College of Micronesia – FSM

P.O. Box 159
Kolonia, Pohnpei

Course Outline Cover Page

Finishing and Trim Work **Course Code VCT 183**

Course Description:

This course is designed to teach the student the tools, methods and materials necessary to finish the interior of a residential or commercial building. The course covers the installation of wall and ceiling panels, installation of windows and doors, construction of cabinets and closets, application of trim and moldings, and installation of finishing hardware.

Course prepared by: Stephen Richmond **State**: Chuuk

	Hours / week		#. of weeks	Total hours	Semester Credits
Lecture/Workshop	3	x	16	= 48	= 3

Purpose of Course

Degree Requirement
Degree elective
Certificate XX
Remedial
Other (workshop)

Prerequisite(s) VCT 153 Introduction to Carpentry

Signature, Chairperson, Curriculum committee — Date Approved by Committee

Signature, President, COM, FSM — Date Approved by President

COUSE TITLE **Finishing and Trim Work**

Nominal Duration **48 hours/3 Credits**

Course Code **VCT 183**

General Objectives:

This course is designed to teach the student the tools, methods and materials necessary to finish the interior of a residential or commercial building. The course covers the installation of wall and ceiling panels, installation of windows and doors, construction of cabinets and closets, application of trim and moldings, and installation of finishing hardware
.
In addition, student evaluation will include digital photos showing details of student production (listed in the specific objectives). Also each student will have a faculty generated portfolio which will include images of individual and class projects as well as a rubric for each finished product using the following criteria:

1. Accuracy in measurement
2. Attention to detail
3. Proper use of tools
4. Selection of appropriate materials
5. Attention to safety concerns

All work practices must ensure that safe practices are adopted.

I. Learning outcomes:

Upon successful completion of this course the student will be able to:

1. **Identify the different types of interior finishing materials**
2. **Lay out and construct hollow wood interior walls from a blueprint or sketch**
3. **Estimate materials required to finish and interior**
4. **Install suspended ceiling**
5. **Layout and install a wood floor**
6. **Layout, construct and install a wood stairway**
7. **Layout and construct a simple closet or hanging cabinet**

Upon successful completion of this course the student will be able to:

<u>Learning outcome 1:</u> Identify the different types of interior finishing materials

Assessment Criteria

a. Identify the various types of common finishing materials
b. Describe the characteristics and benefits of each type of material
c. Identify and select the appropriate tools to work with each type of finishing material.

Conditions **Working in groups given:**

- **Resources**
- **Verbal presentation to the group of learners**

Assessment Method methods **Assessment may involve any of the following**

- **Oral questioning**
- **Written tests**
- **Individual written assignments**

<u>Learning outcome 2:</u> Lay out and construct hollow wood interior walls from a blueprint or sketch

Assessment Criteria:

1. Name the needed parts for the project
2. Select appropriate materials for accomplish the task
3. Select appropriate tools to accomplish the task
4. Demonstrate proper tool usage in performing the work

Conditions **Working in groups given:**

- **Resources**

- **Appropriate tools and materials**
- **Verbal presentation to the group of learners**

Assessment Method methods — **Assessment may involve any of the following**

- **Oral questioning**
- **Written tests**
- **Individual written assignments**
- **Active participation in group activity**

<u>Learning outcome 3:</u> Estimate materials required to finish the interior

Assessment Criteria

1. Read plans and blueprints
2. Perform a materials take off from plans
3. Determine approximate amount of various kinds of materials to be used in the project
4. Based of common costs determine the approximate total cost for the project materials

Conditions — **Working in groups given:**

- **Resources**
- **Verbal presentation to the group of learners**

Assessment Method methods — **Assessment may involve any of the following**

- **Oral questioning**
- **Written tests**
- **Individual written assignments**
- **Active participation in group activity**
- **Accuracy of calculations**

<u>Learning outcome 4:</u> Install suspended ceiling

Assessment Criteria

1. Establish ceiling height
2. Calculate needed materials
3. Select needed materials

4. Select appropriate tools
5. Install a sample ceiling to specifications of the project

Conditions

Working in groups given:

- **Resources**
- **Verbal presentation to the group of learners**
- **Demonstration of specific techniques**

Assessment Method methods

Assessment may involve any of the following

- **Oral questioning**
- **Written tests**
- **Individual written assignments**
- **Active participation in group activity**
- **Quality of final product**

<u>Learning outcome 5:</u> Layout and install a wood floor

Assessment Criteria

a. Based of a blueprint determine amount and type of materials needed
b. Name the needed parts
c. Obtain needed materials
d. Select appropriate tools
e. Layout and install joists
f. Install flooring materials

All work practices must ensure that safe practices are adopted.

Conditions

Working in groups given:

- **Resources**
- **Verbal presentation to the group of learners**

Assessment Method method

Assessment may involve any of the following

- **Oral questioning**
- **Written tests**

- **Individual written assignments**
- **Active participation in group activity**

<u>Learning outcome 6:</u> Layout, construct and install a wood stairway

Assessment Criteria

1. Name the needed parts
2. Determine the rise and run of the stairway
3. Determine number of treads based on common code practices
4. Select appropriate materials
5. Select appropriate tools
6. Cut stair jacks if needed
7. Install treads and risers
8. Trim finished product

Conditions **Working in groups given:**

- **Resources**
- **Verbal presentation to the group of learners**

i. **Demonstration by instructor of technical details as needed**

Assessment Method methods **Assessment may involve any of the following**

- **Oral questioning**
  - **Oral questioning**
  - **Written tests**
  - **Individual written assignments**
  - **Active participation in group activity**

♦ **Quality of finished product**

<u>Learning outcome 7:</u> Layout and construct a simple closet or hanging cabinet

Assessment Criteria

1. Read plans to determine details of project
2. Select appropriate materials
3. Select appropriate tools
4. Construct project to specifications in plans

Course content:

1. Introduction

1. Reading and interpretation of blueprint interior details
2. Types of finishing materials

2. Interior Walls

1. Interior wall openings
2. Wood, gypsum paneling
3. Materials estimation
4. Service accommodation e.g. electrical, plumbing
5. Practical exercise

3. Ceilings

1. Wood and gypsum panel ceilings
2. Suspended ceilings
3. Materials estimation
4. Practical exercise

4. Floors

1. Board and plywood flooring
2. Overview of hardwood strip flooring
3. Vinyl and tile flooring
4. Material estimation
5. Practical exercise

5. Steps and stairways

1. Terms- risers tread, nosing, newel, handrail, baluster, platform, landing, total rise
2. Stairway layout
3. Railings, balusters, newel posts
4. Material estimation
5. Practical exercise

Required course materials

1. Instructor

1. **Wood shop with selected hand and power tools**
2. **Text, Instructors Resource Guide**
3. **Access to paper copying resource**
4. **Digital Camera**
5. **Computer with printer**
6. **Individual student portfolio folders**
7. **Tools lumber and woodworking supplies (See attached list)**

2. Student

1. **Student tool set (if available)**
2. **Three ring binder**
3. **Writing tools**
4. **Drafting tools**
5. **College ruled notebook**
6. **Architectural scale**
7. **Eye protection**
8. **Work gloves**
9. **Safety shoes**

IV. Reference materials:

Carpentry and building Construction
John L. Freirer, Gilbert Hutchings, Mark Freirer, 1997
Glencoe McGraw Hill 5th edition
ISBN 007822702X

V. Instructional Costs

Text:	**41.99**
Instructors Guide	**50.99**
Student tool set	**350.00**
Classroom supplies	**60.00**

VI. Method of instruction:

1. **Demonstration by instructor**
2. **Lecture**
3. **Group work**
4. **Team work on projects**
5. **Discussion**
6. **Practical exercise**

Required course Materials:

Supplies:

1. **Assorted nails**
2. **Corrugated fasteners**
3. **Screws, assorted sizes and types**
4. **Bolts, nuts, washers, assorted lengths**
5. **Corner irons, assorted sizes**
6. **Hinges, assorted sizes**
7. **Hasps, hook and eye fasteners, assorted**
8. **Wood filler**

Materials:

1. **Dimensional lumber, assorted**
2. **Plywood, assorted**
3. **Hardboard, (Masonite or equivalent**
4. **Plastic laminate (Formica or equivalent)**

Adhesives

1. **Yellow glue**
2. **Resin glue**
3. **Contact cement**
4. **Glue cartridge (liquid nail or equivalent)**

Hand Tools:

1. **Hammer, curved claw**
2. **Hammer straight claw**
3. **Hammer, Tack**
4. **Saw 10pt**
5. **Saw coping with blades**
6. **Saw, Miter**
7. **Saw, dovetail**
8. **Hacksaw**
9. **Wood chisel set**
10. **Cold chisel**
11. **Drill brace**
12. **Auger bit set**
13. **Egg beater drill**
14. **Twist drill set**
15. **Plane, block**
16. **Screwdriver set**
17. **File set**
18. **Wood rasp**
19. **Utility knife**
20. **Sharpening stone**
21. **Tape measure (25’ or 30’)**
22. **Carpenter square**
23. **Combination square**

24. Spirit level
25. Nail set

Power tools

1. Table saw
2. Circular saw
3. Band saw
4. Jointer (6 in)
5. Router with assorted bits
6. Belt sander
7. Electric drills (battery powered and plug in)
8. Electric miter box.
9. Extension cord

VII Evaluation

1. Final grades for this course will be assessed based on meeting the course requirements at the following percentage rates:

90% - 100% A -Superior
80% - 89% B -Above Average
70% - 79% C -Average
60% - 69% D -Below Average
0 – 59% F –Failure

2. For each learning outcome the following rubric for evaluation will be used:

Criteria	A	C	F
Accuracy in measurement	Can read measuring tools to a 1/8th inch accuracy	Can read measuring tools to a ½" accuracy	Cannot read measuring tools
Attention to safety concerns	Always has proper safety equipment when working with tools	Sometimes has proper safety equipment	Does not follow safety rules
Proper use of tools	Uses the proper tools 90% of the time	Uses the proper tool 60% of the time	Seldom used the proper tool
Selection of appropriate materials	Can identify and select proper materials 90% of the time	Can identify and select proper materials 60% of the time	Can not select proper materials for the job

3. Competency in practical exercised in determined to be completed required project (s) within the 15+ week course time limit with +/- ¼ inch accuracy in all major dimensions.
4. Written tests

Attendance:

The COM-FSM, Attendance and honesty policy will apply