

**PALOMAR COLLEGE**  
**COURSE OUTLINE OF RECORD FOR**  
**DEGREE CREDIT COURSE**

\_\_\_\_\_ Transfer Course X A.A. Degree applicable course  
(check all that apply)

**COURSE NUMBER AND TITLE:** CFT 149 Hand Joinery I

**UNIT VALUE:** 2,3,4

**MINIMUM NUMBER OF SEMESTER HOURS:** 64,96,128 lecture/laboratory

**BASIC SKILLS REQUIREMENTS:** Appropriate language and computation skills

**ENTRANCE REQUIREMENTS**

**PREREQUISITE:** CFT-105

**COREQUISITE:** None

**RECOMMENDED PREPARATION:** None

**SCOPE OF COURSE:**

Exploration of hand tool techniques with application to Fine Furniture. Skills will be developed through the construction of sample joints and a simple project. Topics include: marking and layout tools, cutting tools, use of the workbench and its accessories, hand saws and their use, Japanese vs. Western tools, dovetail joinery, mortise and tenon joinery, squaring and sizing with a hand plane, sharpening hand tools and building a simple carcass.

**SPECIFIC COURSE OBJECTIVES:**

Students will be able to:

1. Cut dovetail joints by hand.
2. Cut Mortise and Tenon joints by hand
3. Understand and properly use the workbench and its accessories.
4. Sharpen and properly use hand saws.
5. Square lumber with hand tools.
6. Assemble a simple carcass using appropriate joinery.

**CONTENT IN TERMS OF SPECIFIC BODY OF KNOWLEDGE:**

- I. Course Introduction
- II. Measuring, marking and layout tools
  - A. Specific types
  - B. Application and use
  - C. Shop made tools
- III. Cutting and shaping tools
  - A. Chisels
  - B. Planes
  - C. Saws
  - D. Draw knives and spoke shaves
  - E. Carving chisels
- IV. Workbench and its use
  - A. Bench dogs
  - B. Hold downs
  - C. Bench slaves
  - D. Bench hooks and shooting boards
  - E. Pinch rods and winding sticks
- V. Dovetail joinery
  - A. Tools needed
  - B. Joint options
  - C. Layout
  - D. Cutting the through dovetail
- VI. Building a simple carcass
  - A. Sizing the parts
  - B. Cutting the joints
  - C. Assembly
  - D. Leveling the outer surfaces
- VII. Mortise and Tenon joinery
  - A. Tools needed
  - B. Joint options
  - C. Layout
  - D. Cutting a blind Mortise and tenon
- VIII. Specialty topics
  - A. Making a lid for a carcass
  - B. Leveling the frame with the hand plane
  - C. Fitting a door by hand
  - D. Designing and building a tool tote
  - E. Designing and building a decorative box

**REQUIRED READING:**

Selected published articles provided by the instructor.

**SUGGESTED READING:** None

**REQUIRED WRITING:**

Student generated three ring binder notebook of class handouts and class notes.

**OUTSIDE ASSIGNMENTS:**

**Students are expected to spend a minimum of three hours per unit per week in class and on outside assignments, prorated for short-term classes.**

**INSTRUCTIONAL METHODOLOGY:**

**Check all that apply:**

- lecture
- laboratory
- lecture-laboratory combination
- directed study

**DISTANCE LEARNING:**

**This course may be offered as a distance learning course and meets Title 5 regulations 55370, 55372, 55374, 55376, 55378, and 55380.**

Yes  No

**If yes, check all that apply:**

- Television Course (Video one-way, e.g. ITV, video cassette, etc.)
- Online Course (Text one-way, e.g. newspaper, correspondence, electronic file, etc.)
- Two-Way Video Conferencing (Two-way interactive video and audio)
- One-Way Video Conferencing (One-way interactive video and two-way interactive audio)
- Computer Assisted Instruction (A specialized form of mediated instruction relying primarily on student access to information and prepared lessons or teaching materials through a computer terminal, but not under immediate supervision of a qualified instructor.)

**GRADING POLICY AND STANDARDS** (include methods of determining whether the stated objectives have been met by students):

- Class assignments – 40 % of total grade
- Notebook—20 % of total grade
- Tests – 20 % of total grade
- Attendance -- 20 % of total grade

**IS COURSE REPEATABLE FOR REASON(S) OTHER THAN DEFICIENT GRADE?**

Yes  No  Number of times course may be taken for credit: 2

If yes, identify specific provision of Title 5 Division 2 section(s), 55761-55763 and 58161 which qualifies course as repeatable: 58161 D2A

**CONTACT PERSON: Dave Thomsen ext.2554**

**SIGNATURES ON FILE**