Application for Approval – New Credit Program

Palomar Community College District
Palomar College

Woodworking Skills Technology

<table>
<thead>
<tr>
<th>PROPOSED PROGRAM TITLE</th>
<th>CONTACT PERSON</th>
</tr>
</thead>
<tbody>
<tr>
<td>Woodworking Skills Technology</td>
<td>Chris Feddersohn</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COLLEGE</th>
<th>TITLE</th>
</tr>
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<tbody>
<tr>
<td>Palomar College</td>
<td>Chairperson</td>
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<table>
<thead>
<tr>
<th>DISTRICT</th>
<th>PHONE NUMBER</th>
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</thead>
<tbody>
<tr>
<td>Palomar College</td>
<td>760-744-1150 x2556</td>
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<table>
<thead>
<tr>
<th>PROJECTED PROGRAM START DATE</th>
<th>E-MAIL ADDRESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring 2012</td>
<td><a href="mailto:cfeddersohn@palomar.edu">cfeddersohn@palomar.edu</a></td>
</tr>
</tbody>
</table>

GOAL(S) OF PROGRAM (CHECK ALL THAT APPLY):

- [X] CAREER TECHNICAL EDUCATION (CTE)
- [ ] TRANSFER
- [ ] OTHER

<table>
<thead>
<tr>
<th>TYPE OF PROGRAM (SELECT ONLY ONE):</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] A.A. DEGREE</td>
</tr>
<tr>
<td>[X] A.S. DEGREE</td>
</tr>
<tr>
<td>[ ] AA-T DEGREE</td>
</tr>
<tr>
<td>[ ] AS-T DEGREE</td>
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</table>

<table>
<thead>
<tr>
<th>CERTIFICATE OF ACHIEVEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] 18+semester (or 27+quarter) units</td>
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<tr>
<td>[ ] 12-18 semester (or 18-27 quarter) units</td>
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### PLANNING SUMMARY

<table>
<thead>
<tr>
<th>Recommended T.O.P. Code</th>
<th>Estimated FTE Faculty Workload</th>
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<tbody>
<tr>
<td>0952.50 mill &amp; cab</td>
<td>0-5.0</td>
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<table>
<thead>
<tr>
<th>Units for Degree Major or Area of Emphasis</th>
<th>Number of New Faculty Positions</th>
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<tbody>
<tr>
<td>22</td>
<td>0</td>
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</table>

<table>
<thead>
<tr>
<th>Total Units for Degree</th>
<th>Est. Cost, New Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td>$0</td>
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<table>
<thead>
<tr>
<th>Required Units-Certificate</th>
<th>Cost of New/Remodeled Facility</th>
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<tr>
<td>22</td>
<td>$0</td>
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<table>
<thead>
<tr>
<th>Projected Annual Completers</th>
<th>Est. Cost, Library Acquisitions</th>
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<tr>
<td>9</td>
<td>$0</td>
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<table>
<thead>
<tr>
<th>Projected Net Annual Labor demand (CTE)</th>
<th>When will this program undergo review as part of college’s Program Evaluation Plan?</th>
</tr>
</thead>
<tbody>
<tr>
<td>770 in Cal.</td>
<td>Month 10 Year 2015</td>
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</table>
Woodworking Skills Technology Degree
Palomar College

Criteria A. Appropriateness to Mission

1. Statement of Program Goals and Objectives

The Associate of Science degree in Woodworking Skills Technology has the mission of training perspective degree candidates for employment/self-employment as furniture makers or as woodworker in a related industry. Coursework includes; fundamental machine woodworking, fundamental finishing, fundamental hand tool skills, fundamental carving, fundamental veneering, fundamental wood bending, business development and operational practices, and furniture design. This degree compliments the other seven degrees proposed in the Cabinet and Furniture Technology discipline at Palomar College. Graduates of this degree will be employed by custom furniture makers, production furniture manufacturers, cabinetmakers, woodworking related manufacturers, furniture repair shops, or may be self-employed.

Objectives: Students who successfully complete this program will be able to:

- Set up a shop for producing furniture or other wood products with the necessary tools, equipment, space and safety.
- Evaluate a piece of case furniture needing repair, and recommend and perform needed repair.
- Perform with competency all of the fundamental woodworking processes with respect to hand tool and machine use, carving, veneering, wood bending, finishing, and lathe turning.
- Develop a business plan for a furniture/woodworking related business.

2. Catalog Description

The finest furniture in the world is hand made. Skilled craftsman are rare and valuable. There is always a market for quality. This program will prepare students to make a living at woodworking with an emphasis on hand skills, traditional methods and European craftsmanship.

3. Program Requirements

Woodworking Skills Technology
A.A. Degree Major or Certificate of Achievement
Core Course Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFT 100 Fundamentals of Woodworking</td>
<td>4</td>
</tr>
<tr>
<td>CFT 108 Business Woodworking</td>
<td>2</td>
</tr>
<tr>
<td>CFT 118 Furniture Design Development</td>
<td>2</td>
</tr>
<tr>
<td>or CFT 153 Studio Furniture Design I</td>
<td>2</td>
</tr>
<tr>
<td>CFT 149 Hand Joinery I</td>
<td>2</td>
</tr>
<tr>
<td>CFT 151 Veneering Technology I</td>
<td>2</td>
</tr>
<tr>
<td>CFT 176 The Lathe - An Introduction to Woodturning</td>
<td>2</td>
</tr>
<tr>
<td>CFT 180 Wood Bending and Lamination/Wood Technology</td>
<td>2</td>
</tr>
<tr>
<td>CFT 187 Introduction to Carving</td>
<td>2</td>
</tr>
<tr>
<td>CFT 195 Finishing Technology/Touch-Up and Repair</td>
<td>2</td>
</tr>
</tbody>
</table>

Electives (Select 2 units)
CFT 142 The Art and Craft of Planemaking 2
CFT 143 Decorative Box Making 2
CFT 144 Production Furniture Making (Toys) 1
CFT 145 Advanced Manufacturing Production Techniques 1
CFT 155 Classic American Chair Designs 2
CFT 156 Advanced Classic American Chair Designs 2
CFT 173 Bamboo Fly Rod Building 2
CFT 175 Jigs/Fixtures and Routers 2
CFT 182 Timber Framing Technology 3

Total Major Units 22
Plus Minimum General Education Units* 38
Total Degree Requirements 60

* See attached Palomar College Associate Degree Requirements

4. Background and Rationale

Currently the CFT discipline includes 3 degree programs and over 50 individual courses. The current degrees include Cabinet Making and Millwork, Furniture Making Technology, and Cabinet and Furniture Design. The advisory committee endorsed a curriculum revision at its meeting of April 11, 2011. The revision recommendation resulted in the development of seven new certificates/degrees and will phase out two of the current degree programs.

- The Cabinet Making and Millwork degree has been revised and will continue to be offered in both forms while the old version is phased out.

- The current Furniture Making Technology degree will be phased out and replaced with two new degree programs, Case Furniture Construction/Manufacturing and Table and Chair Manufacturing.

- The current Cabinet and Furniture Design Degree will be phased out.

- Four new degrees will be offered which combine and focus on mostly established coursework and a few newly accepted courses. They are Carving Technology, Lathe Turning Technology, Veneering Technology and Woodworking Skills Technology.

- A new degree Guitar Making Technology incorporates several established courses and several newly accepted courses.

The curriculum revision plan was influenced by several factors.

- The mission of the CFT discipline, “Our mission is to help prepare our students to make a living at woodworking.”

- Title 5 guidelines recommend certificate/degree programs be attainable in 4 semesters. Each of our current degree programs is extremely comprehensive and thorough, so much so that many of our students currently find it challenging to finish a certificate program in two years, let alone an A.S. degree. Therefore, streamlining the coursework with the new degrees will help students focus on a clear path to completion.

- According to Educational Portal.com 30% of woodworking professional are self-employed. Therefore all of the proposed degree programs except one contain a
woodworking business class to help students start their own business or gain the skills needed to work as a business manager.

- During periods of economic downturn, statistics show that woodworking businesses with specialization have maintained sustained profitability because there are an increased number of renovations, remodels and repairs. Therefore all of the newly proposed degree programs have a specialty focus.

- All of the proposed degree programs except one contain a design course to give students a foundational understanding of design, which spans from period furniture to contemporary and helps students develop and implement design concepts.

- In summary, advisory committee was presented with concepts of focused coursework for degree programs and recommend discipline move forward to adopt the degrees outlined here. The reworked and new programs accomplish several benefits, which include: 1) a focused streamlined path to completion, which students can attain in 4 semesters, 2) maintaining a strong foundation in fundamental woodworking, finishing, design, and business, and 3) emphasizing a specialty focus which is marketable to employers or customers.

Criteria B. Need

5. Enrollment and Completer Projections

- Number of sections or course courses to be offered annually
  - Of the Core course listed in Criteria A Section 3, approximate 21 sections of these course will be offered annually

Annual enrollment

- Each section typically has a 25 student class maximum x 21 sections = 525 duplicated enrollment
- Unduplicated enrollment is approximately 100 individual students
- Number of anticipated program completers at the end of year two of the program is approximately 18
- Number of anticipated program completes at the end of the fifth year is approximately 45.

6. Place of Program in Curriculum/Similar Programs

The Associate of Science degree in Woodworking Skills Technology will complement the 7 degrees being proposed, as well as the current degrees, in the Cabinet and Furniture Technology department at Palomar College (see Criteria A Section 4). This new degree will not only be a stand-alone degree, but the faculty of the Cabinet and Furniture Technology department envision students earning one of the currently existing degrees and then, by taking a few additional courses, be able to also earn the proposed Associate of Arts degree in Woodworking Skills Technology. This will prepare that student to be even more employable in the local job market.

What related programs are offered by the college?

- This program will join 7 other degrees proposed by the Cabinet and Furniture Technology department (see Criteria A Section 4). It will provide a specialized training and will not replace any other current degree program.

Will this new program fulfill a current need?

- Yes, the Cabinet and Furniture Technology discipline has always offered and valued traditional woodworking skills, which are a trademark of fine European craftsmen
and craftsmanship. Creating this degree program allows students with such skills and passion a clear path to completion of this specialized degree. In the woodworking industry specialization has sustained profitability. Southern California has many custom furniture manufacturers and small shop furniture makers, which could support the need for a highly skilled specialist on staff or a contracted skilled specialist for custom work. The Cabinet and Furniture Technology Advisory Committee have verified the need for this program.

Will there be courses in common shared by this program and another existing program?
- Yes, other degree programs share 10 courses required for the core of this degree.

What enrollment changes will program create?
- Due to the demand for this degree program, we anticipate a slight increase in enrollment. We also anticipate that existing students will enroll in these veneering courses to supplement their current degree or career goals.

Will it accommodate an overflow or attract a new market?
- Yes, the new program will attract people who have an interest in making a living making furniture, either as an employee in the industry or as a small business owner. And, the new program will serve existing students by enhancing their skills for future jobs.

Will it be possible for students to move between this program and another program?
- Yes, since several of the required core courses in this major are common to other Cabinet and Furniture Technology degree cores, it will be very easy for students to move between majors.

Will programs share resources?
- Yes, this new program will share the existing facilities, faculty, staff, supplies, and equipment with other degrees and courses in the Cabinet and Furniture Technology discipline.

7. Similar Programs at Other Colleges in Service Area

Locally, there are no college programs similar to Woodworking Skills Technology offered.

There are two woodworking related programs offered in southern California:

- Cerritos College in Norwalk California is approximately 85 miles north of San Marcos and offers three certificate/degrees in the discipline. They are:
  Cabinet Making
  Furniture Making
  Comprehensive Wood Working

- For those who want to continue their studies in this industry San Diego State University in San Diego California approximately 35 miles south of San Marcos offers a B.A. in Furniture Design.

8. Labor Market Information & Analysis (CTE only)

Students completing the Associate of Science degree in Woodworking Skills Technology will have a solid foundation in woodworking technology as well as a marketable specialty.
Students completing any of the seven new certificate/degree program will be prepared for many
different job opportunities. Labor market information (LMI) from the California Employment
Development Department (EDD) lists the following occupation job titles, which are related to the
programs:

*Cabinetmakers and Bench Carpenters (SOC Code: 51-7011)
*Craft Artists (SOC Code: 27-1012)
*Fine Artists, Including Painters and Sculptors (SOC Code: 27-1013)
*Furniture Finishers (SOC Code: 51-7021)
Musical Instrument Repairers and Tuners (SOC Code: 49-9063)
Sawing Machine Workers (SOC Code: 51-7041)
Teachers, Trade and Technical (SOC Code: 25-2032)
Vocational Education Teachers, Secondary School (SOC Code: 25-2032)
*Woodworking Machine Workers, Except Sawing (SOC Code: 51-7042)
*Woodworkers, All Other (SOC Code: 51-7099)

*The Associate of Science degree in Woodworking Skills Technology is most closely aligned to:
Cabinetmakers and Bench Carpenters, Craft Artist, Fine Artists, including Painters and Sculptors,
Furniture Finishers, Woodworking Machine Workers, and Woodworkers, All others.

The EDD lists the California annual average openings and median hourly rate as follows (2008 to
2018):

<table>
<thead>
<tr>
<th>Employment</th>
<th>Openings</th>
<th>median $/hr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cabinetmakers and Bench Carpenters</td>
<td>330</td>
<td>$15.30</td>
</tr>
<tr>
<td>Craft Artists</td>
<td>30</td>
<td>$25.43</td>
</tr>
<tr>
<td>Fine Artists, Including Painters</td>
<td>30</td>
<td>$26.60</td>
</tr>
<tr>
<td>Furniture Finishers</td>
<td>90</td>
<td>$13.35</td>
</tr>
<tr>
<td>Musical Instrument Repairers</td>
<td></td>
<td>$15.68</td>
</tr>
<tr>
<td>Sawing Machine Workers</td>
<td>40</td>
<td>$13.86</td>
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<tr>
<td>Teachers, Trade and Technical</td>
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<tr>
<td>Vocational Education Teachers,</td>
<td>160</td>
<td>$37.06</td>
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<tr>
<td>Secondary School</td>
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</tr>
<tr>
<td>Woodworking Machine Workers,</td>
<td>160</td>
<td>$12.48</td>
</tr>
<tr>
<td>Except Sawing</td>
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<td></td>
</tr>
<tr>
<td>Woodworkers, All Other</td>
<td>130</td>
<td>$10.44</td>
</tr>
<tr>
<td>TOTAL related openings</td>
<td>970</td>
<td></td>
</tr>
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</table>

According to the EDD employment in this field is sensitive to economic downturns. However,
“opportunities should be available for workers who specialize in such items as custom cabinets.”
“Demand for Cabinetmakers and Bench Carpenters will stem from increases in population,
personal income, and business expenditures, in addition to the continuing need for repair and
renovation of residential and commercial properties. “

The EDD job outlook data can be supplemented by the following current and local research done
on 11/2/2011
A Google search for “woodworking jobs Ca.” led to the following results: on 11/2/2011
Woodweb.com listed 8 jobs openings in the last 2 weeks in southern California. 3 listings in the
last 3 days.
Indeed.com/jobs listed 42 job openings in California. Approximately 50% of which were posted in
the last 2 weeks.
Simplyhirer.com listed 162 job openings in California although approximately only 60% of those
were for medium to highly skilled/experienced positions.
Careerbuilder.com listed 6 openings in California and 3 in southern California in the last 30 days. All of the openings appeared to be for medium to highly skilled/experienced wood workers except where noted above.

A San Diego Craigslist search in jobs for cabinet produced 16 positions offered in cabinet making, furniture making, or a closely related field. All positions appeared to be for skilled wood workers or for management of skilled workforce. Search was done on 11/2/2011.

Graduates of the Palomar College CFT discipline are not easily categorized by the EDD occupation job titles. The CFT programs not only prepare graduates for employment but the programs are also designed to prepare graduates for self-employment, as 30% of woodworkers are self-employed (see Criteria A Section 4). As stated by the EDD specialization tends to afford more opportunities for employment. It would be also true that self-employed who specialize will also be afforded more work opportunities.

9. Employer Survey (CTE only)

The Woodworking program at Palomar College is well established; therefore, no employer survey was conducted to develop this program. As emphasized earlier, this new program is a substantial revision of existing curriculum. The revision was developed with substantial input from the Industry Advisory Committee, which represents local employers and former students who are self-employed. The major objectives were to create a more streamlined path to completion while simultaneously proving the foundational skill students need to seek employment.

10. Explanation of Employer Relationship (CTE only)

The Palomar College CFT discipline maintains an excellent reputation in industry as a leader in woodworking training. A student with a degree or certificate from the CFT discipline is thought of as a highly skilled craftsman and would be considered the best of the best among woodworkers and employers. CFT maintains many contacts with industry in all areas of study that serve as Advisors or Patrons and support the programs and students with scholarships and employment. Some of the areas represented by industry support include: Cabinet makers, Lathe turners, Furniture makers, Furniture finishers, Tool and equipment retailers, Lumber retailers, Finishing supply and equipment retailers, Guitar manufactures, Veneering specialists, and many more.

As stated 30% of woodworkers are self-employed and our programs are designed to prepare our graduates to open their own business. Many of them do start a business and when they are in need of employees they look to our program again and again and hire our graduates.

In summary the employer pool is quite diverse for our graduates. Most of our graduates will work for a small company or become self-employed. All of our graduates have a solid fundamental background and employers recognize this. Our graduates who also have specialized skills are more likely to be employed. Employers value our graduates and seek them out.

11. List of Members of Advisory Committee (CTE only)

Industry Members:

Gary Stodghill, Owner, Stodghill Cabinetry, Vista Ca.
Ken Haines, Turner, member Art in Wood, Spanish Village art center, San Diego Ca.
David Yendes, Owner, David Yendes Sculpture, faculty El Camino High School
Jerry Beaudry, Owner, Beaudry Woodwork, San Diego Ca.
Brendan Mathews, Owner, Foothill Cabinetry, Vista Ca.
Jeff Scott, Owner, Illusion Guitars, Fallbrook Ca.
Mike Durlak, Manager, Rockler woodworking and Hardware, San Diego Ca.
Faculty/Administrative Members:

Chris Feddersohn, Professor, Cabinet and Furniture Technology
Dave Thompsen, Professor, Cabinet and Furniture Technology
Jack Stone, Professor, Cabinet and Furniture Technology
Philip Goetsch, Facilities Manager, Cabinet and Furniture Technology

12. Recommendations of Advisory Committee (CTE only)

On April 15, 2011, the Cabinet and Furniture Technology Advisory Committee endorsed the development of the curriculum for the 7 new degree proposals at Palomar College.

- Case Furniture Construction/Manufacturing
- Table and Chair Manufacturing
- Carving Technology
- Lathe Turning Technology
- Veneering Technology
- Woodworking Skills Technology
- Guitar Making Technology

Advisory committee meeting minutes are attached.

Criteria C. Curriculum Standards

13. Display of Proposed Sequence

1st Semester:
- CFT 100 Fundamentals 4
- CFT 195 Finishing 2
- General Education 8

2nd Semester
- CFT 108 Business 2
- CFT 176 Intro to Lathe 2
- CFT 118 Design Development 2
  or
- CFT 153 Furniture Design 2
- General Education 10

3rd Semester
- CFT 187 Intro to Carving 2
- CFT 149 Hand tool Joinery I 2
- Elective 2
- General Education 10

4th Semester
- CFT 151 Veneering I 2
- CFT 180 Wood Bending/Lamination 2
- General Education 10

Total Core Units 22

Plus General Education required units 38

Total Degree Units 60
14. Transfer Applicability (if applicable)

The Associate of Arts degree in Woodworking Skills Technology currently has no transfer degree possibilities with colleges or universities in California.

Attachment: Outlines of Record for Required Courses

Criteria D. Adequate Resources

15. Library and/or Learning Resources Plan

The college’s Curriculum Committee approves all new degrees and courses at Palomar College. During that process, the library reviews the courses and determines whether there are sufficient resources to support them. We have consulted the Acquisitions Librarian and determined that there are sufficient resources to support this program. The CFT program also has an extensive collection of resources in its own “mini library” to compliment the District’s resources.

16. Facilities and Equipment Plan

The Associate of Science degree in Woodworking Skills Technology will not need any additional facilities or equipment that the current Cabinet and Furniture Technology program does not already have in place. Current equipment, supplies, and facilities will be shared amongst all current degrees and courses.

17. Financial Support Plan

The Associate of Science degree in Woodworking Skills Technology will not need any additional budget monies that the current Cabinet and Furniture Technology program does not already have in place. Support for the new degree program will come from existing budgeted monies supplied to the Cabinet and Furniture Technology program.

18. Faculty Qualifications and Availability

The college has a Faculty Hiring process and a Staffing Plan that proposes the hiring and replacement of faculty. The Cabinet and Furniture Technology program will submit requests for consideration in these processes as needed. No specific new staffing will be requested as a result of this new program proposal.

Criteria E. Compliance

19. Based on model curriculum (if applicable)

There is no model curriculum available for this degree.

20. Licensing or Accreditation Standards

There is no licensing or accreditation standards need for this degree.

21. Student Selection and Fees
Aside from ordinary enrollment fees, students are expected to pay for the materials used in their projects and to pay a lab fee. The total average combine cost per class is approximately $65 to $95 dollars. Students who are having financial difficulties may be awarded a scholarship to help offset the extra costs. Our staff, our patrons, and our former students have set up scholarship funds in order to help needy students. Approximately 15 to 20 students per semester are awarded some financial aide from these funds.