

COURSE SYLLABUS

DIVISION: Workforce Services

CURRICULA IN WHICH COURSE IS TAUGHT: Non-Curricula

COURSE NUMBER AND TITLE: ARC 131-Materials and Methods of Construction

CREDITS: 3

HOURS/WEEK LECTURE: 3

HOURS/WEEK LAB: 1

LECTURE/LAB COMBINATION: 3

I. CATALOG DESCRIPTION

Covers use of wood as a building material in all phases of construction. Deals with species used, growth characteristics, hygroscopic properties, and applications of lumber and plywood. Includes wood framing systems, premanufactured components, modular systems, windows, doors, cabinets and flooring.

II. RELATIONSHIP OF THE COURSE TO CURRICULA OBJECTIVES IN WHICH IT IS TAUGHT:

This is a foundation course of basic skills preparing the student for more advanced construction courses

III. REQUIRED BACKGROUND: General Admission to the College

IV. COURSE CONTENT

Principles of Construction

The Building Process

Understanding Government Regulations

Building Codes, Thermal Properties, Fire Related Properties, acoustical properties

Building Materials

Wood

Steel

Concrete

Soils

Glass

Aluminum

Masonry

Roofing Materials

Floor Coverings

V. LEARNING OBJECTIVES:**VII: EVALUATION**

<p>Understand the Principles of Construction</p> <p>Be aware of how buildings come to being</p> <p>Understand Governmental constraints</p> <p>Be familiar with the building loads, thermal properties, fire related properties, acoustical properties.</p> <p>Introduction to sustainable construction</p> <p>Learn about materials used to construct buildings; wood, steel, concrete, soils, glass, aluminum, masonry, roofing materials, floor coverings</p>	<p>Class assignments, Lab exercises, in-class presentations and participation, written quizzes and test</p>
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The course supports the following education goals/objectives:

- A. DCC Educational Objectives
 - 1. Communication
 - 2. Critical Thinking
 - 3. Computational and Computer Skills