

## FLORIDA STATE COLLEGE AT JACKSONVILLE

## COLLEGE CREDIT COURSE OUTLINE

COURSE NUMBER: BCT 1130

COURSE TITLE: Roof Framing I

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 basic styles of roofs and construction and framing of a gable, hip and combination roof.

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. Styles of Roofs	5
A. Shed	
B. Gable	
C. Hip	
D. Gambrel	
III. Roof Framing Terms	5
A. Slope	
B. Pitch	
C. Total Run	
D. Total Rise	
E. Total Rafter Length	
F. Unit Span	
G. Total Span	
IV. Roof Plan	5
A. Gable	
B. Hip	
C. Shed	
D. Gambrel	
V. The Ridge	5
A. Length	
B. Size	
VI. Common Rafters	5
A. Layout	
B. Cut	
C. Compute Length	
D. Install	
VII. Hip Rafters	5
A. Layout	
B. Back	
C. Cut	
D. Compute Length	
E. Install	

COURSE TOPICS (Continued)	CONTACT HOURS <u>PER TOPIC</u>
VIII. Valley Rafters	10
A. Layout B. Cut C. Compute D. Install	
IX. Jack Rafters	10
A. Types B. Layout C. Cut D. Compute Length E. Install	
X. Hip Valley Cripple Jack Rafters	10
A. Compute B. Layout C. Cut D. Install	
XI. Erection of the Roof	10
A. Shed B. Gable C. Hip D. Combination	
XII. Employability Skills	3

PROGRAM TITLE: Carpentry  
 COURSE TITLE: Roof Framing  
 CIP NUMBER: 0646020106

LIST PERFORMANCE STANDARD ADDRESSED:

NUMBER(S): TITLES(S):

01.0 APPLY SHOP AND OCCUPATIONAL SAFETY SKILLS -- The student will be able to:

- 01.01 Maintain a clean, orderly and safe work area.
- 01.03 Operate a fire extinguisher.
- 01.04 Identify basic first-aid procedures.

06.0 APPLY APPROPRIATE BASIC MATH SKILLS -- The student will be able to:

- 06.01 Solve basic math problems related to carpentry and cabinetmaking.

08.0 READ BASIC BLUEPRINTS -- The student will be able to:

- 08.02 Identify architectural and engineering elevations, perspectives, and schedules.
- 08.03 Identify lines and blueprint symbols.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

- 09.01 Conduct a job search and identify advanced-training opportunities, including apprenticeship programs, if appropriate.
- 09.02 Obtain information about a job.
- 09.03 Identify documents that may be required for a job application.
- 09.04 Complete a job-application form.

24.0 FRAME A CONVENTIONAL ROOF (WOOD) -- The student will be able to:

- 24.01 Identify roof members, styles, and framing units.
- 24.02 Compute the length of common, hip, and jack rafters.
- 24.03 Lay out rafter and ceiling joist locations on plate and ridge on center.
- 24.04 Select and install nails and fasteners according to specifications.
- 24.05 Layout, cut, and erect rafters.
- 25.06 Install roof sheathing.

25.0 INSTALL AND BRACE ROOF TRUSSES (WOOD AND/OR METAL) -- The student will be able to:

- 25.01 Identify the main parts of roof trusses.
- 25.02 Identify the hardware used in roof truss construction.
- 25.03 Describe the advantages of roof trusses.
- 25.04 Describe the installation and bracing (temporary and permanent) of roof trusses.

LIST PERFORMANCE STANDARD ADDRESSED: (Continued)

NUMBER(S):            TITLES(S):

25.05 Install roof trusses, using temporary and permanent bracing.

26.0 INSTALL AND DRY-IN SHEATHING -- The student will be able to:

26.01 Install sheathing

26.02 Select and install nails and fasteners according to the specifications.

26.03 Dry-in a roof.

35.0 INSTALL FINISHED ROOFING COMPONENTS -- The student will be able to:

35.01 Install composition shingles in a valley.

35.02 Install roof-flashing components and accessories.

35.03 Install ridge vent.

35.04 Frame, sheath, and flash a cricket.



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>BCT 1130</u>	SEMESTER CREDIT HOURS: <u>3</u>
COURSE TITLE: <u>Roof Framing I</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 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)		

*Section 3 (If applicable)*

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	

*Section 4*

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
• Frame a conventional roof.	NCCER Module Certification Score 70% or better
• Identify structural timber.	NCCER Module Certification Score 70% or better
• Identify roof trusses.	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

*Section 6* Name of Person Completing This Form: Jim Yurko