

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-162 Tables/Production Manufacturing

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-161

COREQUISITE: None

RECOMMENDED PREPARATION: None

SCOPE OF COURSE:

Development and refinement of table making skills, processes and procedures. Construction of extension and drop-leaf style tables. Joinery and hardware unique to table making.

SPECIFIC COURSE OBJECTIVES:

Students will:

1. Compare and contrast prototype methods to the methods necessary for higher production.
2. Identify and analyze joinery solutions, which will yield high production.
3. Identify, analyze and apply appropriate production tooling, jigs and fixtures to increase accuracy, safety and quality.
4. Identify, analyze and apply specific hardware to the given problematic piece.
5. Compare and contrast finishing schedules and systems appropriate to a production problem.
6. Identify the best possible finish for a given problem and analyze its application in relation to the usage of the proposed clientele.

CONTENT IN TERMS OF SPECIFIC BODY OF KNOWLEDGE:

- I. Introduction
- II. Joinery theory for tables
- III. Table leg joinery
 - A. Mortise and tenon
 1. Hand tool techniques
 2. Machine tool techniques
 - B. Dowels
 1. Hand tool techniques

- 2. Machine tool techniques
 - C. Braces
 - 1. Wood/installation
 - 2. Metal/installation
 - D. Special screw and hardware for legs
- IV. Wood Bending
 - A. Mechanical
 - B. Steam
 - C. Heat
 - D. Ammonia
 - E. Form design
 - F. Clamping and time
 - G. Kerfing
- V. Lamination
 - A. Theory
 - B. Form design
 - C. Milling parts
 - D. Adhesives
 - E. Clamping
- VI. Hand tools/Profile shaping
 - A. Files
 - B. Scrapers
 - C. Chisels
 - D. Gouges
 - E. Sanders
- VII. Machining techniques
 - A. Spindle carving
 - B. Auto shaping
 - C. CNC
 - D. Template shaping
 - E. Template routing
- VIII. Table tops
 - A. Design and theory
 - 1. Solid wood
 - 2. Veneering
 - 3. Veneer core
 - 4. Lumber core
 - 5. M.D.F.
 - 6. Book matching
 - 7. Herringbone
 - 8. Inlays
 - 9. Glass
 - B. Joinery
 - 1. Mortise and tenon
 - 2. Tongue and groove
 - 3. Dowels
 - 4. Splines
 - 5. Laps
 - 6. Miters
 - 7. Plate/wafer
 - 8. Butterfly

- IX. Table extensions
 - A. Design and theory
 - 1. Pull out systems
 - 2. Turning flip-top systems
 - 3. Sliding flip-top systems
 - 4. Drop-leaf assemblies
 - 5. Pull out extensions (wood)
 - 6. Pull out extensions (metal)
 - 7. Wood leaf hardware
 - 8. Folding hardware
 - B. Top assembly
 - 1. Machining all parts and components
 - 2. Adhesives
 - 3. Clamping
 - 4. Rule joint edge
 - 5. Top attachments
- X. Finishing
 - A. Cost analysis
 - B. Compare/contrast schedules available to end usage of clientele
 - C. Types

REQUIRED READING:

Extensive instructor prepared handouts
Selected published handout provided by instructor

SUGGESTED READING:

Talley, Alvin and Joan Bardogiy. Human Scale 1,2,3. New York: Henry Dreyfuss Associates. 1974.
Maloof, Sam. Sam Maloof, Woodworker. New York, NY. Kodansha International. 1983.
Frid, Tage. Tage Frid Teaches Woodworking, Book 1: Joinery. Newtown, CT. The Taunton Press. 1985.
Frid, Tage. Tage Frid Teaches Woodworking, Book 2: Furnituremaking. Newtown, CT. The Taunton Press. 1985.
Fine Woodworking. The Taunton Press, Inc., Newtown, CT.
The Woodworker's Journal. Madrigal Publishing Co., New Milford, CT.
Woodsmith. Woodsmith Publishing Co., DesMoines, IA.
Wood. Meredith Publishing Co., Des Moines, IA.
The American Woodworker. JM Publications Inc., Hendersonville, TN.

REQUIRED WRITING:

Student generated, three-ring binder note book of class handout and class notes. Students will within a one week period, rewrite their class notes taken in class, supplementing and augmenting such class notes with information derived from laboratory exercises, required and suggested reading.

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.

Students are expected to complete their reading assignments, writing assignments, study for exams, complete take-home exams and practice hand tool skills outside of class.

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:

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|----|-----------------------------------------------|-----|
| 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 C2A

CONTACT PERSON: Chris Feddersohn ext. 2556

SIGNATURE ON FILE