Program Review and Planning

OVERVIEW OF PROGRAM REVIEW AND PLANNING FOR INSTRUCTIONAL PROGRAMS

Program Review is about documenting the plans you have for improving student success in your program and sharing that information with the community. Through the review of and reflection on key program elements, program review and planning identifies program strengths as well as strategies necessary to improve the academic discipline, program, or service to support student success. With our new Guided Pathways plan, this review becomes even more crucial for the success of our students and college.

We are using the Strengths, Opportunities, Aspirations, Results (SOAR) strategic planning technique to help us focus on our current strengths and opportunities, create a vision of future aspirations, and consider the results of this approach.

BASIC PROGRAM INFORMATION

Academic Year
2018-2019

Are you completing a comprehensive or annual PRP?
Comprehensive

Department Name
Trade and Industry

Discipline Name
Automotive Technology (AT)

Department Chair Name
Anthony Fedon

Division Name
Career, Technical and Extended Education

Website address for your discipline
https://www2.palomar.edu/pages/at/

Discipline Mission statement
The Mission of the Palomar Automotive Technology Department is to foster a safe learning environment for the

preparation of men and women for potential career paths as an automotive technician, service advisor, manager, parts

person, auto body technician, claims adjuster, or other related jobs in the automotive industry. Palomar College is using

state-of- the-art equipment to provide students with the knowledge and skills necessary to gain entry-level technician

employment in the ever-changing Automotive Repair Industry.

(click here for information on how to create a mission statement)

Does your discipline have at least one degree or   **Are any of your programs vocational (CTE/CE)?**

certificate associated with it?   Yes
Yes

List all degrees and certificates offered within this discipline.
Associate in Science Degrees -

Auto Chassis and Drive Lines

Electronic Tune Up and Computer Control Systems

Mechanics - General

Certificates of Achievement -

Auto Chassis and Drivelines

Electronic Tune Up and Computer Control Systems

Mechanics - General

Please list the names and positions of everyone who helped to complete this document.
Anthony Fedon - Full time faculty
Steve Bertram-Full time faculty

Full-time faculty (FTEF)	**Part-time faculty (FTEF)**
2	6

Classified & other staff positions that support this discipline
Zachary Pye ISA III 1.0 FTEF shared with Diesel and Auto Body 12month

Anel Gonzalez ADA 1.0 FTEF shared with other departments 12month

Additional hourly staff that support this discipline and/or department
None

PROGRAM INFORMATION

PROGRAM OUTCOMES

Begin this section by reviewing the Program Review reports for courses and programs in TracDat. All active course and program outcomes should be systematically assessed over a 3-year cycle.

- **Program** = Leads to a degree or certificate
- **Discipline** = A group of courses within a discipline

*Programs will be able to complete program completion and outcome questions.

How well do your program's learning outcomes communicate the scope and depth of the degree/certificate offered and align with employer and transfer expectations?
We have a minimum number of good program SLOs. The ones we have reflect some of the basic skills students need for the programs. We could use more SLOs that identify specific skills students gain from

our program of study. These SLOs should be tied to the needs of the industry and will be discussed at the advisory committee meeting.

Describe your program's plan for assessing program learning outcomes.
Students will complete a standardized examination. Students will also be observed in the lab to assess their performance. From those observations and review of the exam, other activities may be called for to reinforce the learning outcome.

Summarize the major findings of your program outcomes assessments.
All students pass the safety exam with a score of 90% or better. This promotes a safe learning environment where we have nearly no accidents. Students use the shop tools correctly which accounts for safe practices and no broken tools. On the normal curriculum of each course of study, each laboratory is geared to engage each student in a group activity and many of the students have skills reinforced by other students as guided by the ISA or the instructor.

Reflecting on the major findings you summarized, what are some questions you still have about students' learning in your program that you have not yet been able to address with your outcomes assessments?
Many students come to our program with nearly no mechanical background. Perhaps we should provide more training on basic mechanical skill development. Without being able to repeat a class, the student must be able to communicate and show certain skills during the first go-round of the class. Group work is the best way to address for our laboratories.

Depending on the degree or transfer goals of our students, they have the choice of three different GE pathways:

- [Associate Degree GE Requirements](#)

- [CSU GE Requirements](#)

- [IGETC Requirements](#)

Palomar College has identified a set of General Education/Institutional Learning Outcomes, which represent the overall set of abilities and qualities a student graduating from Palomar should possess.[Click here for a link to Palomar's GE/ILOs.](#)

How do the courses in your discipline support General Education/ Institutional Learning Outcomes? In your response, please specify which GE/ILO(s) your discipline supports.
All of the automotive courses support communication through written lab reports, and oral communication through collaborative learning. The more advanced courses promote critical thinking and problem solving through diagnostic exercises.

Summarize the major findings from your course outcomes assessments that are related to the General Education/Institutional Learning Outcomes that your discipline supports.
Student are able to use diagnostic tools to correctly identify system problems. They work in teams to present their findings through oral and written reports.

PROGRAM COMPLETIONS

Student success is at the core of what we do in assisting students in achieving their goals.

The Chancellor's Office Vision for Success stresses the importance of Program Completion as a major goal for our students. In addition, transfer and career readiness are key components of Palomar College's

mission statement. This year, our funding formula has also changed reflecting this emphasis, providing additional funding as a function of the number of completions.

In this section we will identify a program standard and a stretch goal (what you would like to move toward) for program completions.

The standards represent the lowest number of program completions deemed acceptable by the College. In other words, if you were to notice a drop below the set standard, you would seek further information to examine why this occurred and strategies to increase completions.

In this section we will identify a program standard and a stretch goal (what you would like to move toward) for programs.

List the number of completions for each degree/certificate for the previous year.
AS degrees--9
Certificates--19

Have your program completions Increased, decreased, or stayed the same over the last 5 years?
Decreased

What factors have influenced your completion trends?
Completions were about the same for 4 years (30-45) but dropped to 28 last year. More students have gained employment in the industry last year due to good economy and have not pursued training. Tow capstone classes were cancelled sp 2019 and will have low completions for this semester as well. With the cancellation this spring, we will be conducting classes next spring and will review and compare with this past spring.
Near full employment is affecting this matrix.

Are the courses in your discipline required for the completion of other degrees/certificates?
No

Do you have programs with 7 or fewer completions in the last 5 years?
No

What is your program standard for program completion?
50.0%

Why did you choose this standard?
50% of FTES has been our average.

What is your Stretch goal for program completion?
55.0%

How did you decide upon your stretch goal?
Anything over 50% FTES would be a goal for improvement

ENROLLMENT TRENDS

Palomar College uses the WSCH/FTEF ratio as one indicator of overall efficiency in addition to the overall fill-rate for courses.

Although the college efficiency goal is 525 WSCH/FTEF and 85% fill-rate (minimal), there are many factors

that affect efficiency (i.e. seat count / facilities / accreditation restrictions).

This information can be found by going to the "Program" page in the PRP Data Dashboard.

What was your efficiency trend over the last 5 years? Was it expected?

WSCH/FTEF	2011-12	551
	2012-13	500
	2013-14	510
	2014-15	483
	2015-16	457
	2016-17	566

What factors have influenced your efficiency trends?
The efficiency has been up and down, but last year spiked to an all time high. When classes are cut due to low enrollment, the efficiency goes up. We had to cancel 2 classes due to low enrollment in 16-17. The efficiency seems to be higher than most T&I disciplines due to accepting students over the cap. We have been doing so because of class offerings every other semester to complete the track for certificates or Associates. The job market is very robust at this time and students are in school to further their knowledge to advance to higher paying jobs that require higher skills that are being taught in our program. It is a struggle to keep students in program vs. leaving to work full time. I am encouraging all employers to offer part time work in lieu of taking students before graduation, as many employers are needing mechanics now.

Are there particular courses or programs that are not getting sufficient enrollment, are regularly cancelled due to low enrollment, or are not scheduled at this time? What is contributing to this issue? Does this level of efficiency meet the needs of the program and the district?
There is no one course that struggles with cancellation, just low enrollment due to near full employment.

The Chancellor's Office Vision for Success stresses the importance of reducing equity gaps through faster improvements of underrepresented groups.

ACCJC also requires that colleges establish institutional and program level standards in the area of success rates. These standards represent the lowest success rate deemed acceptable by the College. In other words, if you were to notice a drop below the rate, you would seek further information to examine why the drop occurred and strategies to address the rate.

Click on this link to review the course success rates (A, B, C, or Credit) for your discipline.

In this section we will identify a course success rate standards and a stretch goal (what you would like to move toward) for programs.

Course Success Rates by gender, age, ethnicity, special population, location, and modality (You can access the Student Equity Plan on the SSEC website https://www2.palomar.edu/pages/ssec/)

COURSE INFORMATION

COURSE SUCCESS AND RETENTION

What is your program's standard for Discipline COURSE Success Rate?
70.0%

Why did you choose this standard?
Due to the variables of why students are taking automotive classes this affects the success rate. Part time students are
bringing down the success rate due to the student taking a needed class for his/her job and not taking to fully complete the
program, and introductory classes are a huge offering, and this just gives all students general information on the
automotive industry not just students wanting to be mechanics. These students are there just to gain the knowledge to
maintain their own vehicle.

Has your overall course SUCCESS rates increased, decreased, or stayed the same over the last 5 years?
Stayed the same

Was this expected?
Our success rate has always been above the college's overall rate of 70%. Enrollment and success rate was up for 2013 and
2014 due to a dip in the economy bringing more people into school for training. Current year success rate is down 3% from
last year to 73%. We have many students who get hired and are unable to complete their studies.

What is your Stretch goal for COURSE success rates?
80.0%

How did you decide upon the goal?
This is a high goal, but it is attainable

Have your overall course RETENTION rates increased, decreased, or stayed the same over the last 5 years?
Stayed the same

Was this expected? Please explain.
Retention rates for the past 5 years has been between 94 and 97%

Are there differences in success or retention rates in the following groups? (choose all that apply)
When or where (time of day, term, location)
Age
Special Pop. (Veteran, foster youth, etc.)
Gender

When or Where: Why do you think differences based on when or where the course is offered exists? What do you need to help close the gap?
Daytime class success rates are a few percentage points higher than evening classes.

Gender: Why do you think gender differences exist? What do you need to help close the gap?
Although this is an industry dominated by males, the few females that we do get perform very well. Having video blasts that explain the different jobs and industries that need mechanical trained females, and not

just technicians will help bring women into the industry.

Age: Why do you think age differences exist? What do you need to help close the gap?
20-24 seems to be the most successful age group throughout the years. Better outreach to the high schools and industry partners that will target younger folks right out of high school. Too many counselors at the high school are pushing for 4 year education to the students, and are not offering the CTEE path.

Special Populations: Why do you think special population differences exist? What do you need to help close the gap?
Veteran success was 6.5% higher than non-vets in 2011-2012, and 5.3% higher in 2013-14. Veteran success was not reported for any other years. Marketing and outreach. Our new video clips that are on our webpage are helping address these deficiencies. Other outreach from our student services will also aid.

Are there differences in success/retention between on-campus and online courses?
N/A

Do you have any best practice methods you use for online courses to share with the community?
no online courses offered

COURSE OUTCOMES

How is course assessment coordinated across sections and over time?
Our course outcomes are reviewed annually. Instructors for each section will review the SLO's for each class and we will review and update as necessary. New methods of assessment are reviewed and added if needed.

How have you improved course-level assessment methods since the last PRP?
We have not reviewed as of yet, however we are going to review with our advisory committee on April 30th to add any industry related updates to our courses.

Summarize the major findings of your course outcomes assessments.
New students to the program are lacking basic skills as a technician and will be addressing with our intro AT100 classes with review of necessary tools and usage. Safety however is being a main-stay of our department outcomes and reflects as such with no injuries of students.

Reflecting on the major findings you summarized, what are some questions you still have about students' learning in your courses that you have not yet been able to address with your outcomes assessments?
Not purchasing books and the necessary PPE to participate in laboratories without use of school resources. Basic English and Math are big road-blocks to success. The nomenclature of the service manuals if very difficult for the student with a good grasp of the English language, let alone a Spanish or non-English primary language student. Basic skills are very important and are not taught in the ITC.

What are some improvements in your courses that have been, or can be, pursued based on the key findings from your course learning outcomes assessments?
Through assessment results we have been able to identify areas that students underperform. One of these areas has been
ASE test scores. We have adjusted to this need by focusing more on ASE topics during instruction. We have also added
more classes to the schedule that focus on the ASE topic areas.

PROGRAM CURRICULUM ALIGNMENT, MAPPING,

SCHEDULING, & PLANNING

The Chancellor's Office Vision for Success stresses the importance of decreasing the average number of units accumulated by CCC students earning degrees.

Palomar College's Guided Pathways plan includes clarifying paths for students by sequencing course offerings so that they support scaffolding and timely completion. Our goal is to ensure learning through:

- The mapping and assessment of clear program outcomes that are also aligned to employer and/or transfer institution expectations.

- Engaging and applied learning experiences.

- Effective instructional practices to support students in achieving success.

How do your course outcomes help your students achieve their program outcomes?
All course outcomes are the basis of our program outcome. The main goal is to educate and train our students to safely perform vehicle maintenance with industry specific tooling to repair vehicles to factory specifications. The SLO's for each class build on skills that are necessary to advance a student from learning to doing, and that begins with safety. Critical thinking and problem solving are built into our course SLO's and each course will key in on those tasks as identified by our advisory board. Putting our students to work with knowledge in the automotive field.

How do your degree maps and scheduling strategy ensure scaffolding (how all parts build on each other in a progressive, intentional way)? How do you share the maps with students?
All our mapping is shared with students on our web-page by semester and by class. Our class schedule is scheduled so anyone can participate and leave the college in 1 year with a certificate of 3 different programs. We have just started an entry class in the summer to help our advanced classes fill in the fall. Our capstone classes are now offered at night and on Saturdays for aid in our students to complete the certificate or degree.

What is your departmental strategy on how you schedule your courses including the time of day you offer courses? Do you use fast track or block scheduling (putting required classes near each other) to organize required classes (Particularly to meet the needs of disproportionately impacted students)?
Please see response above. We have been spreading our classes from day's to nights and including the offering on weekends. We are trying to offer more classes in the off hours due to near full employment in the workplace.d

How do you work with other departments that require your course(s) for program completion?
NO other programs require our classes, however Auto Body changed its start time to coincide with Diesel and Auto to allow for easy transition from one class in one program to take a class in another program. Auto Body now starts his classes at 8am like Auto and Diesel have been doing.

Does your discipline offer cross-listed courses?
No

Are there curriculum concerns that need to be resolved in your department? What are they?
Just writing new curriculum for alternative drive trains. Need time and instructor for electric vehicles.

Are there courses that should be added or removed from your program - please explain?
Alternative Drivetrains needs to be added. Hybrid technology is part of that program that needs to be developed.

We need an industry partner to assist with this transition. Ford Motor is making us an offer to become a factory training center under Cuyamaca College.

How is the potential need for program/course deactivation addressed by the department?
Review with advisory board and have a general concensus. then review with Dean and Department Chair

Is your department pursuing non credit or not-for credit options at this time?
No

Are there areas you would like to expand?
Alternative Drivetrains and Hybrid

Click here for information about Noncredit and Community Education

Is your department offering online classes?
No

How do you consider student needs when determining which classes and how many classes should be offered online versus face-to-face?

Describe other data and/or information that you have considered as part of the evaluation of your program
Advisory Board Input is essential and will always be used to lead the direction of the program.

CAREER AND LABOR MARKET DATA

The Chancellor's Office Vision for Success stresses the importance of increasing the percent of exiting students who report being employed in their field of study. It is important for us to consider how _**all**_ of our programs connect to future careers.

Go to this website https://www.onetonline.org/ and enter your discipline in the bubble on the top right for ideas about potential occupations. Click on an example to see more detail.

The following websites are for CTE related data:

- Centers of Excellence (many other data resources besides supply and demand) Password: GetLMI

- LaunchBoard

- LaunchBoard Resource Library

- Chancellor's Office Data Mart

- San Diego Workforce Partnership

- State of CA EDD

- Career One Stop

What kinds of careers are available for people who complete your programs (and/or transfer)? (Refer to link above) Are there any new or emerging careers and if so how would the new or emerging careers impact your future planning?
Automotive Service Advisors, Automotive Service Schedulers, Warranty Administrators, Automotive

Claims Administrators, Automotive Parts Specialists, Automotive Machinist, Lube Technician, Field Service Technician, Master Automotive Technician, Alignment Specialist, Tire and Wheel Specialist, Alternative Drivetrain Technician. Transmission Repair Technician.

Our Future is going to be the Electronic Specialist Technician. All vehicles are moving to electrical/electronic systems and we have to produce future technicians that can understand and repair the modern electronic vehicles. That means updated electrical training aids and curriculum to coincide with industry advancements.

What are the associated knowledge, skills, abilities (KSA's) needed for the occupations listed above? (click examples in the link above to get ideas)

Customer-service skills. Service technicians discuss automotive problems—along with options to fix them—with their customers. Because workers may depend on repeat clients for business, they must be courteous, good listeners, and ready to answer customers' questions.

Detail oriented. Service technicians must be aware of small details when inspecting or repairing vehicle systems, because mechanical and electronic malfunctions are often due to misalignments or other easy-to-miss causes.

Dexterity. Service technicians perform many tasks that require steady hands and good hand–eye coordination, such as assembling or attaching components and subassemblies.

Mechanical skills. Service technicians must be familiar with engine components and systems and know how they interact with each other. They often must take apart major parts for repairs and be able to put them back together properly.

Organizational skills. Service technicians must keep workspaces clean and organized in order to maintain safety and ensure accountability of parts.

Physical strength. Service technicians must sometimes lift and maneuver heavy parts such as engines and body panels.

Troubleshooting skills. Service technicians use diagnostic equipment on engine systems and components in order to identify and fix problems in increasingly complicated mechanical and electronic systems. They must be familiar with electronic control systems and the appropriate tools needed to fix and maintain them.

How does your program help students build these KSA's?

All of our classes incorporate hands-on skills building tasks which build strength in our students ability and they are graded with feedback to help the student progress their skill base. These tasks are review at least every two years for viability. These are our Student Learning Outcomes. SLO's

Have you incorporated work based learning (work experience, internships, and/or service learning) into your program?

Yes

What have you done to integrate work-based learning?

CE100 is an elective for our certificates as well as our degrees. We have been campaigning at the beginning of each semester to our students to enroll in these classes. Jason J. is currently working with Centric Auto and soon to be FORD Motor Corporate to expand our work based learning capabilities.

How does your work-based learning help your students learn how to do some of the tasks associated with the potential occupations?

How to be the model employee - soft skills

How to be on time and to respect the owner and the customer base.

How an automotive shop runs and what to expect when entering the workplace.

How do you engage with the community to keep them apprised of opportunities in your program?
Advisory Boards,
Industry contacts and representation at their place of business and ours.
Community contact board In the ITC Center.
High School visits and outreach in career workshops.

What is the regional three-year projected occupational growth for your program(s)?
The growth of needed employment for Automotive Technicians is 7% year to year. The average annual number of technicians is 7,600 per year including adding and replacing retiring technicians in California. In the San Diego area, there are 719 jobs posted per year and will continue to grow due to replacing an aging workforce.
Certificates & Some College, No Degree

What is being done at the program level to assist students with job placement and workforce preparedness?
Involving Work Experience coordinator Jason Jarvinin to assist with placement. WE are entering an agreement with Ford Motor Company on a work experience program for Fall 2019 start. This will be an apprentice position at local Ford Dealers.

When was your program's last advisory meeting held? What significant information was learned from that meeting?
Last April 2018
The technology in the classroom needs to be expanded to teach advanced automotive skills. The laptops are assisting with this that the Perkins Grant supplied last year.

What are the San Diego County/Imperial County Job Openings?
719 jobs per year in the San Diego County are projected in the coming 3 years for technicians. The other jobs that can be obtained by training in this field are not readily identified, however they can be in the realm of 500 per year in this area. This will be the Service Advisors, Parts Advisors, Collision and Mechanical estimators, ect...
Across the country there will be 7,900 jobs available in just the Automotive Technician job class, although many other jobs may be obtained with this type of training.

Program Goals

In the previous sections, you identified opportunities for improvement. Using these opportunities, develop 3-year SMART goals for your department. Goals should be Specific, Measurable, Attainable, Relevant, Time-Specific. Ensure your goals align with the mission of your department and/or the College's strategic plan.

Please list all discipline goals for this three-year planning cycle. Click here for previous PRPs and goal information.

Goals

Goal 1

Brief Description
ISA for all automotive lab classes

Is this a new or existing goal?   **Goal Status**

Existing   Ongoing

How will you complete this goal?
Proper funding to support daytime and evening classes.

Outcome(s) expected (qualitative/quantitative)
More efficient results from lab classes
Greater quantity of skill tasks completed
More in depth skill task completions
This will promote a safer learning environment

How does this goal align with your department mission statement, the college strategic plan, and /or Guided Pathways?
This will promote a safer learning environment
Better exposure to tasks relating to the service and repair of state of the art equipment

Expected Goal Completion Date
8/31/2019

Goal 2

Brief Description
Repair and replacement of precision tooling

Is this a new or existing goal?   **Goal Status**
Existing   Ongoing

How will you complete this goal?
Secure proper funding in an annual budget ($10,000)
College needs to support CTEE programs by providing proper funding

Outcome(s) expected (qualitative/quantitative)
Students will be able to perform skilled tasks using state of the art equipment
Students will have the opportunity to achieve industry certification

How does this goal align with your department mission statement, the college strategic plan, and /or Guided Pathways?
Provide students with up to date training, keeping up with the ever-changing automotive industry.
Maintain high quality facilities and instructional programs.

Expected Goal Completion Date
8/31/2019

Goal 3

Brief Description
Secure funding for service information subscriptions

Is this a new or existing goal?   **Goal Status**
Existing   Ongoing

How will you complete this goal?

Purchase $2500 annual subscription

Outcome(s) expected (qualitative/quantitative)
Students need this reference information to perform automotive tasks in the lab

How does this goal align with your department mission statement, the college strategic plan, and /or Guided Pathways?
Provide students with up to date training, keeping up with the ever-changing automotive industry.

Expected Goal Completion Date
8/31/2019

Goal 4

Brief Description
Parking area in the parking lot for vehicles for Diesel, Auto, and Autobody with automated gate.

Is this a new or existing goal?
New

How will you complete this goal?
After construction of the storage, we need to have an area of the parking lot for our service vehicles. Facilities and Dennis Astl needs to approve the realignment of the parking and add fencing and security.

Outcome(s) expected (qualitative/quantitative)
Room to store training vehicles, Better area in the shop for training without tripping over vehicles not being utilized for this weeks module for training.

How does this goal align with your department mission statement, the college strategic plan, and /or Guided Pathways?
Better training facilities without clutter in the laboratory area. Need to store the new vehicles that will be acquired for the advanced drivetrain class

Expected Goal Completion Date
12/15/2019

STAFFING AND RESOURCE NEEDS

Instructions

1. Refer to Strategic Plan.
2. See Data.
3. See career info (In PRP)

Are you requesting additional full-time faculty?
No

Are you requesting additional Staff, CAST or AA?
Yes

In the last ten years, what is the net change in number of Staff in the department? (loss vs. gain)
0 loss or 0 gain

REQUEST FOR ADDITIONAL STAFF, CAST, AA

Staff, CAST, AA request 1

Title of Staff position you are requesting
ISA for night classes

How will this Staff position help meet district (Guided Pathways, Strategic Enrollment Management etc.), department and/or discipline goals?
We are lacking assistance for health and safety of our students. We can also have more skills building exercises with additional supervision of laboratories.

Is there a scarcity of qualified Part-Time Staff (for example: Specialized degree/experience, emerging/rapidly changing technology, high demand)

Are you requesting this position for accreditation, regulatory, legislative, health and safety requirements? Please explain.
Health and Safety and skill competencies for our students.