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## 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**  
2020-2021

**Are you completing a comprehensive or annual PRP?**  
Annual

**Department Name**  
Trade and Industry

**Discipline Name**  
Diesel Mechanics Technology (DMT)

**Department Chair Name**  
Anthony Fedon

**Division Name**  
Career, Technical and Extended Education

**Website address for your discipline**  
<https://www2.palomar.edu/pages/diesel/>

#### **Discipline Mission statement**

The mission of the Diesel Technology Program is to educate and prepare the Diesel Technicians of the future with the latest technologies and basic soft skills that the Diesel industry now requires. We achieve this mission by maintaining committed highly trained staff and dynamic private and public partnerships with Local, State and National entities. We work to empower our graduates to make successful career and life choices that improve their lives, their communities, and the economy.

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

**Does your discipline have at least one degree or certificate associated with it?**  
Yes

**Are any of your programs TOP coded as vocational (CTE/CE)?**  
Yes

**List all degrees and certificates offered within this discipline.**  
Certificate of Achievement. Diesel Mechanics Technology

Assoc.of Science Diesel Mechanics Technology

**Please list the names and positions of everyone who helped to complete this document.**  
Sergio H. Hernandez (Program Director / Assoc. Professor)

Use the link to provided to help answer the staffing questions below. This form requires a login and password to access. Please use your Palomar email and password to log in.

Link: [Permanent Employees Staff Count](#)

**Full-time Faculty (total number of FT faculty in your discipline)**

1

**Full-time Faculty (FTEF)**

1.2

**Part-time faculty (FTEF)**

1.6

**Classified and other permanent staff positions that support this discipline**

Anel Gonzalez ADA FTEF 1 Shared with the rest of Trade & Industry (12 month contract)

**Additional hourly staff that support this discipline and/or department**

0

## PROGRAM INFORMATION

In this section you are asked to consider your programs, their learning outcomes, the annual number of completions, goals for completions and enrollment and efficiency trends.

## PROGRAM LEARNING OUTCOMES

Begin this section by reviewing the Program Review reports for programs and courses in Nuventive Improve (TracDat). All active course and program learning outcomes should be systematically assessed over a 3-year cycle. First, look at program learning outcomes.

- **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?**

All of our learning out comes are geared with the following in mind:

- #1 Learning how to work in and around heavy equipment while being safe at all times including in a shop environment.
- #2 Trying to meet the tremendous needs of our industry for Diesel technicians.
- #3 Our program is putting students to work.
- #4 Program is constantly being guided by our Advisory Committee and our strong ties too our industry partners.
- #5 Our retention Rate for 2019 was 98% and our Success rate for 2019 was 87%

### **How do they align with employer and transfer expectations?**

We are placing most of our students in good paying jobs and even during this time of COVID 19 we still get calls for more.

### **Describe your program's plan for assessing program learning outcomes.**

Through regular tests and quizzes, Task sheets related to industry work, directly correlated to our lab assignments. We also provide our students with NC3 certifications that are directly imbedded into our normal courses. The certifications are industry vetted and recognized. This provides our students not just with the added value but with a leg up when the time comes to apply for a job.

### **Summarize the major findings of your program outcomes assessments.**

Thus far we are doing a very good job keeping our students safe and accident free. We are having issues with students coming to the program and not having some basic shop skills and tool knowledge.

## 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.**

Degrees and Certificates Awarded (Count)

2014-15 2015-16 2016-17 2017-18 2018-19 2019-20

AA/AS

Associate in Science Degree 8 4 9 3 3 5

AA/AS Total 8 4 9 3 3 5

Certificate

Certificate of Achievement 20 12 21 13 3 10

Certificate Total 20 12 21 13 3 10

Grand Total 28 16 30 16 6 15

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

Decreased

**What factors have influenced your completion trends?**

Due to the booming economy and high demand for diesel technicians students are offered jobs and do not complete the program, they get a job and never complete the program. And now COVID19 has hit.

**Program Information Summary**

Consider your program outcome assessments, completions, and enrollment/efficiency trends, as well as other internal and external factors.

**How have these factors contributed to the success of your program(s)?**

High demand for trained technicians and low output has created a shortage thus increasing job opportunities, wages for our students.

**How have these factors presented challenges for your program(s)?**

High demands for trained technicians and now COVID has just derailed students career paths and industry is still in dire need for technicians.

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?**

72.0%

**Why did you choose this standard?**

This is the standard that is acceptable by the state. and with the volatile economy it is a safe number to achieve without under delivering.

**What is your stretch goal for course success rates?**

73.0%

**How did you decide upon the goal?**

Being cautiously optimistic about the current economy, COVID 19 and the high demand for more Diesel Technicians.

## **COURSE LEARNING OUTCOMES**

**How have you improved course-level assessment methods since the last PRP?**

No! Not yet, On the to due list, shortly

**Summarize the major findings of your course outcomes assessments.**

You Cannot compete with the current economy and COVID 19.

**This section is intentionally blank for annual PRPs. Please click "Next" to continue.**

**This section is intentionally blank for annual PRPs. Please click "Next" to continue.**

## **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](#)
- [Career Coach-San Diego Workforce Partnership](#)
- [EDD Labor Market Info](#)
- [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?**

Electric Trucks and Buses are the "New Wave" of Technology coming as we speak. We will have to start planning and procure the equipment soon or get left behind.

49-3031.00 Bus and Truck Mechanics and Diesel Engine Specialists Green Occupation Green

49-3042.00 Mobile Heavy Equipment Mechanics, Except Engines

49-3023.01 Automotive Master Mechanics

49-3041.00 Farm Equipment Mechanics and Service Technicians

53-6051.07 Transportation Vehicle, Equipment and Systems Inspectors, Except Aviation Green Occupation

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

Mechanical — Knowledge of machines and tools, including their designs, uses, repair, and maintenance.

Transportation — Knowledge of principles and methods for moving people or goods by air, rail, sea, or road, including the relative costs and benefits.

Customer and Personal Service — Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.

Public Safety and Security — Knowledge of relevant equipment, policies, procedures, and strategies to promote effective local, state, or national security operations for the protection of people, data, property, and institutions.

English Language — Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.

**Skills**

Show all 5 of 14 displayed

Repairing — Repairing machines or systems using the needed tools.

Troubleshooting — Determining causes of operating errors and deciding what to do about it.

Operation and Control — Controlling operations of equipment or systems.

Operation Monitoring — Watching gauges, dials, or other indicators to make sure a machine is working properly.

Critical Thinking — Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.

**Abilities**

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Near Vision — The ability to see details at close range (within a few feet of the observer).

Finger Dexterity — The ability to make precisely coordinated movements of the fingers of one or both hands to grasp, manipulate, or assemble very small objects.

Manual Dexterity — The ability to quickly move your hand, your hand together with your arm, or your two hands to grasp, manipulate, or assemble objects.

Problem Sensitivity — The ability to tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.

Arm-Hand Steadiness — The ability to keep your hand and arm steady while moving your arm or while holding your arm and hand in one position.

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

Through group, team and individual assignments in some cases. On ground courses allow for the much needed interaction with others.

## **Work Based Learning**

Applied and work-based learning (WBL) allows students to apply classroom content in professional settings while gaining real-world experience. WBL exists on a continuum that reflects the progress of experiences from awareness-building to training. Students often cycle back through the continuum many times throughout college and throughout their career. Faculty play a critical role in ensuring these experiences are embedded into curriculum and support learning.

**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?**

CE-100 as an elective.

Lab assignments on equipment or simulators.

Internship with County of San Diego

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

The Diesel Technology Program is career based and is specific to this career field.

**How do you engage with the community to keep them apprised of opportunities in your program?**

Through our industry partners and contacts. Also through our web page and out reach to the high schools.

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

Estimated Employment and Projected Growth

Bus and Truck Mechanics

Geographic Area

(Estimated Year-Projected Year) Estimated Projected Numeric Percent Job

Employment Employment Change Change Openings

(2016-2026) 23,100 26,100 3,000 13.0 24,600

San Diego County Occupational Wages [Top]

Area Year Period Hourly Mean Hourly by Percentile

25th Median 75th

San Diego 2020 1st Qtr \$29.44 \$25.55 \$29.23 \$32.96

Area Estimated Year-Projected Year Employment Employment Change Annual Avg Openings

Estimated Projected Number Percent

San Diego County 2016 - 2026 500 570 70 14.0 56

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

What is done out in the work force is practiced and reinforced here in the program such as writing service reports, reading and understanding manuals, schematics, and troubleshooting.

**When was your program's last advisory meeting held? What significant information was learned from that meeting?**

Meeting was in Thursday, February, 22nd 2018. None held this year due to COVID19

**What are the San Diego County/Imperial County Job Openings?**

Between 2017 and 2022, Bus and Truck Mechanics and Diesel Engine Specialists are projected to increase by 140 jobs or six percent.

- Employers in San Diego County will need to hire 249 workers annually to fill new jobs and backfill jobs due to attrition such as retirement or turnover.
- Between 2010 and 2017, there was an average of 122 online job postings per year for Bus and Truck Mechanics and Diesel Engine Specialists.
- Bus and Truck Mechanics and Diesel Engine Specialists earn median hourly earnings of \$25.08; this is more than the Self-Sufficiency Standard for a single adult in San Diego County, which is \$15.99 per hour.

According to the California Community Colleges Chancellor's Office Management Information System (MIS) Data Mart, there is one Taxonomy of Programs (TOP) code associated with this occupation: Diesel Technology (094700). According to the Classification of Instructional Programs (CIP) data, there are three CIP codes associated with this occupation.

- According to the TOP data, two community colleges supply the region with awards for this occupation: Palomar College and San Diego Miramar College.
- Comparing labor demand (annual openings) with labor supply suggests that there is a supply gap for this occupation in San Diego County, with 249 annual openings and 105 awards. Comparatively, there are 2,652 annual openings in California and 658 completions.

## 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**

Become a Kubota Tech training center part of expanding NC3 program certifications

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

New

Existing

**Goal Status**

Ongoing

**How will you complete this goal?**

Final stages of completion. Need some admin work and integration into normal courses.

**Outcome(s) expected (qualitative/quantitative)**

We will be able to train and issue Kubota training certifications to our students by using Kubota equipment and training materials just like regular Kubota technicians. This is an added value to our students and industry.

Goal dates have changed due to COVID 19.

**How does this goal align with your department mission statement, the college strategic plan, and /or Guided Pathways?**

Addresses goals 2.5 and 2.6

**Expected Goal Completion Date**

12/31/2021



## RESOURCES

Congratulations! You are nearing completion. In this section, you will consider the resources you need to implement your three-year program review plan and/or address any findings from your assessment of your discipline.

The section is organized into the following four parts:

PART 1: Staffing Needs (Faculty and Additional Staff)

PART 2: Budget Review

PART 3: Technology and Facilities Needs

PART 4: One Time Request for Other Needs (NonTechnology Equipment, Supplies, Operating Expenses, Travel)

### PART 1: STAFFING NEEDS

Requests for faculty will follow the prioritization process currently in place in IPC, and the IPC SubCommittee. Requests for new staff positions will be prioritized at the division level and reviewed at Exec.

**Are you requesting additional full-time faculty?**

No

***NOTE: If you are requesting full-time faculty, you must go back to the Labor Market section of the form to complete that section. It is required when requesting additional faculty positions.***

**Are you requesting new Classified, CAST or AA positions?**

Yes

### REQUEST FOR ADDITIONAL CLASSIFIED, CAST, AA

#### Staff, CAST, AA request 1

**Title of position**

ISA III

**Is this request for a full-time or part-time position?**

Full Time

**How does the position fill a critical need for current, future, or critical operations? e.g. accreditation, health and safety, regulatory, legal mandates, institutional priorities, program trend analyses of growth/stability** Untitled

Health and safety, This person will aid with keeping our students safe from injuries and COVID 19. We also have evening courses which require more vigilance.

**Does the position assist in establishing more efficient District Operations through either of the following: reorganization/restructuring OR use of technology?**

This ISA III will help instructors reduce their set up and cleanup times. Also assisting faculty with:

Safe guarding students on dues and don'ts.

Maintain tools and equipment, Order tools and equipment.

Help maintain and track budgets.

Making shop operations smoother.

Notifying about budget short falls.

Supply and material needs for future planning.

**Is there funding that can help support the position outside of general funds?**

No

**Describe how this position helps implement or support your three-year PRP plan.**

By being a monitor and also assisting students and faculty with tool and equipment maintenance, equipment repair and facilities. By having additional supervision in the lab with our students more skill attainment and better mentoring can occur.

(Instructors not being spread so thin)

**Strategic Plan 2022 Objective**

1:3	2:3	2:4	3:1
3:2	3:3	3:4	3:5
4:1			

**If the position is not approved, what is your plan?**

Lower student enrollment due to health and safety. (COVID 19)

**PART 2: BUDGET REVIEW**

Review your Budget/Expenditure reports for 2018, 2019, 2020. Consider your three-year PRP plan.

Click on the link below to access directions to the *Available Budget Report* to complete this section.

**How to Request the Available Budget Report**

**Reflecting on your three-year PRP plan, are there any budget considerations you would like your dean/supervisor to be aware of for the upcoming year?**

Yes

**What budget considerations would you like your dean/supervisor to be aware of or to consider? Please be as specific as possible. For example, if you need an increase in the 40000 account and a decrease in the 23000 account, describe what increase your department needs, how much, and a description of why the department needs the adjustment.**

40000s- General Material for lab instruction; paint, gas, etc. Materials mostly bought by foundation (Peralta Foundation Program – ended in 2017), PRP (2017)

Estimate of what is needed (2018-2019)

Estimate of what is needed in future \$10,000 This includes fuel, more supplies, increase in vendor fees which were paid by foundation but there are no more foundation funds.

**NOTE: PARTS 3 and 4 – TECHNOLOGY, FACILITIES AND OTHER NEEDS**

This year the College is implementing two new processes related to resource needs coming from the PRP process.

1. One-Time Fund Requests. The college is implementing a process for prioritizing and allocating funds for one-time needs/requests tied to Program Review and Planning. Prioritization will take place through participatory governance in planning councils and the Budget Committee. Then, a recommendation will be made to Exec for funding of request utilizing various funding sources.

For more information about funding sources available, see **IELM BLOCK GRANT, LOTTERY, PERKINS AND STRONG WORKFORCE GUIDELINES**.

Consider submitting one-time requests only if you have verified that you cannot fund the request using your general discretionary funds or other funds.

2. Technology and Facilities Review. From now on, ALL requests for technology will go through an institutional review process. If you request technology here, you will see a description of the process below.

**PART 3: TECHNOLOGY AND FACILITIES NEEDS**

**Will you be requesting any technology (hardware/software) this upcoming year?**

No

**Do you have resource needs that require physical space or modification to physical space?**

No

#### **PART 4: OTHER ONE-TIME NEEDS**

For more information about funding sources available, see [IELM BLOCK GRANT, LOTTERY, PERKINS AND STRONG WORKFORCE GUIDELINES](#). Please check with your department chair on the availability for this cycle.

**Do you have one-time requests for other items (e.g., Non-Technology Equipment, Supplies, Operating Expenses, Travel) that your budget or other funding sources will NOT cover?**

No

**I confirm that the Program Review is complete and ready to be submitted.**

Yes

**Enter your email address to receive a copy of the PRP to keep for your records.**

shernandez@palomar.edu

## Review

### Chair Review

#### Chair Comments

Sergio,  
Course learning outcomes should be updated and program outcomes could be tightened up a little.  
Nice work on the trends.

BUDGET NUMBERS ARE INCLUDED

#### Chair Name

Anthony Fedon

#### Chair Sign Date

10/29/2020

### Dean Review

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

I agree with the chair comments. Sergio has developed and maintained very strong industry partnerships that benefit his students not only in employment in the field but in receipt of scholarships. Excellent work in this area.

#### Areas of Concern, if any:

safety in the labs without an ISA helping students.

#### Recommendations for improvement:

#### Dean Name

Margie Fritch

#### Dean Sign Date

11/5/2020

### IPC Review

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

#### Areas of Concern, if any:

#### Recommendations for improvement:

#### IPC Reviewer(s)

#### IPC Review Date

### Vice President Review

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

development of Kubota Tech Training

#### Areas of Concern, if any:

1. how PLOs align with employer expectations -- is it a coincidence that students end up with well-paying jobs OR is it intentional that your outcomes lead to this?
2. Are outcomes assessments embedded into CANVAS?
3. how to get students to see the value in completing -- how to schedule in such a way that encourages them to do so even as they enter the job market
4. course success rate standards can be strong even as enrollments waver
5. SLOs and assessment need to take higher priority -- who is your area's SLO coordinator?
6. lack of advisory connection since 2018?

**Recommendations for improvement:**

1. work with dean and Career Continuum to plan for how to get students to see the value in completing -- how to schedule in such a way that encourages them to do so even as they enter the job market
2. meet with discipline SLO coordinator this semester to set up a plan for adding SLOs and providing for regular assessment; using Canvas to do this will simplify the workload and provide you with plenty of data to make instructional decisions based on outcomes.
3. Schedule an advisory council meeting this semester on ZOOM.

**Vice President Name**

Shayla Sivert

**Vice President Sign Date**

1/2/2021