

**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-167 Cabinetmaking/32mm European Construction

**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:**

European 32mm production methods as used in cabinetmaking. European design and space utilization; European machinery, hardware, and the latest in European systems. Influence of the 32mm system on the American cabinetmaking industry.

**SPECIFIC COURSE OBJECTIVES:**

Students will:

1. Understand the theory and construction of European cabinetry.
2. Draw detailed drawings of their cabinet designs.
3. Identify necessary procedures and skills mandatory to design and construct European cabinets.
4. Identify, analyze, and apply appropriate joinery to achieve solutions to carcass construction.
5. Record time and expenses encountered in their cabinet projects.
6. Demonstrate their proficiency in the 32mm system from design through production.

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

- I. Introduction
- II. Layout and Planning of Cabinets
  - A. Kitchen and Space Arrangements

- B. Ergonomics and Functional Dimensions
- C. Space Utilization and Design

### III. Cabinet Materials

- A. Solid Wood
- B. Particle Board, Plywood
- C. Panels, Coatings, and Surface Treatments
- D. Edge Banding Materials
- E. Material Layout
- F. Estimating/Buying Materials

### IV. The 32mm System

- A. Historic Survey
- B. Understanding Metrics
- C. Systemize Manufacturing
- D. Hole Patterns
- E. European Hardware

### V. Panel Processing

- A. Material Layout and Cutting List
- B. Scoring Blades
- C. Cutting Blades
- D. Panel Saw Technology
- E. Panel Saw Use & Set-up
- F. Stacking Components

### VI. Edge Banding

- A. Panel Edging Materials
- B. Adhesives
- C. Wood Edge Banding Materials
- D. Resin-Impregnated Laminating Materials
- E. Machine Use and Set-ups

### VII. Systemize Boring

- A. Line Boring
- B. End Boring/Assembly Holes
- C. Boring Machine Bits and Sizes
- D. Bit Installation
- E. Machine Use and Set-ups

### VIII. The Multibore Minipress Machine

- A. The Concept and Machine Set-ups
  - 1. Line Boring
  - 2. Hinge Boring
  - 3. Mounting Plates
  - 4. Assembly Fittings
  - 5. K.D. Fasteners
- B. Boring Bits and Sizes
- C. Machine Adjustments

### IX. Carcase/Box Construction

- A. Assembly of Machined Parts
- B. Dowels, Screws, and Assembly Hardware
- C. Gluing and Clamping
- D. Hardware Installation

- X. Drawers
  - A. Material for Drawers
  - B. Joinery and Machining Parts
  - C. Hardware and Drawer Slides
  - D. Hanging and Fitting Techniques
  
- XI. Doors
  - A. Types of Cabinet Doors
  - B. Styles and Construction
  - C. Joinery and Machining Parts
  - D. European Hardware For Door
  - E. Hanging and Fitting Techniques
  - F. Euro-Screw Assembly
  
- XII. Cabinet Installation
  - A. Base Levelers
  - B. Wall Connectors
  - C. Wall Suspension Hardware
  - D. Mounting Plates
  - E. Euro-system Screw Assembly

### **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.

### **SUGGESTED READING:**

Hafele America Co..System Varianta 32 Course.

Holtz-Her Machine Manuals.

Kitchen and Bath Business. Builder's Kitchens and Baths.

K.B. C. Publication Publisher. Cabinet Manufacturing and Fabricating Today.

### **REQUIRED WRITING:**

A written thirty-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 thirty-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 and structure 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 Project                              | 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: 3

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: Chris Feddersohn ext.2556**

**SIGNATURE ON FILE**