



Syllabus

ARC 130 Construction Materials

General Information

Date

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Department

Science and Technology

Course Prefix

ARC

Course Number

130

Course Title

Construction Materials

Course Information

Credit Hours

3

Lecture Contact Hours

3

Lab Contact Hours

0

Other Contact Hours

0

Catalog Description

ARC 130 Construction Materials is intended for Architectural Technology majors and students interested in construction and the architectural profession. This course provides an introduction to the properties and use of materials employed in construction. Topics that will be covered include analysis of construction materials, understanding the architect's process in selecting materials for designs, and various construction techniques. The material covered in this class is presented in a lecture format with field trips. Successful completion of this class will prepare students for the ARC 244 Residential Design class.

Key Assessment

This course does not contain a Key Assessment for any programs

Prerequisites

None

Co-requisites

None

Grading Scheme

Letter

First Year Experience/Capstone Designation

This course DOES NOT satisfy the outcomes applicable for status as a FYE or Capstone.

SUNY General Education

This course is designated as satisfying a requirement in the following SUNY Gen Ed category
None

FLCC Values

Institutional Learning Outcomes Addressed by the Course

Vitality

Inquiry

Perseverance

Interconnectedness

Course Learning Outcomes

Course Learning Outcomes

1. Analyze various construction materials, means and methods and techniques.
2. Identify methods to increase sustainability in architectural designs.
3. Evaluate and present significant architectural works that best exemplify the use of specific construction materials.
4. Determine what characteristics distinguish various materials in construction and examine proper applications.

Program Affiliation

This course is not required as a core course in a program

Outline of Topics Covered

Introduction and Overview of Construction

- Materials
- Methods
- CSI MasterFormat

Concrete

- Foundation and Soils
- Structure
- Form
- Accessories

Masonry

- Foundation
- Block
- Brick
- Stone
- Accessories

Metals

- Steel Frame Construction
- Structural Metal Framing
- Miscellaneous Metals and Accessories

Wood

- General Topics
- Heavy Timber Construction
- Stick Framing
- Exterior Finishes
- Interior Finishes

Openings

- Door
- Windows
- Glass and Glazing
- Miscellaneous

Thermal and Moisture Protection

- Waterproofing and Dampproofing
- Insulation
- Roofing

Finishes

- Interior Walls and Partitions
- Gypsum Board
- Interior Finishes
- Exterior Surfaces