

PALOMAR COLLEGE
COURSE OUTLINE OF RECORD FOR
DEGREE CREDIT COURSE

 X Transfer Course X A.A. Degree applicable course
(check all that apply)

COURSE NUMBER AND TITLE: CFT 130 Stringed Instrument Making

UNIT VALUE: 2,3, 4

MINIMUM NUMBER OF SEMESTER HOURS: 64,96,128 Lecture/laboratory

BASIC SKILLS REQUIREMENTS: Appropriate language, writing and computations skills

ENTRANCE REQUIREMENTS

PREREQUISITE: CFT 100

COREQUISITE: NONE

RECOMMENDED PREPARATION: None

SCOPE OF COURSE:

Through the fabrication of a steel stringed guitar, students will study the: history, tone theory, construction processes, materials, finishing and set up of stringed instruments. Students will work together, production style, milling raw lumber from local sources into guitar part blanks. Students will then work individually constructing their own guitar. Traditional and modern methods of construction and fabrication are explored.

SPECIFIC COURSE OBJECTIVES:

Students will:

1. Apply the principles of shop safety.
2. Select appropriate materials for specific parts and lay out parts.
3. Rough cut and square lumber.
4. Mill lumber specifications.
5. Work in production teams.
6. Apply quality control principles to individual and production work
7. Demonstrate competency in the process of steam bending with various methods.
8. Demonstrate competency in the process of shaping with various methods.
9. Demonstrate competency in the process of gluing and clamping with respect to the various methods of stringed instrument construction.
10. Demonstrate competency in time management and goal setting.
11. Demonstrate competency in finishing and finish preparation.
12. Demonstrate competency in guitar set up.
13. Demonstrate ea versatility and proficiency in the various process and methods of constructing a stringed instrument.

CONTENT IN TERMS OF SPECIFIC BODY OF KNOWLEDGE:

- I. Introduction
 - a. History of the guitar
 - b. Guitar anatomy
 - i. Related parts in stringed instruments
 - c. Guitars woods
 - i. Woods in other instruments
- II. Guitar body construction
 - a. Fronts and backs
 - i. Milling
 - ii. Woods
 - iii. Book matching
 - iv. Cutting sound hole
 - v. Rosette fabrication and inlay
 - vi. Bracing fabrication and milling
 - vii. Bracing location and gluing
 - b. Sides
 - i. Woods
 - ii. Milling
 - iii. Bending
 - c. Head and tail block
 - i. Milling
 - ii. Gluing
 - d. Guitar body assembly
 - e. Binding and purfling
- III. Guitar neck
 - a. Woods
 - b. Milling and fabrication
 - c. Headstock
 - i. Veneer
 - ii. Tuning machines
 - d. Shaping
 - e. Fitting neck to body
 - i. Hardware
 - ii. Fitting
 - f. Truss rod
 - i. Fabrication and installation
- IV. Fingerboard
 - a. Woods
 - b. Milling and fabrication
 - c. Cutting frets slots
 - i. Spacing
 - ii. Cutting methods
 - d. Gluing
 - e. Frets
 - i. Installation
 - ii. Filling and shaping
- V. Bridge
 - a. Woods
 - b. Milling and fabrication
 - c. Shaping

- d. Placement and gluing
- VI. Veneers and inlay
 - a. Woods
 - b. Fabrication and installation
- VII. Finishing
 - a. Preparation
 - b. Methods
 - i. Spraying
 - ii. French polish
 - iii. Brushing
 - iv. Wipe-on
 - c. Products
 - i. Lacquer
 - 1. nitro
 - 2. water based
 - ii. Shellac
 - iii. water borne finishes
 - iv. oil
 - d. Buffing out
- VIII. Set up
 - a. Bridge and nut
 - i. Shaping
 - ii. Installation
 - b. Strings
 - i. Bridge pins
 - ii. Installing
 - c. Setting action
- IX. Miscellaneous
 - a. Pick guard
 - b. Fret markers
 - c. End peg

REQUIRED READING:

Guitar making tradition and technology, Cumpiano and Natelson, Chronicle Books
 Instructor generated handouts

SUGGESTED READING:

Classic Guitar Construction, Irving Sloan, Sterling Publishing
Custom Guitars, String Letter Publishing, ISBN #1-89049-29-6
The Blue Guitar, Ken Vose, ISBN #0-8118-1912-4

REQUIRED WRITING:

Student generated portfolio to include:

- All notes
- handouts
- design sketches
- goal sheet/timeline

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 will spend approximately 5 to 11 hours per week working on their guitar outside of class. Students will prepare portfolios and study for exams outside of class time.

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):

| | |
|----------------------------|-----|
| Mid term exam | 10% |
| Participation | 30% |
| Preparing Stock/production | 20% |
| Guitar Assembly | 20% |
| Guitar Finish | 15% |
| Portfolio | 5% |

The final exam will consist of student/instructor/class critique of each students' project, their skill and craftsmanship development.

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

Yes No Number of times course may be taken for credit: 4

If yes, identify specific provision of Title 5 Division 2 section(s), 55761-55763 and 58161 which qualifies course as repeatable: 58161 d (2) (A)

CONTACT PERSON: Jack Stone ext. 2472

SIGNATURES ON FILE