# 8/11/2020

# brcc keystone logo

Baton Rouge Community College

*Academic Affairs Master Syllabus*

Date Approved: 1 September 2020

Term and Year of Implementation: Fall 2020

**Course Title:** Construction Materials and Methods

**BRCC Course Rubric:** CMGT 1213

**Previous Course Rubric**: CMGT 121

**Lecture Hours per week-Lab Hours per week-Credit Hours**: 3-0-3

**Per semester: Lecture Hours-Lab Hours-Instructional Contact Hours**: 45-0-45

**Louisiana Common Course Number:**

**CIP Code:** 52.2001

**Course Description:** Introduces construction materials, methods, and equipment used in residential and commercial building construction. Emphasis will be on the construction process and how the various materials and equipment relate to the different stages of the process.

**Prerequisites:**  None

**Co-requisites:** None

**Suggested Enrollment Cap:** 40

**Learning Outcomes.** *Upon successful completion of this course, the students will be able to:*

1. Identify different properties of various building materials used in building construction

2. Explain how different building systems and components are selected, constructed, installed, connected, and integrated.

3. Compare properties and applications for heavy timber, dimensional lumber, engineered lumber, and structural wood panels.

4. Explain methods of reducing moisture transmission and thermal bridging in buildings.

5. Identify major components of electrical, mechanical, and plumbing systems in buildings.

**Assessment Measures.** Assessment of all learning outcomes will be measured using the following methods:

1. Assignments, quizzes, and exams

2. A departmental designed estimating project will be utilized to assess learning outcomes.

**Information to be included on the Instructor’s Course Syllabi:**

* ***Disability Statement*:** Baton Rouge Community College seeks to meet the needs of its students in many ways. See the Office of Disability Services to receive suggestions for disability statements that should be included in each syllabus.
* ***Grading:*** The College grading policy should be included in the course syllabus. Any special practices should also go here. This should include the instructor’s and/or the department’s policy for make-up work. For example in a speech course, “Speeches not given on due date will receive no grade higher than a sixty” or “Make-up work will not be accepted after the last day of class”.
* ***Attendance Policy*:** Include the overall attendance policy of the college. Instructors may want to add additional information in individual syllabi to meet the needs of their courses.
* ***General Policies*:** Instructors’ policy on the use of things such as beepers and cell phones and/or hand held programmable calculators should be covered in this section.
* ***Cheating and Plagiarism*:** This must be included in all syllabi and should include the penalties for incidents in a given class. Students should have a clear idea of what constitutes cheating in a given course.
* ***Safety Concerns:*** In some courses, this may be a major issue. For example, “No student will be allowed in the lab without safety glasses”. General statements such as, “Items that may be harmful to one’s self or others should not be brought to class”.
* ***Library/ Learning Resources:*** Since the development of the total person is part of our mission, assignments in the library and/or the Learning Resources Center should be included to assist students in enhancing skills and in using resources. Students should be encouraged to use the library for reading enjoyment as part of lifelong learning.

**Expanded Course Outline:**

I. The Art and Science of Constructing Buildings

II. Introduction to Building Science

III. Foundations and Shoring in Excavations

IV. The Properties of Wood Used in Construction

V. Heavy Timber Structural Framing

VI. Wood Light Frame Construction – The Various Framing Systems

VII. Finishing the Building Exterior – Creating the Building Envelope

VIII. Finishing the Building Interior – Building Services, Basic Stair Calculations

IX. Roofing on Low Slopes and Steep Slopes; Roofing Area Calculations

X. Glass and Glazing Used as Cladding in Modern Structures

XI. Windows and Doors – Selection and Installation