

FLORIDA STATE COLLEGE AT JACKSONVILLE

COLLEGE CREDIT COURSE OUTLINE

COURSE NUMBER:	BCN 1210
COURSE TITLE:	Construction Materials
PREREQUISITE(S):	None
COREQUISITE(S):	BCN 1210L
CREDIT HOURS:	3
CONTACT HOURS/WEEK:	
CONTACT HOUR BREAKDOWN:	
Lecture/Discussion:	3
Laboratory:	
Other _____:	
FACULTY WORKLOAD POINTS:	3
STANDARDIZED CLASS SIZE ALLOCATION:	30
CATALOG COURSE DESCRIPTION:	
<p>Building Construction Materials is a study of materials and supplies used in construction. Identification, uses, manufacture and structure of wood, cement, masonry and metal materials are discussed. The course focuses on the advantages and disadvantages of materials as they relate to durability, permeability, aesthetic qualities, internal stresses, heat and sound energy transfer, combustibility, fire ratings, and other physical characteristics.</p>	
SUGGESTED TEXT(S):	<u>Construction Principles, Materials and Methods</u> , 6th ed. Olin, Schmidt & Lewis. New York: Van Nostran Reinhold,
IMPLEMENTATION DATE:	Fall Term, 2007 (20081)
REVIEW OR MODIFICATION DATE:	Fall Term, 2008 (20091) - Outline Review 2007

COURSE TOPICS

CONTACT HOURS
PER TOPIC

I.	Introduction - Lecture	3
II.	Building Codes & Standards Sitework	3
III.	Concrete: Foundation Systems Precast Concrete	3
V.	Masonry: Concrete Masonry, Clay, Masonry, Stone	3
VI.	Metals	3
VII.	Wood: Framing Systems	3
VIII.	Plastics	3
IX.	Thermal & Moisture Protection: Waterproofing & Dampproofing, Insulation, Sealants	3
X.	Doors & Windows, Glazing	3
XI.	Finishes: Gypsum, Tile, Flooring, Painting	3
XII.	Sound Control	3
XIII.	Mechanical Systems	3
XIV.	Electrical Systems	3
XV.	Course Review & Evaluation	3

PROGRAM TITLE: Building Construction Technology

COURSE TITLE: Construction Materials

CIP NUMBER: 0615.100101

LIST PERFORMANCE STANDARDS ADDRESSED:

NUMBER(S): TITLES(S):

06.0 SELECT AND MAINTAIN CONSTRUCTION SITE TOOLS AND EQUIPMENT--The student will be able to:

- 06.01 Select fire fighting equipment.
- 06.02 Select and maintain safety equipment.
- 06.03 Select cleaning equipment.
- 06.04 Select miscellaneous small tools.
- 06.05 Select and maintain shop and power tools.
- 06.06 Select surveying equipment.
- 06.07 Select concrete finishing equipment.
- 06.08 Select plaster and mortar mixing equipment.
- 06.09 Select and maintain temporary site offices, storage, and restroom facilities.
- 06.10 Select temporary building enclosures.
- 06.11 Select concrete placing equipment.
- 06.12 Prepare equipment service schedules.
- 06.13 Evaluate type and size of earth moving equipment needed for the project.
- 06.14 Select and maintain construction site communication equipment.
- 06.15 Select concrete batching and mixing equipment.
- 06.16 Select compaction equipment.
- 06.17 Identify pile driving and earth boring equipment.
- 06.18 Select and maintain temporary power and lighting equipment.
- 06.19 Select and maintain temporary water services.
- 06.20 Select demolition equipment.
- 06.21 Select balance of power and plant equipment.

14.0 DEMONSTRATE APPROPRIATE UNDERSTANDING OF BASIC SCIENCE--The student will be able to:

- 14.01 Understand molecular action as a result of temperature extremes, chemical reaction, and moisture content.
- 14.02 Draw conclusions or make inferences from data.
- 14.03 Identify health related problems which may result from exposure to work related chemicals and hazardous materials, and know the proper precautions required for handling such materials.
- 14.04 Understand pressure measurement in terms of P.S.I., inches of mercury, and K.P.A.



NOTE: Use either the Tab key or mouse click to move from field to field. The box will expand to accommodate your entry.

<i>Section 1</i>	
COURSE PREFIX AND NUMBER: <u>BCN 1210</u>	SEMESTER CREDIT HOURS: <u>3</u>
COURSE TITLE: <u>Construction Materials</u>	

Section 2

TYPE OF COURSE: (Click on the box to check all that apply)

<input type="checkbox"/> AA Elective	<input type="checkbox"/> AS Required Professional Course	<input type="checkbox"/> College Prep
<input checked="" type="checkbox"/> AS Professional Elective	<input type="checkbox"/> AAS Required Professional Course	<input type="checkbox"/> Technical Certificate
<input type="checkbox"/> Other _____		
<input type="checkbox"/> General Education: (For General Education courses, you must also complete Section 3 and Section 7)		

Section 3 (If applicable)

INDICATE BELOW THE DISCIPLINE AREA FOR GENERAL EDUCATION COURSES:

<input type="checkbox"/> Communications	<input type="checkbox"/> Social & Behavioral Sciences	<input type="checkbox"/> Mathematics
<input type="checkbox"/> Natural Sciences	<input type="checkbox"/> Humanities	

Section 4

INTELLECTUAL COMPETENCIES:

<input checked="" type="checkbox"/> Reading	<input checked="" type="checkbox"/> Speaking	<input checked="" type="checkbox"/> Critical Analysis	<input checked="" type="checkbox"/> Quantitative Skills	<input type="checkbox"/> Scientific Method of Inquiry
<input checked="" type="checkbox"/> Writing	<input checked="" type="checkbox"/> Listening	<input type="checkbox"/> Information Literacy	<input type="checkbox"/> Ethical Judgment	<input type="checkbox"/> Working Collaboratively

	LEARNING OUTCOMES	METHOD OF ASSESSMENT
•	IDENTIFY THE VARIOUS TYPES OF MATERIALS USED IN THE CONSTRUCTION INDUSTRY	LECTURE/PROJECTS/EXAMS
•	SELECT AND MAINTAIN COMMON CONSTRUCTION MATERIALS	LECTURE/PROJECTS/EXAMS
•	UNDERSTAND WHY DIFFERENT CONSTRUCTION MATERIALS ARE USED IN THE INDUSTRY	LECTURE/PROJECTS/EXAMS
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Section 6

Name of Person Completing This Form: JOHN ADCOX Date: 9/01/06