

## FLORIDA STATE COLLEGE AT JACKSONVILLE

## COLLEGE CREDIT COURSE OUTLINE

COURSE NUMBER: BCT 1140

COURSE TITLE: Foundation Formwork, Wall and Floor Framing

PREREQUISITE(S): None

COREQUISITE(S): None

CREDIT HOURS: 3

CONTACT HOURS/WEEK: 5

CONTACT HOUR BREAKDOWN:

    Lecture/Discussion: 2

    Laboratory: 3

    Other\_\_\_\_\_:

FACULTY WORKLOAD POINTS: 3.5

STANDARDIZED CLASS SIZE ALLOCATION: 24

COURSE DESCRIPTION:

Topics include procedures necessary to make buildings and houses strong. The course also includes framing and bracing of floors and walls.

SUGGESTED TEXT(S): NCCER Curriculum Level I, II, III, IV

IMPLEMENTATION DATE: Fall Term, 2004 (20051)

REVIEW OR MODIFICATION DATE: Fall Term, 2008 (20091) - Outline Review 2007

COURSE TOPICS	<u>CONTACT HOURS PER TOPIC</u>
I. Introduction/Safety	2
II. Concrete as a Material	3
III. Factors in Form Design	5
IV. Materials Used in Formwork	5
V. Basic Formwork	5
A. Forming for footings	
B. Procedure for erecting footings	
C. Regional footing construction procedures	
VI. Basic Foundation Forming Types	10
A. Conventional wall forming	
B. Low wall forming	
C. Slab at grade	
D. Grade beam foundation	
VII. Concrete Forming Systems	10
VIII. Erecting Formwork	5
IX. Placing Concrete	5
X. Stripping the Formwork	2
XI. Concrete Stairs	3
XII. Walks and Drives	3
XIII. Wall and Floor Framing	15
A. Rough framing	
B. Frame construction details	
C. Special framing problems	
D. Structural design	
XIV. Employability Skills	2

PROGRAM TITLE: Residential and Commercial Carpentry  
 COURSE TITLE: Foundation Formwork, Wall and Floor Framing  
 CIP NUMBER: 0646020106

## LIST PERFORMANCE STANDARD ADDRESSED:

NUMBER(S):            TITLES(S):

- 01.0 DEMONSTRATE SHOP AND OCCUPATIONAL SAFETY SKILLS --The student will be able to:
- 01.01 Maintain a clean, orderly and safe work area.
  - 01.02 Operate a fire extinguisher.
  - 01.04 Identify common safety hazards.
- 03.0 DEMONSTRATE KNOWLEDGE OF BASIC MATHEMATICS FOR CARPENTRY -- The student will be able to:
- 03.02 Solve for square foot and cubic foot measurement.
- 04.0 READ BLUEPRINTS --The student will be able to:
- 04.03 Identify architectural and engineering elevations and schedules.
  - 04.05 Interpret blueprints and specifications.
- 10.0 DEMONSTRATE PROPER HANDLING AND STORAGE OF MATERIALS --The student will be able to:
- 10.01 Receive and store materials at a job site.
- 11.0 DEMONSTRATE KNOWLEDGE OF FORM CONSTRUCTION--The student will be able to:
- 11.01 Identify characteristics and types of forms.
  - 11.02 Install in beds for various form.
  - 11.03 Identify styles of footings.
  - 11.04 Construct and set forms for a continuous form.
  - 11.06 Construct and set a pier footing form.
  - 11.07 Strip a form for relocation.
  - 11.08 Construct a straight wall with representative patented forms.
  - 11.11 Construct panel forms.
  - 11.12 Construct slip forms.
  - 11.14 Construct various types of curb and gutter forms.
  - 11.16 Construct column forms (round and squared).
  - 11.19 Construct various staircase forms.

## LIST PERFORMANCE STANDARD ADDRESSED: (continued)

- | NUMBER(S): | TITLES(S):   |
|------------|--|
| 12.0       | <u>CUT AND INSTALL FRAMING MEMBERS FOR A FLOOR</u> --The student will be able to: <ul style="list-style-type: none"><li>12.03 Install bridging.</li><li>12.04 Lay subfloor.</li><li>12.05 Install floor joists for cantilever floor.</li></ul>   |
| 13.0       | <u>CUT AND INSTALL A WALL AND PARTITION FRAMING</u> --The student will be able to: <ul style="list-style-type: none"><li>13.01 Identify framing members used in wall and partition construction.</li><li>13.02 Layout wall lines and partition locations on floor.</li><li>13.03 Cut studs, trimmers, cripples headers and firesteps to length.</li><li>13.04 Build T's, corners and headers.</li><li>13.05 Lay out and assemble wall sections.</li><li>13.06 Install wall sheathing.</li><li>13.07 Install metal door bucks.</li><li>13.08 Install steel studs.</li></ul> |
| 24.0       | <u>DEMONSTRATE KNOWLEDGE OF TIMBER CONSTRUCTION</u> --The student will be able to: <ul style="list-style-type: none"><li>24.01 Identify structural timber components.</li></ul>  |
| 25.0       | <u>INSTALL DECKING AND SHEATHING</u> --The student will be able to: <ul style="list-style-type: none"><li>25.02 Install sheathing.</li></ul>   |
| 28.0       | <u>DEMONSTRATE EMPLOYABILITY SKILLS</u> --The student will be able to: <ul style="list-style-type: none"><li>28.01 Conduct a job search.</li><li>28.02 Secure information about a job.</li><li>28.04 Complete a job application form correctly.</li><li>28.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor or other employees.</li><li>28.07 Identify acceptable work habits.</li></ul>  |



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: <b>BCT 1140</b>	SEMESTER CREDIT HOURS: <b>3</b>
COURSE TITLE: <b>Foundation Formwork/Wall and Floor Framing</b>	

<i>Section 2</i>		
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 type="checkbox"/> AS Professional Elective	<input checked="" type="checkbox"/> AAS Required Professional Course	<input checked="" 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)		

<i>Section 3 (If applicable)</i>		
INDICATE BELOW THE DISCIPLINE AREA FOR GENERAL EDUCATION COURSES:		
<input type="checkbox"/> Communication	<input type="checkbox"/> Social & Behavioral Sciences	<input type="checkbox"/> Mathematics
<input type="checkbox"/> Natural Sciences	<input type="checkbox"/> Humanities	

<i>Section 4</i>					
INTELLECTUAL COMPETENCIES:					
<input checked="" type="checkbox"/> Reading	<input type="checkbox"/> Speaking	<input type="checkbox"/> Critical Analysis	<input 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 checked="" type="checkbox"/> Working Collaboratively	

<i>Section 5</i>	
LEARNING OUTCOMES	METHOD OF ASSESSMENT
• Utilize manual and power tools.	NCCER Module Certification Score 70% or better
• Identify the characteristics of building materials.	NCCER Module Certification Score 70% or better
• Identify fasteners and hardware.	NCCER Module Certification Score 70% or better
• Read basic blueprints.	NCCER Module Certification Score 70% or better
• Perform site-preparation and layout activities.	NCCER Module Certification Score 70% or better
• Identify structural timber.	NCCER Module Certification Score 70% or better
• Set up and use a transit and builder's level.	NCCER Module Certification Score 70% or better
• Comply with hurricane codes.	NCCER Module Certification Score 70% or better
• Demonstrate problem solving skills.	NCCER Module Certification Score 70% or better
• Identify safe working conditions and observe safety precautions.	NCCER Module Certification Score 70% or better

<i>Section 6</i>
Name of Person Completing This Form: <b>Jim Yurko</b>