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OVERVIEW OF PROGRAM REVIEW AND PLANNING FOR INSTRUCTIONAL PROGRAMS

Program Review and Planning is about evaluating and assessing programs and documenting plans for improving student success rates. Through review of and reflection on key program elements, Program Review and Planning identifies program strengths and strategies necessary to improve the academic discipline, program, and/or services to support student success.

The College also uses Program Review and Planning as the conduit to request resources (human, technology, facilities and funding) to further help improve and support programs.

BASIC PROGRAM INFORMATION

Academic Year

2021-2022

Are you completing a comprehensive or annual PRP?

Comprehensive

Division Name

Career, Technical and Extended Education

Department Name

Trade and Industry

Department Chair Name

Jennifer Anderson

Discipline Name

Cabinet and Furniture Technology (CFT)

Department Chair email

janderson2@palomar.edu

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

Jennifer Anderson, Associate Professor, Cabinet and Furniture Technology

Georg Kast, ISA III, Cabinet and Furniture Technology

Website address for your discipline<https://www2.palomar.edu/pages/woodworking/>**Discipline Mission statement**

The Mission of the Cabinet and Furniture Technology Department is to prepare a diverse student population to earn an income designing and/or manufacturing wood products. Students gain intrapersonal skills necessary to fulfill the needs of clients and employers, while learning woodworking fundamentals, specialized processes, design and planning skills, and advanced manufacturing techniques for a variety of woodworking disciplines. This rigorous and comprehensive curriculum enables students to maximize employment opportunities in a multitude of woodworking related fields and achieve educational, personal and career goals. Whether entering the workforce as an employee or entrepreneur our graduates are taught to embrace an attitude of life-long learning and enjoy success as active members of a global community.

Describe how your mission statement aligns with and contributes to the College's Vision and Mission.

We help transform lives for a better future by giving students the skills they need to succeed in the regional and global woodworking workforce and community.

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

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

Yes

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

Yes

List all degrees and certificates offered within this discipline.

Woodworking Fundamentals (new mini cert)
Guitar Making Technology
Case Furniture Construction/Manufacturing
Table and Chair Manufacturing
Lathe Turning Technology
Veneering Technology
Woodworking Skills Technology
Cabinetmaking and Millwork

BASIC PROGRAM NFORMATION: FACULTY AND STAFFING RESOURCES

In this section, you will identify how many faculty and staff support your discipline's programs. This information is considered when you request permanent staff and faculty hires. It is also useful as you evaluate your program and the human resources and talent you have to support our students.

To help you answer questions in this section, you will need the two links below. An arrow will appear in the spreadsheet pointing to the data you will enter.

1) **Permanent Faculty and Staff Count**

2) **FTEF LINK**

How many permanent or full-time faculty support your discipline (program)?

1

For this past fall semester, what was your Full-time FTEF assigned to teach classes?

0 (pandemic); Fall 2019 = .6 (pre-pandemic)

For this past fall semester, what was your Part-time FTEF assigned to teach classes?

.53 (pandemic); Fall 2019= 5.93 (pre-pandemic)

List the classified and other permanent staff positions that support this discipline.

Michelle Tucker, ADA (Shared with Design and Manufacturing and she does scheduling for Public Safety)
Georg Kast, ISA III

List additional hourly staff that support this discipline and/or department

Kathy Steffen - 8 hours / week
Joe Chavez - 6 hours / week
Rebekah Leslie - 6 hours / week

In addition, we have 10 part-time instructors teaching this semester. We usually have 14-16 instructors on staff, but due to covid class reductions the number is smaller than normal.

PROGRAM INFORMATION

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

PROGRAM LEARNING OUTCOMES

How well do your program's learning outcomes communicate the scope and depth of the degree/certificate offered?

Our Program's learning outcomes communicate the scope and depth of our degrees/certificates well. Each program/certificate covers safety and proficiency on machines. In addition, the curriculum takes a student through the process of designing and producing a product which simulates an experience they might have in the workplace.

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

Assessments start in the classroom with safety. Each foundation class has a written and physical demonstration of competency on all of the major stationary power machines. Psychomotor and critical thinking skills are assessed through a variety of class exercises and student projects.

Reviewing SLO's and researching and recording assessment data has suffered since we are under staffed. Our plan for assessing program learning outcomes must be reworked and streamlined in order to capture the data. My hope is that this can happen when we have more full-time instructors on staff.

Summarize the major findings of your program outcomes assessments.

Student success is generally high and reports show 85% of students succeeded within the program (pre covid). In foundation level classes safety and basic knowledge of woodworking machinery are emphasized. Both are assessed on a regular basis with hands-on interaction in the lab. Skills and knowledge are also assessed through written exams.

In skill building classes assessments take place through the completion of small projects. Skills and techniques are evaluated in the labs and by evaluating projects. The same is true for the advanced classes, with an added assessment of design and planning elements.

Lab classes provided students the opportunity to work on class curriculum outside of class time. Without access to machinery and tools it's difficult to complete the curriculum.

Depending on the degree or transfer goals of our students, there are three different GE pathways to choose from:

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

Palomar College has identified a set of General Education/Institutional Learning Outcomes (GE/ILOs), 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.](#)

Next, review your course outcomes as they relate to Palomar's GE/ILOs.

How do the courses in your discipline support GE/ILOs? In your response, please specify which GE/ILO(s) your discipline supports. You should refer to the GE/ILOs your program outcomes are mapped to in Nuventive.

Although many of our courses are not mapped to the GE/ILOs in Nuventive because they haven't been updated in META, the courses in CFT support most General Education and Institutional Learning Outcomes including:

ILO 1, Communication: B. Oral - Constant oral communication regarding processes and techniques associated with product development.

ILO 1, Communication: C. Visual - Visual communication through drawings, images and three-dimensional samples.

ILO 2, Computation: B. Inquiry and Analysis - Material selection, joinery considerations, machine processes and finish formulation.

ILO 3, Creative, Critical, and Analytical Thinking: A. Critical Thinking - Solving problems through designing for specific use.

ILO 3, Creative, Critical, and Analytical Thinking: C. Teamwork - Working together in the same environment, exchanging ideas and collaborating on solutions.

ILO 4, Community, Multicultural/Global Consciousness and Responsibility: B. Ethical reasoning - Sustainable material selection and fabrication processes.

GE 1. Communication (see above)

GE 2. Computation (see above)

GE 3. Creative, Critical and Analytical Thinking (see above)

GE 4. Community, Multicultural/Global Consciousness and Responsibility (see above)

GE 5. Foundational Knowledge of Discipline - We start with wood technology and safety which spans all fields of woodworking.

GE 6. Integrative Learning - We use a variety of modalities to teach skills and theories which simulate work based experience.

Summarize the major findings from your course outcomes assessments that are related to the GE/ILOs/education/Institutional Learning Outcomes that your discipline supports. You should refer to the GE/ILOs your course outcomes are mapped to in Nuventive.

Almost all CFT classes require design, planning, analytical and critical thinking, which support ILO 2 and ILO 3A. By the inherent nature of the subject matter all of our courses support GE Foundation Knowledge of Discipline and GE Integrative Learning. A few of our classes, like Production Cabinetry and Production Wood Products incorporate ILO 3 and ILO 4. However, due to a faculty shortage META has not been updated to properly reflect the GE/ILOs and SLO data has not been entered into Nuventive so the outcomes don't align properly.

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

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

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

How do they align with employer and transfer expectations?

CFT's learning outcomes align well with the regions employment needs. San Diego's wood products manufacturing industry is varied and encompasses everything from one person shops, to cabinet shops which employ hundreds of employees. Our SLO's reflect the need for students not only to learn woodworking skills, but to also learn design, planning, and communication skills. Our graduates are well-rounded and highly employable because of their combination of soft skills and their solid foundation in design and manufacturing. The Program SLO's prepare our students for their future, whether setting up their own shop and running an independent business or joining an established advanced manufacturing company.

Most of our students don't transfer to four year institutions, rather they chose to directly enter the workforce. However, CFT 118 - Furniture Design Development articulates with Art 103 - 3-Dimensional Design at SDSU and CFT 100 - The Fundamentals of Woodworking articulates with Art 223 - Beginning Woodworking at SDSU.

PROGRAM COMPLETIONS

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?

Yes

What steps are you taking to address these completions?

We don't want to cut popular classes, but we need to condense our certificates and add a Digital Fabrication (CAD/CAM) certificate. This is challenging considering the learning curve for some woodworking disciplines can be steep. In addition, reassigned time and more faculty will be necessary for this to work to be completed.

What is your program standard for program completion?

16

Why did you choose this standard?

This number represents two completions for each certificate which we currently offer. I believe this can be achieved considering covid and our most recent class offerings.

What is your stretch goal for program completion?

24

How did you decide upon your stretch goal?

I added one more completion for each certificate. This may be possible if we are allowed to offer the classes necessary to earn certificates.

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, you will reflect upon the number of completions students earned for EACH degree/certificate you offer. As required for accreditation, you are also asked to set a standard which represents the lowest acceptable number of completions and a stretch goal for increasing the number of awards.

Link to [Program: Completions](#)

Copy and paste five years of completion data for each of your discipline's degrees and certificates.

2015-16 - AA/AS - Certificate 85 - Grand Total 97
2016-17 - AA/AS 12 - Certificate 25 - Grand Total 26
2017-18 - AA/AS 1 - Certificate 55 - Grand Total 58
2018-19 AA/AS 3 - Certificate 34 - Grand Total 35
2019-20 AA/AS 1 - Certificate 50 - Grand Total 51
2020-21 AA/AS 2 - Certificate 11 - Grand Total 13

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

Decreased

What factors have influenced your completion trends?

Our completions have decreased over the past five years for several reasons. First, our class offerings have been cut by over 30% (pre-Covid) so we weren't/aren't able to offer all of the classes that students need to earn certificates. Since our classes have been cut we need to recruit, mentor and advocate for our students even more than usual. This requires a substantial amount of communication and signing class petitions and waivers, etc. which I am not able to proactively do considering I am one person leading a program which used to be lead by four full-time instructors. Lastly, Covid has severely effected our already reduced class offerings. In the fall we were only able to run two fully on-line classes as compared to 30+ classes which we used to run.

Our accrediting body, ACCJC, and the Federal Department of Education requires that colleges establish standards and goals for student success and completion.

A program-set standard for completion represents the lowest number of program completion you deem acceptable for your program. 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.

A program stretch goal for completions is the number of completions you aspire to award for each program in your discipline.

To determine your stretch goal, consider the number of annual completions you typically award over time, then consider strategies or efforts you are making to increase completions in your program. Then identify the NUMBER you want to set as your goal.

ENROLLMENT AND EFFICIENCY TRENDS

Your courses and offerings represent the path students take to complete their goals. Palomar has a very diverse set of programs and offerings and students have many paths they can take to earn a degree, certificate, or transfer.

In addition to student success and completion, enrollment trends, resources (FTEF), and efficiency metrics like FTES/FTEF are factors reviewed by the college when considering needs for staffing and program support. Evaluating these metrics also helps the College when developing class schedules to meet the needs of students.

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).

In this section, you will examine your enrollments over time and resources (FTEF) utilized to support or generate those enrollments.

This information can be found by looking at enrollment efficiencies.

Link to [Program: Enrollment Trends](#)

Have your enrollment trends increased, decreased, or stayed the same for your discipline over the past five years? (check box)

Decreased

Have your efficiency trends increased, decreased, or stayed the same for your discipline over the past five years? (Check box)

Stayed the same

Were these trends expected? Please explain.

Fall 2015 Enrollment 1,070, Fill Rate 90.07%, WSCH Per FTEF 396.62

Fall 2016 Enrollment 1,102, Fill Rate 87.39%, WSCH Per FTEF 426.75

Fall 2017 Enrollment 893, Fill Rate 84.40%, WSCH Per FTEF 336.42

Fall 2018 Enrollment 789, Fill Rate 95.52% WSCH Per FTEF 379.67

Fall 2019 Enrollment 726, Fill Rate 95.03% WSCH Per FTEF 387.98

These trends were expected. As our schedule was reduced we lost students, however by offering less classes, the small amount of classes we did offer filled. In addition, it should also be noted that for safety reasons, CFT has a limit of 22-24 seats per class. Since the ratio/formula for calculating efficiency is based of a 40+ class maximum our efficiency will not exceed the low 400's.

Program Information Summary

In this section you are asked to evaluate your programs by considering their program learning outcome assessments, the annual number of completions, goals for completions, enrollment and efficiency trends and any other internal or external factors that had an impact on your program.

What factors have contributed to the success of your program(s)? Describe how they have contributed.

CFT offers one of the most diverse woodworking programs in the nation, with world class facilities and phenomenal faculty. The fact remains that people love to take woodworking classes. Our fill rate is 95.03%.

What factors have presented challenges for your program(s)? Describe the impact of these challenges.

Obviously the pandemic has had the most dramatic effect on our program. We had very low completions the semester the pandemic struck because it's not possible to convert our classes to a completely on-line format. The semester following the outbreak we were only able to offer two on-line design classes.

Next to Covid, cuts to our class schedule and lack of resources including additional faculty have posed the greatest challenges to CFT.

COURSE INFORMATION

In this section, you will review how students perform in the courses you offer as part of your program. The Chancellor's Office Vision for Success stresses the importance of reducing equity gaps through faster improvements of underrepresented groups.

Data are provided to help you examine differences in course success rates (C or better) across student demographic categories (e.g., gender) and course type (e.g., face-to-face, online).

After you complete your review of course success data, you are asked about the assessment of student learning outcomes at the course level, progress you have made in these assessments, and changes you have implemented as a result/

COURSE SUCCESS AND RETENTION

ACCJC also requires that colleges establish institutional and program level standards and stretch goals for course success rates.

Program-set standards for course success rates represent the lowest success rate deemed acceptable by your discipline. 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. The College's institution-set standard for course success rates is 70%

Program-set stretch goals for course success rates represent the success rates you aspire your students to achieve.

Link to Course Information

The data includes overall success (% C or better) and retention rates (% No Ws) . The data tables include course 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/>)

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

80.0%

Why did you choose this standard?

Historically, Cabinet and Furniture Technology has been able to maintain a fairly high success rate. I chose 80% because it is higher than the college average, but still seems attainable for our program. Over the past five years we have averaged an 82% success rate.

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

Stayed the same

Was this expected? Please explain.

There was a bit of a dip 5 years ago, to 79% due to the decrease of our program size. However, in 2019 the success rate rebounded to 85%. Unfortunately, the pandemic struck and we dipped back down to 80% in 2020. This is due to the increased stress on the students because of the pandemic and the reductions that have been made to our program. We will need to rebuild our program to meet the needs of our students in these dynamic times.

What is your stretch goal for course success rates?

85.0%

How did you decide upon the goal?

We reached this goal in 2019 and I believe we can meet it again if we are given the time and resources.

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

Decreased

Was this expected? Please explain.

We had a retention rate of 86.4% in Fall 2020. This was down from an average of 93.9% from the previous 5 years (2015-2019). This drop was expected due to the pandemic. Many people are drawn to woodworking because they get to work with their hands to transform a raw material into a tangible object. This is the opposite of what CFT looked like in the Fall of 2020 when we operated in a remote capacity, offering only two on-line classes. Many of our students are not interested in distance learning and some who are struggle with the technology and the modality of education.

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

Gender

Age

Ethnicity

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

Unfortunately CFT is not very diverse in gender. We are comprised mainly of white males, however, the success rate of female students is similar to those of males.

We recently set up a scholarship to encourage female woodworkers, but we need more resources to recruit female students.

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

We often find lower age group students are unprepared for our rigorous curriculum and demanding hours. Unfortunately, cuts made to our discipline have caused us to eliminate our lab classes which have historically been an effective avenue to help with success and retention of students, especially younger students who are less likely to have access to woodworking facilities outside of school. A solution would be to allow CFT to regain cut sections from our schedule. Another solution would be to give us resources to help recruit younger demographics. Increasing our hourly budget so we can pay someone to participate in outreach would be a good place to start.

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

Unfortunately CFT is not very diverse in ethnicity. We are comprised mainly of white males. We currently offer a scholarship which focuses on underrepresented populations, however we need resources and support to recruit more underrepresented populations.

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

Yes

Please share any best practice methods you use for online courses.

There is a slightly higher success rate for in person classes (81.88% averaged over five years) to those taught online (79.5%).

While teaching remotely can be challenging, we try to humanize the experience by encouraging "live" meetings, chat session and discussion threads. Instructors deliver information in different modalities including but not limited to readings, recorded lectures and video demonstrations. All are encouraged to have group or one on one meetings when necessary and to respond to student inquires in a timely manner.

COURSE STUDENT LEARNING OUTCOMES (SLOs)**Summarize the major findings of your course level student learning outcomes assessments.**

Skills demonstrated in class with instructor observation and immediate feedback leads to:

A safer working environment.

Quicker development of vital skills.

Knowledgeable progression of professional practices.

Collaboration and camaraderie.

The ability to apply knowledge and skills to a workplace environment.

Development of transferable job skills.

Development of entrepreneurial skills.

Although safety and knowledge of subject are demonstrated through written methods (assignments, test, quizzes etc.), Hands on project based learning with immediate feedback and correction has the greatest affect

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

Overall Skills development takes time and requires practice. Students who have limited tools, equipment and resource must rely on the schools facilities to develop the ability to work quickly, accurately, safely and with repeatability as required in the manufacturing industry. Our facilities are well equipped and specific for varies programs, however access to our facilities is limited due to cuts in our discipline size, resulting in cuts made to our lab specific classes (to leave room for core, fundamental and specialized required classes). Students need more access to our facilities. Re-instating some of the cut sections would allow for this.

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?

Safety is paramount and is closely monitored. The presence of T.A.'s (both paid hourly and volunteers) has significantly improved the awareness of both good and poor practice among the students, and thus prevented accidents and prepared students to carry safe practice into the workplace. This interaction also improves the discipline related skills and abilities of students with respect to workplace readiness.

Excluding courses that haven't been offered in the last three years, confirm that all of your courses have been assessed in the last three years.

No

If you answered no, please explain.

As the only full-time instructor for a program that used to have four full-time instructors, I haven't had the time to clean up and assess the SLO's.

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.

What is your departmental strategy on how you schedule your courses, including the time of day you offer courses? Do you use 4-week, 8-week, or block scheduling (putting required classes near each other) to organize required classes to meet the needs of disproportionately impacted students? Please explain.

Our courses are rotated into three basic time slots: morning, afternoon and evening. This gives both full-time and part-time students who work an opportunity to enroll in each course in their chosen program creating an attainable pathway to completion. The schedule is organized to avoid overlapping classes which are needed for the same certificate. In addition, classes are grouped together to facilitate certificate completion and help students with their scheduling needs. The evening time slot has the highest demand for working students and is also an option for non working students. Unfortunately the evening is limited to 4 evenings a week because Friday evenings have difficulty filling.

We have a handful of core or foundation level classes needed to earn a Meta certificate. This certificate, "Woodworking Fundamentals" includes CFT 100, 105, 149 and 195. Once a student has earned this Meta certificate they choose a specific Program (skill, product or technique) in which they are interested in focusing on. The core classes, which they've already completed are the foundation of the more specialized certificate degrees. Therefore students only need to take a few capstone classes to earn a certificate. We communicate this scaffolding approach on a one page document/flier which we pass out to our students.

We keep a handful of these fliers in our entry way so that they are always available to our students. In addition, we reinforce by advising verbally and directing students to the course catalog.

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

Until recently, CFT had been inclusive and did not need to work with other departments for program completion requirements. About three years ago we stopped offering our business class - CFT 108 and started deferring students to the Business Department. Unfortunately, the first semester in which our students were signed up for BMG 153, the class was dropped due to low enrollment or was not offered on the main campus. However, since then several CFT certificate earning students have taken the class and I have signed class substitute petitions. I usually reach out to Reza Wrathall during scheduling to see when they plan on offering the class. In addition, I list the Business class on the one page CFT schedule which we provide for our students. Moving forward we will need to foster relationships with both Business and Manufacturing due to the introduction of a new Digital Fabrication certificate.

Does your discipline offer cross-listed courses?

No

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

There are some curriculum concerns in our program. The first is trying to make the schedule so that students can earn certificates within a two year time frame. Since the budget/class cuts, we are having a difficult time offering all of the classes necessary to serve our students.

Second, we are trying to implement CAD/CAM into our curriculum and there is a slight learning curve with that. We are currently fleshing out scheduling, instructor and programming concerns. As mentioned we are trying to redesign our programs to facilitate scheduling demand.

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

Yes, a new digital design and manufacturing class was added in META, which will have a beginning and an advanced semester. We are hoping to adopt Fusion 360 CAD/CAM software in an attempt to net students from disciplines outside of woodworking. Eventually we'd like to build an Digital Fabrication Certificate.

In addition, as stated before, removing our "Lab" classes from the curriculum has had a negative impact on our student body.

Unfortunately, the most adverse effect has been on young and low-income students since this demographic doesn't typically have the tools, equipment or workspace at their home.

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

I believe the former full-time instructor deactivated over a dozen classes a few years ago. While it didn't hurt to deactivate some classes, others negatively impacted the program. Again, not offering lab classes reduces success rates disproportionately in some demographics. In addition, the reduction of classes has had a direct connection to a smaller student body.

A current review of scheduled offerings projected over the next 2-3 years will allow us to identify courses which may need deactivation. One class is the CFT 108 - Business for Woodworkers, which we are replacing with BMGT 153.

Are there areas you would like to expand?

The top priority for expanding CFT is with computer software and machine programming. Training students with these skills is imperative since this is an area in the woodworking discipline with the most projected job growth.

Regional Urban Wood processing has continued to expand and CFT has been approached by non-profit, Tree San Diego and Grant recipient, Treejuvination to write curriculum and advise on a certification program for Urban Wood processing. They've also asked us to partner with them to create an educational demonstration center. The center would educate the public on urban lumber and its use for things like furniture and instrument making, but also for byproducts such as biochar and fuel pellets. This would align nicely with environmental programs at the college, state and federal level.

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

We are always fine tuning our discipline programs, classes, and curriculum. Our evaluation considers the following:
Current regional manufacturing trends and needs - Small production shops, specialized fields, CAD/CAM manufacturing.
Jobs demand - Strong demand in construction related and manufacturing, i.e. cabinetry, finish carpenters and woodworkers.

Local manufacturing- Regional manufacturing in wood products is quite diverse in product and business size with a high number of small shop business. Our discipline offers diverse programs and prepares students for small business start up.

Gig economy- Students in our program can prepare themselves to start working from home even while working another job.

Veteran and other new career students- Usually full time and dedicated but often must enroll in heavy load to take advantage of benefits.

Our facility- Well equipped; Our scheduling and diverse offerings maximize the options for our students.

Student demand- With respect to scheduling for term, day of week, and/or time of day.

Advisory committee- Recommendations from industry and secondary educators, building coordination, articulation and contacts

To answer the next two questions, you will need to review your [program maps](#) and program information in the [2021-2022 Catalog](#).

Is the content in the program mapper accurate?

No

What needs to be corrected in the mapper?

The program mapper is accurate except we aren't able to offer all of the listed classes each semester they are listed.

Is the content in the catalog accurate?

Yes

Has your department or discipline started having discussions about embedding diversity related issues or content in your curriculum?

No

If yes, describe your efforts. If no, what type of training or help do you need to do this work?

I'm not sure what type of training we'd need.

CAREER AND LABOR MARKET DATA

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

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

The following websites are for CTE related data:

- [Centers of Excellence](#) (many other data resources besides supply and demand) Password: GetLMI
- [LaunchBoard](#)
- [LaunchBoard Resource Library](#)
- [Chancellor's Office Data Mart](#)
- [Career Coach-San Diego Workforce Partnership](#)
- [EDD Labor Market Info](#)
- [Career One Stop](#)

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

Our discipline, CFT, is actually 3 disciplines. Cabinet Making, Instrument Repair and Furniture Making. CFT programs prepare students for careers in all three disciplines/industries.

Careers in the Cabinetmaking industry include the following job titles:

Cabinet maker, Cabinet Finisher, Cabinet installer, Woodworker, Finish Carpenter, Carver, CNC Operator, Wood Sawyer, Cabinet Assembler, Quality Technician, Millwork, and Cabinet Fabricator.

Careers in the Instrument Repair industry include the following job titles:

Guitar Technician, Guitar Maker, Luthier, Guitar Repair person, Finisher, Production worker, CNC Operator, and Woodworker.

Careers in Furniture making industry include the following job titles:

Furniture Maker, Woodworker, Finisher, Wood Lathe Turner, CNC operator, Furniture Repair, Stair Builder, Bench Carpenter, Door and Window Installer.

The above industries also include job titles such as Designer, Planner, Sales and Management.

An emerging career path includes design software knowledge and CNC operation. We have considered this in our past and present planning and goals, which include purchase of CNC equipment (completed), acquiring on site laptops for instruction in computer based design software (accomplished), and incorporating CAD/CAM software and CNC machining into our programs and classes (in progress).

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

Knowledge of the following in the wood products manufacturing industry:

Materials, methods, and the tools

Wood species

Tree and wood technology

Milling processes

Joinery processes

Manmade wood sheet goods such as plywood or Formica

Power equipment /machines, their safe use, repair, and maintenance of

Hand tool and portable power tool use, sharpening, and maintenance

Arithmetic, algebra, geometry, calculus, statistics

Production processes, quality control, costs, and other related techniques

Principles of design, creating and reading technical plans, blueprints, drawings, and models

Proper technical and safety practices

Finishing processes, products, and MSDS documents

Proper shop set-up for safety and material flow

Marketing

Skills in:

Troubleshooting

Time Management

Verbal and written communication with others to convey information effectively

Analyzing needs and product requirements to create a design

Critical thinking

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

Ability to:

Safely use hand and power tools associated with the woodworking industry

Design products to meet the needs of client or market

Produce and interpret sketches, schematics, blueprints and specifications relating to wood products

Mill raw lumber to square and exact dimensions with both hand and power tools

Execute simple and complex woodworking joinery

Assemble and construct cabinetry, furniture and other wood products

Prepare wood surfaces for finish

Apply various finishes with various/appropriate methods

Communicate verbally and in written form with clients and coworkers

Set up woodworking shop for safe and efficient function

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

There are 8 distinctly different programs in CFT and several core fundamentals classes common to these programs. In these core classes students are asked to think of their project as a product. In doing so, along with building knowledge, skills and abilities in fundamental woodworking processes, tools, and materials, students also develops KSA's which are transferable to ALL manufacturing industries.

Students first develop design skills and abilities. Students are asked to work with a "client" for design collaboration. Designing includes aesthetics, materials, cost, construction, feasibility, marketability, drawing, model making, etc. Next student must plan the product and produce, working drawings, plans, materials list, cut list, plan of procedure, time estimates, cost estimates, and a time line for production. All the while building on the KSA's of manufacturing.

Students are also encouraged to market their product on the Internet/social media, are further develop soft skills. As students progress in their programs the knowledge, skills, and abilities are reinforced and further developed with respect to the specialized field of the 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?

Yes

What have you done to integrate work-based learning?

Due to the inherent nature of our discipline students gain simulated workplace experience in all of our classes. Designing products and operating machines to manufacture items is exactly what employees do in industry. In addition, many classes take field trips and invite guest speakers into their classrooms. Capstone projects are created in the advanced classes.

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

Again, they are gaining the exact skills and knowledge which they will use in industry.

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

Our faculty sit on advisory committees for local High School programs.

Local High School instructors sit on our advisory committee.

We have an Instagram page and a Facebook page.

We publish and distribute program literature.

We have articulation agreements with a half a dozen local high schools.

Every year (pre covid) we display our student work at the San Diego County fair.

We host an annual CFT Graduation Banquet/picknick/furniture show at our facility in May (pre covid).

We encourage and participate in local woodworking clubs such as the San Diego Fine Woodworkers.

Our faculty is published in local and national periodicals.

We often display student and faculty work at venues such as our CFT Gallery, the Boehm Gallery, the Palomar Library and the Escondido Municipal Arts Gallery.

Students and faculty also participate in national exhibitions and trade shows such as the Furniture Society Conference, AWFS and NAMM.

We are active in the Urban Wood community and Tree San Diego organization.

We participate in "Manufacturing Day" and often host a "Lie Nielsen Hand-Tool" event (pre covid).

Our wood club as well as our production class - CFT 144 and cabinetry class - CFT 165, create products for charity.

Recently, we helped the Children's Arthritis Foundation, by donating 20, #5 guitars to the Museum of Making Music, built a kitchen for a women's shelter and built and installed a kitchen for a tiny home for the Warrior Village in San Marcos.

We have relationships with local manufactures and businesses that hire our students.

We participate in high school outreach such as the Future Fair at San Marcos High School.

We collaborate on outreach events with Festool and Fine Woodworking Magazine.

Some of our faculty record their lectures and share them on You Tube.

We work with the foundation to foster relationships with donors who support our discipline with scholarships for our students.

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

It is extremely difficult to quantify employment within the woodworking field because it is so vast and skill sets are so diverse. It encompasses everything from self-employed woodworkers selling goods on Etsy to CNC machine operators who are responsible for mass manufacturing kitchen cabinets for the housing industry. One TOP code can't sufficiently capture the relevant data.

For example, the COE states that there will be a 5% increase for carpenters in the Inland Empire/Desert Area between 2018-2023, but a decrease for the need of Fine Woodworkers in LA/Orange Counties. The only related information for the San Diego Region is for "Urban Woodworkers" which says there were 41 job postings with associated key words from 2011-2018.

EDD lists Woodworkers, All Other (SOC Code : 51-7099) in California with a 4% increase between 2018-2028 with an average of 3,230 annual job openings.

EDD also lists Industries with growth over the next two years:

Wood Product Manufacturing 4.8%

Other Wood Product Manufacturing 5.5%

Furniture and Related Product Manufacturing 1.5%

Lumber and Other Construction Materials Merchant Wholesalers 9.6%

On O-Net a search for woodworker produces 17 matches, 6 of which have "bright outlooks."

O*NET states a 1% or average job growth for "Cabinetmakers" (51-7011.00) with projected job openings at 9300. However, Ed Smith, our former Deputy Sector Navigator gave a presentation which listed "Furniture and Related Products" and "Wood Products" as two sectors of manufacturing with the largest net employment gains in California. He cited this source as the Bureau of Labor Statistics.

This as well as other research supports the conclusion that the data collected by organizations such as Launchboard, O*NET and Centers of Excellence don't accurately represent regional employment opportunities in the woodworking industries. This is partly due to the fact that much of the work in this field is done both under-the-table and in a gig economy where people are self-employed. Perhaps a more important factor is that the woodworking industry spans many disciplines and organization like those listed above only collect data on jobs with certain titles like "cabinetmaker or bench carpenters."

For example, citing O*NET again, there is a faster than average or a 7-10% increase for Construction Carpenters (47-2031.01), Production Workers (51-9198.00 & 51-9199.00) and Carpenters (47-2031.00) which are all part of the CFT Curriculum.

In addition, O*NET states a much faster than average or an 11% or higher increase for Computer Numerically Controlled (CNC) Machine Tool Programmers (51-9162.00) and CNC Operators (51-9161.00). These occupations show a need for ~15,000 workers.

Finally, O*NET data show a need for 114,200 California openings as Assemblers and Fabricators (51-2099.00) which include approximately 19,300 workers in Manufacturing for disciplines like 1000 Craft Artists (includes Furniture Maker and Luthier - 27-1012.00), 1700 in Furniture Finishers (51-7021.00), 1300 in Logging (45-4023.00 & 45-4029.00), 100 in Manufactured Buildings (49-9095.00), 700 in Musical Instrument Repairers and Tuners (49-9063.00), 5000 in Sawing Machine Operators (51-7041.00), 100 in Wood Model Makers (51-7031.00) and 10,400 in Woodworkers (51-7042.00 & 51-7099.00).

In short, the Palomar College CFT Program is significantly more than the TOP code 0952.50 Cabinet and Millwork implies and rigid job classifications provide for. The demand for individuals with woodworking skills, especially now with Advanced Manufacturing (CNC) is very broad and these skills are more universally applicable than a few job codes can capture.

With this said, there is a supply gap.

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

Preparing our students for the workforce begins in the classroom. From the very first class, our programs build fundamental and advanced woodworking skills as well as design planning and soft skills, knowledge and abilities, needed for employment and/or entrepreneurship.

We work with local manufacturers, businesses, and employers to help place our students into industry.

We are actively pursuing partnerships with Bruce Reaves, Palomar's Job Placement Specialist and Jason Jarvinen, Internship Specialist to help us with these efforts.

We publish job opportunities in our weekly student announcements, which are available in all classrooms and discussed in classes.

We post job announcements on our job board.

We recruit and hand pick students and who are prepared to meet the needs of employers or who have expressed a desire for current employment.

We attend job fairs and communicate job fairs to our students.

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

Our last advisory board meeting was held via Zoom on April 8, 2021. The board recommended:

1. Continue to integrate CAD/CAM tools and incorporate them as quickly as possible into the curriculum for all appropriate classes. Students should focus on a specific software tool to establish a higher level of expertise over the range of their coursework. Instructors need to become familiar with the available digital tools and fabrication machines. Move forward in creating a separate certification/degree program emphasizing Computer Aided Manufacturing.
2. The permanent faculty on the CFT staff desperately need to be increased. This will allow the resources necessary to make the necessary changes to the program and curriculum.
3. Marketing - Industry employers need to become familiar with the Palomar College CFT program and our students. Develop a way for employers to access students interested in a career in the woodworking industry.
4. Marketing -Update the website to reflect industry partnerships and to highlight student success stories. Include Career Pathways that demonstrate the transferability of the digital manufacturing skills learned in the CFT Program to other industries. Include graphics of this information when exhibiting CFT products and at other events (e.g., Manufacturing Day, Week of Welcome, etc.)
5. Use more Facebook and Instagram to get the CFT Program and its benefits into the public eye. This is faster and more flexible than the web pages.
6. Consider integrating the Program with a certified apprenticeship program.
7. Highlight to college staff and students the value of the program and the skills of students by building and installing projects in various campus offices and common areas.

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

From the EDD/CalJobs website a search in San Diego County resulted in the following:

Woodworker 28 postings

Cabinet maker 12 postings

Finish carpenter 21 postings

The National Labor Exchange produced 81 job posting with a search for woodworker.

Also, a web search for "cabinet" in the jobs section of San Diego's Craig's List (on 10/22/21) shows 75 posts with titles such as cabinet installers, finishers, assistants, foreman, technicians, makers, etc. If you search other key word like "woodworker," "furniture repair," "saw operator," "cabinet re-facing," "carpenters," "fabricator," "assemblers," "window and door installers," etc. it returns even more results.

A search for "cnc" on the same platform on the same day list 69 job openings.

In addition, CFT receives several solicitations per month from companies as well as individuals looking for someone to hire.

O-Net lists the Projected Job Openings in CA:

51-7099.00 - Woodworkers, All Other - 1,200 openings, 15% or higher growth expectancy

51-7042.00 Woodworking Machine Setters, Operators, and Tenders, Except Sawing - 8,700 openings, 5-10% growth

51-7011.00 Cabinetmakers and Bench Carpenters - 11,000 openings, 5-10% growth

47-2031.00 Carpenters - 89,300 opening, 1-5% growth

51-7031.00 Model Makers, Wood - 100 openings, 15% or higher growth expectancy

51-2099.00 Assemblers and Fabricators, All Other - 125,200 openings, 1% decline

51-9198.00 Helpers--Production Workers - 31,800 openings, 1% decline

53-7063.00 Machine Feeders and Offbearers - 8,800 openings, 5-10% growth

51-7032.00 Patternmakers, Wood Bright Outlook, 15% or higher growth

49-9063.00 Musical Instrument Repairers and Tuners - 800, 1% decline

51-7021.00 Furniture Finishers - 2,600, 5-10% growth

51-7041.00 Sawing Machine Setters, Operators, and Tenders, Wood - 6,200, 5-10% growth

Skilled labor in woodworking is in high demand and our graduates can find work in the field. The deficiency is not in the demand or in the training, but in job placement and/or tracking employment.

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](#).

If you require any additional resources beyond your exiting budget, please be sure to request those resources in the next section titled "Resources".

Goals

Goal 1

Brief Description

Continue to seek additional full-time faculty.

Is this a new or existing goal?

Existing

Goal Status

Ongoing

How will you complete this goal?

Submit New Teacher hire request on this PRP form.

Outcome(s) expected (qualitative/quantitative)

Hiring a new full-time instructor is essential to the longevity and success of CFT. A new full-time faculty member will help achieve program goals which will reflect in graduate success rates and therefore funding for the college. It is not possible for two people to do the job that four people used to do. Once there is a sufficient amount of full-time faculty to run CFT, student and institutional needs will be met, including the coaching and counseling of student pathways.

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

Our goal of acquiring new full-time faculty members will benefit the program in all areas, including teaching assignment loads, program and college administrative tasks, and most importantly student contact. Consistency in student contact will foster better communication regarding career preparation and pathways. This will result in student employment. Also, by adding more full-time faculty members program tasks will be divided allowing more time for outreach to industry partners and recruitment of students. This will have a positive effect in adding to the diversity and success of our student population and the amount of students attaining employment in industry.

Expected Goal Completion Date

8/18/2023

Goal 2

Brief Description

Hire part-time faculty.

Is this a new or existing goal?

New

How will you complete this goal?

Submit the request to HR and post jobs on the school website. Attend hiring committee training, interview and hire new part-time faculty.

Outcome(s) expected (qualitative/quantitative)

We expect to hire at least three new part-time instructors to replace those who have retired and to teach our new digital fabrication classes.

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

Our goal of acquiring new part-time faculty members will directly help students. Instructors who are experts in the field will give students the skills and knowledge necessary to complete their educational and career goals.

Expected Goal Completion Date

12/17/2021

Goal 3**Brief Description**

Incorporate CAD/CAM and CNC routing into programs (discipline), explore CAD/CAM curriculum to create a Digital Fabrication Woodworking Certificate.

Is this a new or existing goal?

Existing

Goal Status

Ongoing

How will you complete this goal?

Offer supportive courses for computer design such as Cabinet Vision, Sketch-up, Aspire or Fusion 360. Explore and write curriculum for a Digital Fabrication Woodworking program. Acquire "simple" CNC machines to provide "stepped" CNC training.

The completion of this task is largely dependent on hiring more full-time faculty. If we hire another full-time faculty member program and institutional duties will be divided allowing the time needed to update the curriculum.

Perhaps a new hire will be proficient in current CAD/CAM practices and take 'ownership' of those courses/certificate.

Outcome(s) expected (qualitative/quantitative)

Discipline mission better met by students gaining more skills and graduates achieving more job opportunities.

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

Incorporating CAD/CAM will better prepare students for woodworking jobs and entrepreneurial opportunities.

Expected Goal Completion Date

8/25/2022

Goal 4**Brief Description**

CFT curriculum re-build and rebranding.

Is this a new or existing goal?

Existing

Goal Status

Ongoing

How will you complete this goal?

The completion of this task is largely dependent on whether or not we hire more full-time faculty and/or if we are given the time to do this.

Outcome(s) expected (qualitative/quantitative)

Updating the curriculum in META will directly lead to more completions/certificates earned and more students gaining employment in industry.

Since our class offerings have been cut I spend a lot of time counseling students. The information currently on-line and in literature regarding how to earn certificates is no longer up to date. This causes a lot of confusion for students and what I assume results in less completions. It's imperative that I have the time to update curriculum in META to reflect our current class offering/FTEF.

Updating curriculum with streamlined programs will make career paths more obvious and relevant. This, coupled with adding a Digital Fabrication certificate and re-branding the program will attract a more diverse demographic as well.

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

Rebranding the program and updating curriculum so our students have the most relevant skills and knowledge to succeed in industry is the essence of our mission statement.

Expected Goal Completion Date

8/18/2023

Goal 5**Brief Description**

Move our discipline from Trade and Industry to Design and Manufacturing

Is this a new or existing goal?

Existing

Goal Status

Ongoing

How will you complete this goal?

Request a meeting with the VP of instruction and discuss the merits of this move.

Outcome(s) expected (qualitative/quantitative)

Collaboration with Fashion, Machining, Interior Design and other disciplines in the Design and Manufacturing Department will help students from both areas gain exposure and enable a closer collaborative working relationship. Both areas could gain enrollment and improve completions.

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

CFT is the Design and Manufacturing of wood products. This department is where we belong. Trade and Industry is service and skill based. Although we do teach service and discipline skills in our discipline as well, we also teach design and manufacturing of products skills not taught in the other trade and industry disciplines. The other disciplines do not teach Designing and Manufacturing of products.

Expected Goal Completion Date

5/27/2022

Goal 6**Brief Description**

Researching and developing curriculum for an Urban Wood Products Manufacturing program

Is this a new or existing goal?

Existing

Goal Status

Ongoing

How will you complete this goal?

Bring back the utilization and milling of Urban lumber. This includes moving the timber frame to it's permanent home where the saw mills and kilns can be housed. Reintroduce curriculum into our current classes and introduce more in depth classes on the subject which can be through Non-Credit classes. Continue to pursue grant opportunities with Cal Fire and Tree San Diego. The completion of this task will be dependent on hiring full-time faculty and/or being allocated time.

Outcome(s) expected (qualitative/quantitative)

Training and possible certification of Urban Wood Processing technicians. According to the Center of Excellence there are 41 regional job openings per year under "Urban Woodworker." In addition, simple milling processes are used in all other woodworking disciplines.

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

This has been an area where Palomar College has lead the county and California for the past 2 decades. The industry continues to grow with demand for product and knowledgeable sawyers and technicians. This will also provide a complete and structured environment for students to witness and understand the production aspects of an operational sawmill. This along with enrollment in non-credit classes will prepare students for employment and/or business opportunities in this growing field. This would help re-new the positive image that Palomar College once had in the Urban Forestry/Green building industry and regain trust lost due to non-support of previous grant involvement.

Expected Goal Completion Date

8/16/2024

RESOURCES

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

The section is organized into the following four parts:

PART 1: Staffing Needs (Faculty and Additional Staff)

PART 2: Budget Review

PART 3: Technology and Facilities Needs

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

PART 1: STAFFING NEEDS

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

Are you requesting additional full-time faculty?

Yes

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

REQUEST FOR ADDITIONAL FULL-TIME FACULTY

Faculty Request 1

Title of Full-Time Faculty position you are requesting

Assistant Professor, Trade and Industry, Cabinet and Furniture Technology

How will this faculty position help meet district (Guided Pathways, Strategic Plan, Strategic Enrollment Management etc.), department and/or discipline goals? Please be sure to tie this back to your PRP goals and three year plan.

The addition of a full-time faculty member would enable us to:

Complete the CFT Curriculum Rebuild and Rebrand (Guided Pathways, Strategic Enrollment Mgmt. and Dept./Disc. goals)

Recruit and Retain a more Diverse Population (Dept./Disc. goals)

Foster more Completions/Certificates Earned (Guided Pathways, Strategic Enrollment Mgmt. and Dept./Disc. goals)

Promote Industry Partnerships (Dept./Disc. goals)

Increase Graduate Placement in the Workforce (Guided Pathways, Strategic Enrollment Mgmt. and Dept./Disc. goals)

Participation in a Larger Capacity in Institutional Service (Dept. and Institutional Goals)

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

In this technical career field finding teaching candidates with the right combination of formal education and professional experience is difficult. Instructors must be able to teach all classes in one of three disciplines: Cabinet Making, Furniture Making and Guitar Making/Instrument Repair. They must have a very broad woodworking background as well as be highly specialized in one or more fields. It is difficult to find candidates with a combination of this professional experience and the proper educational degree(s). These highly qualified candidates require more than just "part time teaching". We currently have 1 Full-Time Faculty and 11 part time faculty currently teaching this semester.

In addition, there is a scarcity of qualified Part-Time Faculty who are proficient in digital processes, including CAD/CAM technology for woodworking. Most people with these digital skills and knowledge can earn more money in industry, therefore they do not want to teach Part-Time. However, a full-time instructor earns a comparable wage.

Firefox <https://www.cognitofrms.com/forms/admin/view/8/entrydetails>

Are you requesting this position for accreditation, regulatory, legislative, health and safety requirements? Please explain.

In terms of health and safety there are two issues, which can be greatly improved by hiring a new Full-Time Faculty member: Safety training of students in foundation courses and supervision of the facility and staff during all hours of operation.

1. For consistency in curriculum, including safety policies and procedures, full-time faculty members must teach foundation courses as well as specialized woodworking courses. Program and safety policies are clearly communicated and established in foundation courses. However, currently CFT does not have enough full-time faculty to teach all sections of the foundation course. In addition, full-time CFT faculty are not always able to teach in their specialized area(s) of expertise, in many cases giving these classes to less qualified part time instructors.

2. For safety and consistency CFT Full-Time Faculty must schedule hours in order to be on site during all hours that courses are offered. The classrooms and shops are often occupied 5 days a week 13 hours a day. Currently it is simply impossible for the 1 Full-Time Faculty to be present to supervise all of the 14 part time instructors during class sessions.

Utilizing your PRP data, please summarize the discipline productivity, efficiency, and any regional career education needs for this discipline.

The following information does not take into consideration covid data or the approval for one new hire which is expected to begin in Fall 2022 if the hiring process is successful.

For the past two years the ratio has been almost 90% part-time to full-time faculty! For the previous five years 22% of instruction in CFT had been taught by 2 Full-Time Faculty (78% Full/Part-time ratio in 2018-2019). Even if there were 3 Full-Time Faculty in CFT the ration would still be 67% which is higher than the schools average of 63%. Therefore, at least 2 new Full-Time Faculty hires are needed to bring the discipline to a reasonable Full-Time/Part-Time ration of 67%.

The inequality when compared to the other disciplines in Trade and Industries is highlighted below:

CFT: 726 enrolled students / Full-time 9% / Overload 3% / Part-time 88%
AB: 130 enrolled students / Full-time 83% / Overload 17% / Part-time 0%
AT: 734 enrolled students / Full-time 29% / Overload 20% / Part-time 51%
DT: 486 enrolled students / Full-time 72% / Overload 7% / Part-time 21%
WELD: 553 enrolled students / Full-time 39% / Overload 8% / Part-time 53%

Here is how the FTEF for CFT breaks down:

Full Time FTEF:

Fall 14 = 1.89
Fall 15 = 2.00
Fall 16 = 1.80
Fall 17 = 2.00
Fall 18 = 1.80
Fall 19 = .06

Part Time FTEF:

Fall 14 = 8.12
Fall 15 = 6.11
Fall 16 = 7.09
Fall 17 = 7.26
Fall 18 = 5.67
Fall 19 = 5.93

Part-Time FTEF Overload FTEF:

Fall 14 = .33
Fall 15 = .17
Fall 16 = .73
Fall 17 = .40
Fall 18 = .33
Fall 19 = .20

Part-Time FTEF Hourly FTEF:

Fall 14 = 7.79
Fall 15 = 5.94
Fall 16 = 6.36
Fall 17 = 6.86
Fall 18 = 5.33
Fall 19 = 5.73

FTEF:

Fall 14 = 10.01
Fall 15 = 8.11
Fall 16 = 8.89
Fall 17 = 9.26
Fall 18 = 7.47
Fall 19 = 6.53

CFT is actually 3 disciplines (Furniture, Cabinet and Instrument), with 8 unique and rigorous programs and is akin to a factory, with 150 machines (potentially dangerous) needing adjustment, maintenance and repair. Supplies, materials and finishing products must be budgeted, ordered, stored and delivered to students safely and efficiently. Student

projects must be stored and accessible easily. All of this and more is required before any instruction can begin.

We have the only manufacturing jobs oriented woodworking program in California south of Los Angeles county. Cerritos College is the closest college with a similar program. CFT's unique set of program offerings sets it apart from any school in the state, with Red Rocks College in Colorado (who modeled their wood program after ours) being the only other school in the country with a similar curriculum. As a result our student population represent San Diego county, Imperial county, Riverside county and Orange county. We also draw students from other states and even other countries. We have had students from Japan, Germany, Australia, England, France and other countries who have come here primarily to attend the CFT Program. This pattern and our reputation show the degree of respect the rest of the world gives to Palomar College and validates the quality of education and relevance we have in preparing students for a livelihood in woodworking.

San Diego is region which is rich "Mom and Pop" manufacturing. Small, privately owned shops are a large part of industry and wood manufactured products are abundant. Product lines in San Diego are diverse and include items such as cabinetry, home furnishings, urban wood, skateboards, guitars, ukuleles, banjos, massage furniture, meditation furniture, contract and restaurant furniture, custom furniture, wooden surfboards, wooden boats, humidors and more. CFT addresses the diverse employment needs of the regions wood industry with a comprehensive woodworking curriculum. This includes foundation level classes and specialized programs which produce highly knowledgeable and skilled graduates. Our graduates are ready to work in many manufacturing industries, they can manage someone else's business or be an entrepreneur and run their own business. The classes and degrees are designed to stack and crossover making it likely a full time student will complete at least two certificates in two years.

In the past four years there has been a large dip in enrollment in due to major cuts to our program. Our course offerings are currently 57% of what they were four years ago, which means our program has been cut by 43%. In Fall 2016 we had 1,102 students and in Fall 2019 we had 726 students enrolled.

Our Fill Rate has improved dramatically going from 87% in Fall 2016 to 95% in Fall 2019. Last year the course success rate was 85% and the retention rate was 95%. Both above the school goal.

Our efficiency numbers are below the school goal of 525, however CFT class sizes are capped at 24 or 22, thus efficiency will never get above the low 400's. With that said, efficiency rates are lower than they were in 2016, however the efficiency has improved over the past three years. In Fall 2017 efficiency was 336, in Fall 2018 efficiency was 380 and in Fall 2019 efficiency was 388.

In 2019-2020 CFT awarded 51 certificate/degrees, or 1 completion for each 2 FTES (full time equivalent student). This number is strong considering the previous four years, but I attribute some of this to recruiting students to petition for their certificate(s). If we continue to reduce our course offerings then the completion rate will follow suit and will drop. This is evidenced by the dip in completions in 2016-2017. The low number of 26 completions has a direct correlation with CFT course offering being cut by 30% (at the time).

Is your department affected by faculty on reassigned time? If so, please discuss.

Yes, the only full-time faculty member has an ongoing 20% lab-coordinator release time which is a contractual obligation. This is to run the administrative and safety duties of the program. This is due to the fact that the program has dropped from four full-time faculty members and one full-time ISA to one full-time faculty member to one full-time ISA.

In addition, the only full-time faculty member is the current T&I Chair with a 60% release time. This is a total of 80% release time, so there is very little student contact from the full-time faculty.

Are you requesting new Classified, CAST or AA positions?

No

PART 2: BUDGET REVIEW

Review your Budget/Expenditure reports for fiscal year 2019, 2020, 2021. Consider your three-year PRP plan.

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

[How to Request the Available Budget Report](#)

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

Yes

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

Budget Requirements:

240000 (Short Term Hourly): \$37,100

400010 (Supply): \$22,000

500010 (Operations): \$12,000

600010 (Capital): \$ 8,500

The data above is the stable funding level required to maintain the Cabinet & Furniture Technology program. Previous budget cycles have provided higher and lower values for each category as well as for the total district allocation from a high of \$116K to a low of \$39K. Recent COVID budgets are not adequate to sustain the program when normal operation resume in Fall 2022. This wildly fluctuating budget allocation make it extremely difficult for the program to manage Supply costs, equipment maintenance and normal replacement of capital equipment. One-time capital expenditures to replace high value equipment (e.g., CNC Routers, computer equipment) are not included in these figures.

NOTE: PARTS 3, 4 and 5 – TECHNOLOGY, FACILITIES AND OTHER NEEDS

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

For more information about funding sources available, see [IELM BLOCK GRANT, LOTTERY, PERKINS AND STRONG WORKFORCE GUIDELINES](#).

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

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

PART 3: TECHNOLOGY AND FACILITIES NEEDS

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

Yes

Technology Request

Technology Request 1

What are you requesting?

Software License Renewal

Provide a detailed description of the item requested. What is it, and why do you need it? Please be as descriptive as possible. Include in your description how the requested item aligns with your discipline's PRP goals, analysis of PRP data, SLO/SAOs.

Computers and computer software are essential elements of Advanced Manufacturing processes. The CFT Program uses these tools extensively in its digital fabrication curriculum. The software used for Cabinetmaking is unique to the industry and the cost of annual maintenance is not in the budget.

Estimated Amount of Request.

\$5,000.00

If any, list ongoing costs for the technology (licences, support, maintenance, etc.)

\$5,000.00

Do you already have a budget for this request, or will you need additional funds?

No

What PRP plan goal/objective does this request align with?

Goal 3 & 4

What Strategic Plan 2022 Goal/Objective does this request align with?

2:4

If you have multiple requests for technology and had to prioritize, what number would give this? (1 = Highest)

1

Do you think that your request for technology will require changes to a facility?

No

Note about technology requests:

All technology requests will now go through a review process before prioritization.

- *Your dean/director will send you a Technology Request Checklist (aka Technology Proposal Analysis Checklist).*
 - *You must complete this checklist and return it to your dean no later than 11/19/2021.*
 - *Once the dean approves the form and the request, the dean will send the document to the Technology Review Committee to determine IS resources needed, any integration issues, and/or potential overlap with existing technology.*
 - *The results of the review will be sent to the dean and chair with feedback.*
 - *The dean will determine whether or not the request moves forward for prioritization and/or implementation.*
 - *Requests for one-time funding will move forward for prioritization.*
 - *Requests that use funding from your department budget may move forward for purchase.*

Part 4: Facilities Requests

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

Yes

Facilities Requests

Facility Request 1

What are you requesting?

Replacement of the structure housing the CFT Urban Lumber operation - Design & Planning Phase

What discipline PRP plan goal/objective does this request align with?

Goal 4

What Strategic Plan 2022 Goal/Objective does this request align with?

2:4

3:4

Provide a detailed description of the facilities item or space requested. What is it, and why do you need it? Please be as descriptive as possible. Include in your description how the requested item aligns with your discipline's PRP goals, analysis of PRP data, SLO/SAOs.

The CFT Program has been a leader in this field and run an Urban Lumber operation since 2000. The need for a structure to house the CFT Urban Lumber operation has been an outstanding issue since the removal of the existing structure and the construction of the three T&I storage/learning buildings that began more than 3 years ago. Since that time, the Urban Lumber operations have been at a standstill depriving student of an essential hands-on learning and work experience opportunity. The objective of this request is to initiate the work required to design and construct a new structure to house the Urban Lumber operation on the mesa on the east side of the CFT 'T' building. This request reflects only the design and Planning phase of the construction. Total cost for construction will be a deliverable of this work.

Is there an associated cost with this request?

Yes

Will you fund the request through your budget or other sources?

One Time Request, Strong Workforce

What impacts will this request have on the facilities/institution (e.g., water/electrical/ADA compliance)?

This request is to initiate the design and initial planning for the facility; no institutional impact for this phase.

PART 5: OTHER ONE-TIME NEEDS

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

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

Yes

Requests

Item 1

What are you requesting?

Replacement of the structure housing the CFT Urban Lumber operation - Design & Planning Phase

Estimated Amount of Request.

\$155,000.00

Will you accept partial funding?

No

Budget Category

Non-technology Equipment (acct 600010 and per unit cost is >\$500)

What PRP plan goal/objective does this request align with?

Goal 4

What Strategic Plan 2022 Goal/Objective does this request align with?

2:4

3:4

Provide a detailed description of the item requested. What is it, and why do you need it? Please be as descriptive as possible. Include in your description how the requested item aligns with your discipline's PRP goals, analysis of PRP data, SLO/SAOs.

The CFT Program has been a leader in this field and run an Urban Lumber operation since 2000. The need for a structure to house the CFT Urban Lumber operation has been an outstanding issue since the removal of the existing structure and the construction of the three T&I storage/learning buildings that began more than 3 years ago. Since that time, the Urban Lumber operations have been at a standstill depriving student of an essential hands-on learning and work experience opportunity. The objective of this request is to initiate the work required to design and construct a new structure to house the Urban Lumber operation on the mesa on the east side of the CFT 'T' building. This request reflects only the design and Planning phase of the construction. Total cost for construction will be a deliverable of this work.

Please upload a copy of the quote, if available.



[D-Astl Timber Frame Design conceptual proposal.pdf](#)

88.37 KB



I confirm that all full-time faculty in this discipline have reviewed the PRP. The form is complete and ready to be submitted.

Yes

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

janderson2@palomar.edu