



# 2016-17 Academic Department Annual Report

**Academic Department:**  
**Document Prepared By:**

Automotive Technology  
Chad Lodenstein, Department Head

## **Annual Report Submission Instructions:**

This Annual Report of your Academic Department is intended to serve as a summary of departmental activities over the past year and as an outline of plans for the upcoming year.

Please note that responses are limited to the space provided below for each prompt and do not need to be written in narrative form (you are welcome to use bullet points/lists, as appropriate).

Please submit your Academic Department 2016-17 Annual Report to your Dean via email by May 31<sup>st</sup>.

For your reference, prior year reports (2011-2015) can be found on the Instructional Support website, <http://www.grcc.edu/instructionalsupport/departmentyearendreports>. If you have any questions about the 2015-16 reports entered into WEAVEonline, please contact Sheila Jones, Dean of Instructional Support, [sheilajones@grcc.edu](mailto:sheilajones@grcc.edu) or x4289.

## **Part I: Report on 2016-17 Progress**

Part I is intended to provide a “big picture” overview of your department’s activities during this past academic year. When completing the sections below, please consider the main points/highlights of each category.

### ***Current Year Goals & Outcomes***

This section asks you to provide details about the status of your department’s goals and outcomes for this past year. Please limit your response to the space provided in the text boxes below.

**Goal 1.** Implement and assess new department advising plan with faculty-to-student communications and comprehensive advising and course planning.

**Outcome:** The department's advising plan was revised for Fall, 2017. The revised plan added detailed roles of both the faculty members and the department head. The faculty members have observed an increase in student advising contacts. Students are receiving quality advising, from faculty members who know the proper course sequencing. An "Advising Information for Auto Tech Students" tab has been added to the Auto Tech group on Blackboard.

**Goal 2.** Expand coverage of electrified vehicles in curriculum, likely including a new course.

**Outcome:** A new course, TR275 – Hybrid Vehicle Operation, Maintenance, and Diagnostics was developed by Benjamin Smith. This course was offered on the Winter, 2017 schedule, but it was cancelled, due to low enrollment. After review of the program courses and credit hour requirements, the TR275 course was changed from an "or" to an "and." The department is using the extra time to plan for the course and procure additional tools and equipment for this specialized area.

**Goal 3.** Participate in Skills USA competitions

**Outcome:** Students participated in Skills USA competitions for the second consecutive year. This year, our two of our students secured second and third place in the competition. The faculty members in the department collaborated at the end of the Fall, 2016 semester to conduct hands-on testing that was used as a qualifier for the State competition. This hands-on testing was beneficial to both the faculty members and the students. The faculty members were able to identify instructional weaknesses in individual courses. The students were able to test their skills and, in some cases, determine where improvements were needed.

**Goal 4.** Expand recruiting efforts, including

- a. Visits to repair facilities, reaching out to technicians who may need training for advancement
- b. Showing of Auto Tech Student Org project vehicles at local events
- c. Participation by faculty members at GRCC-hosted recruiting events

**Outcome:**

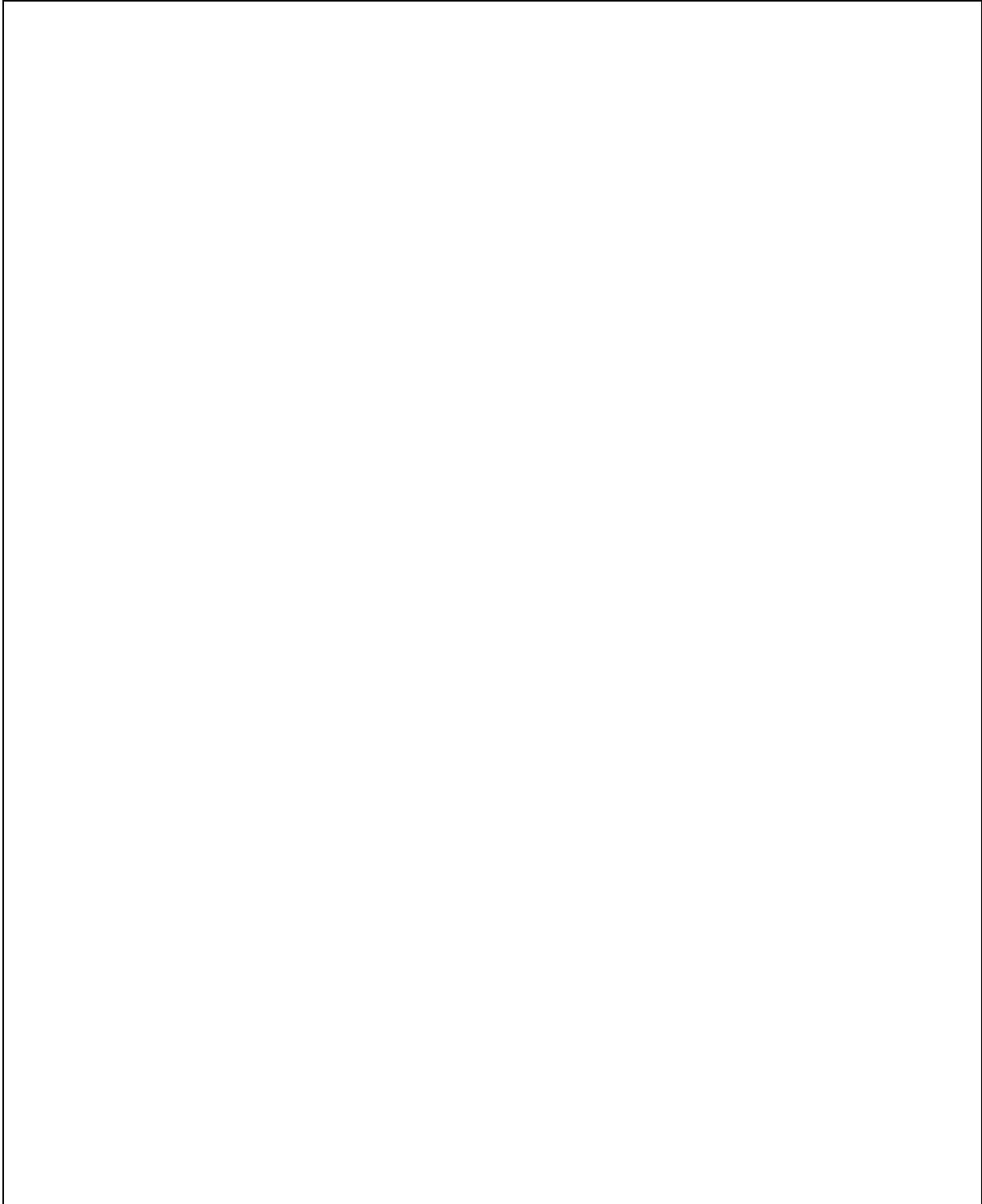
- a. As Department Head, I visited several area repair facilities to increase awareness of our program. One product that resulted from these visits was the addition of a few new members to our advisory committee. The recruiting of existing technicians who are in need of training and certifications will be an ongoing effort.
- b. Both the Jeep and the Subaru BRZ project vehicles were used at local events, including: West Michigan 4x4 fest, Silver Lake, Furrin Group, Sonic, Kent – KCTC, Ottawa CTC.
- c. After discussion of low turn-out of automotive students at previous events, the department faculty members decided to now participate this year.

**Unplanned Goal:** Chrysler MOPAR CAP LOCAL integration and implementation

**Outcome:** After being approached by the National Coalition of Certification Centers (NC3) to become a Chrysler MOPAR CAP LOCAL program, the Automotive Technology department rapidly integrated the program into our curriculum and course sequencing. This addition to our program offers many benefits to students, including industry credentials, quality online training, and reinforcement of learning.



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### ***Departmental Professional Development***

In this section, please provide details about your department's emphasis for professional development during this year. Please limit your response to the space provided in the text box below.

Every faculty member is required to complete at least 20 hours of technical training to meet NATEF standards.

As part agreement to add MOPAR CAP LOCAL to our program, all of the faculty members completed over 40 hours of training.

Benjamin Smith and Brett Atchison attended technical training seminars at the Mobile Air Conditioning Society Trade Show and Conference event in February, 2017.

### ***Departmental Advising Plan & Outcomes***

In this section, please describe your department's advising plan and outcomes for this year. Please limit your response to the space provided in the text boxes below.

## Automotive Technology Student Advising Plan

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### **1) Automotive Technology department advising plan objectives**

Student advising objectives:

- Send welcome emails and faculty-advisor introduction to students
- Provide advising session (schedule check) on first day of class
- Schedule monthly drop-in advising sessions
- Offer course-scheduling and transcript-review sessions

### **2) Assignment of Students to Faculty Members**

In the Auto Tech organization that is set up on Blackboard, three groups of students will be set up. Each faculty member will be assigned a group of students. E-mails and announcements can be sent to each group. Faculty advisors can print a photo roster to help identify student advisees. Faculty members can also use Blackboard to scan student course schedules.

### **3) Instructions for Faculty Members**

#### Faculty-Advisor Introduction

In the week leading up to each semester, send an email to your student group. Welcome the students to the start of the semester and introduce yourself as their faculty advisor. Explain your role, which is to help guide students in course planning and completion of program requirements. Advise the students of the dates (possibly tentative) for drop-in advising and scheduling sessions.

#### First-Day of Semester Plan

Post an announcement on Blackboard (also send as email) in the days leading up to the start of the semester, recommending that the students bring their printed schedule to review with you in the first two days of classes. The main goal is to have faculty members use this opportunity to confirm that the schedule is both efficient and meets the student's goals.

Drop-in Advising

Students rarely utilize faculty office hours, so the goal of offering scheduled advising sessions is to let the students know that we expect them to drop-in for assistance and advice. Schedule monthly drop-in sessions and announce the dates to the students.

Course Scheduling and Transcript Review

In the week leading up to open enrollment, provide a meeting time for students to get assistance in scheduling courses.

Outcomes:

Since implementing the faculty-to-student advising plan, the department's faculty members have observed an increase in volume of student advising sessions every year. While many students still interact with counselors, the awareness of the importance of faculty advising is starting to increase among students.

***Program Accreditation Updates***

In this section, please provide details regarding any program accreditation or re-accreditation that occurred this past year, if applicable. Please limit your response to the space provided in the text boxes below.

NATEF Mid-Point Compliance Review was completed in 2015-16. Recertification will be required in 2017-18.

***Perkins & Key Performance Indicators***

In this section, please discuss Perkins and Key Performance Indicators for programs (total student enrollment, demographic profile, new students, student progress rate (transferred, graduated, enrolled), number of graduates, graduate employment rate, time to completion), if applicable. Please limit your response to the space provided in the text boxes below.

**Certificate and Degree 1P1: N/A**

**Certificate 2P1:** 0% - This data is inaccurate. Five students earned a certificate this year (see data on the next page).

**Degree 2P1:** 19% - This percentage falls short of the expected level, but changes in program requirements and general education course requirements should help to increase the number of graduates.

**Certificate 3P1:** 31.82% - The certificate program is intended to be completed in one year, so retention would not indicate success.

**Degree 3P1:** 61% - The percentage of concentrators remaining in the program or transferring to another institution is 10% lower than expected. Changes in the program's required courses may help improve retention and completion in the future. Additional improvements in student advising could help to identify students who intend to complete a one-year certificate, instead of a two-year degree.

### Certificate and Degree 4P1: 0% Placement

As Department Head, I follow up with graduates each year, per NATEF requirements. According to my data, 79% of students either secured employment in the automotive industry or transferred on to Ferris State University. (Note: I was unable to contact 10% of the graduates)

#### Graduates 2015-2016

##### Summary:

Five students earned a Certificate	<b>Certificate</b>	5
Fourteen students earned an AAAS	<b>AAAS Degree</b>	14
	<b>Total</b>	19

##### Placement:

Of the nineteen grads, twelve entered automotive technology field.	<b>Automotive</b>	12
Two of the graduates are employed outside of the field of automotive technology	<b>Other</b>	2
Unable to reach two of the graduates	<b>?</b>	2
Two students transferred to FSU after initial placement into field	<b>Place/Transfer</b>	2
One graduate transferred directly to FSU	<b>Transfer</b>	1
	<b>Auto industry placement and transfer %</b>	<b>79%</b>

##### Certificate Program

ID	Degree	Initials	Employer	Position/Title
1	CERTIFIC	JD	Berger Chevrolet	Technician
2	CERTIFIC	ES	Fox Honda	Technician
3	CERTIFIC	NB	Dykstra's Automotive	Technician
	<b>Degree</b>	<b>Initials</b>	<b>Employer</b>	<b>Position/Title</b>
✓ 1	AAAS	KR	Community Automotive	Technician
✓ 2	AAAS	MF	Chattahoochee Tech College	Instructor
✓ 3	AAAS	AV	German Auto Service	Technician
✓ 4	AAAS	AH	Import Service	Technician
✓ 5	AAAS	AC	Family Farm	Equipment Maintenance & Repair
✓ 6	AAAS	LJ	Valley Truck, then Burnips Equip	Technician
✓ 7	AAAS	AK	MDOT Garage	Technician
✓ 8	AAAS	KH	OK Tire, then FSU	Technician Continuing Ed
9	AAAS	MU	Cortez Garage	Manager, Service Writer, Technician
10	AAAS	SS	Van Andel & Flikkema CDJ	Technician
11	AAAS	NW	Schneider Tire Outlet, then FSU	Technician Continuing Ed

##### Continuing Education (two copied from above)

AAAS	MB	Transfer to FSU	Auto Engineering Tech
AAAS	KH	OK Tire, then FSU	Automotive Management
AAAS	NW	Schneider Tire Outlet, then FSU	Auto Engineering Tech

##### Non-Automotive

1	AAAS	KD	Grand Rapids Popcorn Co.
2	AAAS	DV	JR Automation Machine Builder

##### Unable to Contact

1	CERTIFIC	JL	?
2	CERTIFIC	RS	?



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**Certificate and Degree 5P1 and 5P2:** The percentage of participants from underrepresented gender groups in the certificate and degree programs is 15% and 26%, respectively. The percentages fall short of the expected 26%. With a shortage of technicians in the automotive service industry, and decreasing enrollment, it will likely be difficult to draw women into this program.

The high completion rate of 42% in the certificate program, and 14% in the degree program show that many women who enroll in the program are able to successfully complete the program.

### ***Learning Outcomes Assessment Data & Findings on Past Year's Projects***

In this section, please summarize your department's assessment work for this year, outlining the Program Learning Outcomes (PLOs) or Institutional Learning Outcomes (ILOs) assessed, the assessment measure, the findings, and the improvements planned based on the findings. Please limit your response to the space provided in the text boxes below.

The Automotive Technology program's primary tool for measurement of learning outcomes is Student ASE Certification tests. The test data provides year-to-year comparisons and benchmarking based on national data. In addition to assessing program learning outcomes, the Student ASE tests also measure the ILO's of critical thinking skills.

Students in 2016-17 had a 100% passing rate on Student ASE tests. Our students' test scores were at least 25% higher than national average in all subject areas. The highest comparison percentage was in the subject area of Brakes, with our students scoring 54% higher than average. A chart, comparing GRCC student scores to national averages is on the next page.

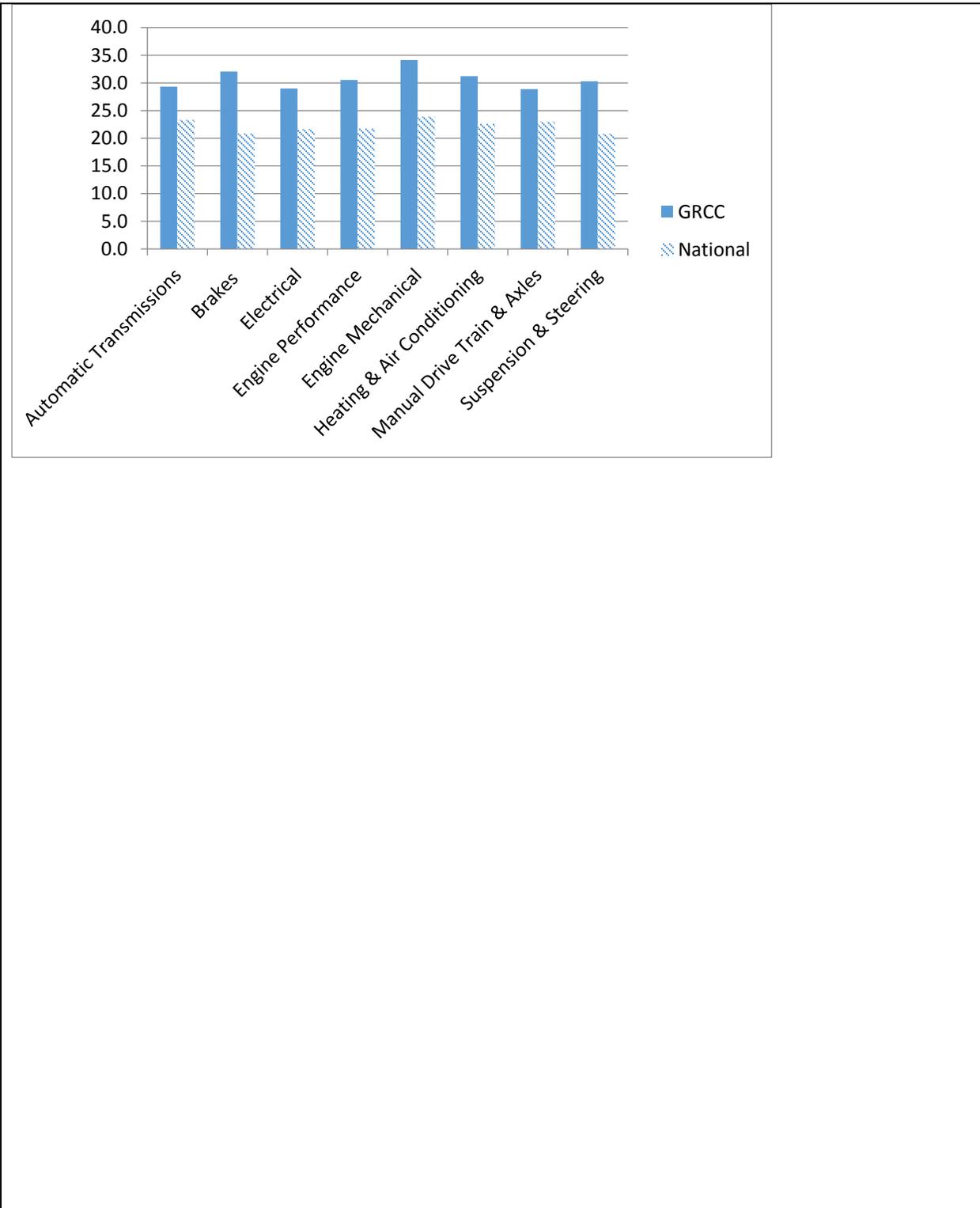
In past years, Heating & Air Conditioning and Suspension & Steering were identified as areas that could be improved. Our students scored higher than average in these subject areas, but not to the levels of other subject areas. Based on this data, the faculty members have focused on improvement through the following approaches:

- Increased technical training for faculty members
  - Perkins-funded training, such as MACS Conference
- Addition of a new course – TR245 Automotive Chassis Systems
  - Expanded coverage of Steering & Suspension, including wheel alignment practice
- New labs in TR143 Heating Ventilation & Air Conditioning
  - Collaboration between Chad Lodenstein, Brett Atchison (Auto Tech) and Gayl Beals (Job Training)

Outcomes:

Heating & Air Conditioning scores improved by 9%, with GRCC students scoring 38% higher than the national average. Suspension & Steering test scores improved by 7% over last year, and GRCC student scores averaged 46% higher than average.

A chart with test score comparisons of GRCC to national averages is on the next page.



## Part II: Plan for Upcoming Year

Part II is intended to provide a guide for your department's plans for the upcoming year with regards to the following: **Operational Goals and/or Plans, Curriculum Goals and/or Plans, Learning Outcomes Assessment Plans, and Advising Plans.** When answering the questions or completing the sections below, please consider the main points/highlights of each category.

### ***A. Operational Goals and/or Plans***

What are your departmental goals and plans for 2017-18?

- 1) MOPAR CAP LOCAL  
The CAP LOCAL program was added to the program curriculum in Fall, 2016. This program is in its infancy, and several changes were made by NC3 and Chrysler after the start of the school year. The faculty members modified plans several times and adapted to changes in policies and procedures. The first year was successful, in terms of student participation and feedback, but the course integration plan will be re-examined, modified, and improved.
- 2) Connections: Employers-to-Students and Students-to-Employers  
Working with advisory committee members, Fiat Chrysler employees, and local employers, a tentative plan has been set to help employers connect with students. Employer representatives will be invited to observe students during class lab sessions. The employers will be exposed to the excellence in our program, and they will have opportunities to introduce themselves and connect with students. The goal of this plan is to inspire and motivate students to fill the demand for automotive technicians by applying for jobs at employers who support our program.
- 3) Explore Creation of Apprentices Program  
At a May, 2017 roundtable discussion with NC3, Fiat Chrysler, and representatives from several community colleges, the topic of automotive apprentices was discussed. This program warrants further investigation as a potential solution to help fill the need for automotive technicians.
- 4) Skills USA Competitions  
After two successful years of competition in Skills USA competitions, the faculty members plan to participate again, next year.



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What new information from external sources has influenced your planning for next year?

- Advisory Committee
- Local Employers
- Industry (Fiat Chrysler and NC3)

Are your goals targeting any Perkins or Key Performance indicators? If yes, please explain.

Perkins:

1P1: Technical Skill Attainment

CAP LOCAL enhances and expands on technical skill attainment

2P1: Credential, Certificate or Diploma

CAP LOCAL participation results in industry certification

4P1: Student Placement

Plan to connect students to employers is intended to help with student placement



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What resources do you need to accomplish your departmental goals for the upcoming year?

None. We have the resources we need.

Do you need support from other departments to accomplish these goals? If yes, please explain.

Do you need professional development in order to accomplish these goals? If yes, please explain.

No



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For each of your departmental goals/plans/projects, please list the name of the lead faculty member(s) involved.

- 1) CAP LOCAL  
Lead faculty member: Brett Atchison
- 2) Apprenticeship, Creation of  
Lead faculty member: Chad Lodenstein
- 3) Skills USA  
Lead faculty member: Benjamin Smith

For each of your departmental goals/plans/projects, please provide a brief timeline for completion.

- 1) **CAP LOCAL**  
Timeline: Prior to start of Fall, 2017 semester
- 2) **Apprenticeship, Creation of**  
Investigate and determine feasibility in 2017-18 AY
- 3) **Skills USA**  
Qualification and selection of competitors at the end of the Fall, 2017 semester.  
Compete in Statewide competition in April, 2018

***B. Curriculum Goals and/or Plans***

What are your departmental curriculum development goals and plans for 2017-18?

Curriculum goals include:

- 1) Create a new Automotive Specialty Technician certificate. This certificate will likely consist of approximately 18-20 credit hours.

This certificate will align with the following occupation classification:

**49-3023.02 - Automotive Specialty Technicians**

Repair only one system or component on a vehicle, such as brakes, suspension, or radiator.

**Sample of reported job titles:** A/C Technician (Air Conditioning Technician), Automobile Mechanic (Auto Mechanic), Automobile Technician, Automotive Technician (Auto Technician), Drivability Technician, Heavy Line Technician, Lube Technician, Oil Bay Technician, Quick Service Technician, Service Technician

- 2) Design two hybrid courses, blending online learning with hands-on practice. The two targeted courses are TR102 Intro to Automotive Service and TR147 Automotive Brake Systems

Brett Atchison will set up the hybrid TR102 course.

Chad Lodenstein will set up the hybrid TR147 course.

**Review of Department's Curriculum Transferability**

*Please note: this section should be completed by all SAS Departments, Business, and CIS.*

Using transferability data provided by Instructional Support, please summarize your perceptions of how courses in your department transfer to our four-year university partners and how this understanding will impact your curriculum goals for the upcoming year.



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What new information from external sources has influenced your curriculum development planning for next year?

Are your curriculum development goals targeting any Perkins or Key Performance Indicators? If yes, please explain.



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What resources do you need to accomplish these curriculum development goals?

No

Do you need support from other departments to accomplish these curriculum development goals? If yes, please explain.

For each of your departmental curriculum development goals/plans/projects, please list the name of the lead faculty member(s) involved.



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For each of your departmental curriculum development goals/plans/projects, please provide a brief timeline for completion.

### ***C. Learning Outcomes Assessment Plan for 2017-18***

In this section, please outline your department's plan for learning outcomes assessment work for the upcoming academic year, outlining the Program Learning Outcomes (PLOs) or Institutional Learning Outcomes (ILOs) that will be assessed as well as the assessment instruments/measure that will be used. Please limit your response to the space provided in the text boxes below.

The use of Student ASE Certification tests for PLOs and ILOs has been effective in the past, so the Automotive Technology department plans to continue using these assessments next year.



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## ***D. Departmental Advising Plan for 2017-18***

In this section, please outline your department's advising plan for the upcoming academic year. Please limit your response to the space provided in the text box below.

### **1) Automotive Technology department advising plan**

Student advising components:

- Send welcome emails and faculty-advisor introduction to students
- Provide advising session (schedule check) on first day of class
- Schedule monthly drop-in advising sessions
- Offer course-scheduling and transcript-review sessions

### **2) Assignment of Students to Faculty Members**

In the Auto Tech organization that is set up on Blackboard, three groups of students will be set up. Each faculty member will assigned a group of students. E-mails and announcements can be sent to each group. Faculty advisors can print a photo roster to help identify student advisees. Faculty members can also use Blackboard to scan student course schedules.

### **3) Department Head Responsibilities**

- Post advising calendar on Blackboard group site and Automotive Technology web page.
- Send reminders to department faculty members to ensure timely communication with students.

### **4) Instructions for Faculty Members**

#### Faculty-Advisor Introduction

In the week leading up to each semester, send an email to your student group. Welcome the students to the start of the semester and introduce yourself as their faculty advisor. Explain your role, which is to help guide students in course planning and completion of program requirements. Advise the students of the dates (possibly tentative) for drop-in advising and scheduling sessions.

#### First Month of Semester Plan

Post an announcement on Blackboard (also send as email) in the days leading up to the start of the semester, recommending that the students bring their printed schedule to review with you in the first two days of classes. The main goal is to have faculty members use this opportunity to confirm that the schedule is both efficient and meets the student's goals.

Review student transcripts at the beginning of the winter semester and evaluate the status of students and each one's progress in the program.

#### Drop-in Advising

Students rarely utilize faculty office hours, so the goal of offering scheduled advising sessions is to let the students know that we expect them to drop-in for assistance and advice. Schedule monthly drop-in sessions and announce the dates to the students.

#### Course Scheduling and Transcript Review

In the week leading up to open enrollment, provide a meeting time for students to get assistance in scheduling courses.

## Part III: 2016-17 Faculty & Staff Accomplishments/Awards

Part III is intended to provide a space to share the accomplishments, awards, and/or accolades achieved by faculty and staff in your department during the course of this past year.

Accomplishments:

- Successful first year of MOPAR CAP LOCAL
- The most significant accomplishment by faculty members and the department in 2016-17 was surviving the winter semester. With one faculty member on family medical leave, the remaining full-time and adjunct faculty members shuffled course loads and there was minimal negative impact on the students.



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*Thank you for completing this report. Please submit to your Dean via email.*