



THE FEDERAL UNIVERSITY OF TECHNOLOGY, AKURE

Department of Architecture

ARC 405 – CONSTRUCTION DETAILING I (Building Components and Methods III)

COURSE PARTICULARS

Course Code: ARC 405

Course Title: Construction Detailing (Building Components and Methods III)

No. of Units: 3

Course Duration: Two hours of theory and three hours of practicals per week for 15 weeks.

Status: Compulsory

Course Email Address: arc405@gmail.com

Course Webpage: <http://www.fwt.futa.edu.ng/courseschedule.php?coursecode=arc%204045>

Prerequisite: NIL

COURSE INSTRUCTORS

Dr. Y. M. D. Adedeji

Room 031, SET Building,

Dept. of Architecture,

Federal University of Technology, Akure, Nigeria.

Phone: +2348064681423

Email: ymdadedeji@futa.edu.ng

and

Arc. I. A. OGUNDIRAN

Room 203, 2nd Floor, SET Building,

Dept. of Architecture,

Federal University of Technology, Akure, Nigeria.

Phone: +2347030844757

Email: iaogundiran@futa.edu.ng

COURSE DESCRIPTION

This is an advanced study of building component, their design and detailing methods. Building components: their uses and detailing; internal finishes to buildings; design and fabrication of components; joinery detailing; panelling, windows, doors and their functional requirements; suspended ceilings. Finishing to floors, walls and other partitions. A careful and detailed consideration of the structure, finishing, thermal and moisture control, emphasis is on masonry and timber structures.

COURSE OBJECTIVES

The objectives of this course are to:

- teach students the various building components design, uses and detailing methods; and
- provide students with opportunities to develop basic supervision skills with respect to simple structures and high rise buildings

COURSE LEARNING OUTCOMES / COMPETENCIES

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

(Knowledge based)

- do a careful detailing of various components of buildings.
- classify and explain the various components and functions of different components of a building;

(Skills)

- supervise the construction of buildings and their components; and
- identify snags in defective construction

GRADING SYSTEM FOR THE COURSE

This course will be graded as follows:

Class Attendance	5%
Assignments / Workshop	55%
<u>Final Examination</u>	<u>40%</u>
<u>TOTAL</u>	<u>100%</u>

GENERAL INSTRUCTIONS

Attendance: A student must attend 65% classes to qualify for examination. 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: plagiarism is strictly 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. A semester’s project is given

Code of Conduct in Studios and Workshop : 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 studios and workshop.

READING LIST

¹Barry R, (2007). *‘The construction of buildings. (Vol. I – IV)’*. Blackwell Science Ltd.

⁴Chudley, R and Greeno, R (2010). “Building Construction Handbook” Elsevier

⁴Fadamiro, J.A and Ogunsemi, D.R. (2008). “ Fundamentals of Building Design, Construction and materials”. Adeyemo Publishing House, Akure.

¹Jolaoso, A.B. (2001). *Housing and Indigenous Building Technology, An Introduction*. Desi-GGA Publications, Abeokuta.

¹Olafare, S.O. (2008). *Building Construction Simplified (Vol. I – IV Combined)*. Holad Publishers, Ibadan.

Legend

- 1- Available in the University Library
- 2- Available in Departmental/School Libraries
- 3- Available on the Internet.
- 4- Available as Personal Collection

COURSE OUTLINE

Week	Topic	Remarks
1	Introduction and Course Overview	During this first class, the expectation of the students from the course will also be documented.
2	Foundations	Detailing of a part shall be done in class and the rest shall be done as assignment.
3	Floors	Detailing of a part shall be done in class and the rest shall be done as assignment.

4	Site Visit	Students shall submit individual report on the visit.
5	Walls	Detailing of a part shall be done in class and the rest shall be done as assignment.
6	Stair Case	Detailing of a part shall be done in class and the rest shall be done as assignment.
7	Site Visit	Students shall submit individual report on the visit
8	Roofs	Detailing of a part shall be done in class and the rest shall be done as assignment.
9	Windows	Detailing of a part shall be done in class and the rest shall be done as assignment.
10	Doors	Detailing of a part shall be done in class and the rest shall be done as assignment.
11	Timber Panels	Students shall undertake a study on the applications of timber panels in building construction.
12	Site Visit III	Students shall submit individual report on the visit
13	Workshop 1	Students shall be divided into groups to construct a particular building component.
14	Workshop 2	Students shall be divided into groups to construct a particular building component.
15	Revision	Students shall be allowed to ask questions on all topics covered in the previous weeks.