

**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-190 Specialty and Manufactured Hardware

**UNIT VALUE:** .5,1,2,3

**MINIMUM NUMBER OF SEMESTER HOURS:** 16,32,64,96 lecture/laboratory

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

**ENTRANCE REQUIREMENTS**

**PREREQUISITE:** None

**COREQUISITE:** None

**RECOMMENDED PREPARATION:** None

**SCOPE OF COURSE:**

Survey of traditional, contemporary, European, and Oriental market hardware found in the cabinet and furniture industries, including consumer applications. Exploration and application of various system solutions for given problem(s). Study and application of hinges, K-D fasteners, fastening systems, joint systems, drawer guides, and runners.

**SPECIFIC COURSE OBJECTIVES:**

Students will:

1. Identify and analyze hardware solutions to problematic situations.
2. Identify the basic engineering principles of hinge operation.
3. Compare and contrast availability, function and application of domestic, European and Asian market hinges.
4. Compare and contrast materials used in hardware manufacture.
5. Identify basic principles of 32mm hardware system.
6. Identify sources of supply, cost analysis and consumer education for contemporary hardware industry.

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

1. Types of hardware
  - A. Traditional/period
  - B. European
  - C. Oriental
  
- H. Styles
  
- III. Sources
  
- IV. Construction
  
- V. Materials
  
- VI. Application to Given Problem Situation
  
- VII. Hinge Types
  - A. Lip
  - B. Flush
  - C. Overly
  - D. Recessed
  - E. Specialty
  
- VIII. Testing
- IX. Finishes
- X. Functions
- XI. Consumer Information

## **REQUIRED READING:**

Cabinet and Furniture Technology Safety Manual (Revised yearly)

Extensive instructor-originated class information sheets, which are then summarized and included in the instructor-evaluated notebook submitted by all students.

Industrial Fasteners Institute. Fastener Standards. Cleveland: Industrial Fasteners Institute, 1998.

## **SUGGESTED READING:**

Feirer, John L. The Woodworker's Reference Guide and Source Book. New York: Charles Scribner's Sons, 1983,

Hafele Company. The Complete Hafele. High Point: The Hafele Company, 1986.

Workbench Magazine. Kansas City: Modern Handcraft, Inc.

Fine Woodworking. Newton: The Taunton Press, Inc.

The Woodworker's Journal. New Milford: Madrigal Publishing Co.

Woodsmith. Des Moines. Woodsmith Publishing Co.

Popular Woodworker. Concord: EGW Publishing Co.

Wood. Des Moines: Meredith Publishing Co.

The American Woodworker. Hendersonville: JM Publications Inc.

Kitchen and Bath News

Wood and Wood Products.

Furniture World.

### **REQUIRED WRITING:**

A written 30 page notebook is required of all students. Students will, within a period of one week rewrite their notes taken in class, supplementing and augmenting such class notes with information derived from suggested reading (see listing) and instructor-originated information sheets. All drawings in the notebook will be redrawn to reproduction standards. Students will complete a minimum of two written exams, each exam consists of 3-4 written pages. Questions may include mathematical and algebraic functions, and analytical problem solving.

### **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.**

Each student will complete a 30-page class notebook. Each student is responsible for required reading. Each student is responsible for rewriting their lecture/demonstration notes taken in class, adding relevant information derived from the required reading. Proper English grammar is required.

### **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):

Final grades will be based on the following factors:

- |    |   |     |
|----|---|-----|
| 1. | Participation                                 | 20% |
| 2. | Tests   | 25% |
| 3. | Learning Projects                             | 30% |
| 4. | Notebook, design paper or product development | 25% |

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

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

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: Steve Kirby ext. 2555**

**SIGNATURES ON FILE**