

# CHIPOLA COLLEGE

Chipola's website: www.chipola.edu

# COURSE TITLE:

COURSE NUMBER: BCN 1214C

Materials & Methods of Construction-Basic Structure

# COURSE DESCRIPTION (with prerequisites):

This course examines how various materials and construction methods associated with: site construction; concrete; masonry; metals; and wood & plastics (Master Format sections 1 -6), affect the construction cost, total life, and maintenance cost of a building. The merits of new materials and methods are introduced and compared to existing products and methods. The major focus will be from a builder perspective emphasizing proper installation procedures and processes. 3 semester credit hours

#### NAME(S) OF INSTRUCTORS:

Olabode Ogedengbe, Workforce Development Building, Room 123, phone 718-2390, <u>OgedengeO@chipola.edu</u>.

## EFFECTIVE ACADEMIC YEAR:

2023-2024

# **REQUIRED TEXTBOOKS AND INSTRUCTIONAL MATERIALS:**

Fundamental of Building Construction, Materials and Methods by Edward Allen and Joseph Iano, published by Wiley. ISBN 9781118138915.

#### **GRADING POLICY:**

The standing of a student in each course is expressed by one of the following letters and corresponding grading system:

- A 90 100
- B 80 89
- C 70 79
- D 60 69
- F 59 or less

The Chipola Catalog provides policies and procedures regarding the grading system. A student's Grade Point Average is derived from the grading system/quality point scale.

# ATTENDANCE AND WITHDRAWAL POLICIES:

Chipola College expects regular attendance of all students, and all instructors' record attendance daily. Students who are absent from classes for any reason other than official college activities must satisfy the instructor concerned that the absence was due to illness or other clearly unavoidable reasons. Otherwise, the student may suffer grade loss at the

discretion of the instructor. Chipola policy allows each instructor to specify in the Instructor First Day Handout whether or not an absence is excusable and what affect the absence or tardy may have on the grade.

A student is allowed to repeat a course a maximum of three (3) times. On the third attempt a student (1) must bear the full cost of instruction (unless waived by Student Services), (2) cannot withdraw, and (3) must receive a grade.

#### MAKE-UP POLICY:

Chipola allows each instructor to specify in the Instructor First Day Handout the makeup policy.

#### ACADEMIC HONOR CODE POLICY:

Students are expected to uphold the Academic Honor Code. Chipola College's Honor Code is based on the premise that each student has the responsibility to (1) uphold the highest standards of academic honesty in his/her own work; (2) refuse to tolerate academic dishonesty in the college community; and (3) foster a high sense of honor and social responsibility on the part of students. Further information regarding the Academic Honor Code may be found in the Chipola Catalog, Student Governance section.

#### STUDENTS WITH DISABILITIES POLICY:

Chipola College is committed to making all programs and facilities accessible to anyone with a disability. Chipola's goal is for students to obtain maximum benefit from their educational experience and to effectively transition into the college environment. Students with disabilities are requested to voluntarily contact the Office of Students with Disabilities to complete the intake process and determine their eligibility for reasonable accommodations.

#### NOTICE OF EQUAL ACCESS/EQUAL OPPORTUNITY AND NONDISCRIMINATION:

Chipola College does not discriminate against any persons, employees, students, applicants or others affiliated with the college with regard to race, color, religion, ethnicity, national origin, age, veteran's status, disability, gender, genetic information, marital status, pregnancy or any other protected class under applicable federal and state laws, in any college program, activity or employment.

Wendy Pippen, Associate Vice President of Human Resources, Equity Officer and Title IX Coordinator, 3094 Indian Circle, Marianna, FL 32446, Building A, Room 183C, 850-718-2269, pippenw@chipola.edu.

#### LIBRARY AND ON-LINE REFERENCE MATERIALS:

The library is a comprehensive learning resource center providing information in print, electronic, and multimedia format to support the educational objectives of the College. On-line catalogs, e-books and electronic databases can be accessed by using the *LINCCWeb* icon on the Chipola Library website at <u>www.chipola.edu/library</u>. If you have

questions about database usage consult the "How to Use the Chipola Databases" on the Library website or call the Library at 850/718-2274 during regular hours. Library hours are posted each semester at the building entrance and on the Library website. See your Instructor First Day Handout for individual instructor recommendations and resources.

#### **TECHNOLOGY RESOURCES:**

The college's learning management system is **Canvas**. Classes become available on Canvas on the first day of the semester. It is the student's responsibility to log onto the Canvas system the first day of class to establish the first day of attendance and to check announcements. All official class communication must be through Canvas. For further information, contact your instructor or the Director of eLearning. The Canvas support hotline is available online in live chat and on the phone, toll-free, at 855-3082812 for any issues in accessing or utilizing Canvas. The **Technology Center**, located in the library, is equipped with computer workstations. Lab hours are posted each semester at the building entrance and on the Library website.

#### FREE TUTORING RESOURCES:

The <u>A</u>cademic <u>C</u>enter for <u>E</u>xcellence (**ACE**) Lab, located in Building L, offers free tutoring from 8 a.m. to 5 p.m. and is equipped with computer workstations. ACE lab hours are posted each semester at the room entrance and on the website. Additionally, live online tutoring conferences and individual tutoring sessions are available for a variety of courses through ACE@Home. For a conference schedule or to schedule an individual appointment, visit "ACE Tutoring" in the left navigation from any course in Canvas.

#### ELECTRONIC DEVICE USAGE STATEMENT:

Classrooms should be free of all unnecessary distractions from the task of learning. Therefore, as a general rule, students should silence and avoid use of all electronic devices (laptops, phones, tablets, etc.) not being used for coursework. Consult first-day handouts for any specific policies related to the use of electronic devices in the classroom, as they may vary depending upon the nature of the course or the guidelines of the instructor. Faculty reserve the right to regulate the use of electronic devices and their accessories in class.

#### **DISCIPLINE SPECIFIC COMPETENCIES / LEARNING OUTCOMES:**

Explain proper material installation procedures.

## LINKING COURSE-LEVEL STUDENT LEARNING OUTCOMES WITH DISCIPLINE-SPECIFIC COMPETENCIES, ASSESSMENT METHODS, AND ARTIFACTS

COURSE-LEVEL STUDENT LEARNING OUTCOMES FOR BCN 1214	DISCIPLINE-SPECIFIC GENERAL EDUCATION COMPETENCIES	ASSESSMEN T METHODS FOR COURSE LEVEL STUDENT LEARNING OUTCOMES	LEARNING ARTIFACTS FOR AA PROGRAM ASSESSMENT
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At the completion of the course, the	Demonstrate mastery of	Assessme			
student will be able to:	computer aided drafting	nt methods			
1. Identify and categorize various	(CAD) by constructing engineering, mechanical,	used are:			
foundation systems.	and geometrical drawings.				
2. Explain how to properly place		Q, UT, SD,			
concrete.	Demonstrate ability to	SP, Proj, F			
3. Describe what affects the strength	sketch, letter, and generate line-work to	- , -,,			
and finish characteristics of	describe various objects.				
concrete.					
4. List masonry product options and	Demonstrate ability to read				
advantages that each gives you.	and produce drawings				
5. Identify and categorize wood types	involving orthographic projection, sections,				
and characteristics.	pictorial and auxiliary				
6. Compare installation practice and	views.				
properties for metal and wood	Demonstrate e wide reven				
systems. 7. List and describe alternate	Demonstrate a wide range of mathematical skills				
systems for superstructure	including plane				
support.	trigonometry, strength of				
8. Communicate with clarity and	materials, technical, and other engineering				
precision.	problems, including				
9. Apply critical thinking through	theories learned in				
problem solving.	engineering mechanics.				
10. Analyze and compare the merits of	Demonstrate ability to use				
various existing products and	standard surveying				
methods.	equipment to make				
	measurements and calculations to run a				
	traverse, establish levels,				
	keep notes and produce				
	required drawings.				
	Demonstrate ability to				
	analyze physical and				
	mechanical properties of				
	soil and concrete.				
	Demonstrate ability to				
	solve basic hydraulic				
	problems using the theory of incompressible fluids.				
	Demonstrate on-site skills				
	required to establish				
	grades, locate property				
	lines and utilities and				
	produce plots and calculate cut and fill by average-end-				
area					
**Assessment Codes					

T = Tests	<b>RPT =</b> Report/Presentation	Proj. = Projects	<b>BO =</b> Behavioral Observation
<b>Pre/Post</b> = Pre- and Post-Tests	<b>SP</b> = Skills Performance	Exp. = Experiments	Clin. = Clinicals
<b>OT</b> = Objective Tests	<b>SD</b> = Skills Demonstration	Cap. Proj. = Capstone Project	CS = Case Study
UT = Unit Tests	<b>W</b> = Writing Assignments	Cap. Course = Capstone	CP = Case Plan
<b>Q</b> = Quizzes	E = Essays	Course	Port. = Portfolio
<b>F</b> = Final Examination	<b>DE</b> = Documented Essays	Prac. = Practicum	<b>Obs.</b> = Teacher Observation
CF = Cumulative Final	<b>RP</b> = Research papers	Intern. = Internship	Sk. Check = Skills Check-off
EX = Departmental Exam	<b>J</b> = Jury	H = Homework	Curriculum Frameworks
SE = Nat'l or State Standardized	R = Recital	PS = Problem Solving	JP = Judged
Exam		<b>DB</b> = Discussion Board	Performance/Exhibition

# MEANS OF ACCOMPLISHING STUDENT LEARNING OUTCOMES:

Learning outcomes are determined by measuring the ability of each student to retain the learning objectives of the course. Performance-based methods, such as completion of assigned projects, general knowledge tests, oral and written presentations of assignments, group discussions, observation of mastery of critical skills and analysis of the final product will determine the final grade on this course.

#### ASSIGNMENT AND/OR COURSE OUTLINE

See your Instructor First Day Handout for individual instructor assignment schedule.