



THE FEDERAL UNIVERSITY OF TECHNOLOGY, AKURE

Department of Architecture

ARC 210–WOOD WORKSHOP PRACTICE (CRAFT)

COURSE PARTICULARS

Course Code: ARC 210

Course Title: WOOD WORKSHOP PRACTICE (CRAFT)

No. of Units: 2

Course Duration: One hour of theory and three hours of practical classes per week for 14 weeks.

Status: Compulsory

Course Email Address: woodworkarc210@gmail.com

Course Webpage:

Prerequisite: NIL

COURSE INSTRUCTORS

Arc.(Mrs.) A. O. Ajenifujah-Abubakar

Room 030, SET,

Dept. of Architecture

Federal University of Technology, Akure, Nigeria.

Phone: +2348034707585

Email: aoajenifujah-abubakar@futa.edu.ng

Chief A. A. Akintewe

Room 110, SET

Dept. of Architecture

Federal University of Technology, Akure, Nigeria.

Phone: +2348062606164

Email: aaakintewe@futa.edu.ng

Arc.N. I. Omoyajowo

Room: Computer Lab, SET,

Dept. of Architecture

Federal University of Technology, Akure, Nigeria.

Phone: +2348035901567

Email: niomoyajowo@futa.edu.ng

COURSE DESCRIPTION

Introduction to basic manufacturing processes, organisation of the workshop. Workshop hazard and safety practices and codes. Properties of wood materials, bench work and fitting.

Introduction to turning exercises – straight and step turning. Chamfering, screw cutting, milling and milling exercise. Drilling techniques and exercises. Properties of work, woodwork and joinery exercise. Workshop measurements.

COURSE OBJECTIVES

The objectives of this course are to:

- To expose the students to the basic principles in workshop practice mist especially, the safety precautions and rules in the workshop to avoid accident
- To provide the basic knowledge of the wood terminologies in respect of the terms used in relation to wood.

COURSE LEARNING OUTCOMES / COMPETENCIES

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

(knowledge based)

- To provide the basic foundation to practice on the use of the functional tools
- To identify these tools used in the wood workshop and the various wood joints, their descriptions and classifications.
- To practice on the use of these functional tools so as to assemble the wood joints and construct wooden items such as tee – squares, lecterns, notice boards, wooden stools, display boards and drawing boards etc
- Gain insight into the economic and social benefits of wood production

(skills)

- Competently develop the skill to become part of the growing wood industry globally
- Work in groups – fostering active participation in the workshop, listening to the theory lectures and teamwork in the production of the wood items

GRADING SYSTEM FOR THE COURSE

This course will be graded as follows:

Class Attendance	5%
Assignments	15%
Group practical presentation	20%
<u>Final Examination</u>	<u>60%</u>
<u>TOTAL</u>	<u>100%</u>

GENERAL INSTRUCTIONS

Attendance: It is expected that every student will be in class for lectures and also participate in all practical exercises. Attendance records will be kept and used to determine each person's qualification to sit for the final examination. In case of illness or other unavoidable cause of absence, the student must communicate as soon as possible with any of the instructors, indicating the reason for the absence.

Academic Integrity: Violations of academic integrity, including dishonesty in assignments, examinations, or other academic performances are prohibited. You are not allowed to make copies of another person's work and submit it as your own; that is plagiarism. All cases of academic dishonesty will be reported to the University Management for appropriate sanctions in accordance with the guidelines for handling students' misconduct as spelt out in the Students' Handbook.

Assignments and Group Work: Students are expected to submit assignments as scheduled. Failure to submit an assignment as at when due will earn you zero for that assignment. Only under extenuating circumstances, for which a student has notified any of the instructors in advance, will late submission of assignments be permitted.

Code of Conduct in Lecture Rooms and Laboratories: Students should turn off their cell phones during lectures. Students are prohibited from engaging in other activities (such as texting, watching videos, *etc.*) during lectures. Food and drinks are not permitted in the laboratories.

READING LIST

¹Lecture Materials

Legend

1- Available as Personal Collections

COURSE OUTLINE

Week	Topic	Remarks
1	Introduction and course overview	Course description, assessments, outline, attendance and expectations of students are explained.
2	Safety rules and precautions in the wood workshop	General explanation on safety, precautions, personal safety rules, workshop safety habits, hand tools safety and machine tools safety.
3	Wood terminologies and definitions	Explanation on “grains” of wood, preservation of woods, conversion of woods etc.
4	Seasoning of woods and natural defects in timber	Explanation of the need to season wood and its effect, observation of defects in timber <ul style="list-style-type: none"> ▪ first individual assignment
5	Introduction to the classification of tools used in the workshop	Differentiating the various groups of classification. Explaining in details geometric tools. Explanation on holding and supporting tools.
6	Continuation of Tools Classification	Explanation on boring, cutting tools and percussion and impelling tools. Explanation on the abrading and scrapping tools.
7	Continuation	Explanation on the carving and shaving cutting tools. Explanation on the paring and shaving cutting tools.
8	Visitation to the wood workshop	Familiarisation with the workshop processes and identification of the above mentioned tools.
9&10	Introduction to the Classification of Joints	Differentiating the various groups of the classification with emphasis on two groups.
11&12	Continuation of the Wood Joints	Explanation on the halving joints
13	Continuation of the Wood Joints	Explanation on the mortice and tenon joints
14&15	Practical exercises in the wood workshop	Work on assignment in two groups in the workshop and team work to produce wooden items.
15	Revision	This is the week preceding the final examination. At this time, evaluation will be done to assess how far the students’ expectations for the course have been met.