

**Honolulu Community College
Marine Education and Training Center
Boat Maintenance and Repair Program**

Course Syllabus

Course Name: Yacht Joinery

Course Number: MARR 31

Course Credits and Hours: 3 credits; 90 hours lecture/lab

Prerequisites: MARR 30

Course Description: Advanced joinery projects are covered in this course. Projects include lamination techniques, mortise and tenon and rabbeted moldings. Additional hands-on instruction in the use of the various shop tools which were introduced in MARR 30, as well as an introduction into the safety and uses of the spindle shaper and additional power hand tools.

Course Objectives:

- 1) Introduce the student to the quality standards expected in the marine industry.
- 2) Have the student gain a proficiency in the use of all the wood shop tools.
- 3) Have the student show proficiency in the construction of joints commonly found in boat interior construction.
- 4) Practice router fundamentals including construction of templates.
- 5) Practice installing plastic laminates onto plywood.
- 6) Practice making shop sketches.
- 7) Construct a Joiner's Mallet
- 8) Construct a rolling tool cabinet which, will incorporate the use of blueprint reading, a range of joinery skills and which will meet yacht quality standards.

Outline of Instruction:

A. NEW TOOL ORIENTATION

1. Spindle Shaper
2. Panel Saw

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B. MATERIALS PURCHASING

1. Bill of Materials.
2. Review on how lumber stock is dimensioned.
3. Grading and pricing

C. JOINT FABRICATION

1. Doweling jig.
2. Mortising machine
3. Table saw rail tenons

D. RABBETED CORNER POST CONSTRUCTION

1. Drawing the detail
2. Angled rabbet joints on table saw

E. JOINER'S MALLETT CONSTRUCTION

E. ROLLING TOOL CART CONSTRUCTION

F. PLASTIC LAMINATE (FORMICA) TECHNIQUES.

1. Contact cements
2. Router trimming

G. TRIM MOLDING FABRICATION

1. Sawn
2. Laminated

Evaluation:

Standard Alpha System

| | |
|---|----------|
| A | 94 -100 |
| B | 88 -93 |
| C | 80 -87 |
| D | 70 -80 |
| F | below 70 |

Evaluation by percentages

| | |
|-----------------|------|
| Shop Projects | 40% |
| Written Quizzes | 40 % |
| Work Habits | 20% |

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The evaluation addresses behavior such as “Does the student report to class on time and prepared? Does the student use lab time wisely? Does the student cooperate with the instructor and team members? Is METC policy followed? Does the student participate in class discussions?”

Many handouts will be issued to you throughout your career at the METC. It is imperative that you keep a three-ring binder with labeled dividers. During some written tests you will be allowed to refer to your notes. You will also find it beneficial to refer to your notebook while executing projects. Your notebook will directly effect your written and "hands on" project scores. Your notebooks will periodically be turned in and evaluated.

Prompt attendance is vital to your success. Many "hands-on" projects and demonstrations simply can not be repeated. The table below demonstrates how absences and tardiness will limit how high a grade you will be eligible to receive for this course.

| If you miss: | You are eligible for a(n) |
|--------------------|---------------------------|
| 5 hours or less | A |
| 10 hours or less | B |
| 15 hours or less | C |
| 20 hours or less | D |
| More than 24 hours | F |

Each Tardy will equal 1/2 Hour Absent. This includes being late to returning to class after a designated break.

Please call to inform if you are going to be absent. Many of our projects are tackled as a team. We need to know if a team member is going to be absent. The answering machine is on phone # **832-3682**.

If you do not call to notify of your absence and there is a test, and you are granted permission to take a make-up test, a 14 point (based on 100 pt. scale) penalty can be deducted from your make-up score. Be advised that any make-up exam administered may be different in format from the original exam, and may include oral examination.

Required Textbooks:

Modern Woodworking ,Wagner, Goodheart-Wilcox Co.

Basic Blueprint Reading and Sketching, 7th Edition, Olivo, Delmar Publishing.