



# Program Review and Planning 2019-2020

## 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**  
2019-2020

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

**Department Name**  
Design and Manufacturing Technologies

**Discipline Name**  
Drafting Technology (DT)

**Department Chair Name**  
Co-Chairs: Anita R. Talone and Rita Campo-Griggs

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

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

#### Discipline Mission statement

In direct alignment with Palomar College's mission statement, the Drafting Department is committed and focused on being the leading provider of education to influence positive change and excellence in the technical, mechanical, electrical, and industrial drafting disciplines. We celebrate diversity in cultures, beliefs, abilities and needs. We foster a culture of integrity, professional practices, ethical behavior, environmental responsibility and global sustainability. Our instructors will educate, nurture, and inspire our creative-minded drafting and design students immersing them in a culture of professional practices designed to evoke passion and inspiration in the pursuit of their professional goals. Our curriculum is inclusive of individuals pursuing educational enrichment, career and technical training and re-training, certificates of achievement, associate degrees, and transfer-readiness to public schools, private schools and universities. We equip students with the skills and confidence necessary to become engaging leaders of change in society while living respectfully and responsibly in a global society.

[\(click here for information on how to create a mission statement\)](#)

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

**Are any of your programs vocational (CTE/CE)?**  
No

Yes

**List all degrees and certificates offered within this discipline.**

Computer Assisted Drafting - Certificate of Achievement and A.S. Degree  
Drafting Technology, Technical - Certificate of Achievement and A.S. Degree  
Electro-Mechanical Drafting & Design - Certificate of Achievement and A.S. Degree  
Drafting Technology, Multimedia - Certificate of Achievement and A.S. Degree

**Please list the names and positions of everyone who helped to complete this document.**

Anita R. Talone, Full Time Faculty Member  
Art Gerwig, FullTime Faculty Member

**Full-time faculty (FTEF)**

2.20

**Part-time faculty (FTEF)**

1.40

**Classified & other staff positions that support this discipline**

Yesenia Gamble Zermeno, Shared Division ADA  
1/7 of 100% of 12 months

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

None

## **PROGRAM INFORMATION**

## **PROGRAM OUTCOMES**

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

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

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

**How well do your program's learning outcomes communicate the scope and depth of the degree/certificate offered and align with employer and transfer expectations?**

We examined our Program Learning Outcomes for four of our Certificate and AS degrees:

COMPUTER ASSISTED DRAFTING  
DRAFTING TECHNOLOGY-TECHNICAL  
ELECTRO-MECHANICAL DRAFTING AND DESIGN

All four of our existing AS Degrees and Certificates of Achievements have two learning components, the first being modeling, drafting, and documentation. The second component is software proficiency. Not only are the students learning a complex software, they also must learn the techniques of how to visualize, design, create and get their thoughts on paper according to acceptable drafting standards for the industry. Our current program outcomes address these two components; however they are in need of updating and we feel there should be more than two Program outcomes for each.

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

We assess our program learning outcomes in several ways. Each of our classes has a lecture followed by a lab component. Each of our classes are approximately a three-hour block. We do not have multiple labs that go along with one lecture. We have the same students for both lecture and lab during that three-hour

block. Most of our lectures are interactive. We are delivering information through lecture as the students are sitting in front of their computers. Some of our instructors use the podium computer and generate the "live" lesson by using the podium computer. Some instructors have their students do exactly what they are doing as they are doing it on their computers. Other instructors use the whiteboard to demonstrate each lesson and have the students "try out" each of the commands/topics/ideas as they are being presented. Questions are answered exactly at the time they come up during the lecture. It is very easy to see if students are understanding as the lesson progresses. It is better for the students to understand each concept before we proceed with the lecture. We can assess ourselves and our teaching methods as well as assess the student's comprehension and success with our methods of instruction. When using drafting software, no two programs work, or look the same. Each software has its own purpose in the drafting field. Therefore, students need to learn a new interface and new sequential steps to make something happen. In addition to learning software, students are learning the concepts of drafting. Many of our students have never seen our software in addition to never having taken a drafting class. They need to learn an entire new vocabulary in our classes to speak and understand drafting. It takes several semesters to even begin to be competent at drafting and the software. During the lecture we are introducing both these worlds to the students. We are making sure they understand how the software works, as well as how it applies to what they are drawing. It is easy to see the comprehension level during this time and assess the students. If they do not understand, they cannot get the software to work or accomplish the instructions we have given them. They actually come to a complete stop until we can help them.

The next way we evaluate our program outcomes is during lab. During each lab the students must complete multiple drawings that encompass that week's lessons and contain the knowledge they must apply from the previous week's lessons. Our classes are building blocks. Nothing is an independent module onto itself. If you miss a class, you cannot move forward without learning the prior information. We are at each student's computers with them during the labs. We are circulating through the rows of computers non-stop making sure everyone understands, is moving forward, and is able to finish their drawings. If we find the majority of students during lab time unable to do a specific part of the lesson, we interrupt the class and reteach the concept.

Finally, we test students both through a multiple choice/written type midterm and final, along with a midterm and final drawing or project. This ensures that a student understands how to read, write, research, and communicate their knowledge as well as use the software to accomplish their designs/drawings. We often tell the students that what they want to build or design is only an idea in their heads until they can get it down on paper. If they can properly draw, annotate and print out their work, they will be able to take their ideas and make them reality.

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

As mentioned above our programs are two-pronged. This is well laid out in the outcomes; however, we need to create more applicable and specific outcomes for all the objectives we wish the students to achieve.

### **Reflecting on the major findings you summarized, what are some questions you still have about students' learning in your program that you have not yet been able to address with your outcomes assessments?**

We need to get feedback from our students after they have been hired to see if what we have taught them is current, relevant and pertinent to their position. We need to ask them what we need to teach more of, or expand upon, and what we need to spend less time on, or get rid of. We also want to know if our software is appropriate and what other software is being used at their company. Secondly, we need to check in with our Advisory Committee to what trends they see coming so we are ready to teach what Industry will be looking for when they hire.

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

- [Associate Degree GE Requirements](#)
- [CSU GE Requirements](#)
- [IGETC Requirements](#)

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

**How do the courses in your discipline support General Education/ Institutional Learning Outcomes? In your response, please specify which GE/ILO(s) your discipline supports.**

After reading Palomar's Institutional Learning Outcomes, the Drafting discipline implements the following outcomes:

- 1) Communication
  - a. Oral
  - b. Visual
- 2) Computation
  - a. Quantitative Literacy
  - b. Inquiry and Analysis
- 3) Creative, Critical, and Analytical Thinking
  - a. Critical Thinking
  - b. Information Literacy
  - c. Teamwork and problem solving
- 4) Community, Multicultural/Global Consciousness and Responsibility
  - a. Intercultural Knowledge
  - b. Ethical Reasoning
  - c. Civic knowledge and engagement

**Summarize the major findings from your course outcomes assessments that are related to the General Education/Institutional Learning Outcomes that your discipline supports.**

After reading Palomar's Institutional Learning Outcomes, the Drafting discipline implements the following outcomes:

- 1) Communication
- 2) Computation
- 3) Creative, Critical, and Analytical Thinking
- 4) Community, Multicultural/Global Consciousness and Responsibility
- 5) Foundation Knowledge of Discipline
- 6) Integrative Learning (learning communities, service learning, engagement through the arts)

## 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.**

Awards Received 2018-19

Certificates 20

AS Degrees 13

Total Program Completion 33

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

Decreased

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

Our total awards went from 38 awards in 2017-2018 to 33 awards in 2018-2019.

This is a slight downturn, and is not alarming. The factors could be many, such as our Programs usually take 2 years to complete, so going back two years it could be that some of students left school to join the workforce without a degree. Sometimes our students only need one class to graduate and this class was not offered or did not fill, so they found a job without the Certificate or AS Degree. Conversely, it could be that the class had a huge wait list and there was not a second section being offered, so they did not get the one class they needed to earn the Certificate. Once again they could have been hired away from school. 1/3 to 1/2 of our students in our software classes, such as AutoCAD, SolidWorks and Creo, are Engineering majors. Generally, they do not all apply for Certificate, they transfer. We have addressed this issue by creating three new 9 unit Certificates that they can earn in addition to transferring. This way they will be able to get an entry-level drafting job or internship while getting their 4 year degree.

**Are the courses in your discipline required for the completion of other degrees/certificates?**

No

**Do you have programs with 7 or fewer completions in the last 5 years?**

No

**What is your program standard for program completion?**

70.0%

**Why did you choose this standard?**

We were told our Success Rate standard is 70% by our former Department Chair.

**What is your Stretch goal for program completion?**

80.0%

**How did you decide upon your stretch goal?**

We look at the data for our students and we spoke to all our Adjunct instructors about the success rate in their classes. Most everyone felt the majority of their students could achieve 75% or higher success rate. We only had one Adjunct instructor tell us that we were reaching too high, and it was not attainable. We need everyone on board, both full-time faculty and part-time faculty, in order to attain all our Program goals.

## **ENROLLMENT TRENDS**

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

Although the college efficiency goal is 525 WSCH/FTEF and 85% fill-rate (minimal), there are many factors that affect efficiency (i.e. seat count / facilities / accreditation restrictions).

This information can be found by going to the "Program" page in the [PRP Data Dashboard](#).

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

Our Enrollment trends for the past five years are:

2014-15	458
2015-16	450
2016-17	392
2017-18	384
2018-19	444

We are really close to being at the height of our enrollment over the past five years.

If you look at the WSCH Per FTEF we are at 407 which is the highest it has been over the past five years. We are still below the efficiency goal of 525, but our classroom caps are small (as they should be for what we do) compared to other Programs. Our Fill Rate efficiency is fabulous. It has been 100% for the past two years with the efficiency rate being at 85%. Yes, we expected this. We had the addition of Art Gerwig to our Full-Time Faculty in the Darting Program. Full-time instructors know the importance of awarding Certificates and Degrees. We talk to our students about completing the classes and earning the Certificates and Degrees. We are invested in our students. We also hold office hours and work with our students whenever they need this. Conversely, if you have mostly Adjunct teaching your classes, they do not as much investment in the big picture. Our Adjunct are excellent at what they do, but they don't know how important it is to inspire and encourage our students to get the Certificates or the Degrees. It is up to the Full-Time instructors to educate the Adjunct about the importance of retention and completion of our students. This year Art and I held an Adjunct meeting and discusses this very topic with them. Also, your Adjunct need to be aware of how important and valued they are to the overall success of the Program.

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

We are CTE and fill a specific need in our community. Palomar College is known for their top notch Programs in the field of CTE. We have small class sizes which are sometimes criticized, but the fact is we need these caps because what we do cannot be taught to large groups. Our Programs would not be as success with larger caps, because students could not receive the type and amount of instruction that is required to be in such a high-tech, competitive industry. We have incredibly high success rates comparatively speaking, because of the level of hands-on, one-on-one instruction, especially during lab time. Also, our students sign up for our classes because they want to take them, not because they are required to take them.

**Are there particular courses or programs that are not getting sufficient enrollment, are regularly cancelled due to low enrollment, or are not scheduled at this time? What is contributing to this issue? Does this level of efficiency meet the needs of the program and the district?**

Yes, there are courses that are not filling and one AS Degree & Certificate that is not being awarded. These are the DT180, DT182 and DT184 classes in the Drafting Technology - Multimedia AS & Certificate of Achievement Program. These courses and the AS & Certificate have been launched for Deactivation. The contributing factor is that these are highly specialized Animation and Gaming classes. There is not enough demand or high wage earning potential here in San Diego or Imperial Counties. These jobs are more readily available in Los Angeles.

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

improvements of underrepresented groups.

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

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

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

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

## **COURSE INFORMATION**

### **COURSE SUCCESS AND RETENTION**

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

70.0%

**Why did you choose this standard?**

We were told it was 70%. We need to have a discussion with Full-Time and Adjunct Faculty to revisit this, especially after looking at this past year's trends.

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

Increased

**Was this expected?**

Overall course SUCCESS rates:

2018-19	86%
2017-18	79%
2016-17	80%
2015-16	81%
2014-15	70%

As you can see from the numbers, our success rate has increased significantly in the past year. For the three prior years it stayed relatively the same. We are up 16% from where we were 5 years ago. Yes, once again this was expected because we have an additional Full-Time Faculty Art Gerwig in the Department. The reasoning is the same as in the "Program" section above.

**What is your Stretch goal for COURSE success rates?**

90.0%

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

I would love to see our stretch goal be at 90%. Everyone thought I was told I was crazy when I said we could get to 85% and we did.

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

Increased

**Was this expected? Please explain.**

Overall course RETENTION rates:

2018-19	95%
2017-18	91%
2016-17	93%
2015-16	96%
2014-15	88%

As you can see from the numbers, our retention rate has increased 4% in the past year, but it is 1% below the higher percentage of 96% in 2015-16. Yes, it was expected. We work really hard to keep our eyes on the retention and success of our students. Our lab time is where we work one-on-one with our students at length. We do not leave anyone behind. The only students that are not retained are the ones that tend to get so far behind, they stop showing up. We constantly talk to our students about keeping up with assignments, so they do not get overwhelmed. We are invested in our student's success. This is why a smaller class size works so well for our Program.

**Are there differences in success or retention rates in the following groups? (choose all that apply)**

Age

Special Pop. (Veteran, foster youth, etc.)

Gender

Ethnicity

**Gender: Why do you think gender differences exist? What do you need to help close the gap?**

**Age: Why do you think age differences exist? What do you need to help close the gap?**

Success Rates by Age:

Looking over the past five years, the success rate is highest for the 50+ age category.

19 and under are at 85.8% average

20 to 24 are at 78.2% average

25 to 49 are at 78.8% average

50+ are at 87% average

Looking over the past five years, the retention rate is highest for the 19 and under age category.

19 and under are at 95.4% average

20 to 24 are at 92.8% average

25 to 49 are at 91.8% average

50+ are at 93.2% average

There are no significant/alarming differences.

**Ethnicity: Why do you think ethnicity differences exist? What do you need to help close the gap?**

Success Rates by Ethnicity:

Looking over the past five years, the success rate is highest for the Multi-Ethnicity category.

Asian 74.4% average

Black 60.0% average

Filipino 63.0% average

Hispanic 76.8% average

Multi-Ethnicity 86.2% average

Unknown 85.75% average

White 82.0% average

Looking over the past five years, the retention rate is highest for the Multi-Ethnicity category.



Asian 88.0% average  
Black 100% average  
Filipino 90.75% average  
Hispanic 90.6% average  
Multi-Ethnicity 100% average  
Unknown 97.0% average  
White 93.2% average

The retention rate is great among all ethnicities regardless of how many students there are. Regarding success rate there are divisions. White and Hispanic make up the majority of our student population. When you only have a few students in a category and they fail the class, the numbers look bad. I think we are very invested in the success of all our students, We need to be more ware now that we see the numbers.

**Special Populations: Why do you think special population differences exist? What do you need to help close the gap?**

Success Rates for Foster Youth:

Looking over the past five years, the success rate is highest for the No category, yet so close.

No 80.2% average

Yes 79.8% average

Looking over the past five years, the retention rate is highest for the category.

No 91.4% average

Yes 93.6% average

Success Rates for Gender:

Looking over the past five years, the success rate is highest for the Female category.

Female 82.0% average

Male 79.6% average

Looking over the past five years, the retention rate is highest for the Female category, again very close.

No 93.0% average

Yes 92.6% average

Success Rates for Veterans:

Looking over the past five years, the success rate is highest for the No category.

No 80.6% average

Yes 73.75% average

Looking over the past five years, the retention rate is highest for the No category.

No 92.8% average

Yes 90.5% average

There are no significant/alarming differences.

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

N/A

**Do you have any best practice methods you use for online courses to share with the community?**

n/a

## **COURSE OUTCOMES**

**How is course assessment coordinated across sections and over time?**

We only have a few classes that have multiple classes and the same instructors usually teach these classes. We are very aware every semester how the courses are doing. As instructors we all talk among ourselves how the semester is going. We are a smaller Program, so we have no difficulty assessing multiple sections over time.

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

Yes, we are currently working on that. It will take the entire school year to finish the process.

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

We are achieving more than our course assessments ask for. This is why we are adding more assessments and more student learning outcomes to assess in order to make sure the students are successful.

**Reflecting on the major findings you summarized, what are some questions you still have about students' learning in your courses that you have not yet been able to address with your outcomes assessments?**

These findings are the same as our Program findings. We need to get feedback from our students after they have been hired to see if what we have taught them is current, relevant and pertinent to their position. We need to ask them what we need to teach more of, or expand upon, and what we need to spend less time on, or get rid of. We also want to know if our software is appropriate and what other software is being used at their company. Secondly, we need to check in with our Advisory Committee to what trends they see coming so we are ready to teach what Industry will be looking for when they hire.

**What are some improvements in your courses that have been, or can be, pursued based on the key findings from your course learning outcomes assessments?**

Our learning outcome assessments are getting more numerous due to the changes we are currently making. We are reviewing and updating our Programs and courses. We are getting Industry input through our Advisory Committee and from Industry leaders. Art and I attended the Advanced Manufacturing Conference in October where we were able to speak to eight of the largest companies here in San Diego that could actually hire our students. We asked very specific questions with them during our one-on-one time with them. We asked about software, theory, critical thinking, skill sets and soft skills needed for our students to succeed for today's industry needs. It was phenomenal the amount of information we were able to bring back with us to change our Programs, courses and curriculum. We also have met and spoken with Ruishan Chow who is the Regional Director of Employer Engagement. Her job is to align education with industry in San Diego and Imperial counties. We have been consulting with her every step of the way to make sure we are relevant, current and offer the best student experience anywhere.

## **PROGRAM CURRICULUM ALIGNMENT, MAPPING, SCHEDULING, & PLANNING**

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

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

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

- Effective instructional practices to support students in achieving success.

### **How do your course outcomes help your students achieve their program outcomes?**

Our courses and outcomes are building blocks to the completion of the Program(s). If the students follow the progression of classes as we lay them out, they will have no problem earning a Certificate or AS Degree. The course outcomes become more advanced as the student progresses into the more difficult subjects.

### **How do your degree maps and scheduling strategy ensure scaffolding (how all parts build on each other in a progressive, intentional way)? How do you share the maps with students?**

Scheduling is a very tricky and sticky situation with our Program. We have four disciplines sharing three rooms. This is not going to be possible for very much longer. Drafting shares with Architecture Interior Design and Industrial Technology Machining. All these programs are increasing in numbers now that we have someone leading the Program. We hired three new Full-Time Faculty, one for Architecture (starting 2nd year), one for Interior Design (starting 2nd semester) and one for Industrial Technology (Machining [starting 1st semester]). These instructors are phenomenal and the students are excited. We need to find space soon. We do not have enough space to run our courses the way we want to run them. We have been looking for more space, but have not found any yet. We are unique in that we cannot use a regular lab because we need both computers and drafting boards; we have special software; and we require a space that allows for us to spread out drawings and materials and get messy. We also have special printing needs and a lot of measuring equipment that we use (not to mention we need a real Machine Shop). Our Programs have courses that serve several Disciplines, so we need to be close together. There is no time to drive around to other campuses to take classes. We do not have enough sections for that and traffic is so bad, it prohibits running from campus to campus.

Our maps are on our website. We have our AS Degrees and Programs on the walls of the classrooms and Full Time Faculty talk about them to the students a lot. We have met with the Adjunct to ask them to become more involved in encouraging and guiding their students. Our Programs and some courses are changing right now, so we will have current and relevant curriculum that is attainable faster. We also are creating stackable certificates which will allow student to enter the workforce at different levels. We will be meeting with the Counseling Department to let them know about all the changes.

### **What is your departmental strategy on how you schedule your courses including the time of day you offer courses? Do you use fast track or block scheduling (putting required classes near each other) to organize required classes (Particularly to meet the needs of disproportionately impacted students)?**

This year we want to be very thoughtful when creating our schedule. Every semester we have almost the same courses being offered, with the exception of three or four courses that are only offered every other year due to the fact that we do not have enough classroom space and the demographic is a night student. Yet, every semester there are many revisions of the schedule being created for a few months. This makes it hard to get a rhythm going for the students, so they know what to expect. It also causes a lot of extra work for the ADA, Yesenia. I would like to see a two year schedule made and stick to it. Of course, when a class gets cancelled due to low enrollment, it may need to be placed in the schedule again the next semester. The problem this creates are twofold. The first being we have given that room and time slot to another Program. The other concern is that our start and stop times are not uniform. We had a lot of trouble this past year with overlapping classes and crazy start times. We need to keep the students in mind when we create the schedule and place courses in an achievable sequence in a logical order.

### **How do you work with other departments that require your course(s) for program completion?**

This seems to always work out as long as we offer our multiple sections morning, afternoon and night. This is one thing we do well. The other departments usually need the courses that are offered throughout the week. Again, if we keep it consistent, then all departments can be confident when building their schedules.

**Does your discipline offer cross-listed courses?**

Yes

**How do you work with the other department(s) to ensure consistent curriculum per the COR and minimum qualifications? How do you coordinate course scheduling?**

A lot of our courses are cross-listed with Engineering. We have had great success working with their department in the past. Now, faculty has changed. Art Gerwig transferred from Engineering into Drafting. He knows their courses and content thoroughly inside and out. We also know the new hire Quan Nguyen. We are excited to work with Quan. This is his first semester as Full Time Faculty. Also, Dan Finkenthal, the Chair, is very supportive of all the cross-listing. We work with Engineering when articulating our classes to UC schools, SDSU and now CSUSM. With the Electrical Engineering Program starting at CSUSM, we are already talking with Engineering to align our transfer classes. Also the ADA, Abby is amazing at her job. If need any quick information about scheduling or offerings, she has the answer immediately.

The other departments we co-list with are Industrial Technology and Welding. Industry Technology is in the same classrooms as stated previously. Michael Wright is the new Full Time Instructor. We see him and talk to him daily. He is also changing his curriculum and creating certificates to align with industry needs. We have been working with him at length to make sure we are not repeating curriculum. We are moving some of the curriculum from one course to another where it make sense. Some of this curriculum is going to Industrial Technology and some is coming to Drafting. This way the course will serve two Programs and it will save the school and the students money. Students will be getting a more concentrated course with relevant, current material in their courses, and will also save on classroom space. We won't have to pay two instructors to teach the same curriculum. Drafting and Industrial Technology courses will appear in both Program's certificates and degrees.

**Are there curriculum concerns that need to be resolved in your department? What are they?**

Yes, there are. We have spent over a year working on changing our courses, certificates and degrees. We have consulted with our Advisory Committee, big industry and small "mom and pop" shops to find out what is needed right now today to be employable in the many fields of Drafting. At our last Advisory Meeting we handed out copies of our courses with descriptions, along with our current certificates and degrees. We asked for their input in order to make our Program up-to-date and desirable for employers. Our advisors jumped in and the process began renaming certificates, changing the courses in the certificates, talking about descriptions, and getting everything to align with industry. They told us that they had no idea what our students knew had to do by the title of our certificates and degrees. They said our course names needed to be uniform and relate to what people do in industry. They also told us that we need to tie these names to what a search engine for job search would pick up on. They said our program and course names needed to "understandable" to employers, and that they shouldn't have to ask what these titles mean. Very enlightening.

We attended the Regional Advanced Manufacturing Conference a few weeks ago. We had the opportunity to hear speakers talk about the big picture of where Advanced Manufacturing is heading. We have had one-on-one time with eight major companies right here in San Diego. We were able to ask all kinds of questions from software needs, internships, job market, what they are looking for in an entry level hire, etc. It was amazing and incredibly informative.

We have been meeting with Ruishan Chow, the Regional Director of employer Engagement. Our Advisors and Ruishan have been invaluable in helping us align our courses, certificates and degrees with industry needs. We showed Ruishan, who was an Electrical Engineer, the new names the Advisors and we came up with for our certificate and degrees. She made a few changes to align them with what industry is looking for and what other colleges are doing. She helps us make everything fresh and current.

**Are there courses that should be added or removed from your program - please explain?**

Yes, there are courses that are not filling and one AS Degree & Certificate that is not being awarded. These are the DT180, DT182 and DT184 classes in the Drafting Technology - Multimedia AS & Certificate of Achievement Program. These courses and the AS & Certificate have been launched for Deactivation. The contributing factor is that these are highly specialized Animation and Gaming classes. There is not

enough demand or high wage earning potential here in San Diego or Imperial Counties. These jobs are more readily available in Los Angeles.

**How is the potential need for program/course deactivation addressed by the department?**

The three Full Time Faculty members talked about the aforementioned deactivations last spring. We announced to the students last spring that these classes would be deactivated the following year. We also gave them the names of classes they could take to substitute to complete their certificates and degrees. I talked to the Department Chair of Art to let them know this was going to happen, so they could make changes if needed. We have been having curriculum meetings for the past two months. We have included Mike from Industrial Technology and Ruishan Chow at the meetings.

**Is your department pursuing non credit or not-for credit options at this time?**

No

**Are there areas you would like to expand?**

Yes, but we have so much to do right now straightening out our certificates and degrees that we will have to reflect on this further later this year.

Click here for information about [Noncredit](#) and [Community Education](#)

**Is your department offering online classes?**

No

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

We know from years of experience that the courses we teach cannot be taught on-line. Our courses need one-on-attention constantly during the three hours we are with our students. These classes are extremely difficult and two-fold. We need to teach them how the software works, and we need to teach them the drafting component of the course. There is an exact way to do things correctly and a million ways to do it wrong. It takes a lot of time and practice to understand how to bring these two together. Throughout the class students find themselves coming to a complete stop because the software will not let them move forward. Also, some students do not know how to move forward, because they have no idea what to do. Some people say that Utube exists for this very purpose. Then you have a million people doing things not accorded to "best practices" of industry. You can "mickey mouse" something together on paper, but it will most definitely will not be able to be built in real life. We have to teach students how to draft for production and this doesn't happen online. I ask my students at the end of the semester how many people think they could finish this course online. The answer is always zero.

**Describe other data and/or information that you have considered as part of the evaluation of your program**

I spent months researching Drafting Programs locally, statewide and out of state. I researched their courses and programs. I looked at the titles of their courses and certificates. I looked at the unit value of their courses. I talked at length with the Chair at Mira Costa asking him what is working and what is not working in their Program. Also, I have net with Ruishan Chow as mentioned earlier. She had been a great resource for the advancement of our Program.

## **CAREER AND LABOR MARKET DATA**

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

Go to this website <https://www.onetonline.org/> and enter your discipline in the bubble on the top right for

ideas about potential occupations. Click on an example to see more detail.

**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?**

Electronic Drafters  
Civil Drafters  
Electrical Drafter  
Printed Circuit Board Designers  
Mechanical Drafters  
Mechanical Engineering Technicians  
Cartographers and Photogrammetrists  
Mapping Technicians  
Geographical Information Systems Technicians  
Drafting and Engineering Teachers, Postsecondary  
Vocational Education Teachers, Postsecondary  
Career Technical Education Teachers, Postsecondary

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

Technology Skills:

Computer aided design CAD software  
Computer aided manufacturing CAM software  
Document management software  
Enterprise resource planning ERP software  
Graphics or photo imaging software

Knowledge:

Design — Knowledge of design techniques, tools, and principles involved in production of precision technical plans, blueprints, drawings, and models.

Engineering and Technology — Knowledge of the practical application of engineering science and technology. This includes applying principles, techniques, procedures, and equipment to the design and production of various goods and services.

Mechanical — Knowledge of machines and tools, including their designs, uses, repair, and maintenance. Knowledge of arithmetic, algebra, geometry, calculus, statistics, and their applications.

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:

Active Learning — Understanding the implications of new information for both current and future problem-solving and decision-making.

Active Listening — Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.

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

Mathematics — Using mathematics to solve problems.

Reading Comprehension — Understanding written sentences and paragraphs in work related documents

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

This is what every one of our classes does. Our curriculum emphasizes all of these. Students have 6 hours per week per course of hands-on learning building these skills. Our Programs reflect the exact knowledge represented above. Our Advisors let us know how and what is needed, obsolete or changing. We educate ourselves by going to conferences and doing professional development that pertains to our Program.

## 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?**

No

**Do you want more information about or need assistance integrating work-based learning into your program?**

No

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

This is something we need to do more of. The problem is that we do not have enough time in the week to do everything. We talk to our Advisors of how to get more exposure. We use our website (which needs attention); we go to career fairs; we are having new marketing materials created. We work closely with Bruce Reaves, who is a Job Developer/Case Manager here at Palomar; we articulate with local High Schools. We could be doing more

## 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

Rename and Redesign all Certificates and AS Degrees

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

Existing

#### Goal Status

Ongoing

#### How will you complete this goal?

We are currently working on this goal. We have launched several courses at the time of writing this PRP and are set to launching the new Programs in the next two weeks. The courses we were not able to review and update due to time constraints will be worked on over the next year.

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

Outcome(s) expected (qualitative/quantitative)

More robust courses and programs

More relevant material and instruction

More certificate and degree completions  
Creation of stackable certificates

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

This goal is in direct alignment with Palomar College's mission statement, the Drafting Department's mission statement and Guided Pathways. All three of these aspire to inspire positive change and enhance the learning experience at Palomar. These changes will allow drafting and design students to receive the most relevant, current instruction and professional practices designed to evoke passion and

**Expected Goal Completion Date**

10/1/2020

## Goal 2

**Brief Description**

Update Course Curricula

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

Existing

**Goal Status**

Ongoing

**How will you complete this goal?**

Talk to our Advisory Committee and bring Full-Time Faculty and Adjunct Faculty that are currently working in industry together to talk about what we need to be doing in order to produce the best prepared students we can for the workforce. We need to know what is new; what is outdated/irrelevant; what to keep; and what to throw out.

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

More relevant courses

Highly prepared students

Team building within the Drafting Department

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

This goal is in direct alignment with Palomar College's mission statement, the Drafting Department's mission statement and Guided Pathways. All three of these aspire to inspire positive change and enhance the learning experience at Palomar. These changes will allow drafting and design students to receive the most relevant, current instruction and professional practices designed to evoke passion and inspiration in the pursuit of their professional goals. We will equip students with the knowledge, skills and confidence necessary to succeed.

**Expected Goal Completion Date**

5/22/2020

## Goal 3

**Brief Description**

Update Course SLO's and Program SLO's

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

Existing

**Goal Status**

**How will you complete this goal?**



Examine new curriculum created in Goal #2. Again, bring Full-Time Faculty and Adjunct Faculty and talk about what are the achievable outcomes at every level of instruction during the classes we offer. We need to get more in depth and examine what we are doing.

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

Students will understand by the outcomes exactly what they are going to learn and/or achieve for every course and certificate program. They will have an idea of what the courses encompass and what will be expected of them. They will be able to discern if this is something they want to pursue.

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

This goal is in direct alignment with Palomar College's mission statement, the Drafting Department's mission statement and Guided Pathways. All three of these aspire to inspire positive change and enhance the learning experience at Palomar. These changes will allow drafting and design students to receive the most relevant, current instruction and professional practices designed to evoke passion and inspiration in the pursuit of their professional goals. We will equip students with the knowledge, skills and confidence necessary to succeed.

**Expected Goal Completion Date**

5/22/2020

## STAFFING AND RESOURCE NEEDS

### Instructions

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

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

No

**Are you requesting additional Staff, CAST or AA?**

No

## RESOURCE REQUESTS AND BUDGET ALLOCATION REVIEW

Budget Analysis: This section should be completed by department chairs by the end of September.

**Are there areas in your budget where there has been a historical surplus (See three year trend)?**

No

**Are there processes that need to be examined to ensure we are being the most efficient with funding?**

No

**Are there ongoing needs in your department budget that you currently do not have the resources for?**

No

**Do you have non-general fund sources of funding?**

No

## One Time Needs

For more information about funding sources available, see [IELM BLOCK GRANT, LOTTERY PERKINS AND STRONG WORKFORCE GUIDELINES](#) (on the left menu of the web page.)

Please check with your department chair on the availability for this cycle.

**Do you have one-time funding requests?**

No

## Review

### Chair Review

#### Chair Comments

Well done! Thorough and informative.

#### Chair Name

Rita Campo Griggs

#### Chair Sign Date

10/29/2019

### Dean Review

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

The Drafting program has three very qualified faculty with different skill sets. this makes for a rich learning environment for the students.

#### Areas of Concern, if any:

Your programs are all CTE and need to be changed in your review on page one.

Would like to see WBL added into the curriculum so students can apply what they are learning immediately in real world situations.

Need an additional lab for ARCH, DT, and ID to share.

Disagreement between the faculty on the KSAs the program needs to focus on.

#### Recommendations for improvement:

Faculty need to meet together and reach an agreement based on the labor market needs of the regional economy and design their program around those needs.

#### Dean Name

Margie Fritch

#### Dean Sign Date

11/6/2019

### IPC Review

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

The program appears to have a strong basis in practical learning and assessment. The PRP shows strong reflection on areas of improvement and achievable goals. The program should be commended on their current completion rate. Faculty demonstrate a strong commitment to meeting student needs. The department did considerable work (and collaboration with Engineering) to create stackable certificates and programs, in consultation with DSN and industry partners.

#### Areas of Concern, if any:

The concerns raised by the department related to space and scheduling needs should be noted. Hopefully they will receive the District-level assistance they need in order to remedy these issues. Creating a

scheduling plan is necessary, but it will do little good if there are not appropriate facilities in which to offer the Drafting courses.

**Recommendations for improvement:**

We believe that the Drafting programs ARE vocational, so that should be changed on the first page. On the second page- the PRP discusses four programs, but only three are listed- please clarify.

We agree with the department's plan to reach out to former students, assess industry needs, and use Advisory Committee recommendations to improve/strengthen their course/program design and assessment plans. Additionally, it is recommended that the department develop a concrete plan to help encourage/increase the part-time faculty understanding of the importance of completions, as noted on page 2.

Based on the information provided on the Labor Market page, the department is encouraged to develop a plan for community/industry outreach and utilize their Advisory Committee to more effectiveness.

**IPC Reviewer(s)**

Pearl Ly, Jenny Fererro, Anastasia Zavodny

**IPC Review Date**

11/19/2019

## **Vice President Review**

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

The assessment section is really interesting- great detail. I agree student feedback would be crucial— learning outcome section is excellent- really well done. The demographics data was very interesting – what might be needed to assist with older students in terms of success etc? The room issue is definitely an issue we need to improve – thank you for including this. Extremely thoughtful and well done here—see comments above but well done overall!

**Areas of Concern, if any:**

**Recommendations for improvement:**

**Vice President Name**

Jack S. Kahn, Ph.D.

**Vice President Sign Date**

1/7/2020