as they begin to realize how relevant instruction in basic maintenance, repair and vehicle operation helps them with unconventional vehicle modifications!

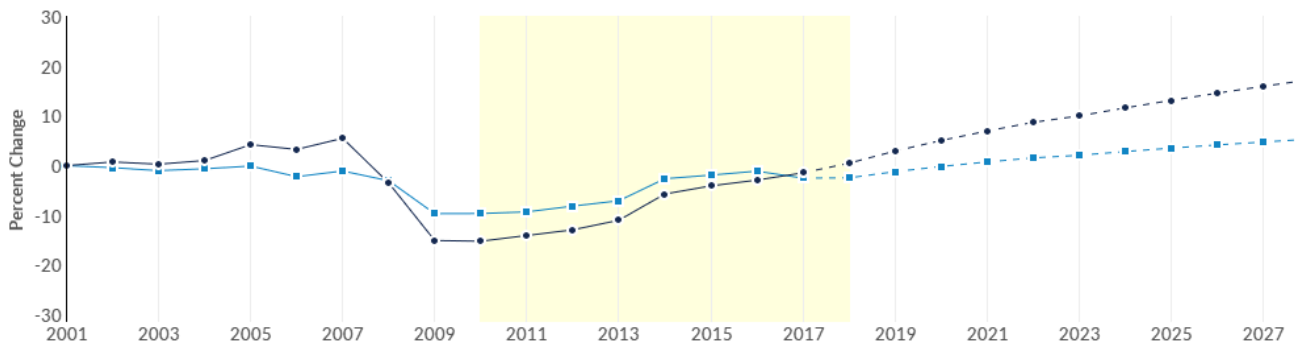
V. Evaluation of Curriculum

Regular Advisory Council meetings are held, and curricular outcomes reviewed. However, the primary indicator of the relevancy of the curriculum was the internal hiring of our graduates to work in the Dept. of Corrections Motor Pool pre-release and the hiring of students by local employer’s post-release. During the time spanned by this program review, the curriculum was

focused on the Level 1 CCL. Student completion in the Level 2 CCL was about 30% of the total due to several factors. Among these are inmate movement and the advanced nature of curriculum. Advisory Boards indicate that basic maintenance and repair are job areas where this population has the best opportunity, and these are met with the Level 1 CCL with Level 2 competencies having little direct relevance. Finally, the AAS is only attainable if a student completes a CCL in Workforce Development. During the time of this review, this content was only available through print-based, self-pay format.


Significant changes were made over AY2018-19, prompted in large part by Guided Pathways and supported by the new instructor as well as three other Maricopa Colleges that offer automotive degrees. Critically important is that starting in September 2019, students from the incarcerated population will take the same courses as any other Maricopa student. This assures common skills, certificates and transferability to degree programs once they are released. These changes are favorably augmented by the college commitment of more than \$250,000 in equipment, tools and instructional facility upgrades over the past two academic years. Transfer of assets in the form of vehicles from sister colleges in Maricopa District further enhances student learning. Finally, as a result of this commitment of resources, the Dept. of Corrections supported a change to expand a half-time program at both Lewis and Perryville Correctional facility to 2 full-time programs. This further decreases the time to program completion, likely increasing the number of students able to complete the required coursework and therefore improving post-release employment options.

Job Outlook: Regional Trends



	Region	2010 Jobs	2018 Jobs	Change	% Change
●	Region	8,410	9,967	1,557	18.5%
●	Nation	599,363	646,974	47,611	7.9%

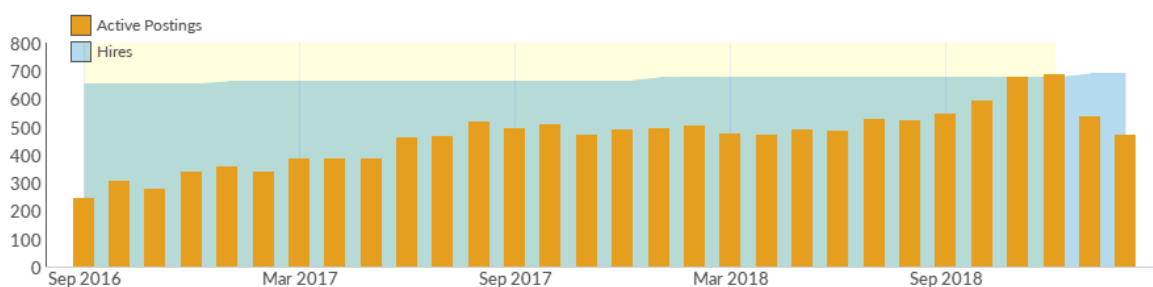
Job Postings Summary

4,139 Unique Postings 20,727 Total Postings	5 : 1 Posting Intensity Regional Average: 4 : 1 	40 days Median Posting Duration Regional Average: 31 days
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There were **20,727** total job postings for your selection from September 2016 to December 2018, of which **4,139** were unique. These numbers give us a Posting Intensity of **5-to-1**, meaning that for every 5 postings there is 1 unique job posting. This is close to the Posting Intensity for all other occupations and companies in the region (4-to-1), indicating that they are putting average effort toward hiring for this position.

Job Postings vs. Hires

461 Avg. Monthly Postings (Sep 2016 - Dec 2018)	668 Avg. Monthly Hires (Sep 2016 - Dec 2018)
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Occupation	Avg Monthly Postings (Sep 2016 - Dec 2018)	Avg Monthly Hires (Sep 2016 - Dec 2018)
Automotive Service Technicians and Mechanics	461	668

VI. Student Learning Outcomes

a. Program-Level Student Learning Outcomes

Summarize basic principles of automotive service operations. (APT101)

Describe the organizational structure of automotive service management, automotive service, and parts department. (APT101)

Review automotive theory. (APT161)

Explain procedures for repairing automotive batteries and related circuits. (APT161)

Summarize basic principles of automotive service operations. (APT101)

Describe the organizational structure of automotive service management, automotive service, and parts department. (APT101)

Review automotive theory. (APT161)

Explain procedures for repairing automotive batteries and related circuits. (APT161)

Identify automotive charging systems and related components. (APT161)

Diagnose, test, service, and repair various automotive electrical and electronic automotive systems. (APT161)

Summarize reconditioning procedures for automotive ignition systems. (AUT103BD)

Explain the evaporative system and exhaust system for automotive emission control systems. (AUT210AA)

Identify major components and designs of exhaust system devices. (AUT210AA)

Identify federal and state emission testing procedures and standards. (AUT210AA)

AND

Summarize how internal combustion engines operate. (AUT101AA)

Explain various components of internal combustion engines and their function. (AUT101AA)

OR

Explain the theory and principles of automotive refrigeration and air conditioning. (AUT107AA)

Demonstrate ability to diagnosis, service, repair, and recondition automotive air conditioning systems. (AUT107AA)

OR

Summarize the fundamentals and principles of automotive brake systems. (AUT109AA)

Differentiate between power brake systems and anti-lock brake systems. (AUT109AA)

Upon completion of this CCL in Automotive Technology Level 1, the student is prepared to engage in very basic automotive service tasks including:

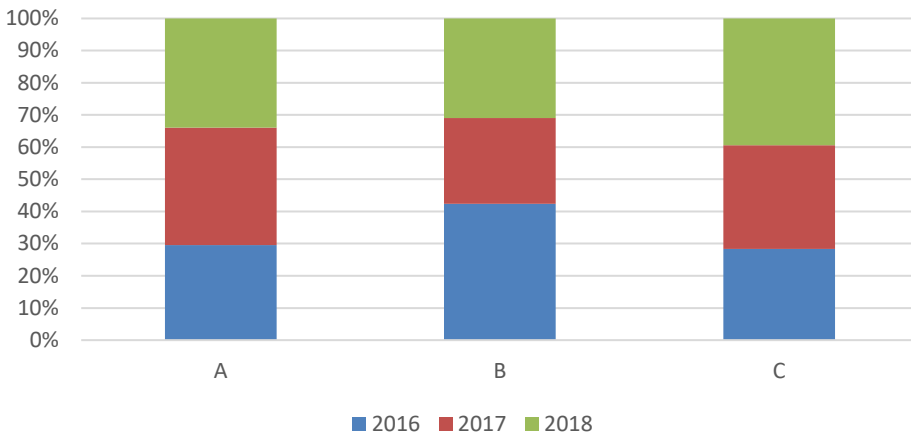
- Service and replacement of disc brakes

- Replacement of oil, oil filters, air filters

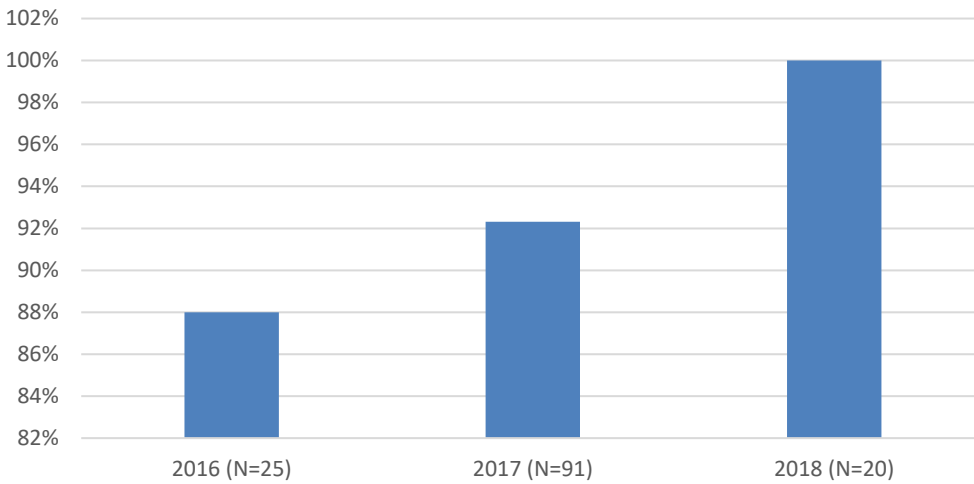
- Replacement of fuses, lamps, and other basic electrical parts

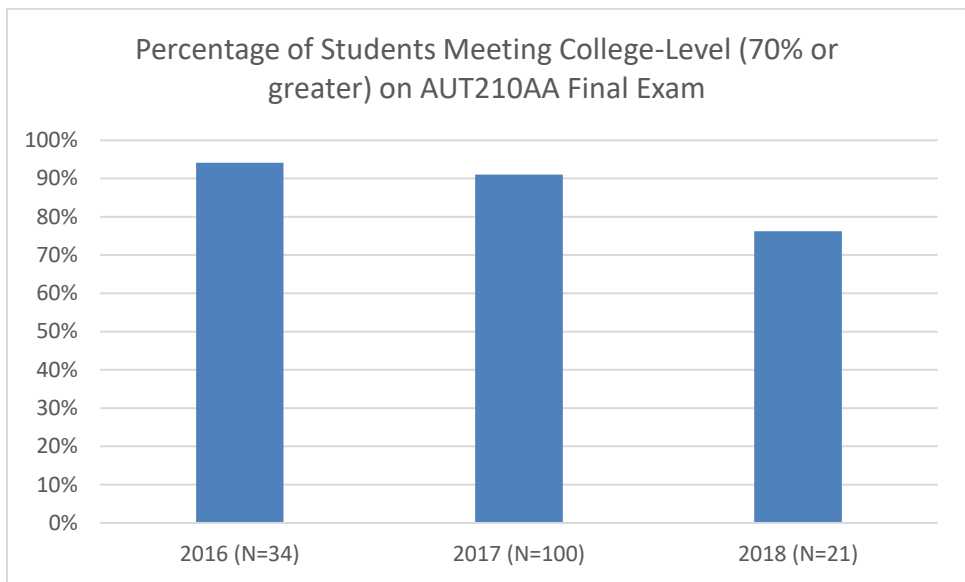
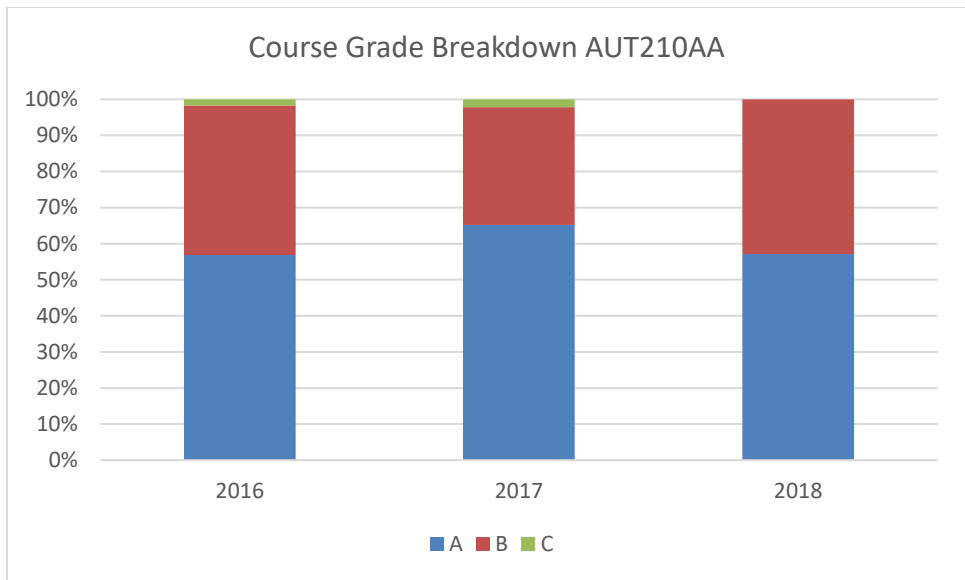
See below for data on student learning outcome achievement.

Course Grade Breakdown AUT109AA



Percentage of Students Meeting College-Level (70% or greater) on AUT109AA Final Exam





As stated previously, AUT109AA is a critical course and has significant safety implications since the content is braking (stopping) systems. Typically, this should be a gateway course and students would not progress to advanced stages of the course until ‘mastery’ of basic skills are demonstrated. Therefore, 88%-92% of the students achieving 70% or better on the final exam is expected. The final year pass rate of 100% of the students is both unexpected and inconsistent with previous years. However, the distribution of final grades remains consistent throughout the review period.

Compare and contrast AUT109AA with the AUT210AA course results. One would typically expect student performance in a 200-level course to be lower due to more complex concepts. However, AUT210AA was taught and assessed in a purely didactic mode, completely

unacceptable for this type of program. The resulting grade inflation is likely due to students using the resource materials during the assessment process because there was no opportunity to practice the skills. Additionally, this course has a pre-requisite that was not part of the program of study, further encumbering the opportunity to succeed without course material at the time of assessment. Finally, the learning outcomes (skills) defined for this course are not consistent with basic automotive repair.

Focusing on basic repair and maintenance, time necessary for skill attainment, and program completion are factors impacting job acquisition. Standardized district curriculum provides the opportunity for students from this population to continue in an Automotive Technology AAS rather than Workforce Re-entry AAS. Together these led to a decision to only offer a Level I CCL in Basic Automotive Maintenance starting November 2019

b. College-Wide Student Learning Outcomes

In addition to the program-level outcomes addressed above, Rio Salado College places a high priority on developing core competence in the following areas:

1. **Critical Thinking:** The student will demonstrate the ability to analyze information, evaluate material, use inference to draw conclusions, and use deductive reasoning and inductive reasoning at a college level
2. **Information Literacy:** The student will demonstrate the ability to determine an information need, access successfully and evaluate critically the needed information, and organize and apply the information appropriately to accomplish a given research task.
3. **Oral Communication:** The student will demonstrate the ability to prepare and present oral communication in a variety of contexts as a college-level speaker.
4. **Reading:** The student will demonstrate the ability to comprehend a variety of materials by determining the central idea and providing textual evidence, drawing inferences or valid conclusions, analyzing the author's purpose and bias, and applying the text to a given task or course content.
5. **Writing:** On a written assignment, the student will demonstrate the ability to generate relevant and sufficient content; organize his or her thoughts coherently; adhere to the conventions of correct mechanics and sentence structure; and use correct terminology and rich vocabulary in the fulfillment, at the college level, of his or her writing assignments.

For more information:

<http://www.riosalado.edu/about/teaching-learning/assessment/Pages/SLO.aspx>

The integration of College-Wide Student Learning Outcomes is an area needing effort and improvement. Current assessments were not created by faculty experienced or trained in assessment techniques nor were they reviewed by this Faculty Chair prior to now. Prompted by this Program Review and necessitated by the changes to curriculum, all assessments are undergoing revision to include elements to support college-wide student learning outcomes.

It will take at least a year to accumulate enough data points on the new assessments for the information to become meaningful. The good news is that both sites will soon be 5 day per week programs rather than the present schedule of 2 days a week per site. This will significantly increase the number of data points and the rate at which data is accumulated.

VII. Effective Teaching

- Beginning three years ago, instructors for this program began attending the All Faculty meetings.
- Beginning in 2018, all new instructors are now required to take certain AFD courses. The Chair has been committing time with all new instructors to address in-person teaching practices.
- As an augment to teaching practices, the Chair is working with these individuals to modify assessment techniques by shifting from written assessment format to project/performance-based assessments. This has proven to be much easier process for the newer instructors who are less entrenched in historical methods and process.

VIII. Retention and Persistence

This program is intentionally designed to be short duration since the goal is to complete the training in anticipation of release from the system. Additionally, typical measures of retention and persistence are not valid due to the enrollment being a mandatory assignment by the Dept. of Corrections, and the fact that continuation of this enrollment being impacted by inmate movement and release managed by this same organization. Neither the student nor Rio Salado College can impact either of these conditions.

IX. Impact of Co-curricular Programs

Incarcerated persons enrolled in this program are not participating in co-curricular activities, nor are there any honors-only courses.

X. Program Resources

In order to maintain, and in certain cases attain, the educational standards and assure learning outcomes consistent with our three sister institutions, significant expenditures in equipment and materials is required. Specific needs are lifts to demonstrate safe use, wheel and tire service (a new instructional area for the prisons), spring and strut equipment to upgrade and meet instructional standards, and additional drum brake trainers to assure student skills on all braking systems (not just disc brakes). This is being supported by an \$85,000 commitment of Prop 301 funds in FY20.

The incarcerated population currently has no internet access, making most college academic resources unavailable. However, there is a full-time Student Services Specialist at both Prison sites.

XI. Program Recommendations, Decisions, and Action Plans

a. Program Best Practices

- A significant issue for the population served by these CCLs is that they were not applicable to any other AAS in the District. Thus, the CCLs were extremely limiting. An important outcome of recent work is that the new Level 1 curriculum students take while incarcerated is better focused on employability and it directly transfers to other programs in the District, meeting the needs of a general AAS in Automotive Technology rather than just the AAS in Workforce Development and Community Re-entry. This is an improved pathway, with less negative stigma for students to pursue post-release.
- Completion should be improved due to two changes, both related to scheduling. The first change allows students to meet for 6-hour blocks rather than 3- hour blocks. Not only does this reduce the time to complete, but it also allows students to complete lab projects without interruption. The second change involved meeting 5 days per week rather than 2 days per week. This was due to agreement from AZ Dept. of Corrections (ADOC) allowing the hiring of a second instructor. With this additional meeting time, the significant investment in equipment is more fully utilized and the additional skills that are part of the modified program discussed above are now completed in approximately 12 weeks.
- This program is following a “cohort instructional model” which allows direct instructor-led instruction. This is highly effective in promoting student learning but required adaptation in enrollment and instructional approach. The main reason for these adjustments is due to student movement to meet ADOC needs. Simply stated, in this

new cohort model students are enrolled at the start of the next course after placement in the program and “roll through” to make up the courses that were missed prior to placement by ADOC.

- The program is transitioning from strong emphasis on theory to project-based learning by utilizing the lab equipment purchased in the last year. This is known best-practice for career and technical education and is now possible due to the equipment and schedule changes. Students are highly motivated in these courses and look forward to “lab days.”

b. Program Viability

These programs are funded through a Dept. of Corrections contract to provide instructors and instructional materials, which does not include equipment and course content. This funding is limited to salary, benefits, and consumable materials to support specific programs.

Additionally, ADOC provides instructional space and infrastructure, including utilities. All curricular content for these programs is based on MCCCDCD curricular standards, created by District Faculty and Instructional Councils. The primary goal of the program is to provide employable skills to incarcerated persons who are close to release. Nationally and locally, the evidence supports that meaningful college-level education, especially in trade-based jobs, significantly increases the ability of these persons to re-integrate in society. Enrollment is mandatory placement in the program according to Dept. of Corrections policy.

c. Action Plans

Further research will be conducted to answer the following questions:

How can college-wide and program learning outcomes be better tracked for reporting against College standards?

How can in-person instructors, many with no formal college education but significant and meaningful experience, become better prepared to teach (especially in this setting)?

d. Recommendations

- Improve the curricular process and tracking of student performance by assuring all courses are managed using RioLearn, and that instructors use RioLearn as the repository for all student assessment records.
- Assessments need to be reviewed by the Faculty Chair to assure conformance to course-level learning outcomes and Rio Salado College standards. This will help with future program review tracking, completion and enrollment tracking, and individual assignment records specifically related to the college-wide student learning outcomes.

- College-wide learning outcomes need to be implemented where possible and assessments developed to measure changes.
- Course content and assessments need to fully align with the Course Outlines for Competencies/Learning Outcomes to meet the national standard of Automotive Service Excellence.

Version 6. Last Updated by Assessment Committee 12-5-2018