PALOMAR COLLEGE®
Learning for Success

Program Review & Planning (PRP)

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:	Welding Technology
Department Name:	Trade and Industry
Division Name:	CTEE

Please list all participants in this Program Review:

Name	Position
Kevin Powers	Probationary full-time faculty
Kevin Smith	Adjunct/ Temporary Full-time Contract

Number of Full Time faculty	1	**Number of Part Time Faculty**	8

Please list the Classified positions (and their FTE) that support this discipline:
Shared Full-time Academic Department Assistant

What additional hourly staff support this discipline and/or department:
3 short-term/ student employees

Discipline mission statement (click here for information on how to create a mission statement):
The Welding Technology program at Palomar Community College is committed to providing students with the knowledge, skills, and abilities necessary to obtain entry level positions in welding related industries. The welding field offers countless opportunities for program graduates. Our diverse graduates can be employed in the aerospace, manufacturing, utilities, and shipbuilding industries. The Welding program offers an A.S. Welding Technology, Certificate of Achievement, and 3 certificates of proficiency in the major welding processes.

List all degrees and certificates (e.g., AA, AT, Certificates) offered within this discipline:
Associate in Science- Welding Technology. Certificate of Achievement Certificate of Proficiency- Entry-Level Gas Metal Arc/ Flux Cored Arc Welding, Entry-Level Shielded Metal Arc Welding, Entry-Level Gas Tungsten Arc Welding. Welder Qualification Certification- Professional license

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	X	Steady/No Change		Decreased	

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

The trend was expected. Being the only for credit program in the county, the Welding Program at Palomar has always been in high demand and severely impacted. Despite having a small laboratory, strategic scheduling, adding course sections in available time slots, and offering distance education courses has allowed more student access and success. With the scheduled remodel and gaining extra capacity, the Welding program expects to grow in number. The faculty believes that 800 enrollments is an achievable goal. With curricular changes the program anticipates to grow in quality and completions. The Welding program operates at 105.88%.

Column Labels							
Values	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Definitions
Enrollment At Census	442	505	522	540	526	540	Sum of Census Day Enrollments from all Components (Lec, Lab, Cln, etc.
Seats	388	448	488	510	510	510	Sum of Enrollmnent Caps (a.k.a. "Seats") from All Components (Lec, Lab, Cln, etc.)
Fill Rate	113.92%	112.72%	106.97%	105.88%	103.14%	105.88%	Enrollment at Census Divided by Total Seats
WSCH	1,361.00	1,463.34	1,583.90	1,641.80	1,600.20	1,728.60	Weekly Student Contact Hours
FTES	45.37	48.78	52.80	54.73	53.34	54.99	One Full-Time Equivalent Student = 30 WSCH
Total FTEF	3.00	3.42	3.93	4.11	4.11	4.11	Total Full-Time Equivalent Faculty
WSCH/FTEF	453.67	428.29	403.40	399.36	389.24	420.47	WSCH Generated per Full-Time Equivalent Faculty Member
Full-Time FTEF	1.00	1.00	2.00	2.00	1.00	1.00	FTEF from Contract Faculty
Hourly FTEF	1.83	2.02	1.06	1.44	2.78	2.78	FTEF from Hourly Faculty
Overload FTEF	0.17	0.40	0.86	0.67	0.33	0.33	FTEF from Contract Faculty Overload
Part-Time FTEF	2.00	2.42	1.93	2.11	3.11	3.11	Hourly FTEF + Overload FTEF
Part-Time /Total FTEF %	66.67%	70.73%	49.06%	51.35%	75.68%	75.68%	Percent of Total FTEF Taught By Part-Time Faculty

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?
Last year the welding faculty initiated program level and course level changes. No welding classes have been cancelled due to low enrollment. The program deactivated 1 course (WELD 105) that was required for degree and certificates, and deactivated 1 course (WELD 136) that was not required. The changes were made to remove overlapping content and to remove antiquated technology that is no longer used within industry. The removal of these courses open the laboratory to hold another course that will ensure program completions. These program changes have lowered the A.S. degree unit requirement from 33 to 30 units.

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

Reflect on your enrollment trends over the past five years. Was the trend expected? What factors have influenced enrollment?
With the limited space of the welding laboratory, we are limited in the number of seats/ sections we have available to students. Our current Laboratory/ Lecture capacity is a maximum of 22. Having this capacity is required due to safety reasons, and because there is only 22 welding stations in the welding laboratory. With the scheduled welding facility expansion we will be able to offer more sections and offer classes concurrently. The increase of stations per class will be 24. The remodel will also allow for more time between classes to allow more instructor preparation, and required maintenance of equipment.

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.
With changes to full-time faculty load hours, adjunct load was negatively impacted. The load hours were changed from 18 to 15. The amount of courses an adjunct was allowed to teach went from 2 to 1.5. This required that the welding program hire more adjunct. Qualified adjunct are extremely difficult to hire for morning courses. The welding program is now taught 75% by adjunct instructors. Currently, the district is in the process of hiring an additional full-time instructor. With the projected growth and expansion of the program, it is anticipated the need for contract faculty to teach overload classes will be reduced.

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?

The overall success rate of the institution is 70.9% while the welding department has an overall success rate of 85.3%. There has been some changes in the welding departments' success rate over the past five years. 2014-2015 held the lowest success rate at 76.4%. The program attributes this rate to the lack of leadership of full-time faculty and facility relocation. 2014-2015 the program was taught entirely by adjunct. The program attributes its current success rate to curricular changes and the teamwork of all faculty working together to ensure student success on all fronts.

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
⊟ Overall						
Success Rate						
All	87.2%	83.4%	83.1%	76.4%	77.5%	85.3%
Enrollments						
All	250	301	302	326	315	326
Overall Success Rate	**87.2%**	**83.4%**	**83.1%**	**76.4%**	**77.5%**	**85.3%**
Overall Enrollments	**250**	**301**	**302**	**326**	**315**	**326**

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

The gender success rate for the institution is 70.6% while the gender success rate for the welding department is 85.8%. The welding industry is traditionally a predominantly male occupation. Our student population is reflective of this demographic. The department is in discussions with industry stakeholders on ideas to recruit/ encourage more female students. The local unions have developed special programs for females to enter apprenticeships and the Ironworkers have contacted faculty for recruitment opportunities for our female students.

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
⊟ Gender						
Success Rate						
Male	86.4%	82.5%	83.9%	76.1%	76.6%	85.8%
Enrollments						
Male	236	286	285	310	290	309
Gender Success Rate	**86.4%**	**82.5%**	**83.9%**	**76.1%**	**76.6%**	**85.8%**
Gender Enrollments	**236**	**286**	**285**	**310**	**290**	**309**

Age

The welding program is diverse in its age success rates. The program has 76.2% aged 19 and under, 87.2% 20-24, and 89.4% 25-49. The program would like to raise the success rate for students aged 19 and under. There are safety concerns for students under the age of 18, but we have had underage

students succeed in the past. Being a vocational program we expect our success rates to be where they are for the ages 20 and up. The faculty are planning recruitment strategies for the local high schools.

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
⊟ Age						
Success Rate						
19 And Under	96.0%	91.7%	68.8%	61.5%	84.2%	76.2%
20 To 24	89.3%	88.6%	82.1%	80.3%	70.6%	87.2%
25 To 49	84.5%	81.5%	84.8%	82.8%	79.2%	89.4%
Enrollments						
19 And Under	25	24	16	13	19	21
20 To 24	56	70	67	66	51	109
25 To 49	116	124	138	116	106	94
Age Success Rate	**87.3%**	**84.9%**	**82.8%**	**80.5%**	**77.3%**	**87.1%**
Age Enrollments	**197**	**218**	**221**	**195**	**176**	**224**

Ethnicity

Welding is primarily composed of students that identify as hispanic or white. The programs ethnicity success rate is the highest it has been since 2011-2012 school year. The department is excited that the ethnicity gap is closing in welding and that the ethnicity success rate is only 1 point lower than our overall success as a program.(84%)

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
⊟ Ethnicity						
Success Rate						
Hispanic	86.8%	81.1%	85.4%	72.5%	75.0%	88.5%
White	91.4%	84.7%	81.6%	76.8%	71.8%	83.0%
Enrollments						
Hispanic	38	37	41	40	48	52
White	139	176	196	155	156	176
Ethnicity Success Rate	**90.4%**	**84.0%**	**82.3%**	**75.9%**	**72.5%**	**84.2%**
Ethnicity Enrollments	**177**	**213**	**237**	**195**	**204**	**228**

Special Population (examples- veteran, foster youth, etc)

The welding department success rates are 84.9% Veterans, 85.4% foster youth, and 85.3% disabled. The welding department is a diverse program and there doesn't appear to be and gaps in the success of our students based on any of the provided special populations data.

Veterans

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
⊟ Veteran						
Success Rate						
N	86.5%	81.4%	80.6%	75.2%	74.8%	84.9%
Y	91.7%	100.0%	91.1%	79.1%	N/A	N/A
Enrollments						
N	215	264	217	234	266	279
Y	12	14	45	43	N/A	N/A
Veteran Success Rate	**86.8%**	**82.4%**	**82.4%**	**75.8%**	**74.8%**	**84.9%**
Veteran Enrollments	**227**	**278**	**262**	**277**	**266**	**279**

Foster Youth

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
⊟ Foster Youth						
Success Rate						
Not Foster Youth	87.2%	83.3%	82.8%	76.2%	77.8%	85.4%
Enrollments						
Not Foster Youth	250	299	297	323	311	322
Foster Youth Success Rate	**87.2%**	**83.3%**	**82.8%**	**76.2%**	**77.8%**	**85.4%**
Foster Youth Enrollments	**250**	**299**	**297**	**323**	**311**	**322**

Disability

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
⊟ Disability						
Success Rate						
N	86.1%	85.3%	81.7%	77.0%	78.7%	85.3%
Y	100.0%	N/A	100.0%	N/A	N/A	N/A
Enrollments						
N	216	265	268	300	272	285
Y	11	N/A	11	N/A	N/A	N/A
Disability Success Rate	**86.8%**	**85.3%**	**82.4%**	**77.0%**	**78.7%**	**85.3%**
Disability Enrollments	**227**	**265**	**279**	**300**	**272**	**285**

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.

The success rate for distance education is 77.7%, mornings are 87.2% while evenings are 93.9%. We are above the percentages of the institution in each category, however the program acknowledges the success rate of our distance education courses need to improve. We have increased our distance learning success rate by 10% since 2014-2015. The program attributes this success to integrating the use of blackboard in all courses and curricular changes to update courses. By the time the student needs to take our distance education only courses, they should be very familiar with the learning management software and we believe the course updates will make the courses more coherent and streamlined.
The amount of students on financial is almost 50% compared to the students receiving no assistance. The success of students receiving financial aid is the exact same percentage as students receiving none.

Financial Aid:

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
⊟ Financial Aid						
Success Rate						
N	86.4%	83.9%	83.2%	78.3%	81.2%	85.3%
Y	92.3%	87.1%	86.0%	74.0%	73.6%	85.3%
Enrollments						
N	162	161	101	161	154	150
Y	65	116	143	100	121	136
Financial Aid Success Rate	**88.1%**	**85.2%**	**84.8%**	**76.6%**	**77.8%**	**85.3%**
Financial Aid Enrollments	**227**	**277**	**244**	**261**	**275**	**286**

Time of day:

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
⊟ Class Type						
Success Rate						
Day	94.6%	91.7%	84.9%	84.7%	81.2%	87.2%
Distance Education	86.4%	74.2%	80.5%	67.0%	71.2%	77.7%
Evening	82.7%	84.3%	81.3%	73.4%	79.0%	93.9%
Enrollments						
Day	74	96	172	150	149	148
Distance Education	66	97	82	112	104	112
Evening	110	108	48	64	62	66
Class Type Success Rate	**87.2%**	**83.4%**	**83.1%**	**76.4%**	**77.5%**	**85.3%**
Class Type Enrollments	**250**	**301**	**302**	**326**	**315**	**326**

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:	80%
Why?	

The welding program strives to ensure the success of all students. We implement different teaching methodologies to foster a positive learning environment for all students with all learning styles. We averaged the overall success rate of our students over the last 5 years to be 82%. One area that we recognized needed improvement was distance education. Faculty held a meeting and decided to implement requirements for all welding classes to use Blackboard LMS for delivery of course content documents and quizzes. Initiating this change has allowed students to become more proficient in using the LMS and has now increased our online course success rates.
To give some room for factors beyond our control we believe 80% student success rate to be an achievable goal for our program.

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?

Over the welding programs' history our completions fluctuate due to many factors. The factors that influence the program completions are; Limited availability of course sections, scheduling conflicts, and limited capacity of courses.
Welding is a program in which students can take one single class, and upon completion, gain enough knowledge and skills to enter the workforce. The program is composed of primarily part-time students. Many of our students are working and can only take a limited number of courses at one time. Many of our students take our courses to enter a new career or to enhance a career in welding. Traditionally, in the welding industry, professional licenses are more important than certificate or degrees. The welding faculty have promoted our degree and certificate programs so our students enter the workforce while commanding a higher wage. The faculty will continue to promote our courses and encourage students to complete the entire program. The faculty are discussing additional certificates that are based on welding, but focus on management, inspection, and non-destructive testing. These smaller unit value certificates would be stackable into higher unit value certificates, and would open options for students that do not plan to be welding technicians. In addition, once students are enrolled in the program, the faculty promote the Associate Degree so that employers hire students that are well rounded in the technical skills as well as the soft skills including writing, speaking, and critical thinking.

Sum of Awards									
		2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
⊞ AA/AS			2	3	5	6	2	7	11	6
⊞ Cert <18 Units		8	19	18	19	20	17	20	23	23
⊞ Cert 18+ Units		3	3	5	4	10	5	9	12	10
Grand Total		11	24	26	28	36	24	36	46	39

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 Associates in Science degree awards have always been low when compared to GE or transfer programs. Compared to other vocational programs it is average.

Vocational programs typically have low degree award values when compared to GE or transfer programs due to traditionally fewer number of courses to take in order to enter the workforce. According to labor market data, most vocations that welding program students enter require little to no post-secondary education.
When compared to all 6 CTEE programs, welding is doing average.

CTEE Values

Sum of Awards	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
⊞ AA/AS	15	21	27	28	39	26	59	55	60
⊞ Cert <18 Units	8	19	18	19	20	17	20	23	61
⊞ Cert 18+ Units	34	38	46	60	55	51	109	135	114
Grand Total	57	78	91	107	114	94	188	213	235

Welding Values

Sum of Awards	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
⊞ AA/AS		2	3	5	6	2	7	11	6
⊞ Cert <18 Units	8	19	18	19	20	17	20	23	23
⊞ Cert 18+ Units	3	3	5	4	10	5	9	12	10
Grand Total	11	24	26	28	36	24	36	46	39

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/Supply-and-Demand.aspx

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)?

Welding is a program unlike any other program on campus. Welding is not a trade, or a career in and of itself. It is a tool of many trades and industries. The welding industry and welders in general are in any industry you could think of and any product that has ever been made is possible because of welding. The following is a sample of industries that employ people with welding skills and their annual openings in San Diego County.

Occupational Title	Typical Entry Level Education	2015	2018	15-18 Change	% Change	Openings	Annual Openings
Construction and Building Inspectors	HS diploma or equivalent	1,259	1,349	90	7.2%	202	67
Structural Metal Fabricators and Fitters	HS diploma or equivalent	935	950	15	1.6%	77	26
Welders, Cutters, Solderers, and Brazers	HS diploma or equivalent	2,707	2,765	59	2.2%	340	113
Telecommunications Equipment Installers and Repairers,	Postsecondary nondegree award	2,419	2,547	127	5.3%	228	76
Radio, Cellular, and Tower Installers and Repairs	Associate degree	99	87	(12)	(11.7%)	6	2
Structural Metal Fabricators and Fitters	HS diploma or equivalent	935	950	15	1.6%	77	26
Assemblers and Fabricators, All Other	HS diploma or equivalent	2,257	2,286	28	1.3%	196	65
Reinforcing Iron and Rebar Workers	HS diploma or equivalent	548	556	9	1.6%	51	17
Roofers	No formal educational credential	1,712	1,909	198	11.6%	287	96
Sheet Metal Workers	HS diploma or equivalent	2,406	2,487	82	3.4%	244	81
Structural Iron and Steel Workers	HS diploma or equivalent	539	538	(2)	(0.3%)	53	18
Solar Photovoltaic Installers	HS diploma or equivalent	124	131	7	5.9%	13	4
Pipelayers, Plumbers, Pipefitters, and Steamfitters	HS diploma or equivalent	292	327	35	11.9%	47	16
Plumbers, Pipefitters, and Steamfitters	HS diploma or equivalent	4,735	5,064	329	6.9%	530	177
Operating Engineers	HS diploma or equivalent	2,062	2,105	43	2.1%	154	51
Maintenance and Repair Workers, General	HS diploma or equivalent	11,907	12,595	689	5.8%	1,671	557

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

Through the program's advisory committee, the department faculty have made many industry contacts. Our industry representatives forward employment requests to faculty on a regular basis. Employment requests get posted to the department job board regularly.
In our classes, students are required to write a resume and participate in mock job interviews.
Many students elect to take the WELD 140 course- Qualifications in welding, where the student has the option to obtain a welding certification license. The faculty identify that only offering this course one time per year is not enough to ensure our student success and they are currently working on curricular changes to address this deficiency.

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.

The Welding 140 course is designed to offer students the ability to take a welding qualification test in accordance with American Welding Society (AWS) codes and standards. The professional certifications are recognized on a global scale. The program is organized to offer these tests once a year. The program is incorporating the certification tests into all of our advanced level courses to ensure students will be entering the workforce with required licenses.

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)

Due to administrative actions the Welding Department has not held an advisory committee this calendar year. The next advisory committee is scheduled for 12/14/2017

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).

There is a need in industry for non-destructive testing technicians. Palomar purchased the equipment for an NDT program but it was never offered due to class space. With the need in industry for technicians, our full-time faculty needs to be trained and certified to train students in NDT. The plan is to utilize grant funding to pay for this training.

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/
Our SLO's begin with safety. Students need to be evaluated before taking any class on safety training and a safety test provided by the welding faculty. Each section evaluates this SLO every semester. The SLO's will be updated this year to include destructive test methods to ensure the program is aligned with industry standards. Students will be destructive testing their welded coupons. These types of tests prepare the student for entry into the workforce, but also demonstrate an overarching knowledge has been obtained.

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/
The current SLO assessment methods appear to be working as our success rate at the program level continues to rise. Our SLOs should be updated to incorporate more difficult assessments to track the advanced competencies as students move through the program.

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/
The program level SLO's address 3 different types of learning domains. Cognitive (knowledge), Affective (Attitude), and Psychomotor (Skills). The 3 program level SLO's require the student demonstrate these competencies throughout the assignment. Once these learning domains have been mastered the student is ready to enter the workforce at a competitive wage.

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?
During the course of the last year, faculty have initiated course reviews, program modifications, and course deactivations to keep our program relevant with the welding industry. We deactivated 2 courses and modified our certificate of achievement, A.S. degree to be 30 units instead of 33. Our advisory committee members and industrial partnership stakeholders make recommendations to our curricula to ensure the program stays valid, up to date technologically, and to ensure students are being trained in emerging welding trends. Through professional development activities and industry technical meetings and conventions, faculty stay up to date in the latest of welding topics, trends, emerging technologies, and employment trends for our graduates.

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.

The welding program is structured in that all students need to start with WELD 100. From that point all courses become more advanced and process specific. The program has what we refer to as WELD GE which are blueprint reading, math, fabrication and layout, these WELD GE courses combined with a process specific course and WELD 100 earn the student a certificate. The only course that differs between certificates is the process specific course. Therefore, all of the welding certificates are composed of stackable courses which are required courses for the A.S. degree. The welding department has not been impacted by enrollment issues. All of our courses continue to fill prior to open enrollment and we still have 5-10 students try and crash each section offered. The biggest complaint that we hear from students and our advisory committee stakeholders, is that students cannot get into the classes they need.
The department identified that our traditional scheduling was leaving some students without the ability to complete the courses required for their degrees. For example, if a student could only attend night courses, they were never able to complete WELD 115 which was only being offered on days/ afternoons. The department decided to offer WELD 115 on days in the Spring and in the Fall it will be held in the evenings. Switching the class with WELD 110 will enable access for more students to complete, and allows for a more streamlined academic plan. With the expansion of the welding laboratory, it is the goal of the department to offer the entire program on mornings and evenings.

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.?

Students from other departments typically take WELD 100 as a required course or elective. Many students with other declared majors decide to take more welding courses after having completed WELD 100. The access for these students can be difficult as WELD 100 is the most popular course we offer requiring the most amount of sections offered. We offer WELD 100 in the morning, evening, and on Saturday.

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:	Student Employment, Industry Reputation and support, Best Equipment, Program exceeds Industry Standards.
Weaknesses:	Facility size, Class capacity/ Booths, SLO's, Student access to technology
Opportunities:	Student have real opportunity to become adjunct. Employment in industry for students. Test facility for students/ industry. Student Club.
Threats:	Recruiting qualified faculty. Faculty retention. Funding. Certifications for students. Continuing education for overloaded faculty.

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
Hire two full time faculty in welding	X		
Add another welding laboratory. The welding department needs another laboratory to accommodate the demand of students. Our class sizes are limited to 22 students. Having another laboratory and an additional lecture room would allow the program to offer more sections, increasing student completion and retention. The currently laboratory requires the program runs classes back to back from morning to night. The students are not able to get the classes they need in a time slot that works for them.		X	
Become an accredited AWS SENSE and an American Welding Society test facility.		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	Add another welding laboratory. The welding department needs another laboratory to accommodate the demand of students. Our class sizes are limited to 22 students. Having another laboratory and an additional lecture room would allow the program to offer more sections, increasing student completion and retention. The currently laboratory requires the program runs classes back to back from morning to night. The students are not able to get the classes they need in a time slot that works for them.
Strategies for implementation	Remodel using Strong Workforce funding
Timeline for implementation	Complete remodel by Fall 2019.
Outcome(s) expected (qualitative/quantitative)	Welding classes are filled and have wait list of over 10 students in each class during the first 3 days of registration. We will be able to serve/train more students to enter the high demand workforce in welding and manufacturing.
Goal #2	
Program or discipline goal	Become an accredited AWS SENSE and an American Welding Society test facility.

Strategies for implementation	Hiring two full time faculty will help facilitate these two important goals
Timeline for implementation	Fall 2018
Outcome(s) expected (qualitative/quantitative)	Students will be trained and certified ready to enter the work force.
Goal #3	
Program or discipline goal	Integrate welding qualification tests into process specific/ advanced courses.
Strategies for implementation	Modify courses to include welding qualification tests.
Timeline for implementation	Fall 2018
Outcome(s) expected (qualitative/quantitative)	To provide students opportunity to earn professional licenses prior to entry in the workforce. Currently students obtain welding certifications once a year during spring-summer intersession. If we become an AWS test facility, we have to be able to take **walk ins*** which would further promote the program and establish more relationships within industry. * (Contract education/not-for-credit: Strategic Plan Objective 5.6)
Goal #4	
Program or discipline goal	Write new course for Non-destructive testing.
Strategies for implementation	With the hiring of an additional full-time faculty member, overloaded faculty will be able to focus on curricular and program changes.
Timeline for implementation	Fall 2018
Outcome(s) expected (qualitative/quantitative)	Currently students have no access to Non-Destructive Testing methods and procedures. Our Advisory committee stated that a general NDT course would benefit our program.
Goal #5	
Program or discipline goal	
Strategies for implementation	
Timeline for implementation	
Outcome(s) expected (qualitative/quantitative)	

3. How do your goals align with your discipline's mission statement?
All of our goals align with our mission statement in that they allow more student access. Our goals help to establish an improved program that ensures our students are prepared to enter the workforce and with enough knowledge, skills, and certifications to be able to compete for lucrative jobs.

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

Our goals are directly aligned with the college vision, mission, and values.
Our goals are to increase the capacity of the program(SP OBJ 4.1), increase the quality of instruction through curricular changes and program planning (SP OBJ 2.5), through curricular and scheduling changes ensure access for all student populations.

PART 4: FEEDBACK AND FOLLOW-UP

This section is for providing feedback.

Confirmation of Completion by Department Chair	
Department Chair	Anthony Fedon
Date	11-7-17

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

Reviewed by Dean	
Reviewer(s)	Made suggestions to clarify and enhance
Date	11/07-17
1. Strengths and successes of the discipline as evidenced by the data and analysis:	
LMI is so strong and program is only credit program in region. Industry support is a strength.	
2. Areas of Concern, if any:	
Expanding access to more ethnicities and women.	
3. Recommendations for improvement:	
Focused marketing to increase diversity and women enrolling in the program.	

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

Reviewed by: Instructional Planning Council PRP Sub-Committee	
Reviewer(s)	Michelle Barton, Susan Snow
Date	12/12/17
1. Strengths and successes of the discipline as evidenced by the data and analysis:	
Well written PRP! Only credit program. Strong enrollments; great success rates - ability to grow	
2. Areas of Concern, if any:	
Advisory committee needs to meet; increase diversity of student body	
3. Recommendations for improvement:	
Once new lab comes online grow this program.	

4. Recommended Next Steps:	
X	**Proceed as Planned on Program Review Schedule**
	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 info is very impressive! And thank you for including the chart.
2. Good discussion of wsch/ftef and remodel.
3. Success rates are very impressive – reflecting quality instruction
4. Good discussion of demographic differences and inclusion of data and plans- we will be looking forward for welders that better represent underrepresented students
5. Disaggregated success rate discussion is excellent- great analysis and inclusion of data
6. Completion discussion is also well done- thanks again for including the chart (it's a great idea) with the appropriate analysis etc
7. LMI information was also well presented and not a surprise
8. Curriculum overview is also well done and helpful to understand sequencing etc.
9. Goals make sense given the narrative above
10. Well done report and overview.

2. Areas of Concern, if any:

a. Im unclear what the 1st two sentences mean in the gender section
b. SLO section needs some more detail (see rubric) but a good start and good information

3. Recommendations for improvement:

4. Recommended Next Steps:

X	**Proceed as Planned on Program Review Schedule**
	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.