

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 70 / DT 70 Drawing for the Construction/Cabinet/Millwork
Trades

UNIT VALUE: 3

MINIMUM NUMBER OF SEMESTER HOURS: 80 L/L

BASIC SKILLS REQUIREMENTS: Appropriate language and computational skills

ENTRANCE REQUIREMENTS

PREREQUISITE: None

COREQUISITE: None

RECOMMENDED PREPARATION: None

SCOPE OF COURSE:

Planning, drawing, interpreting, estimating construction, and cabinetwork and millwork drawing.

SPECIFIC COURSE OBJECTIVES:

Successful students will:

1. Introduce, survey, and develop practice in making sketches and drawings of various projects in cabinetwork, millwork, and construction.
2. Analyze the applications of different types of drawings used in the cab/mill trades and produce lay-outs, cut list and material list.
3. Compare and contrast knowledge of cabinet/millwork/construction design and construction methodology with a variety of applications by analyzing a minimum of five applied drawings.
4. Produce a complete and accurate set of lay-outs, cut list, and material list with specifications of a cabinet/millwork project.

CONTENT IN TERMS OF SPECIFIC BODY OF KNOWLEDGE:

- I. Sketching
 - A. Importance
 - B. Materials
 - C. Methods and Techniques
 - D. Estimating Proportions
- II. Use of Drawing and Lay-out Tools
 - A. Compass
 - B. Dividers
 - C. Straight Edge
 - D. Trammel Points
- III. Geometry for Lay-out
 - A. Geometric Shapes
 - 1. Circles and their parts
 - 2. Triangles
 - 3. Parallelograms
 - 4. Regular Polygons
 - B. Triangle Geometry
 - 1. Right Triangle
 - 2. Copy a Triangle to a New Location
 - 3. Construct a Triangle from Given Sides
 - C. Geometry of Regular Polygons
 - i. Square
 - ii. Pentagon
 - iii. Hexagon
 - iv. Octagon
 - D. Location of the Center of a Circle
 - E. Tangency Construction
 - i. Arc Tangent to Two Straight Lines
 - ii. Arc Tangent to One Circle and One Straight Line
 - iii. Arc Tangent to Two Circles
 - F. Ellipse Construction
 - i. Trammel Method
 - ii. Concentric Circle Method
 - iii. String and Pin Method
 - iv. Approximant Ellipse Method
- IV. Orthographic Projection
 - A. Glass Box Theory
 - B. Primary Dimensions
 - i. Height
 - ii. Width
 - iii. Depth
- V. Sectional Lay-outs
 - A. Full Size Sections for Cut List
 - B. Joinery Sections for Construction
- VI. Cabinet Design
 - A. Detail Lay-outs
 - B. Construction Methods

- C. Assembly Techniques
- D. Bill of Materials
- E. Cut List
- VII. Furniture Design
 - A. Detail Lay-outs
 - B. Construction Methods
 - C. Assembly Techniques
 - D. Bill of Materials
 - E. Cut List
- VIII. Hardware and Fasteners Applications
 - A. Hinge Types
 - B. Drawer Slides
 - C. 32 Millimeter System
 - D. Fasteners
 - i. Conventional
 - ii. K.D. Fasteners
- IX. Specifications
 - A. Materials
 - B. Hardware
 - C. Construction
- X. Estimating
 - A. Materials
 - B. Labor
 - C. Installations

REQUIRED READING:

A variety of materials and resources provided by the instructor.

SUGGESTED READING:

Manual of Millwork. Los Angeles: Woodwork Institute of California, 1988.

REQUIRED WRITING:

Procedural outlines of project plan development, bill of material and cost estimation analysis, class notes log. Notebook should consist of not less than 30 pages.

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.

Library readings from various industrial journals applied to the subject. Text readings, test preparation, weekly assignments, and writings.

INSTRUCTIONAL METHODOLOGY:

Check all that apply:

 X 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):

- 60% Weekly or biweekly assignments are submitted and evaluated based on previously provided material information and criteria.
- 25% Two midterm examinations on approximately the sixth and the twelfth weeks of the course testing for the general knowledge of material studied in that interim.
- 15% A final examination including a written project demonstrating the skills and knowledge developed through study and work in the course.

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:

CONTACT PERSON:

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SIGNATURE ON FILE