Program Review & Planning (PRP)

PALOMAR COLLEGE®
Learning for Success

PART 1: BASIC PROGRAM INFORMATION

Program Review is a self-study of your discipline. It is about documenting the plans you have for improving student success in your program and sharing that information with the college 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 that in mind, please answer the following questions:

Discipline Name:	Automotive Technology
Department Name:	Trade and Industry
Division Name:	Career Technical and Extended Education

Please list all participants in this Program Review:

Name	Position
Anthony Fedon	Instructor
Steve Bertram	Instructor

Number of Full Time faculty	2	**Number of Part Time Faculty**	6

Please list the Classified positions (and their FTE) that support this discipline:

John Even ISA III 1.0 FTEF shared with Diesel and Auto Body
Anel Gonzalez ADA 1.0 FTEF shared with other departments

What additional hourly staff support this discipline and/or department:

None

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

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.

List all degrees and certificates (e.g., AA, AT, 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

PART 2: Program Assessment

The first step in completing your self-study is to examine and assess your discipline/program. To accomplish this step, complete the Following Sections:

Section 1: Program Data and Enrollment
Section 2: Course Success Rates
Section 3: Institution and Program Set Course Success Rate Standards
Section 4: Completions
Section 5: Labor Market Information (CTE programs only)
Section 6: Additional Qualitative Information
Section 7: Curriculum, Scheduling, and Student Learning Outcomes

SECTION 1: PROGRAM DATA & ENROLLMENT

Click on the following link to examine enrollment, efficiency, and instructional FTEF trends for your discipline. Log-in using your network username and password.
https://sharepoint2.palomar.edu/sites/IRPA/SitePages/Productivity%20Metric%20Summary.aspx

A. To access your discipline data, select your discipline from the drop down menu.
B. To access course level data (e.g., COMM 100 or BIOL 100) use the drop down menus to select "discipline" and "catalog number".

Use the data to answer the following questions.

1. Discipline Enrollment

Discipline Enrollment (over last 5 years)	**Increased**		**Steady/No Change**	X	**Decreased**	
Reflect on your enrollment trends over the past five years. Was the trend expected? What factors have influenced enrollment?						
2011-12 779 2012-13 543 2013-14 696 2014-15 712 2015-16 624 2016-17 671 After review of the above numbers and what has transpired with our discipline, the conclusion is that we will fill most classes offered when they are offered with overfill or wait lists. We need to expand our offerings to students to include new technology, however we have run out of room at the facility. When looking at enrollment vs. available seats, we are busting at the seams.						

We currently have students seated at the end of desks to accommodate students need to complete classes to attain their AS or Certificate in a timely manner. We are expecting continued interest from students to take and complete the program.

2. Course-Level Enrollment and Fill Rates

If there are particular courses that are not getting sufficient enrollment, are regularly cancelled due to low enrollment, or are not scheduled, discuss how your discipline is addressing this. For example, are there courses that should be deactivated?

AT170 Summer Shop Experience is not as packed as we would like, however, this is due to our students going to work during the summer at shops to hone their mechanical skills and to make money.

AT220 Advanced Transmissions has not been offered in 4 years and we are currently developing courseware to convert this class to Alternative Drivetrains ie: Hybrid technology with the help of Perkins Funds for trainers to complete the course.

3. WSCH/FTEF

Although the college efficiency goal is 525 WSCH/FTEF or 35 FTES/FTEF, there are many factors that affect efficiency (i.e. seat count / facilities / accreditation restrictions).

Discipline Efficiency Trend	Increased	X	Steady/No Change		Decreased	
Discipline Efficiency:	Above 525 (35 FTES/FTEF)	566	At 525 (35 FTES/FTEF)		Below 525 (35 FTES/FTEF)	

Reflect on your enrollment trends over the past five years. Was the trend expected? What factors have influenced enrollment?

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

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.

4. Instructional FTEF:

Reflect on FTEF (Full-time, Part-time, and Overload) over the past 5 years. Discuss any noted challenges related to instructional staff resources.

2011-12   3.58
2012-13   2.89
2013-14   3.61
2014-15   3.89
2015-16   3.61
2016-17   3.44
We have 2 full time faculty and 6 part time. The full time faculty teach a moderate amount of overload. We do not anticipate any changes, however, there needs to be other part-time faculty hired for day classes that can be offered in the afternoon. This is the only time slot available to maximize utilization of facilities. This is a challenge as most skilled people are working full time in the field, and cannot find the time to teach during the day.

SECTION 2: COURSE SUCCESS RATES

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

    A. **On-Campus Course Success Rates**
    B. **Online Course Success Rates**
    C. **Course Success Rates by gender, age, ethnicity, and special population (use the filter buttons at the top of the worksheet to disaggregate success rates by demographic variables)**
    D. **Course Success Rates by class location (Escondido, CPPEN, etc.)**

https://sharepoint2.palomar.edu/sites/IRPA/SitePages/Success%20and%20Retention.aspx

1. Overall Success Rate:

Reflect on your discipline's on-campus, online, and by location (ESC, CPPN, etc.) course success rates over the past five years. Compare your success rates to the overall college success rates. Are the rates where you would expect them to be? Have there been changes over time?

2011-12	**76.2%**
2012-13	**75.3%**
2013-14	**76.9%**
2014-15	**79.2%**
2015-16	**76.4%**
2016-17	**73.7%**

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.

2. Course Success Rates by gender, age, ethnicity, and special population:

Reflect on your discipline's success rates by the given demographic variables (gender, age, ethnicity, special population). Are there large differences between groups? If so, why do you think this is happening and what might you consider in the future to address the needs of these groups?
Note: Institutionally, the College has a goal to close the performance gap of disproportionately impacted students, including African-American, Hispanic/Latino, veterans, foster youth, and students with disabilities. You can access the Student Equity Plan on the SSEC website https://www2.palomar.edu/pages/ssec/

Gender	Although this is an industry dominated by males, the few females that we do get perform very well.
Age	20-24 seems to be the most successful age group throughout the years.
Ethnicity	There seems to be little difference between the success rate of Hispanics vs. whites.
Special Population (examples- veteran, foster youth, etc)	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.

3. Disaggregated Course Success Rates (Select at least two other variables):

Disciplines/programs find it useful to examine course success rates by other types of variables (e.g., time of day, level of course (basic skills, AA, Transfer). Examine course success rates disaggregated by at least two other variables and reflect on your findings.

Day		Evening	
2011-12	77.8%	2011-12	66.1%
2012-13	75.3%	2012-13	75.0%
2013-14	79.7%	2013-14	64.9%
2014-15	80.1%	2014-15	74.6%
2015-16	76.6%	2015-16	75.0%
2016-17	74.2%	2016-17	70.6%

Daytime class success rates are a few percentage points higher than evening classes.

Full load		Part load	
2011-12	79.6%	2011-12	72.9%
2012-13	75.6%	2012-13	75.1%
2013-14	76.7%	2013-14	75.8%
2014-15	88.0%	2014-15	73.0%
2015-16	81.5%	2015-16	72.8%
2016-17	88.3%	2016-17	68.9%

Students that take more units per semester (full load) have a better success rate than those with part time loads.

SECTION 3: INSTITUTION AND PROGRAM SET COURSE SUCCESS RATE STANDARDS

ACCJC requires that colleges establish institutional and program level standards in the area of course success rates. These standards represent the lowest success rate (% A, B, C, or Credit) 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.

Discipline Level Course Success Rate:
- **A. The College's institutional standard for course success rate is 70%.**
- **B. Review your discipline's course success rates over the past five years.**
- **C. Identify the minimum acceptable course success rate for your discipline. When setting this rate, consider the level of curriculum (e.g., basic skills, AA, Transfer) and other factors that influence success rates within your area. If you set your discipline standard below the College's standard, please explain why.**

Standard for Discipline Course Success Rate:	70%

Why?

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.

SECTION 4: COMPLETIONS

Click on the following link to review the completions for your discipline.
https://sharepoint2.palomar.edu/sites/IRPA/SitePages/Degrees%20and%20Certifications.aspx

- **A. To access your discipline data, go to the "Awards" tab at the bottom of the page and click on your discipline.**
- **B. To access your program level completions, click on the tab titled "Awards by Academic Plan" at the bottom of the page and then click on your discipline.**

1. Overall Completions:

Reflect on your discipline's overall completions over the past five years. Are the completions where you would expect or want them to be? What is influencing the number of completions?
2011-12   9 2012-13   27 2013-14   41 2014-15   30 2015-16   40 Completions have maintained a steady climb over the past 5 years except for a spike in 2013-14 when our enrollment was higher due to a weak economy and fewer jobs.

2. Specific Degree/Certificate Completions:

Do you have degrees or certificates with few or no completions? If so, what factors influence completions within specific programs? If you have degrees/certificates with few completions, are they still viable? What can be done to help students complete programs within your discipline?
The General Mechanic certificate remains the most popular. Certificates are earned more often than degrees because they require less units. The advantage of the certificate is the students complete their studies quickly and get into the job market. The Tune Up certificate is second most popular and is still viable in today's industry. The Chassis and Driveline certificate is least earned but still important in industry. Possibly have work partnerships with shops that recognize the need for students to complete their studies and allow them to complete while working part time. Many shops are needing full time employees and the need outweighs the needs for the students to complete for themselves.

SECTION 5: LABOR MARKET INFORMATION (CTE PROGRAMS ONLY)
If you have CTE programs in your discipline, refer to the following link to obtain relevant labor market data. This data can be found on the Centers for Excellence website at http://www.coeccc.net/sandiego_imperial.asp. **Example of Labor Market Information:**

SOC	Description	Counties	2014 Occupations	2017 Occupations	Change	% Change	Openings	Annual Openings	10% Hourly Earnings	Med Hourly Earnings	Entry Level Education (Typical)
13-2011	Accountants and Auditors	Imperial	341	361	20	5.8%	57	19	$17.70	$26.09	Bachelor's degree
13-2011	Accountants and Auditors	San Diego	12,554	13,735	1,181	9.4%	2,388	796	$20.88	$32.92	Bachelor's degree

1. What is the regional three-year projected occupational growth for your program(s)?

SOC Code	Occupational Title	Typical Entry Level	2015 Jobs	2018 Jobs	2015-18 Change	% Change 2015-18	Openings (New + Replace-ments)	Annual Openings	10% Hourly Earnings	Median Hourly Earnings
49-3023	Automotive Service Technicians and Mechanics	Postsecondary nondegree award	7,428	7,646	219	2.9%	839	279	$9.55	$17.89
Grand Total			7,428	7,646	219	2.9%	839	279	$9.55	$17.89

2. What is being done at the program-level to assist students with job placement and workforce preparedness?

Job Board with current postings, Automotive Service Excellence Testing preparation, Soft Skill emphasis

3. If your program has other program-level outcomes assessments (beyond SLOs and labor market data), including any external mandated regulatory items, discuss how that information has been used to make program changes and/or improvements.

Just the mirroring of ASE examination materials and including them in our course delivery and discussions with our advisory board.

4. When was your program's last advisory meeting held? What significant information was learned from that meeting? (CTE programs are required by Title 5 to conduct a minimum of 1 advisory meeting each year)

March 22, 2017 Curriculum Review for Hybrid Training and Engine Performance AT 110,115. Industry needs fully trained technicians in the performance and hybrid areas and we are gearing up to deliver up to date class offerings.

SECTION 6: ADDITIONAL QUALITATIVE INFORMATION

Not all information important to reviewing your program is quantitative or included in the section above.

Describe other data and/or information that you have considered as part of the assessment of your program. (Examples of other data and factors include, but are not limited to: external accreditation requirements, State and Federal legislation, four-year institution directions, technology, equipment, budget, professional development opportunities).

SECTION 7: CURRICULUM, SCHEDULING, AND STUDENT LEARNING OUTCOMES

1. SLO Assessment Results:

How have SLO assessment results impacted your planning over the last three years? Consider curriculum, teaching methodology, scheduling, department discussion (FT & PT faculty included) resources, etc. Refer to the SLO/PRP report – https://outcomes.palomar.edu:8443/tracdat/

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.

2. SLO Assessment Methods:

How effective are your current methods/procedures for assessing course and program student learning outcomes? What is working well and how do you know? What needs improvement and why? Refer to the SLO/PRP report – https://outcomes.palomar.edu:8443/tracdat/
Success rates are a good assessment method for us. Students that complete assignments correctly, and score well on the corresponding exam indicate a positive assessment of a student learning outcome.

3. Program SLOs:

How do your program SLOs represent the scope and depth of learning appropriate to the degree/certificate programs offered? What needs improvement and why? Refer to the SLO/PRP report – https://outcomes.palomar.edu:8443/tracdat/
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 should be discussed at the advisory committee meeting.

4. Curriculum overview:

Does your program offer sufficient opportunities for students to learn current disciplinary and professional knowledge, skills, competencies, etc. for the type and level of degree/certificate offered? Discuss how your course/program reviews, since the last PRP, have changed and/or impacted your program. How is the potential need for program/course deactivation addressed by the department?
Our courses are reviewed and updated regularly. New material is added to meet industry needs during the review process. The advisory committee drives the decision on appropriate material and which courses if any should be deactivated.

5. Curriculum scheduling:

Describe how you schedule your courses to include a discussion on scaffolding (how all parts build on each other in a progressive, intentional way), and scheduling of courses so students can follow the best sequence. Address how enrollment issues impact scheduling and student completion/achievement.
We have expanded our course offerings to include more advanced classes during non-traditional times. We added advanced classes during the evening and on Saturdays for the fall 2017 semester. Both of these classes have been very successful. We will continue this plan for the spring 2018 semester.

6. Curriculum communication:

How does regular communication with other departments that require your courses in their programs occur – scheduling, review scheduling conflicts/overlaps for courses within same program, etc.?
No other programs require our classes.

PART 3: Program Evaluation and Planning
Program Evaluation and Planning is completed in two steps. Section 1: Overall Evaluation of Program

Using the results of your completed assessment (See Sections 1-6 above), identify the strengths and areas for improvement within your program. Also consider the areas of opportunities and any external challenges your program faces over the next three years. Summarize the results of your assessment in the Grid below.

Section 2: Establish Goals and Strategies for the Next Three Years
Once you have completed your overall evaluation, identify a set of goals and strategies for accomplishing your goals for this upcoming three year planning cycle. Use the template in Section 2 below to document your goals, strategies, and timelines for completion.

SECTION 1: OVERALL EVALUATION OF PROGRAM

1. Discuss your discipline's strengths, weaknesses, opportunities and threats in regards to curriculum, assessment, enrollment, success rates, program completion, etc. For helpful suggestions on how to complete this section, go to http://www2.palomar.edu/pages/irp/files/2017/02/Helpful-Tips-for-Completing-a-SWOT.pdf

Strengths:	**We have a great facility that has allowed us to serve our students well. Local industries indicate that our students are well trained and ready for the workforce.**
Weaknesses:	**Some equipment in the machine shop is outdated and needs repair.**
Opportunities:	**Hybrid and electric vehicle technology has become very popular and students are asking about training. We will be developing curriculum to meet this opportunity.** **There seems to be a significant student population that seeks advanced automotive classes offered in the evenings and Saturdays. We are offering classes to meet this need.**
Threats:	**Safety is always a concern. We have had excellent success keeping our students safe. Outdated machining equipment creates a safety concern and needs to be addressed.**

SECTION 2: **Establish Goals and Strategies for the Next Three Years**

1. Progress on Previous Year's Goals: Please list discipline goals from the previous year's reviews and provide an update by placing an "X" the appropriate status box .

Goal	Completed	Ongoing	No longer a goal
Storage facility		X	
Gate security		X	
New smog equipment	X		

2. New Discipline Goals: Please list all discipline goals for this three-year planning cycle (including those continued from previous planning cycle):

Goal #1	
Program or discipline goal	**Secure funding for Shopkey Pro subscription**
Strategies for implementation	**$1200 annual subscription**
Timeline for implementation	**1 year**

Outcome(s) expected (qualitative/quantitative)	**Stay current with industry**

Goal #2	
Program or discipline goal	**Classroom set of laptop computers**
Strategies for implementation	The classroom laptops will allow better use of our online information services ie: shopkey pro. This will also give our students an opportunity to have all our lab sheet's automated and this will give us a repository for tracking laboratory activities, rather than paper which gets lost.
Timeline for implementation	1 year
Outcome(s) expected (qualitative/quantitative)	No more paper lab-sheets, all students can participate with class time Shopkey pro service information activities. More questions and class interaction as activities are produced and delivered to our students.

Goal #3	
Program or discipline goal	**Crane Maintenance**
Strategies for implementation	The crane is one of those shop items that are necessary for labs, and without it heavy labs cannot be performed. The cranes need quarterly inspections and load testing every 4 years and the programs are struggling with the costs to maintain compliance. This was to be a facilities "thing" that was pushed onto the programs. This is a must have for our area
Timeline for implementation	This year and ongoing
Outcome(s) expected (qualitative/quantitative)	Safe Laboratory Area protecting our students and allowing our students to gain the education in the heavy maintenance studies, ie engine rebuild, transmission rebuild.

Goal #4	
Program or discipline goal	**Engine machining equipment**
Strategies for implementation	Need $10,000 to update equipment
Timeline for implementation	1 year
Outcome(s) expected (qualitative/quantitative)	Safer teaching environment, better skill development.

Goal #5	
Program or discipline goal	**Hybrid Technology Development**
Strategies for implementation	Invest in desktop hybrid training modules
Timeline for implementation	1 year
Outcome(s) expected (qualitative/quantitative)	Having desktop modules will allow our students to have one on one time to discover and learn at the student's own pace to understand the new hybrid technology. All shops are looking for this skill from new employees

3. How do your goals align with your discipline's mission statement?

All of our goals and mission statements have the same overall purpose: Provide students with the best possible training so they gain employment in the industry and earn a livable wage with advancement opportunities. Some of our goals relate to facility improvement, and some relate directly to instructional methodologies.

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4. How do your goals align with the College's Strategic Plan Goals?

Maintain high quality facilities and instructional programs.

PART 4: FEEDBACK AND FOLLOW-UP

This section is for providing feedback.

Confirmation of Completion by Department Chair

Department Chair	Anthony Fedon
Date	11-7-2017

*Please email your Dean to inform them that the PRP has been completed and is ready for their review

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Reviewed by Dean

Reviewer(s)	Margie Fritch
Date	November 27, 2017

1. Strengths and successes of the discipline as evidenced by the data and analysis:

The industry partnerships and the facilities along with exemplary faculty make this program a viable option for students pursuing a career in the automotive industry.

2. Areas of Concern, if any:

Technology is changing so rapidly that the curriculum and facilities will always be a challenge to maintain to industry standards and needs.

3. Recommendations for improvement:

N/A

*Please email your VP to inform them that the PRP has been completed and is ready for their review

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Reviewed by: Instructional Planning Council PRP Sub-Committee

Reviewer(s)	Zeb Navarro, Katy Farrell, Joe Briceno
Date	12/13/17

1. Strengths and successes of the discipline as evidenced by the data and analysis:

Increased efficiency. Curriculum meets industry needs with students being well-trained to meet industry skills. The addition of advanced classes in the evenings and Saturdays has been very successful. Opportunities in hybrid and electric vehicle field for

students and the program can make this program even more desirable.

2. Areas of Concern, if any:

Replacement and maintenance of equipment to meet technology and industry changes. Classroom space for students since some are sitting at the end of desks. Retention of students leaving due to early job placement or not completing a course so they can re-enroll the following semester to finish projects.

3. Recommendations for improvement:

Take a closer look at success rates for the various groups of students and address underperforming and underrepresented groups. Develop program goals to address success rates of part-time students and overall student retention. Develop more formal pathways for certificate completion and job placement. This seems like a program that would benefit from collaborating with area high schools to recruit new students. Maybe this is already in place?

4. Recommended Next Steps:

	Proceed as Planned on Program Review Schedule
X	Repeat Comprehensive Review

Reviewed by: Vice President	
Reviewer(s)	Jack S. Kahn, Ph.D.
Date	1/14/18

1. Strengths and successes of the discipline as evidenced by the data and analysis:

1.   Enrollment information is well discussed- let's discuss doing more on the weekends- I think there is expansion possible here
2.   Great discussion of efficiency and your analysis and summary are correct!
3.   Success rates are yes right above Palomar's set etc.
4.   Great to see more completions here- fantastic!
5.   SWOT is succinct but handles basics here
6.   Goals make good sense also
7.   Overall a good start but a few areas that are incomplete and need more data and anlysis

2. Areas of Concern, if any:

a.   See comments from reviewers on areas that need more thorough analysis
b.   See comments on LMI
c.   SLo section is a good start but is incomplete – please see rubric- need more detail, data and plans

3. Recommendations for improvement:

4. Recommended Next Steps:

	Proceed as Planned on Program Review Schedule

X	**Repeat Comprehensive Review**

Upon completion of PART 4, the Program Review document should be returned to discipline faculty/staff for review, then submitted to the Office of Instruction and Institutional Research and Planning for public posting. Please refer to the Program Review timeline.