Entry #: 81 - Career, Technical and Extended Education

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#### DRAFT

### **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.

#### ALL PROGRAMS WILL COMPLETE AN ANNUAL PROGRAM REVIEW FOR 2023-2024.

**Department Name** 

Trade and Industry

### **BASIC PROGRAM INFORMATION**

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

Microsoft\_List\_ID

**Discipline Name** 

Cabinet and Furniture Technology (CFT)

Department Chair NameDepartment Chair emailAshley Woltersawolters@palomar.edu

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

Jennifer Anderson, Associate Professor, Furniture Making Jordan Clarke, Assistant Professor, Cabinet Making Chance Coalter, Assistant Professor, Furniture Making Erin Behling, Assistant Professor, Furniture Making Georg Kast, ISA III

#### Website address for your discipline

https://www.palomar.edu/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 interpersonal 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.

#### (Click here for information on how to create a mission statement.)

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

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

Yes

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

Woodworking Fundamentals Guitar Making Technology Cabinetmaking and Millwork Case Furniture Construction/Manufacturing Table and Chair Manufacturing Lathe Turning Technology Veneering Technology Woodworking Skills Technology

#### 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 links shown in red.

#### Enter the number of permanent or full-time faculty support your discipline (program)?

4 Full-Time Faculty Members, 1 ISA III and 1 ADA (who is shared with all of T&I and Design and Manufacturing). It's important to note that our ISA III will be retiring within the academic year. Budgets must stay intact so we can list and fill this position.

For this past fall semester, what was your Full-time FTEF assigned to teach classes?	For this past fall semester, what was your Part-time FTEF assigned to teach classes? (Part-time FTEF = PT hourly and	
3.40	overload.)	
	3.73	

# List the classified and other permanent staff positions that support this discipline. If possible, include number of months and percentage workload.

Georg Kast, ISA III - 10 Months at 40 hrs. / week Carrie Espinoza-Vilanueava - ADA 40 hrs. / week (shared with T&I and D&M)

#### List additional hourly staff that support this discipline and/or department. Include weekly hours.

Kathy Steffen - 8 hours / week Bill Strenger - 18 hours / week Charles Wallace - 18 hours / week Joe Chavez - 18 hours / week Rebekah Leslie - 18 hours / week

# **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 goals focus on eliminating equity gaps and increasing timely completions. Examining, reflecting upon, and developing strategies to improve course success rates is one way to help the college meet its Vision for Success Goals and support our students in reaching theirs.

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 to confirm that you have assessed each course SLO within the past three years.

#### Link: Course Data

#### **COURSE SUCCESS AND RETENTION**

#### 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.

Last year we had an 82% success rate which is 12% higher that the institutional set average. Over the last five years the number has ranged from 79% - 86%.

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

Stayed the same

#### Was this expected? Please explain.

Last year we had an 92% retention rate which is 2% higher that the institutional set average. Over the last five years the number has ranged from 86% - 95%.

Age

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

When or where (time of day, term, location)

# When or Where: What did you find and why do you think differences based on when or where the course is offered exists? What do you need to help close the gap?

All of CFT's groups were at or above the institutional average except for the categories for Age and Term Load. For full-time students we have a 77% retention rate compared to a 93% retention rate for part-time instructors. Hands on classes where techniques are taught and/or products are constructed are often challenging and labor intensive. Many students take more classes than they can successfully complete, so they end up dropping out of classes. This is especially true for Veterans who need to carry a specific load to receive their benefits. CFT and T&I in general would benefit from a dedicated counselor who could better advise both Veteran and non-Veteran students to weave academic courses into their schedule.

#### Age: What did you find and why do you think age differences exist? What do you need to help close the gap?

There is a correlation between age and success rates: the older the student the higher the success rate. The only group below the institutional average is 19 and under who have a 33% success rate. Currently CFT is trying to instate open lab hours. This would help close the age gap success rate by offering our facilities and mentorship to younger students who often don't have the space, machines and equipment to work with outside of class time.

Please share methods that your department is using to improve retention and success rates in your courses. If you are focusing on a specific group like online students or a demographic group please include that information in your answer.

As mentioned above, educating students on the intensity of hand-on classes is essential. Dedicated T&I counselors who understand the challenges associated with our Department will be invaluable. In addition, offering students a time and space outside of class time to practice and solidify the skills and techniques they learn in class will help retain students and add to their success rates.

### COURSE STUDENT LEARNING OUTCOMES (SLOs)

Excluding courses that haven't been offered in the last three years, do you confirm that all of your courses have been assessed since August 2020 (Result Summary Date)?

No

#### If you answered no, please explain.

CFT was understaffed for several years so the full-time faculty member was unable to enter the data. CFT is now fully staffed and will begin to enter the data into Nuventive.

# Upload a copy of your SLO report from Nuventive ("Report 0. Last Result Date and Action Date for All Active Course Outcomes")



# PROGRAM INFORMATION

In this section, you are asked to consider and evaluate your programs, including the annual number of completions, and their program learning outcomes,

### **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.

Link: Program Completions

# Access the link above titled "Progam Completions" and copy and paste five years of completion data for each of your discipline's degrees and certificates.

The Programs Completions report did not give information for individual certificates, but gave totals. This is what was listed for totals:

2016-2017=26, 2017-2018=58, 2018-2019=35, 2019-2020=51, 2020-2021=13, 2021-2022=24  $\overline{\mathbf{A}}$ 

### **PROGRAM LEARNING OUTCOMES**

**Do you confirm that all of your programs have been assessed since August 2020 (Result Summary Date)?** No

#### If you answered no, please explain.

CFT was understaffed for several years so the assessments were not entered. CFT now has more faculty and the outcomes will be entered.

# Upload a copy of your SLO report from Nuventive ("Report 2. Last result, action, and follow-up date for each active program outcome").



 $\checkmark$ 

### **Program Review Reflection and Summary**

In this section you are asked to evaluate your programs by considering their program learning outcome assessments, the annual number of completions, 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.

Currently we have a supportive administration who has been pivotal in getting the program fully staffed. We have amazing facilities, instructors and students. Our Program's and our 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.

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

There have been several challenges for CFT in the past five years:

1. Class offerings were severely cut so students weren't able to take classes necessary to earn certificates.

2. CFT was severely understaffed so the only full-time faculty member could not update programming to reflect the new, reduced class allocation.

3. The pandemic happened.

These three events took place around the same time and negatively impacted CFT, however in the past two years CFT has hired 3 full-time faculty members and has been able to slightly grow their schedule. In addition, the full-time faculty members are currently working on a program re-brand and curriculum overhaul.

# **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 <u>https://www.onetonline.org/</u> 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 O\*net Link below) Are there any new or emerging careers? If so, how would the new or emerging careers impact your future planning?

The CFT program encompasses 3 disciplines: Cabinet Making & Millwork, Stringed Instrument Making and Furniture Making. CFT students choose to prepare for careers in one or more of these disciplines/industries.

Careers in the Cabinetry & Millwork industry include the following occupations:

Cabinetmakers and Bench Carpenters, Furniture Finishers, Cabinet Installers, Woodworkers, Carpenters (finish carpentry), CNC Machine Programmers, CNC Machine Operators, Woodworking Machine Setters, Operators and Tenders (including sawing), Quality Technicians, Construction Estimators, Assemblers and Fabricators, Architectural Millwork Drafters and Engineering Technicians.

Careers in the Instrument Repair industry include the following job titles: Guitar Technician, Guitar Maker, Luthier, Guitar Repair person, Finisher, Production worker, CNC Operators, and Woodworkers.

Careers in Furniture making industry include the following job titles:

Furniture Makers, Woodworkers, Furniture Finishers, Wood Lathe Turners, CNC Programmers and Operators, Furniture Repair, Bench Carpenters.

The above industries also include related occupations such as Designers, Project Managers, Salespeople and First Line Supervisors of Production and Operating Workers. The continuing transition to automation in the industry has opened up a high-growth career path in the Advanced Manufacturing arena for production woodworkers:

Casework, Millwork, Instrument and Furniture Engineering Technologists utilize CAD-CAM Software to program Computer Numerically Controlled machinery for production.

We have been working to meet this need in past and present planning and goals, which include acquiring on-site laptops for instruction in computer based design software (accomplished), incorporating CAD/CAM software and CNC machining into our programs and classes (complete), purchasing current CNC equipment (in progress - funds requested), and creating a new digital fabrication certificate (in process).

# 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 laminate Power equipment /machines, their safe use, repair, and maintenance 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: Project Management Workflow Management Troubleshooting Time Management Verbal and written communication 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.

The following four questions are for CTE programs only. If you are not a CTE program, please go back to the BASIC INFORMATION tab and select "no" for "Are any of your programs TOP coded as vocational (CTE/CE)?"

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

Centers of Excellence lists two CFT program occupations in the top 20 for growth in the South Region, San Diego County Subregional Profile from October 2023:

Computer Numerically Controlled Tool Programmers (SOC 51-9162) Engineering Technologists and Technicians, Except Drafters, All Other (SOC 17-3029)

Career One Stop and/or the EDD state that over the next ten years in CA: (Soc Code 517042) - Woodworking Machine Setters, Operators, and Tenders, Except Sawing, will increase 14% (Soc Code 53-70630) - Machine Feeders and Offbearers will increase 6% (Soc Code 25-2032) - Career/Technical Education Teachers, Secondary School will increase 7% (Soc Code 47-2031) - Carpenters will increase 1 % (SOC 51-9162) Computer Numerically Controlled Tool Programmers will increase 16% Wood Product Manufacturing will increase 2.2%

#### 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. 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. 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 pursing partnerships with Michael Gomez, K12 Pathway Coordinator 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 and have recently adopted Handshake as a method for employers and students to connect. We also recruit and hand pick students who are prepared to meet the needs of employers or who have expressed a desire for current employment.

Additionally, we attend job fairs and publicize job fairs to our students.

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

The last advisory board meeting was held on 4/24/23. Significant outcomes include:

- Continue to integrate CAD/CAM tools and incorporate them as quickly as possible into the curriculum for all appropriate classes. Continue to move forward in creating a separate certification/degree program emphasizing Computer Aided Manufacturing. CNC manufacturing skills are transferable to other industries including metal and plastic fabrication. This coupled with the CFT approach using project/poduct-based learning can provide students significant opportunities in a variety of fields.

- The current timeline to complete a Certification at Palomar is lengthy. Many of the required classes are not offered frequently. Many potential students are not willing or are unable to invest 2+ years to complete a Certificate. Continue work to schedule classes so that students can complete in a shorter period by evaluating and revising existing Certificates.

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

According to the EDD in San Diego County there will be:

950 Job Openings for Cabinetmakers and Bench Carpenters (Soc Code 51-7011) 150 Job Openings for Furniture Finishers (Soc Code 51-7021) 260 Job Openings for Woodworking Machine Setters, Operators, and Tenders, Except Sawing (Soc Code 51-7042) 27,100 Job Openings for Other Production Occupations (Soc Code 51-9000) 2,730 Job Openings for Helpers--Production Workers (Soc Code 51-9198) 3,820 Job Openings for Production Workers, All Other (Soc Code 51-9199) 150 Job Openings for Machine Feeders and Offbearers (Soc Code 53-70630) 200 Job Openings for Millwrights (Soc Code 49-9044) 370 Job Openings for Maintenance Workers, Machinery (Soc Code 49-9043) 230 Job Openings for Miscellaneous Construction and Related Workers (Soc Code 47-4090) 3,980 Job Opening for Other Construction and Related Workers (Soc Code 47-4000) 12,940 Job Opening for Carpenters (Soc Code 47-2031) 1,590 Job Openings Computer Numerically Controlled Tool Operators (Soc Code 51-9161) 410 Job Openings Computer Numerically Controlled Tool Programmers (Soc Code 51-9162) 370 Job Openings Molders, Shapers, and Casters, Except Metal and Plastic (Soc Code 51-9195) 380 Job Openings Cutting and Slicing Machine Setters, Operators, and Tenders (Soc Code 51-9032)

### **PROGRAM GOALS**

#### **Progress on Prior PRP Goals**

In the most recent PRP cycle, you identied a set of goals Provide an update to your most recent PRP goals.

Click here for previous PRPs with goal information.

#### **Prior PRP Goals**

#### **Prior Year PRP Goal 1**

#### **Brief Description**

Continue to seek additional full-time faculty.

#### **Goal Status**

#### Completed

Add any comments related to your work on prior goal (e.g., success, challenges, reasons for eliminating a goal). Describe Outcomes, if any.

CFT was able to hire two more full-time faculty last year. We currently have four full-time faculty members and one ISA III. This is a huge milestone and sufficient for the time being.

#### **Prior Year PRP Goal 2**

#### **Brief Description**

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

#### **Goal Status**

Ongoing

# Add any comments related to your work on prior goal (e.g., success, challenges, reasons for eliminating a goal). Describe Outcomes, if any.

We now offer multiple courses for computer aided design and computer aided manufacturing using industry leading software including Cabinet Vision, Alphacam, Sketch-up, and V-Carve. Over the next year, we will complete curriculum for a new Digital Wood Fabrication certificate and launch it in META.

We have invested in two new Shaper Origin CNC router systems using program funds, but access to modern, safe and functional equipment remains a limiting factor in student achievement. Further investment is needed and we have requested funding to replace outdated, unsafe and non-functional machinery to support this initiative through Perkins and/or Strong Workforce.

#### **Prior Year PRP Goal 3**

#### **Brief Description**

CFT curriculum re-build and rebranding.

#### **Goal Status**

Ongoing

# Add any comments related to your work on prior goal (e.g., success, challenges, reasons for eliminating a goal). Describe Outcomes, if any.

This goal is top priority for CFT and the curriculum update proposal has been presented within the program and is well supported by faculty. Significant work remains to complete the project, including curriculum writing for the aforementioned Digital Wood Fabrication certificate.

We have requested funds from Perkins and/or Strong Workforce to help support this initiative.

#### **Prior Year PRP Goal 4**

#### **Brief Description**

Researching and developing curriculum for an Urban Wood Products Manufacturing program.

#### **Goal Status**

Ongoing

# Add any comments related to your work on prior goal (e.g., success, challenges, reasons for eliminating a goal). Describe Outcomes, if any.

While this is still a goal, CFT has prioritized updating curriculum, adding a digital fabrication certificate and rebranding the program. Once these goals are achieved and the program is more stable we will begin to focus on this again. It will include faculty time needed to develop the curriculum and funding for facilities necessary to relocate the milling and drying equipment.

#### Describe any changes to your goals or three-year plan as a result of this annual update.

We have made significant progress on our goals, specifically in the area of faculty hires. We hope to complete our curriculum overhaul by fall 2024 so that the new programming will reflect in the 2025 catalog. We will continue working towards our remaining goals and expect to reach some others in the coming year.

#### Do you have any new goals you would like to add?

Yes

#### **Establishing New Goals and Strategies for the Next Three Years**

Goal 1

Brief Description

Open Lab Hours

#### How will you complete this goal? Include Strategies and Timeline for Implementation.

We have requested funds from Perkins/Strong Workforce which will be used to increase student access to our facilities in CFT. Currently, students have (0) access to the equipment outside of scheduled class hours. The open lab concept will allow us to run (24) hours of open-labs each week. The labs will be run by (2) paid Shop Monitors, which we will hire from our existing pool of gualified Teaching Assistants and possibly Adjunct Faculty. Because of safety concerns the labs will be limited to a maximum of (24) students. Students will be assigned points based on the number of units they are registered for in CFT each semester. They will use those points to sign up for open labs. We will use a scheduling software from a company called ProClass to schedule the labs. Students will log on using their name and email address, and select the number of units they are enrolled in that semester in CFT. Based on those units, they will be awarded a certain number of points, which they can then use to sign up for open labs. We will schedule the labs to best utilize our open labs (classrooms) throughout the week, and create variation to best serve the students. This will include labs during the day, in the evening and on weekends. In the future, we want to create a woodworking club. Once the club is established, the club can be involved. The club would create a system where they award points to volunteers through the club. This would be for things such as - shop maintenance (cleaning cast-iron surfaces, sharpening community chisels, etc.) - Open lab assistant (helps as an extra set of hands with students, extra set of eyes to help the Shop Monitors, extra set of legs to go get supplies to support the lab, etc.) and more. This would create an opportunity for CFT students to get more experience, and earn more points for open labs. The open lab concept is something we have needed for decades. The open labs are there for students to work on school projects only, and not for personal projects. The open labs are also non-instructional labs, which are meant to give the student access to equipment, promoting their independent learning and problemsolving skills. The Shop Monitors are primarily there to make sure the students are safe using machines, and to support them if they have questions.

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

Expected outcome are: Increased enrollment Increased retention Increased completion Increased success rates Increased enrollment, retention, completion, and success rates of under-served and underrepresented populations.

# How does this goal align with your department mission statement, the college Vision Plan 2035, and /or Guided Pathways?

#### Several items from:

Goal 1. Reimagine and redesign instruction and student services to increase student success.

Goal 3. Optimize enrollment for fiscal stability and growth.

Goal 5. Build a unified Palomar College district while allowing each location to establish a unique culture and programs to serve its student population and create community connections.

#### **Expected Goal Completion Date**

8/26/2024

#### Goal 2

#### **Brief Description**

Cabinet & Millwork Equipment Modernization

#### How will you complete this goal? Include Strategies and Timeline for Implementation.

We have recent quotes from the major industry manufacturers and experience bringing in and setting up this type of machinery. Jordan Clarke has purchased and/or spearheaded installation of several pieces of comparable equipment in private industry, at Bellflower High School, and at Cerritos College. We have excellent facilities with the necessary space, power, compressed air and dust collection services readily available. The equipment requested is readily available in North America with the exception of the Schmalz lift, which is 12-14 weeks away from receipt of Purchase Order. Each equipment quote includes delivery, setup, training, and warranty. If funds are granted, the near term objective of upgrading our Panel Saw, Boring machine, and Panel lift will be completed well within the 2025 fiscal year. Longer term needs include replacing our Automatic Edgebander, Widebelt sander and Face-frame assembly table.

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

1. Increased enrollment in Cabinetry & Millwork program courses.

2. Increased completion of Cabinetry & Millwork certificates.

3. Increased job opportunities for Cabinetry & Millwork program completers resulting from better alignment with industry partners equipment and processes.

4. Increased enrollment and completion of students from underrepresented groups.

# How does this goal align with your department mission statement, the college Vision Plan 2035, and /or Guided Pathways?

Reaching this goal will improve CFT's ability to serve a diverse student population and particularly benefits underrepresented and underserved groups, helping them succeed with their educational goals as well as preparing them to earn an income from woodworking.

This goal aligns with several items from all 5 categories of goals and objectives:

Goal 1. Reimagine and redesign instruction and student services to increase student success.

Goal 2. Invest in our people and processes.

Goal 3. Optimize enrollment for fiscal stability and growth.

Goal 4. Strengthen external partnerships and community relationships.

Goal 5. Build a unified Palomar College district while allowing each location to establish a unique culture and programs to serve its student population and create community connections.

#### **Expected Goal Completion Date**

8/25/2025

### Goal 3

#### **Brief Description**

CFT Restructure to Operating as an Independent Department

#### How will you complete this goal? Include Strategies and Timeline for Implementation.

CFT operates under three divisions: Instrument Making, Furniture Making and Cabinet Making. These processed align with Design and Manufacturing, Trade and Industries and what was formerly known as Industrial Arts, but don't fit neatly into one discipline. Wood is the medium that unites us. Other programs similar to us (Cerritos College) operate as their own Department. Considering our size (physical plant, faculty and staff, and student population) we should also operate independently.

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

Expected outcome are: Increased enrollment Increased retention Increased completion Increased success rates Increase in student employment rates Stronger industry partners Increased enrollment, retention, completion, and success rates of under-served and underrepresented populations.

# How does this goal align with your department mission statement, the college Vision Plan 2035, and /or Guided Pathways?

This goal aligns with several items from all 5 categories of goals and objectives:

- Goal 1. Reimagine and redesign instruction and student services to increase student success.
- Goal 2. Invest in our people and processes.
- Goal 3. Optimize enrollment for fiscal stability and growth.
- Goal 4. Strengthen external partnerships and community relationships.
- Goal 5. Build a unified Palomar College district while allowing each location to establish a unique culture and programs to serve its student population and create community connections.

#### **Expected Goal Completion Date**

8/24/2026

# 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 five parts:

PART 1: Staffing Needs (Faculty and Additional Staff)

PART 2: Budget Review

- PART 3: Technology Needs
- PART 4: Facilities Needs

PART 5: One Time Request for Other Needs (NonTechnology Equipment, Supplies, Operating Expenses, Travel)

Reflect upon the three year plan you created above, your current operations, and any upcoming factors (retirements, changes in legislation, and changes in policies or procedures) that will impact your unit. How will you allocate resources to implement your plan? Describe additional resources needed to improve the effectiveness of your unit/program. All resource requests must be aligned with the College's <u>Vision Plan 2035</u>.

Summarize any reallocation/re-organization of resources you are making based upon your three-year plan, your current operations, and any other factors (e.g., legislation). Describe the impact of the reallocation of resources to your unit.

NOTE: All requests listed in the PRP will be reviewed by deans and supervisors, then forwarded to the appropriate review group for prioritization. A resource requests approved to move forward in the review process does NOT guarantee a position or funding.

### **PART 1: STAFFING NEEDS**

Requests for faculty will follow the prioritization process currently in place in the Faculty Position Prioritization committee, which reports to the Education, Equity, and Student Success Council. Requests for new staff positions will be prioritized at the division level and reviewed at Exec.

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

No

#### **REQUEST FOR ADDITIONAL FULL-TIME FACULTY**

#### Are you requesting AA, CAST for Classified Staff?

No

#### **PART 2: BUDGET REVIEW**

Request that your ADA provide you with your Available Budget Report and complete this section.

Review your recent Budget/Expenditure reports and consider your three-year PRP plan.

#### Do you have any ongoing needs or needs to augment your regular budget?

Yes

# What budget considerations would you like your dean/supervisor to be aware of or to consider? Describe the need and the amount of the adjustment.

There is a need for additional funding (beyond the base budget) in the following areas: 240010 Short Term Hourly - \$63,232; Based on 2024 spending for 11 classes. 13 classes are projected for FY 25 Funds provide Safety Monitor and instructor support for entry level classes and temporary replacement for ISA Spring 25.

600010 Capital -\$9250; for Replacement of failing Widebelt Sander discovered after Perkins grants submitted.

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

1.One-Time Fund Requests. Through the PRP process the college implements an approach for prioritizing ad allocating onetime needs/requests. Prioritization takes place through the appropriate groups, leadership, and the Budget Committee. The executive team and Resource Allocation Committee consider various sources for funding PRP requests. Resource requests also inform the larger planning process like Scheduled Maintenance Plans, Staffing Plans, and institutional strategic planning.

For more information about funding sources available, see <u>IELM BLOCK GRANT, LOTTERY, PERKINS AND STRONG</u> <u>WORKFORCE GUIDELINES</u> (on the left menu of the webpage).

If you are a CTE program and think you may qualify for CTE funds for your PRP request(s), you are STRONGLY encouraged to answer the call for Perkins/Strong Workforce grant applications in February. Contact the Dean of CTEE for additional information.

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

1.Technology and Facilities Review. Requests for technology and facilities are assessed by the Deans and then, if appropriate forwarded to the proper institutional group (e.g., technology review committee, or facilities) for review and feedback.

### PART 3: TECHNOLOGY NEEDS

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

No

### **PART 4: FACILITIES REQUESTS**

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

No

### PART 5: OTHER ONE-TIME NEEDS

For more information about funding sources available, see <u>IELM BLOCK GRANT, LOTTERY, PERKINS AND STRONG WORKFORCE</u> <u>GUIDELINES.</u> 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?

Biesse Rover K FT 1531 CNC Machine 5x10' Flat grid table, Full work enclosure, Bumper safety system Vacuum pumps, 12hp spindle, C (4th) axis, Automatic tool changer (delivery included / tax estimated)

#### Provide a detailed description of the the request. Inlude in your response:

#### a. Description of the need? (e.g., SLO/SAO Assessment, PRP data analysis)

This equipment will be the foundation for a new certificate program within CFT: Digital Wood Manufacturing. Digital manufacturing has become commonplace in the wood products industry and demand is high for employees with this specialized skillset. We expect the new certificate to quickly eclipse many of CFT's traditional programs. This new program has been under development for a few years and we are now offering all but one course in the proposed certificate. The new equipment is the final piece in the puzzle because it offers expanded capabilities and safety over the older machine that it will replace.

#### b. Who will be impacted by its implementation? (e.g., individual, groups, members of department)

Faculty training will be required, but is included by the machinery manufacturer/supplier.

#### c. What are the expected outcomes or impacts or implementation?

- 1. New Digital Fabrication Certificate
- 2. CNC technology adoption across more CFT certificate programs, especially Cabinetry & Millwork and Furniture making.
- 3. Increased enrollment through attracting new students from industry and underrepresented groups.
- 4. Improved certificate completion.
- 5. Improved job opportunities for CFT program completers.

d. Timeline of implementation					
FY25 - Equipment availability fluctuates, but conservative estimates indicate a few weeks to a few months between PO and delivery. Installation, setup and training requires one week once the equipment is under power.					
What is the anticipated cost for this request? If any, list ongoing costs for the request (additional equipment, support, maintenance, etc.).					
\$134,373					
<b>Do you already have a bud</b> g No	get for this request?	?			
What PRP plan goal/object	ive does this reques	st align with?			
2					
		ctive does this request align w			
1:4 1:7	1:10 1:11	3:7 4:3	5:5		
	sts for facilities and	had to prioritize, what numb	er would you give this? (1 = Highest)		
1					
What impacts will this request have on the facilities/institution (e.g.,water/electrical/ADA compliance, changes to a facility)?					
Minor changes may be required to power supplies and dust collection					
Will you accept partial fund	dina?				
Yes	ang:				
Budget Category					
Non-technology Equipment (acct 600010 and per unit cost is >\$500)					
Please upload a copy of the	e quote, if available.				
ltem 2					
What are you requesting?					
Cabinet & Millwork Lab Modernization					
Provide a detailed description of the the request. Inlude in your response:					

#### a. Description of the need? (e.g., SLO/SAO Assessment, PRP data analysis)

These funds will strengthen existing CFT programs in three ways:

1. Safety - The equipment provides needed protection from injury: Altendorf Hand Guard technology uses optical recognition to retract the saw blade BEFORE a student's hand can contact the blade. The Schmalz Jumbo Ergo 85 prevents back injuries with vacuum power to lift and maneuver panels up to 198 lbs with ease. The Homag DrillteQ D-200 features a dynamic LED light bar to keep hands away from danger.

2. Inclusion & Accessability - Each of these pieces of equipment ensure inclusion for students with physical limitations with better controls like touchscreen visual interfaces (multiple), and by removing physical barriers such as heavy lifting (Schmalz), and long reach (Altendorf & Schmalz).

3. Alignment with Industry - The project increases program alignment with industry best practices and improves graduate industry employability. Project will help re-establish Palomar CFT as a leader in Cabinetry & Architectural Millwork trade education.

#### b. Who will be impacted by its implementation? (e.g., individual, groups, members of department)

Faculty training will be required and is included by machine manufacturers / suppliers.

#### c. What are the expected outcomes or impacts or implementation?

This project specifically addresses three areas of need:

1. The need to increase enrollments & completions - Cabinetry and Millwork certificate program represents the best employment opportunities for CFT students, yet the enrollments and completions are not commensurate with the opportunities. Modernization of lab equipment will generate interest and enthusiasm particularly among underrepresented groups for the inclusion and accessibility factors discussed above.

2. The need to improve safety and function - The current equipment is aging at more than 20 years old and functionally lacking. The Holz-Her sliding panel saw has an unreliable scoring unit that requires near daily adjustment and repair. The current boring machine cannot perform horizontal drilling operations necessary to support modern cabinet assembly methods. Safety is thoroughly discussed above.

3. The need to better align with industry - Without functional scoring on the current panel saw, it's extremely difficult for students to achieve a high-quality cut with fragile materials such as textured melamines and fine veneered panels. Our students are forced to hand drill assembly holes for their cabinet products without this equipment and they are unable to learn to use the type of machine now ubiquitous in industry.

#### d. Timeline of implementation

FY25 - Equipment availability fluctuates, but conservative estimates indicate a few weeks to a few months between PO and delivery. Installation, setup and training requires one week once the equipment is under power.

# What is the anticipated cost for this request? If any, list ongoing costs for the request (additional equipment, support, maintenance, etc.).

\$198,430

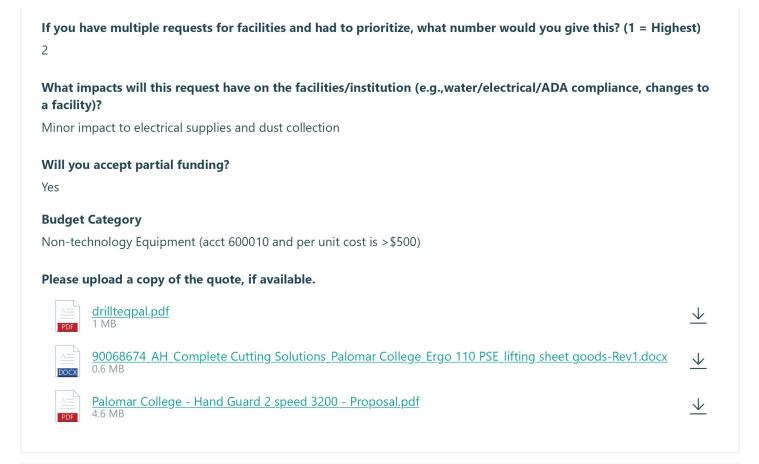
Do you already have a budget for this request?

No

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

2

1:4	1:10	3:7
1:7	1:11	4:3



#### Item 3

#### What are you requesting?

Open Lab time for Cabinet and Furniture Technology Program students. ProClass software and funding for staff oversight

Provide a detailed description of the the request. Inlude in your response:

#### a. Description of the need? (e.g., SLO/SAO Assessment, PRP data analysis)

The funds will be used to increase student access to our facilities in CFT. Currently, students have (0) access to the equipment outside of scheduled class hours. The open lab concept will allow us to run (24) hours of open-labs each week. The labs will be run by (2) paid Shop Monitors, which we will hire from our existing pool of gualified Teaching Assistants and possibly Adjunct Faculty. Because of the safety concern we have working with dangerous machinery, the labs will be limited to a maximum of (24) students at a time. Students will be assigned points based on the number of units they are registered for in CFT each semester. They will use those points to sign up for open labs. We will use a scheduling software from a company called ProClass to schedule the labs. Students will log on using their name and email address, and select the number of units they are enrolled in that semester in CFT. Based on those units, they will be awarded a certain number of points, which they can then use to sign up for open labs. We will schedule the labs to best utilize our open labs (classrooms) throughout the week, and create variation for the students benefit. This will include labs during the day, in the evening and on weekends. In the future, we want to create a woodworking club. Once the club is established, the club can be involved as well, and we could create a system where we award points to volunteers through the club. This could be for things like - shop maintenance (cleaning cast-iron surfaces, sharpening community chisels, etc.) - Open lab assistant (helps as an extra set of hands with students, extra set of eyes to help the Shop Monitors, extra set of legs to go get supplies to support the lab, etc.) and more. This would create an opportunity for our students to get more experience and earn more points for open labs. The open lab concept is something we have needed for decades. The open labs are there for students to work on school projects only, and not for personal projects. The open labs are also non-instructional labs, which are meant to give the student access to equipment, promoting their independent learning and problem-solving skills. The Shop Monitors are primarily there to make sure the students are safe using machines, and to support them if they have questions.

#### b. Who will be impacted by its implementation? (e.g., individual, groups, members of department)

**CFT** Students

#### c. What are the expected outcomes or impacts or implementation?

I was an adjunct in CFT for 10 years before being hired as an Associate Professor last year. Before that I was a student in CFT starting in 2007. I know how important this is to our entire program. Currently, students have zero access to the labs and facility outside of scheduled class sessions. This is unheard of in a woodworking program, and causes a lot of issues. We are competing with other schools that have programs in place for students to access machinery. We compete against non-profit schools where students have 24/7 access to the studio, but we also compete against other community colleges such as Red Rocks Community College - which have open-labs (6) days a week for 8-10 hours per day. Our students have (0) access, and we compete with these schools in national design competitions such as at AWFS in Vegas. This is also a safety and an equity issue. Woodworking takes a lot of time, and students don't have enough time to build their projects. This causes them to rush, which is incredibly dangerous and leads to poor quality work. Woodworking equipment is also incredibly expensive. Only our most affluent students have their own equipment at home, and are able to flourish in the classes. Most of our students can't afford the equipment, and they suffer immensely from our limited access to equipment. We have students who are really talented, but they aren't able to show their true potential because we are not giving them an opportunity to. In most disciplines on campus, students can access the library, computer lab, tutoring center, etc. so that they get access to the equipment and resources they need to be successful in their classes. Our students don't have that access. The new open lab concept will allow us to run 24 hours of open labs per week during the semester, so that students can access the equipment in a safe and monitored setting where they are supported and watched over. It will create more equity in our program and allow our students to show their true potential. It will allow us to build more complicated objects, better implement what we are teaching, reduce stress and the need to rush, create a safer working environment, and more. We are also working on new curriculum and more advanced classes in the future in our program, and this open lab concept is crucial to the success of those classes and our program at large.

#### d. Timeline of implementation

FY25

What is the anticipated cost for this request? If any, list ongoing costs for the request (additional equipment, support, maintenance, etc.).	
\$30,320	
Do you already have a budget for this request?	
No	
What PRP plan goal/objective does this request align with?	
2	
What Educational Vision Plan 2035 Goal: Objective does this request align with?	
1:1 1:2	
If you have multiple requests for facilities and had to prioritize, what number would you give this? (1 = Highest)	
3	
What impacts will this request have on the facilities/institution (e.g.,water/electrical/ADA compliance, changes to a facility)?	
None	
Will you accept partial funding?	
Yes	
Budget Category	
Labor, Supplies	
Please upload a copy of the quote, if available.	
Pro Class software.pdf	

#### Item 4

PDF

What are you requesting?

0.2 MB

CFT Rebranding and Program Rework

#### Provide a detailed description of the the request. Inlude in your response:

#### a. Description of the need? (e.g., SLO/SAO Assessment, PRP data analysis)

The funds will be used to compensate faculty during the summer to revamp and rebrand the Cabinet and Furniture Technology Program. This will start with a complete overhaul of programming by streamlining nine existing certificates into five, creating a new digital fabrication certificate and partnering with the Business Department to develop a certificate for woodworking entrepreneurs. The result will funnel students into certificates, increase completions and better serve the needs of the students, employers and college administration. The rebranding will also include a new mission statement and promotional efforts to recruit a more diverse student demographic.

<b>b. Who will be impacted by its implementation? (e.g., individual, groups, members of department)</b> CFT faculty				
c. What are the expected outcomes or impacts or implementation?				
The need is to update CFTs image and programming to better serve students and the regional wood industry. Rebranding will help target a new student demographic and bring CFTs image into the 21st century. This will lead to increased enrollment, higher completion rates and more students placed in jobs. It will strengthen our reputation and create new industry and academic partnerships.				
d. Timeline of implementation				
FY 25				
What is the anticipated cost for this request? If any, list ongoing costs for the request (additional equipment, support, maintenance, etc.). \$24,100				
Do you already have a budget for this request?				
No				
What PRP plan goal/objective does this request align with? 2,3,4				
What Educational Vision Plan 2035 Goal:Objective does this request align with?				
1:2 1:8 1:10 1:11				
If you have multiple requests for facilities and had to prioritize, what number would you give this? (1 = Highest) 4				
What impacts will this request have on the facilities/institution (e.g.,water/electrical/ADA compliance, changes to a facility)?				
None				
Will you accept partial funding?				
Yes				
Budget Category				
Labor, Supplies				
Please upload a copy of the quote, if available.				
Rebranding ancillary costs.pdf   0.2 MB				

# 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

# **Feedback and Review**

### **Department Chair**

I confirm that the PRP is complete. No

**Department Chair Name** 

Date