

**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-144      Production Furniture Making (Toys)**

**UNIT VALUE: .5, 1.0**

**MINIMUM NUMBER OF SEMESTER HOURS: 16/32**

**BASIC SKILLS REQUIREMENTS:** Appropriate language writing and computational skills.

**ENTRANCE REQUIREMENTS**

**PREREQUISITE:** None

**COREQUISITE:** None

**RECOMMENDED PREPARATION:** None

**SCOPE OF COURSE:**

Methods and techniques of manufacturing production are learned through lecture and demonstration. Skills are acquired as these methods and techniques are applied in extensive lab work in a production mode. In order to enable the production of relatively large quantities with varied complexity, this course utilizes the manufacture of quality wooden toys, which are donated to local charities.

**SPECIFIC COURSE OBJECTIVES:**

The student will:

1. Create basic drawings and work instructions.
2. Apply production woodworking methods using machinery and hand tools.
3. Develop and practice safety procedures.
4. Demonstrate proficient use of Jigs and fixtures.
5. Demonstrate proper and safe finishing techniques including mixing and applying shellac coatings and spray-painting techniques.

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

### **Course Introduction**

1. The history of mass production.
2. The principle of reducing complex work to a series of simple tasks or operations.
3. The essential requirement of interchangeability of like parts.

#### **I. Reading drawings:**

1. Introduction to drawings.
2. Orthographic versus isometric projection.
3. Sectional views.
4. Dimensions and tolerances to ensure interchangeability.
5. Locations types and size of holes or features.

#### **II. Machinery and Hand Tools:**

Understanding the purpose, selection and use of machinery or tools used to perform an operation.

#### **III. The Control of Operations using Jigs and Fixtures:**

Learn why and how jigs and fixtures are used to accomplish production steps safely and economically.

1. The distinction between jigs and fixtures.
2. Band-saw jigs.
3. Drill press jigs
4. Table-saw jigs.
5. Assembly fixtures.

#### **IV. Production Teamwork:**

Students will experience the benefits of working as a member of a production team. The student will rotate through each of the operations in order to develop skills in the use of hand tools and machinery such as:

1. The table saw.
2. The band saw.
3. The drill press.
4. Various sanding machines
5. Hand tools.

### **REQUIRED READING:**

1. Working drawings.
2. Instruction Sheets.
3. Handouts provided by the instructor.

### **SUGGESTED READING:**

Nagyszalanczy, Sandor. Woodshop Jigs and Fixtures Newtown, CT. The Taunton Press, 1990.  
Blizzard, Richard. Blizzard's Wonderful Wooden Toys, New York, The Sterling Publishing Co Inc. 1983.  
Makowicki, Jim. Making Heirloom Toys, Newtown, CT. The Taunton Press, 1996.

### **REQUIRED WRITING:**

The student will provide and maintain a class binder for instructor-generated handouts and the student generated class notes.

### **OUTSIDE ASSIGNMENTS:**

Students are encouraged to assist in the preparation of the materials used for production in this 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):

- |  |     |
|--|-----|
| 1. Participation in production teams,      | 40% |
| 2. Quality of student's products.          | 20% |
| 3. Practice of safety rules.               | 20% |
| 4. Student / Instructor critique of course | 20% |

**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@2(A)

**CONTACT PERSON: Gordon Collinson.**

**SIGNATURES:**

SIGNATURES ON FILE