

Palomar College Woodworking Cabinet & Furniture Technology



CFT 110/111



CFT 180



CFT 131 GUITAR MAKING/STRINGED INSTRUMENT CONSTRUCTION



CFT 100/105

One of the finest woodworking programs in the nation

is located right here in San Diego County. The Cabinet and Furniture Technology program at Palomar College strives to offer the most comprehensive and progressive curriculum on the West Coast. These courses provide exciting and gratifying challenges to both men and women of all ages, aspiring amateurs and to wood-workers from all backgrounds. The high level of diversity in our program provides woodworking students with the wide scope of experiences necessary to succeed professionally.

Students will find our classes extensive and rewarding. Traditional methods of construction in solid wood as well as those applied to man-made materials are thoroughly explored. Our courses emphasize skill and knowledge in the use of hand tools and machine tool procedures. Our instructors are enthusiastic and extremely knowledgeable in all facets of woodworking.

We ask that our students are dedicated in their endeavor to master the technical skills of traditional and contemporary fine woodworking.

Palomar College Woodworking is Cabinet and Furniture Technology (CFT). Our Mission is: To help students prepare to make a living At Woodworking.

In 2011 CFT has overhauled the curriculum. 7 new programs have been added, 1 existing program has been rewritten, and 12 new courses have been added in order to support the new programs. These changes will streamline the path for students to completion, and prepare students to make a living at woodworking by promoting specialized areas of expertise.

The new Certificate/Degree programs are;

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

Our existing programs will still be honored for those who have begun them and would like to complete the coursework. The are; Cabinetmaking and Millwork, Furniture Making, and Cabinet and Furniture Design.

The new courses recently added to support the programs are;

CFT 108 Business Woodworking
CFT 118 Furniture Design Development
CFT 133 Guitar Set-Up and Repair
CFT 134 Electric Guitar Construction/Solid Body
CFT 135 Acoustic Guitar Making I
CFT 136 Acoustic Guitar Making II
CFT 137 Arch Top Guitar Construction I
CFT 138 Arch Top Guitar Construction II
CFT 152 Veneering Technology II
CFT 177 Lathe II - Intermediate Turning
CFT 178 Lathe III - Advanced Turning
CFT 182 Timber Framing Technology

CONTACT INFORMATION **(760) 744-1150**

Mon.–Thurs.: 8 a.m. - 9:30 p.m.

Friday: 8 a.m. - 4 p.m.

Secretary, Ext. 2545

Mon.–Fri.: 8 a.m. - 5 p.m

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REGISTRATION INFORMATION
www.palomar.edu
(760) 744-1150 or 727-7529, Ext.
2160

STUDENT SERVICES CENTER **ADMISSIONS HOURS**

Mon.-Thurs.: 7:30 a.m. - 7 p.m.

Friday: 7:30 a.m. - 2 p.m.

Saturday: 9 a.m. - 12:00 p.m.



FREQUENTLY ASKED QUESTIONS

WHERE DO I START?

For most people, even those with some experience, we recommend our beginning class: CFT 100, Fundamentals of Woodworking. It's important to get started "on the right foot." Visit our website at <http://www.palomar.edu/woodworking>. Classes run from early morning to evening. They usually meet four (4) hours a day/evening for two days/evenings a week. Some classes meet only once a week.

WHERE DO I REGISTER?

You may register online at <http://www.palomar.edu/woodworking> or at the admissions office located in the Student Services Center at the front of our campus. Phone numbers and office hours are listed on the back of this brochure

WHAT IF THE CLASS IS FULL WHEN I GO TO REGISTER?

First, ask to sign the "crash list." Next, show up at the first class meeting(s). We can usually accommodate you.

I'M RETIRED AND HAVE ALWAYS WANTED TO LEARN FINE WOODWORKING. CAN I TAKE CLASSES AT PALOMAR COLLEGE?

Yes! You'll feel right at home. Many of our students are retired and are finally getting to do what they've wanted to do for years. Remember – we are a community college... here to serve everyone. Bring your spouse, too. You'll have a good time and meet lots of great people who share similar interests with you.

CAN I GET AN A.A. DEGREE WITH A MAJOR IN WOODWORKING OR A CERTIFICATE OF ACHIEVEMENT IN WOODWORKING?

Yes... we offer three programs. One is Cabinetmaking and Millwork, one specializes in Furniture Making and the third is Cabinet and Furniture Design.

THE MOST FREQUENTLY ASKED QUESTION BY STUDENTS IS, "AT WHAT LEVEL DO I ENTER THE PROGRAM?"

Generally speaking, for the biggest percentage of people, you should take the basic, introductory class (CFT 100) first.

WHAT COMMENTS HAVE PREVIOUS STUDENTS MADE?

The overwhelming reaction of students who have previously debated the decision as to whether they should or should not take the basic class first is that they are happy they did. Comments usually fall into categories such as, "Even though I thought I knew a lot about woodworking, I found that I still had a great deal to learn," or "I'd forgotten so much" or "I'd learned so many bad habits" or "Things have changed so much since I took classes."

BUT, I'VE HAD SOME EXPERIENCE...

Obviously, it becomes more difficult for us to answer the question when people have had parts or all the experience(s) outlined above. Once again, however, our experience has overwhelmingly shown that even people with such experience; having tools/equipment at home, can still benefit by taking our basic CFT 100 class. So many times in the past when we have counseled such people and advised them to skip the basic class and go directly into the next class (CFT 105-Intermediate Woodworking) the experiences they bring into the intermediate class are either quite limited and/or outdated. Oftentimes, those who have equipment and shops at home are "self-taught" have often picked up bad (and sometimes unsafe) habits.

WHAT IS COVERED IN THE BASIC CLASS?

We begin with an understanding of what wood is as a material. We study its structure, differences in hardwood vs. softwood; we develop an understanding of why wood "warps" (bow, cup, twist, wind, crook); we learn why wood moves and in which direction(s) it shrinks. We learn how to apply this knowledge of wood movement into our furniture. We know a panel will move-so how do we design for this? This is one of the major concepts taught in this class which is unique to this class. Therefore, when people "skip" this class, they never develop this understanding of what wood is as a material.

We naturally cover units such as the basic machine tools, hand and power tools, joinery, adhesives, abrasives and basic finishing. We teach an appreciation for hand tools and hand work, and place a strong emphasis on tool sharpness. We do not, as many schools do, believe you must become a "hand" woodworker before you can progress to machine woodworking. Actually, we begin by building your confidence and competence with machine tools, and in later, more advanced courses, begin to develop skill and expertise with the hand tools necessary to the fine woodworker.

WHAT IS THE COST PER UNIT?

You may register online at <http://www.palomar.edu/woodworking>

WHERE CAN I GET MORE INFORMATION?

Contact us at (760) 744-1150 or 727-7529;
Chris: ext. 2556, cfeddersohn@palomar.edu Dave: ext. 2554, dthomsen@palomar.edu. Jack: ext. 2472, jstone@palomar.edu the Department Secretary: ext. 2545, or come on by for a visit!

ENTRY LEVEL CLASSES

There is nothing like the thrill of creating fine furniture from raw wood and now you have the opportunity. There are two sorts of beginners, those who have never studied woodworking and those who have, but not at Palomar College. Our entry-level classes are a wonderful place to start. We encourage everyone to begin our program with the CFT 100 class. It definitely will not be a waste of your time! The level and pace of the work is designed to allow you to set your own standards of achievement. Students at different skill levels work alongside one another in harmony. If in a few weeks, you measure your progress against your start-up ability, you will not be disappointed.

During the second semester class, CFT 105, students will design and build a small piece of furniture with doors and drawers. The study of materials, tools, machinery and skill development is ongoing throughout the first year. These two classes are the foundation of our advanced program. Advanced study areas include furniture making, table and chair construction, cabinet-making/millwork and advanced special studies. The work is project oriented, geared towards the personal interests and goals of the student.

CFT 100 FUNDAMENTALS OF WOODWORKING

This is a class where the beginner and the long-term woodworker work side by side and each gain tremendously. The work is presented in such a way that it is easily understood by the novice. At the same time the experienced woodworker will find that the work fills in all sorts of knowledge gaps that update and refresh their skills. Some newcomers wishing to save time want to pass over this class for the more advanced CFT 105 class only to return later to CFT 100. This course is normally taught in the Fall semester (starting late August).



CFT 105 MACHINE WOODWORKING/FURNITURE

This is an intermediate or transition course for those people having completed CFT 100, with recent high school experience or other extensive experience. If your experience was a number of years ago, we suggest taking CFT 100 "Fundamentals of Woodworking" first. The CFT 105 class deals with cabinet construction – the design and construction of drawers, doors, face frames, carcass, and moldings. More advanced joinery and machine work are covered. Students will build a piece of furniture which has doors and drawers – such as a buffet, credenza, computer cabinet, entertainment center, stereo unit, chest of drawers and a variety of single-unit pieces of furniture. This course is normally taught in the Spring semester.



ADVANCED FURNITURE CLASSES



FT 149 HAND JOINERY I

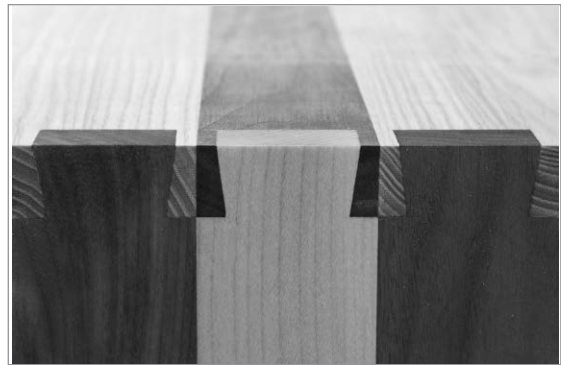
Whether you are a novice lacking the training or an experienced woodworker lacking the time, these courses will offer the opportunity to study hand joinery techniques, exploring their application in fine furniture, as well as provide the opportunity to practice and develop hand skills. Through the construction of a project, students will develop skills in hand plane usage, mortise and tenon, and dovetail joinery. With the completion of these courses students can truly gain the confidence to become highly skilled craftsman.



CFT 110 MACHINE TOOL JOINERY I

CFT 111 MACHINE TOOL JOINERY II

The understanding and development of fine cabinet furniture is developed in this two semester (year long) course. Together with CFT 111 (taken in the Spring), students will advance to a more sophisticated level of joinery and design – utilizing mortise and tenon, dovetails, frame and panel, and other joinery appropriate to fine furniture. With the addition of advanced machinery training, students will be able to develop and build a custom design of their choice, creating heirloom furniture in either traditional or contemporary styling.



CFT 151 VENEERING TECHNOLOGY I

Whether you are duplicating the timeless richness of a Federal furniture piece or creating your own contemporary styling, your furniture will come to life with your ability to utilize veneers. By eliminating the movement problems of solid wood, veneering allows us to efficiently work our most highly figured and prized timbers using techniques that date back to the time of the Egyptians.

In these courses, students will explore various application techniques - including vacuum technology and hammer veneering. The use of various substrate options, designing with pattern and color matches, and accenting with inlay and marquetry. Whether you cut your own or purchase pre-sliced veneers, this class will help you to beautify your furniture in ways you never dreamed possible.

CFT 152 VENEERING TECHNOLOGY II

Students learn advanced veneering techniques which include working with radius shapes, hand and machine, hammer veneering, and installation of bandings and stringings. Demonstration of abilities will be required with the construction of a small piece of furniture.

ADVANCED CLASSES - TABLE AND CHAIR DESIGN/PRODUCTION

CFT 155 CLASSIC AMERICAN CHAIR DESIGNS I

CFT 156 ADVANCED CLASSIC AMERICAN CHAIR DESIGNS II

The student will explore the history and design of the American Windsor chairs and the Appalachian style Ladder Back chairs. One of these chairs will be selected by each student and built from freshly harvested trees. Traditional chair making tools including draw knives, spoke shaves, shaving horses and steam boxes are used to build these classic 19th century heirloom quality chairs. Hand woven hickory bark seats and milk paint finishes re-create a by-gone era in chair making.



CFT 161 TABLE/PROTOTYPE CONSTRUCTION

CFT 162 TABLE/PRODUCT MANUFACTURING

The table can be a very challenging and rewarding project. The woodworker must take into account many design considerations including proper height, length and width. This class will examine table functions, seating requirements, the history of table development, material selection, joinery for legs and rails, and base design including pedestal and trestle designs. The various ways to extend a table will also be covered. This is a two-semester class.

ADVANCED CLASSES - PRODUCTION CABINETMAKING



CFT 165 CUSTUM RESIDENTIAL CABINETRY I

CFT 167 CUSTUM RESIDENTIAL CABINETRY II

Production cabinetmaking is a two semester course designed to give students a thorough understanding of the principles of both European and traditional cabinet building procedures. Emphasis will be placed on developing a production-oriented system for manufacturing of all components to maximize efficiency and accuracy.

Students will also learn how to design cabinetry for a variety of built-in applications with an emphasis on kitchens but also including media centers, bathrooms, home office, wardrobe and garage spaces.

Additional topics include door and drawer manufacturing, cabinet software, wholesale suppliers, and outsourcing suppliers.

Demonstrations, class oriented projects and personal projects will provide students with an opportunity to develop hands on skills.

CFT 169 COMPUTER CABINET LAYOUT

TURBO/CAD, CABINET VISION, AND CABINET WARE

Selection and application of appropriate software as developed for the cabinet industry. Students will develop industrial standard cabinet plans and specifications utilizing personal-size computer and software programs.



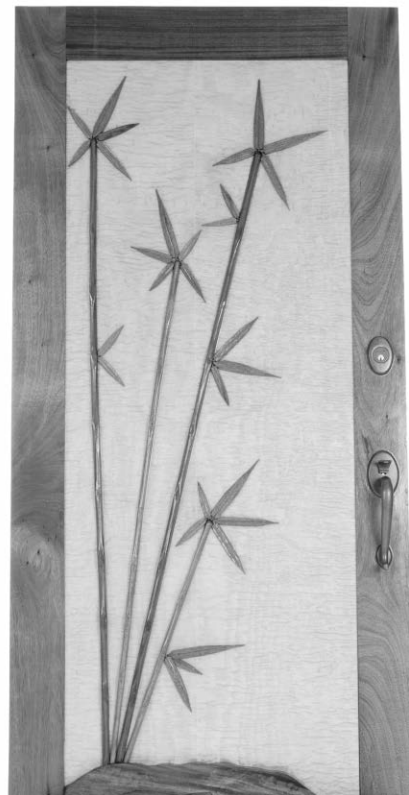
CFT 163 PLASTIC LAMINATE FABRICATION

Plastic laminates are widely used in the woodworking industry in both commercial and residential applications. Students in this course will learn about the adhesives, tools and techniques used to apply plastic laminate ("Formica") to a suitable substrate.

We will concentrate on the production of custom countertops, installation, specialized tools, and tricks-of-the-trade. In addition, we will discuss how these same techniques can be applied to new cabinets and refacing of kitchen and bath cabinets

CFT 168 ARCHITECTURAL MILLWORK I

It is said that it's the finish work that makes the house. This class will study historical and contemporary architectural millwork. This is a fast-paced class that will first examine the house as a whole. Then each of the components of finish woodworking will be studied in depth. Door making and installation, moulding detailing, window construction, wall systems, staircases, built-in cabinetry and fireplace mantels will be included. Lecture and lab time will be equal. Students may select their own project.



ADVANCED CLASSES - SPECIALIZED FIELDS

CFT, 132 UKULELE MAKING/INTRODUCTION TO STRINGED INSTRUMENTS

Through the construction of a ukulele students will study the basic processes and construction details, as well as acoustic theory involved in the building of stringed instruments. Students will utilize skills gained in other CFT courses to mill and fabricate parts. Production work is a part of this class. Each student must complete an individual ukulele. An extremely demanding and fast paced course. Excellent woodworking skills are required.

CFT 133 GUITAR SET-UP AND REPAIR

Students learn the techniques to analyze/diagnose common guitar repair issues and the options and techniques in the repair of common problems. A basic preparation course for guitar repair technician positions.

CFT 134 ELECTRIC GUITAR CONSTRUCTION/SOLID BODY

The construction of a solid body electric guitar provides basic processes and construction details involved in the building of electric guitars, as well as the basic electronics. Skills gained in other CFT courses will be used to mill and fabricate parts. Production work and completion of an electric guitar are required. Excellent woodworking skills are essential. An extremely demanding and fast-paced course.

CFT 135 ACOUSTIC GUITAR MAKING I

CFT 136 ACOUSTIC GUITAR MAKING II

Students in this challenging and rewarding course will make a acoustic, a classical or ukulele from raw materials. At the beginning of the first course students will learn the basics of acoustic construction and then produce basic guitar parts, in teams, production style. Once the basic parts are complete, students will construct their own guitar by hand.

The time line for this class is very tight, therefore students must be committed to finishing, and allow for extra work time outside of class. The cost of materials will be approximately \$135 to \$175. Enrollment in the class will be limited to students with prior woodworking experience, who have completed CFT100. Students may retake the course and explore more advanced techniques.



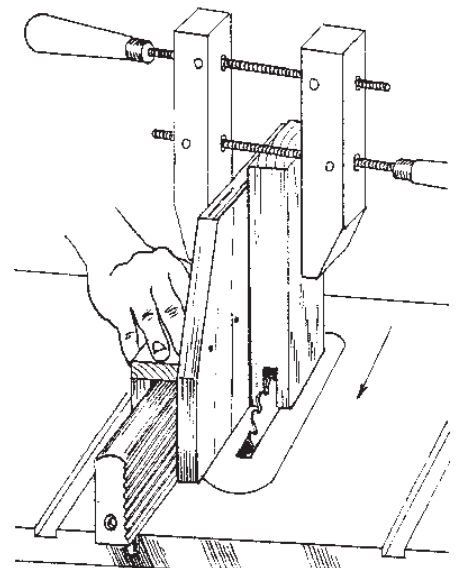
CFT 137 ARCH TOP GUITAR CONSTRUCTION I **CFT 138 ARCH TOP GUITAR CONSTRUCTION II**

Prepares students for a career as a luthier while studying the history, anatomy, construction methods, design, tone, and sound theory of acoustic guitars. Construction of an Arch Top Guitar (somewhat like a violin with the front and back plates carved to a thin arched shape from thick stock) is required. Considerable prior woodworking/instrument making experience is recommended.

CFT 175 JIGS & FIXTURES

In Jigs & Fixtures, students learn that one of the woodworker's secrets is the ability to both design as well as make jigs and fixtures. These jigs and fixtures are then used to save time, improve accuracy and the quality of work while greatly improving safety. This specialized course will deal with the concepts of fixture, jig and tooling design. Materials, clamping devices and associated hardware used in the design and building of jigs and fixtures will be both studied and applied. "Tricks of the trade" are also an integral part of this course. Students will have the opportunity to apply these principles to machines and tools such as the table saw, router, router table, band saw, radial arm saw and others.

Working in production teams, students will produce the following jigs and fixtures: mortise jig (router), sliding cutoff table (table saw), sliding miter table (table saw), dado jig (router), box joint jig (table saw), router table fence and router table top, tapering sled (table saw). More jigs and fixtures will be added as the course grows. Jigs will be constructed of Maple hardwood and Baltic Birch plywood.



ADVANCED CLASSES - SPECIALIZED FIELDS

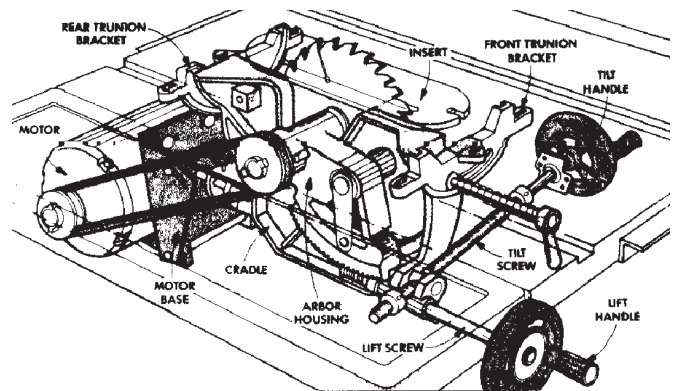


CFT 180 WOOD BENDING AND LAMINATING

Learn the mysteries of bending wood in CFT 180. The skills learned in this class will enable you to bring the curved line into your contemporary design work or to reproduce historic pieces which use bent wood. Topics covered include layout, form making, strip lamination, steam bending, panel bending, hot pipe bending and vacuum forming. Each student will design and build a bent lamination piece, and build a small set of three shaker oval boxes to execute the theories and skills taught in the course.

CFT 185 SHOP LAYOUT/DESIGN & MACHINE TOOL TECHNOLOGY

Woodworkers need to know how to adjust and maintain their woodshop machinery. In this class we cover the table-saw, bandsaw, miter saw, jointer, planer, and drill press. Move from theory to practice through in-class demonstrations and practical homework assignments. Gain a comfortable familiarity with how machines work and how to make them work better for your own needs. Students discover that tuning their machines is easy when broken down into basic steps, and can be a lot of fun. In addition to learning the machines, we also explore their tooling, electricity and motor basics, dust collection systems, and efficient woodshop layout. Each student will also complete a shop improvement project of their choosing at home. Emphasis throughout the class is on addressing the actual needs of students. We mostly focus on the types of machines typically found in the small woodshop.



CFT 186 INTRODUCTION TO CARVING I

CFT 188 INTERMEDIATE CARVING II

CFT 189 ADVANCED CARVING III

These three woodcarving courses explore the use of hand tools. Design considerations, carving techniques and incorporation of woodcarving into cabinetmaking, furniture making and architectural millwork.

ADVANCED CLASSES - SPECIALIZED FIELDS



CFT 195 FINISHING & TOUCH-UP REPAIR

This class will provide information on the following topics:

- How to safely use finishing materials
- Preparing wood surfaces; removing mill marks, repairing dents and other defects
- Applying various stains, dyes and grain fillers
- How to use traditional and High Volume-Low Pressure (HVLP) spray equipment
- Applying surface film finishes; varnishes, polyurethane, shellac, nitro cellulose and water-based lacquers
- How to apply sensuously smooth oil finishes with linseed or tung oil products
- How to rub out finishes to various sheens
- How to apply waxes to protect the finish
- How to touch up and make minor repairs on finishes

CFT 198 ADVANCED FINISHING & TOUCH-UP REPAIR

Applying historic furniture finishing techniques of glazing, shading, marbling, wood graining, crackle, faux finishes, gilding and French Polishing makes this a very challenging and exciting class. Learning to design painted surfaces is a must for the advanced furniture maker and finisher.



ADVANCED CLASSES - SPECIALIZED FIELDS

CFT 153 STUDIO FURNITURE DESIGN I

This course presents a survey of the history of furniture, with an emphasis on design elements applicable to the creation of contemporary works.

The course begins with the ancient record, examining the cultural history of the Greeks and Romans, through Medieval, Renaissance, and Baroque. Special attention will be paid to the development and identification of the English, French, and American periods and styles, as well as an examination of the 19th and 20th century innovations that continue to influence contemporary designs.

We will examine the structure of important pieces, including the joinery, the uses of ornament, the development of contours and lines, the uses of materials and technology, and how all of these change as tastes and techniques evolve.

Finally, we will explore current trends in design, from Memphis to the contemporary crafts market and studio furniture movement. We will view the works of the leading figures in America and abroad, and will discuss the problems and possibilities that confront the designer and craftsman working in the 21st century.



CFT 118 FURNITURE DESIGN DEVELOPMENT

Study the fundamental elements and principles of design while developing unique design methodologies and creative practices. Practical skills such as sketching, drawing, drafting, and model making will be stressed. In addition, students will explore wood as a creative medium by experimenting with a variety of surface textures and treatments.

CFT 108 BUSINESS WOODWORKING

Prepares woodworkers to start and run a business. Topics include developing a business plan, strategies for shop efficiency, and tax and legal requirements.



CFT 173 – BAMBOO FLY ROD BUILDING

This class will instruct the student in the art of bamboo fly rod building. A bamboo culm will be split, straightened, heat treated and planed into six triangular strips that are glued, turned on a lathe for the installation of the tips, ferrels, cork handle, reel seat insert and wire guides are made and silk wrapped to the bamboo.

This class has no pre-requisites and will instruct the student in a number of woodworking skills such as: form building, planning, sharpening plane blades and bench scrapers, heat treating, straightening wood, gluing with string wrap clamping, boring and mortising, and turning on a lathe. The class has recently been expanded to a 4 unit class, 2 mornings a week to reduce the necessity of doing work at home. The cost of the materials ranges from \$135 to \$250 per rod. The class can be retaken to improve skills and/or to build a variety of rod types and lengths as well as ancillary wooden fishing accessories and rod build forms.

ADVANCED CLASSES - SPECIAL TOPICS



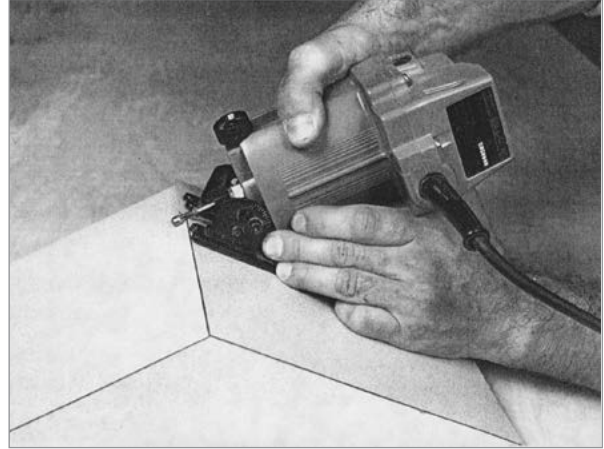
CFT 144 PRODUCTION TOY MAKING

This popular class will be making performing circus seals, helicopters, cell phones, games and puzzles, stilts, doll beds, a grasshopper push toy and more.

If you would like to use your skills to make a child happy why not sign up. You will learn elements of the production process. Such as how the process is broken down to work each step in a logical order, and how to make many parts of the same kind safely, economically, and ensure that all of them are interchangeable with each other. You can learn to do pattern milling, drilling, use assembly jigs, hone your skills on the router tables and the band saws and to apply various finishes.

These all-wood toys are all donated to deserving children, except that everyone gets to choose one toy to take home for their own favorite small person.

At 1 unit, this course is a bargain.



CFT 176 THE LATHE – AN INTRODUCTION TO WOODTURNING – EMPHASIS ON SPINDLE TURNING OR TURNING BETWEEN CENTERS.

In this class the student will learn the history of the lathe; the components of the lathe and how to select the best lathe and accessories for their particular turning style.

We will discuss tool selection, proper tool sharpening techniques, what to expect from a basic set of turning tools with emphasis on the skew, the gouge, the parting tool and importantly – the handle. We will design and fabricate tool handles, including tool making and tool modification.

Additionally, projects will include turning a mallet, tool handles, kitchen utensils, “weed vases” and ornaments.

Students will also be introduced to bowl turning and turning other than solid wood such as laminates and acrylics.

CFT 177 LATHE II - INTERMEDIATE TURNING

CFT 178 LATHE III - ADVANCED TURNING

The study of architectural turning in relation to furniture making and overall advanced turning techniques. Discussion of tool selection, proper tool sharpening techniques, what to expect from a basic set of turning tools, with emphasis on the skew, gouge, parting tool, and an introduction to specialty turning tools. Split turning, offset turning, multi-axis turning, and duplication will be introduced.

ADVANCED CLASSES - SPECIAL TOPICS



CFT 143 DECORATIVE BOX MAKING

This advanced course will concentrate on techniques unique to the making of highly crafted boxes. It will teach the skills needed to build heirloom quality art boxes. You will learn that boxes can showcase your skills and wood selection with minimal investment of materials and time when compared to a large furniture project. A typical project for this course would be any small box or chest such as a jewelry box, silver chest, cigar humidor, or keep box. The students will design their boxes for a particular function, select appropriate materials, construction technique, and hardware, then construct and finish the box. Lecture topics will include: different ways to make a box, assembly techniques, hinge selection and installation, finishing, custom hardware, and internal fitments such as partitions and lining.

CFT 120 ADVANCED FURNITURE LAB CLASS

This course will allow personal woodworking skills and goals to be achieved by; completing a learning project of the student's choice, observation and sharing of fellow classmates projects, learning how to equip and maintain a shop, helping to improve school facilities and receiving individual instruction as desired and necessary.



CFT CFT 142 THE ART AND CRAFT OF PLANE MAKING

This is an advanced course designed to introduce students to the art and craft of wooden planemaking. A history of planemaking and design will be presented covering a wide variety of planes with an emphasis on bench planes. Both modern and traditional methods of plane construction will be explored and the tools, jigs and fixtures specific to this trade will be presented. Plane blade construction, shaping, tempering, and sharpening will also be taught. Students will also be taught the use and tuning of metal and wooden plane.



182 TIMBER FRAMING TECHNOLOGY

Timber framing is one of the oldest building systems in the world. Structures are created utilizing heavy timbers jointed via pegged mortise and tenon joints. This course teaches how to design and engineer a modern timber frame using energy efficient systems. Introduction to engineering principles, analyzing loads, architectural design, and layout. In this hands-on class students will build a timber frame structure. The class structure will be rigged and raised by students.

Our Patrons

The following companies have supported the Palomar College Cabinetmaking and Furniture Technology program with the publication and mailing costs of this brochure, discounts and scholarships for the students.

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P.O. Box 9, Warren, ME 04864
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Escondido, CA 92029
760-480-1444; FAX 760-480-0411
800-735-8665
www.toolmarts.com
Email: info@toolmarts.com
Stores also in Vista and Temecula

TIMBER FRAMERS GUILD
PO Box 60, Becket, MA 01223
Phone and fax: 888-453-0879 (toll-free)
http://www.tfguild.org/
Email: info@tfguild.org

TROPICAL EXOTIC HARDWOODS
2270-B Camino Vida Roble
Carlsbad, CA 92009
760-434-3030; FAX 760-434-5423
www.anexotichardwood.com

VAC-U-CLAMP
105 Copperwood Way
Oceanside, CA 92054
888-342-8262
www.vacuclamp.com

SAN DIEGO FINE WOODTURNERS
P.O. Box 507061, San Diego, CA 92150-7061
www.sdwat.org

SAN DIEGO WOODWORKERS ASSOCIATION
P.O. Box 82323, San Diego, CA 92138-2323
www.sdfwa.org

SWANER HARDWOODS
5 West Magnolia Blvd., Burbank, CA 91502
800-368-1108
www.swanerhardwood.com

EQUIPMENT:

DRILLING/BORING

8 Drill Presses
2 Boring Machines
32mm Boring Machine
Mini Press
Pocket Boring Machine
32mm Dual Boring Machine

JOINTERS/SURFACERS

2 6" Jointers
4 8" Jointers
12" Jointer
2 16" Jointers
16" Surfacers
2 30" Spiral Head Surfacers

BENDING/STEAM

Steam
Ammonia

LAMINATION

Bent Lamination

MILLING

3 Shapers
Overhead Pin
15" Spindle Dovetailer
Panel Router
30 Lathes
Edge Bander
2 Slot Mortiser
4 Hollow Chisel Mortiser

CLAMPING

Clamp Wheel
Veneer Press

SANDERS

1 18" Disc
12" Disc
12" Disc/6" Belt
Edge Belt
(Brush Head)
Pneumatic Drum
42" Wide Belt
3 Spindle Sanders
37" 2 Drum Sander

SAWS

Panel Saw (horizontal)
7 10" Table Saws
3 16" Table Saws
Panel Saw (vertical)
3 Radial Arm Saws
2 20" Band Saws
30" Band Saw
36" Band Saw
8 Scroll Saws
4 Power Miter Boxes
36" X 21' Sawmill
18" Band Saw
24" Resaw
16" Straight Line Rip Saw
2 Wood Kilns

FACILITIES: 3 Lecture Rooms - 2,500 sq. ft. • 3 Machine Rooms - 6,800 sq. ft. • Finish Room - 610 sq. ft. • Storage - 4,000 sq. ft.
3 Bench Rooms - 1,900 sq. ft. • Sawmill - 1,500 sq. ft. • Library Learning Resource Center - 150 sq.ft.



CFT 100/105



CFT 105



CFT 180



CFT 100



CFT



CFT 188



CFT 100



CFT 110/111 MACHINE TOOL JOINERY I & II



CFT 142



CFT 105



CFT 110/111



CFT 110/111



CFT 157



CFT 100

Palomar Community College Cabinet & Furniture Technology Program

1140 West Mission Road, San Marcos, CA 92069-1487
760.744.1150, ext. 2545 • www.palomar.edu/woodworking



Student Highlight

Don Krepps designed and constructed this mahogany Bombay Table during the fall of 2005 and spring of 2006 school year while enrolled in CFT 110, 111 Machine Tool Joinery and CFT 153, 154 Studio Furniture Design classes. Pulls and highlights are hand carved cocobolo.

Student Highlight

John Madson designed and constructed this award winning "Maloof Style Rocker Settee" in the 2007-2008 school year while enrolled in the CFT 157 Chair & Seating/Prototype Construction and CFT 158 Chair and Seating Product Manufacturing classes.

