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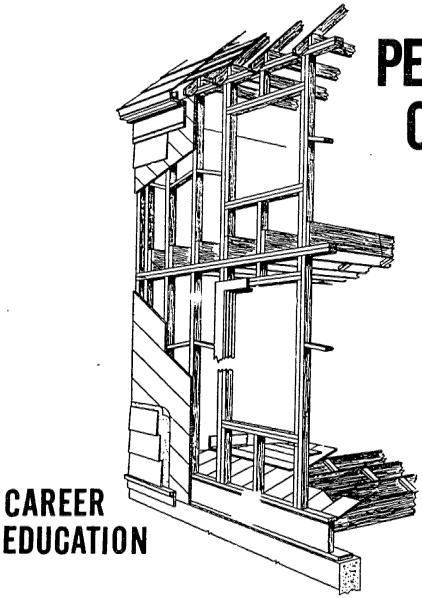
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ABSTRACT

Several intermediate performance objectives and corresponding criterion measures are listed for each of 12 terminal objectives in this course guide in basic carpentry. The guide is designed to prepare persons for initial employment, or to upgrade or retrain persons already employed, or to provide the apprenticeship related course work necessary to insure successful employment in the carpentry trade. The plan of instruction includes specialized classroom and shop experiences concerned with all phases of construction carpentry. Included is training in layout, fabrication, assembly, installation, and repair of structural units. Emphasis is placed on care and use of carpentry tools, equipment and materials, common systems of frame construction and principles involved, drafting, blueprint reading, applied mathematics, materials estimating, and interpretation of building codes. The titles of the terminal performance objective sections are Orientation, Safety, Basic Measurement, Hand Tools, Fower Tools, Maintenance of Tools, Building Products, Building Insulation, Hardware (Rough and Finish), Adhesives, Building Nomenclature and Blueprint Reading, and Simulated House Construction. (This manual and 54 others were developed for various secondary level vocational courses using the System Approach for Education (SAFE) guidelines.) (HD)





PERFORMANCE OBJECTIVES

BASIC COURSE

US DEPARTMENT OF HEALTH.

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Duval County Public Schools October, 1974

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This manual was developed using System Approach For Education (SAFE) Guidelines.

Appreciation and recognition are extended to the following educators who have assisted in the preparation of this manual:

Writers: C. L. Downing, Supervisor

E

John W. Adcox, Jr., Instructor

Cover Design & Printing: Chester Seivert, Instructor

Typist: Jana Elaine Henry

CARPENTRY - BASIC

9163

Syllabus of Terminal Performance Objectives

- 1.0 Orientation
- 2.0 Safety
- 3.0 Basic Measurement
- 4.0 Hand Tools
- 5.0 Power Tools
- 6.0 Maintenance of Tools
- 7.0 Building Products
- 8.0 Building Insulation
- 9.0 Hardware (Rough and Finish)
- 10.0 Adhesives
- 11.0 Building Nomenclature and Blueprint Reading
- 12.0 Simulated House Construction

Course Objective

This course is designed to prepare persons for initial employment, or to upgrade or retrain persons already employed, or to provide the apprenticeship related course work necessary to insure successful employment in the Carpentry trade under such primary job titles as the following as taken from the <u>Dictionary</u> of Occupational Titles:

860.381-026 Carpenter

Course Description

Plan of instruction includes specialized classroom and shop experiences concerned with all phases of construction carpentry. Included is training in layout, fabrication, assembly, installation, and repair of structural units. Emphasis is placed on care and use of carpentry tools, equipment and materials, common systems of frame construction and principles involved, drafting, blueprint reading, applied mathematics, materials estimating, and interpretation of building codes.

TERMINAL PERFORMANCE	
OBJECTIVE NO. 1.0	Orientation

The learner will define carpentry, list the course requirements, define apprentice and Journeyman, and name three (3) types of carpenters.

	INTERMEDIATE		
NO.	PERFORMANCE OBJECTIVES	NO.	CRITERION MEASURES
	weeks	1.0	Define carpentry, apprentice, and Journeyman. List course requirements and three (3) types of carpenters.
1.1	The learner will list the items he/she needs to bring to class each day to be successful. in this course. a. Notebook b. Pen/Pencil c. Ruler/Scale	1.1	List three (3) items you need to bring to class each day.
1.2	Given four (4) class- ifications to be used for determining the final grade of this course, the student will correctly write the percentage value each has on his final grade:	1.2	Write the percentage value each of the following items will have on your final grade: a. Test (Daily) b. Project Assignment c. Written work/notebook d. Daily shop Assignments e. Nine week test f. Class Involvement & Discussion
A Company of the Comp	Written work/ notebook 10% Daily shop Assignment 10% Project Assign. 30% Tests (Daily) 30% Nine week test 10% Class Involv- ment & Discussion 10%		Discussion
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COURSE	CARPENTRY	-	Basic

TERMINAL PERFORMANCE
OBJECTIVE NO. 1.0 (cont'd)

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Orientation

(8) (8)	INTERMED LATE		OR THER TON MEACHINES
NO.	PERFORMANCE OBJECTIVES	NO.	CRITERION MEASURES
1 • 3	The learner will demonstrate his/her knowledge of various types of carpenters classifications by naming four: a. Finish carpentry b. Cabinetmaker c. Frame or rough carpentry d. Roofing carpentry		Name four different types of carpenter classifications:
1.4	The learner will define three given terms associated with the organization of workers in the building trades: a. Apprentice b. Journeyman c. Master	1.4	Define: a. Apprentice b. Journeyman c. Master
1.6	Given two lists, one of building trade crafts and one of typical construction duties, the learner will correctly match the two lists with 80% accuracy. The learner will with 75% accuracy answer given questions about the student club available to carpentry students.	1.5	Match: Plumber 1. Installs flashing Electrician 2. Installs framing. Roofer 3. Installs brickwor Carpenter 4. Installs conduit. Mason 5. Installs drains 6. Installs carpetin a. Name one club especially designed for the Industrial Education studen b. Who can belong to VICA? c. What are three (3) benefits you can derive from VICA? d. What do the initials "VICA" Stand for?
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OBJECTIVE	NO.	1.0	(cont	'd)

Orientation	3	

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TERMINAL PERFORMANCE OBJECTIVE NO. 1.0 (cont'd)		Orientation
NO. PERFORMANCE OBJECTIVES	NO.	CRITERION MEASURES
1.7 Given a list of eight obligations a carpenter has to his/her employer, the student will define seven (7) of the eight correctly: a. Punctuality b. Safety c. Efficiency d. Loyalty e. Cooperation f. Self-improvement g. Integrity h. Courtesy 1.8 Given instruction on the history and development of the carpentry trade, the learner will correct - ly write the definition of carpentry with 100% accuracy. Carpentry- Work which is performed by a craftsman in cutting, framing and joining pieces of timber in the construction of ships, houses, and other structures of a similiar character.	1.7	Write your definition of what your obligation as a carpenter would be to your employer for each of the following: a. Punct:ality b. Safety c. Efficiency d. Loyalty Define "Carpentry".



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	OBJECTIVE	NO.	12.0

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The learner will list with 85% accuracy the carpentry shop safety rules, and will define the term "OSHA".

NO.	INTERMEDIATE PERFORMANCE OBJECTIVES	NO.	CRITERION MEASURES
2.1	Given instructions con- cerning 15 general safe	2.0	List ten shop safety rules and define "OSHA".
	-ty rules for the carpen -try shop, the learner will recall them in writing with 90% accuracy.	2.1	Write the 15 general safety rules for the carpentry shop.
3.2	The learner will demon- strate his/her know- ledge of eye safety de- vices by choosing the correct protective de- vice and wearing it for each job requiring eye safety protection.	2.2	Select and wear the proper eye safety device each working day.
2.3	The learner will define the term "OSHA" and will name three (3) implications OSHA has on safe working conditions for carpenters.	2.3	Define the term "OSHA", and list three safe working conditions for carpenters that are attributed to OSHA.
2.4	The learner will demon- strate his/her knowledge of good housekeeping conditions by performing ing assigned clean-up duties with 80% profic- iency.		Perform the clean up duties assigned to you by the instructor. You will be evaluated on how well clean up duties were performed.
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BASIC MEASUREMENT

Given three (3) pieces of lumber, the learner will measure each with a given different measuring tool (framing square, 6 foot folding rule, metal tape), record the measurements of each, and figure the board feet of each with 90% accuracy.

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NÓ.	INTERMEDIATE PERFORMANCE OBJECTIVES	NO.	CRITERION MEASURES
3.1	Given instruction on using a metal tape and six foot wood rule, the learner will correctly	3.0	The instructor will take three pieces of lumber. Given to the learner to figure board feet.
	measure 10 pieces of given lumber with 80% accuracy. (1/16" tolerance.)	3.1	Write the measurement of 10 pieces of lumber. (Instructor will supply lumber
3.2	The learner will demon- strate his/her know- ledge of estimating lumber by figuring how many board feet in 5 pieces of lumber with 80% accuracy.	3.2	Measure and compute separately the number of square feet in 5 pieces of lumber.
3.3	Given a list of areas to measure the learner will correctly measure with 80% accuracy.	3.3	Measure the following and write the answer: a. shop b. classroom c. parking lot d. work table
3.4	The learner will demonstrate his/her know- ledge of the framing square by measuring given pieces of lumber and laying out given common rafters.	3.4	Write the length of pieces of lumber and layout a given rafter. Example: Span - 12' Find total length total run - 6' and layour on overhang - 1'
			11



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TEXTITUTE T	THE OVERTINE	E .				
		Δ	TIANITA	TOOLC		
OBJECTIVE	NO. 4.	. U	HAND	TOOLS		

The learner, with 80% accuracy, will list the correct names of 40 given carpenter hand tools. (As shown in 4.1)

NO.	INTERMEDIATE PERFORMANCE OBJECTIVES	NO.	CRITERION MEASURES
		4.0	List the correct names to the forty given hand tools. (Instructor will layout on the table and number.)
4 • 1	Given a group of hand tools the learner will identify with 90% accuracy. Instructor will number the following tools for the learner to identify.	4.1	Write the correct hame for each numbered tool shown.
	(List on next page)		(List on next page)
	ing district the second of the		
		12	(2) (4) (4)



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                                                                          HAND TOOLS
      CARPENTRY - BASIC
 11 (11) Hand saw (crosscut, rip)
(22) Coping saw
(33) Keyhole saw (compass)
(44) Back saw
(55) Hand drill
(03) Breast drill
(77) Hack saw
Hammer - (ripping or straight claw)
- (curved claw)
- (flooring)
- (dry wall)
- (slidge)
    (9) Chalk box
G10)—Plum-box-----
(11) Brace (ratchet)
(12) Expansive bit
(13) Auger bit
(14) Screwdriver bits
(15) Forstner bit
   (16) Countersink bit
(17) Framing square
(18) Combination square
(19) Try square
(20) Twist-drill
(21) Smooth plane
(21) Smooth plane
(22) Block plane
(23) Power Auger bit
(24) Dividers
(25) Nail set
(26) Hand rasp
(27) Level
(28) Scratch awl
  (29) Utility knife
(30) Center punch
(31) Scriber
    (32) Pliers - cutting
   - pinched (carpenter)
- combination
   (33) Six (6) foot wood rule
(34) Tape
  (34) Tape
(35) T.--level
   (36) Wrecking bar
(37) Trammel points
(38) Screwdrivers - straight
- phillips
* (39) Tin snips
* (40) Chisel
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COURSE	CARPENTRY	- BASIC	

COURSE_______
TERMINAL PERFORMANCE
OBJECTIVE NO. 4.0 (cont'd)

HAND TOOLS

NO.	INTERMEDIATE PERFORMANCE OBJECTIVES	NO.	CRITERION MEASURES	
4-2	The learner will correct ly use the following	4.2	Select and use carpenters basic too select projects. Instructor will n	
	given carpenters basic	j	Layout and cut board 6'. 2'-5/8",	
And the second second	tools and demonstrate		3", 1'-1.16", 1/2 1/8", using a fra	am:
And the second	use with 80% accuracy. They will layout spec-		square, 6' wood rule and hand saw.	
W. Carre	ific sizes and cuts with	}	(1) Hammer	
	hand tools. (Note: Use	Ì	1(2) Handany	Sec.
eggi Alamani Alamani	the equipment mentioned	Į	(3) Plane	
	above on 4.1)	1	(4) Framing square	
	(1) Hammer	ł	(5) Brace (6) Auger bit	
	(2) Handsaw	1	(6) Auger bit	
Approximation	(3) Plane	e - compaying on woman	Stand Make of Brownian in the half Color Color Make (any Mary Mary Marks) in the property of the Standard Color Co	
	(4) Framing square]	,	,
	(5) Brace			
	(6) Auger bit	1	*	
4.3	The learner will ident-	4.3	Draw and label parts for the follow	Ji.
- 3 - E - Tables		1		
KATUVII II. PORLOGIJA	itry given main dasic	1	inand tools. Draw arrow to correct	D.
	ify given main basic parts of the carpenters		hand tools. Draw arrow to correct (Use list above on 4.1)	Р
	parts of the carpenters basic hand tools with			P
	parts of the carpenters basic hand tools with 80% accuracy. (See			р
	parts of the carpenters basic hand tools with			р
4.4	parts of the carpenters basic hand tools with 80% accuracy. (See above list on 4.1) The learner with 90%	4.4	(Use list above on 4.1) List three safety precautions for e	-
4.4	parts of the carpenters basic hand tools with 80% accuracy. (See above list on 4.1) The learner with 90% accuracy will list three	4.4	(Use list above on 4.1) List three safety precautions for elthe following:	-
4 - 4	parts of the carpenters basic hand tools with 80% accuracy. (See above list on 4.1) The learner with 90% accuracy will list three safety rules for the	4.4	(Use list above on 4.1) List three safety precautions for e the following: (1) Hammer	-
4-4	parts of the carpenters basic hand tools with 80% accuracy. (See above list on 4.1) The learner with 90% accuracy will list three safety rules for the given hand tools.	4.4	(Use list above on 4.1) List three safety precautions for ethe following: (1) Hammer (2) Hand Saw	-
4.4	parts of the carpenters basic hand tools with 80% accuracy. (See above list on 4.1) The learner with 90% accuracy will list three safety rules for the given hand tools. (1) Hammer (2) Hand Saw	4.4	(Use list above on 4.1) List three safety precautions for ethe following: (1) Hammer (2) Hand Saw (3) Screwdriver (4) Knives	-
4.4	parts of the carpenters basic hand tools with 80% accuracy. (See above list on 4.1) The learner with 90% accuracy will list three safety rules for the given hand tools. (1) Hammer (2) Hand Saw (3) Screwdriver	4.4	(Use list above on 4.1) List three safety precautions for ethe following: (1) Hammer (2) Hand Saw (3) Screwdriver	-
4-4	parts of the carpenters basic hand tools with 80% accuracy. (See above list on 4.1) The learner with 90% accuracy will list three safety rules for the given hand tools. (1) Hammer (2) Hand Saw (3) Screwdriver (4) Knives	4.4	(Use list above on 4.1) List three safety precautions for ethe following: (1) Hammer (2) Hand Saw (3) Screwdriver (4) Knives	-
4.4	parts of the carpenters basic hand tools with 80% accuracy. (See above list on 4.1) The learner with 90% accuracy will list three safety rules for the given hand tools. (1) Hammer (2) Hand Saw (3) Screwdriver	4.4	(Use list above on 4.1) List three safety precautions for ethe following: (1) Hammer (2) Hand Saw (3) Screwdriver (4) Knives	-
4.4	parts of the carpenters basic hand tools with 80% accuracy. (See above list on 4.1) The learner with 90% accuracy will list three safety rules for the given hand tools. (1) Hammer (2) Hand Saw (3) Screwdriver (4) Knives	4.4	(Use list above on 4.1) List three safety precautions for ethe following: (1) Hammer (2) Hand Saw (3) Screwdriver (4) Knives	-
4-4	parts of the carpenters basic hand tools with 80% accuracy. (See above list on 4.1) The learner with 90% accuracy will list three safety rules for the given hand tools. (1) Hammer (2) Hand Saw (3) Screwdriver (4) Knives	4.4	(Use list above on 4.1) List three safety precautions for ethe following: (1) Hammer (2) Hand Saw (3) Screwdriver (4) Knives	-
4-4	parts of the carpenters basic hand tools with 80% accuracy. (See above list on 4.1) The learner with 90% accuracy will list three safety rules for the given hand tools. (1) Hammer (2) Hand Saw (3) Screwdriver (4) Knives	4.4	(Use list above on 4.1) List three safety precautions for ethe following: (1) Hammer (2) Hand Saw (3) Screwdriver (4) Knives	-
4.4	parts of the carpenters basic hand tools with 80% accuracy. (See above list on 4.1) The learner with 90% accuracy will list three safety rules for the given hand tools. (1) Hammer (2) Hand Saw (3) Screwdriver (4) Knives	4.4	(Use list above on 4.1) List three safety precautions for ethe following: (1) Hammer (2) Hand Saw (3) Screwdriver (4) Knives	-
4-4	parts of the carpenters basic hand tools with 80% accuracy. (See above list on 4.1) The learner with 90% accuracy will list three safety rules for the given hand tools. (1) Hammer (2) Hand Saw (3) Screwdriver (4) Knives	4.4	(Use list above on 4.1) List three safety precautions for ethe following: (1) Hammer (2) Hand Saw (3) Screwdriver (4) Knives	-
4 - 4	parts of the carpenters basic hand tools with 80% accuracy. (See above list on 4.1) The learner with 90% accuracy will list three safety rules for the given hand tools. (1) Hammer (2) Hand Saw (3) Screwdriver (4) Knives	4.4	(Use list above on 4.1) List three safety precautions for ethe following: (1) Hammer (2) Hand Saw (3) Screwdriver (4) Knives	-
4.4	parts of the carpenters basic hand tools with 80% accuracy. (See above list on 4.1) The learner with 90% accuracy will list three safety rules for the given hand tools. (1) Hammer (2) Hand Saw (3) Screwdriver (4) Knives	4.4	(Use list above on 4.1) List three safety precautions for ethe following: (1) Hammer (2) Hand Saw (3) Screwdriver (4) Knives	-



OUR TOTAL PERFORMANCE OF TREATURE NO. 5.0

POWER TOOLS

Given a list of 12 power tools the learner will identify each tool and will write a primary use for each tool and three safety rules for each tool with 85% accuracy.

180.	TINTERMEDIATE PERFORMANCE OBJECTIVES	NO.	CRITERION MEASURES
		5.0	List the names of 12 power tools and their primary use. List three safety rules for each.
5.1	The learner will ident-	5.1	
	ify given power tools with 90% accuracy. (1) Circular saw (2) Sabre saw (3) Router (4) Reciprocating saw (5) Power planer (6) Table saw (7) Radial arm saw (8) Band Saw (9) Jointer (10) Power miter box (11) Grinder (12) Portable electric drill	The second secon	the name of the basic power tools. (1) Circular saw (2) Sabre saw (3) Router (4) Reciprocating saw (5) Power planer (6) Table saw (7) Radial arm saw (8) Band saw (9) Jointer (10) Power miter box (11) Grinder (12) Portable electric drill
5.2	Given safety instruct- ion on all power tools mentioned above the learner will list three safety rules for each with 100% accuracy.	5.2	Write three safety precautions for each power tool mentioned above.
5.3	Given the main parts of the power tools the learner will identify correctly with 80% accuracy. (See 5.1 list)	5.3	Label or identify the main parts of the power tools, $\sqrt{(\text{See 5.1 list})}$
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TERMINAL PERFORMANCE
OBJECTIVE NO. 5.0 (cont'd)

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POWER TOOLS

NO	INTERMEDIATE PERFORMANCE OBJECTIVES	NO.	CRITERION MEASURES
	The Control of the Co	1.0.	OATEDITION TERISORIES
5.4	The learner will correct ly use given power tools with 100% accuracy. Lay out and cut a board to specific length.	1	Perform correctly the following length and angles and cut with circular saw. (1) 8"-90° cut (2) 12 1/4"- 90° cut (3) 16" - 90° cut
			(4) 24 1/2" - 90° cut (5) 11 3/8" - 45° cut
			(6) 12 1/8" - 30° cut
		, i	(7) 113 5/8" - 60° cut (8) 15 3/16" - 45° cut
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		CONTRACTOR OF	A CONTRACT		19.5	Signification and	O	<u>,</u>

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Maintenance of tools

Given five (5) hand tools and ten (10) power tools the learner will demonstrate basic maintenance, lubrication and/or sharpening with 854-accuracy.

NO:	INTERMEDIATE PERFORMANCE OBJECTIVES	NO.	CRITERION MEASURES		
		6.0	power tools lub Hand tools Plane Auger bit	and tools, and ten ricate and/or shar Power tools Router Circularrsaw	(10) pen.
			Chisel Drill bit Tin snips	Table saw Band saw Jointer Power miter box Radial arm saw Portable electric Grinder	dri11
6.1	Given demonstration & instruction on main-taining hand tools the learner will demonstrate knowledge by lubricating and sharpening given tools with 80% accuracy. (1) Plane (2) Auger bit (3) Chisel (4) Drill bit	6.1	Perform maintenaing tools: (1) Chisel (2) Auger bit (3) Drill bit (4) Plane (5) Tin snip	ince or sharpen th	e foll
	(5) Tin snips		i 7 7		-
			17		



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ONTERIVE NO. 6.0 (cont'd)

Maintenance of tools

INTERMEDIATE PERFORMANCE OBJECTIVES	NO.	CRITERION MEASURES
Given a demonstration & instruction on maintaining power tools the learner will demonstrate knowledge by lubricating and sharpening given tools with 80% accuracy. (1) Circular saw (2) Sabre saw (3) Router (4) Table saw (5) Band saw		Perform maintenance or sharpening of too (Assigned by instructor and evaluated on results) (1) Circular saw (2) Sabre saw (3) Router (4) Table saw (5) Band saw (6) Jointer (7) Power miter box (8) Cut off (Radial Arm) (9) Portable electric drill
= t(6) Jointer		(10) Grinder
(7) Power miter box (8) Cut off saw (Radial	1 11	The second secon
Arm) (9) Portable Electric		
drill (10) Grinder		
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COURSE CARPENTRY - Basic

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(1) 「我の数量を整える。」という。	and the second s	
OBJECTIV	e no.	7.0

Building Products

The learner, with 80% accuracy, will identify the kind, use and size of given building materials. Successful completion of each I.P.O. will be the criteria for success for this terminallobjective.

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Leisteidas.	INTERMEDIATE	AB TROTTING	NO.	CRITERIO	MPACII	DEC					
NO.	PERFORMANCE C	BJECTIVES	NO.	CRITERIO	N MEASU	RES			· · · · · ·		
7.1	Given instr	uction of	7.1	Identif	v and	list	four	hardwoo	ods	and	
	hardwoods a			four so	ftwoo	ds.					
	woods the 1								:		
	list four e										
		0%_accuracy.	م جشق مدرسو، شدرو پوسست.	COMPANY CONTRACTOR	- 64-12-24-14-14-1						ė marama.
	Softwoods	Hardwoods									
	Cedars &	Alder			,						
	Junipers	Ashes									
A' 1 () () () () () () () () () (Cypress	Aspen									
¥4.	Douglas fir	Basswood		•							
#. Y.	White fir	Beech									
	Hemlocks	Birch									
	Larch	Buckeye		i							·
	Pines	Butternut							•		
	Redwood	Cherry									
	Spruce	Chestnut			**r	1			•		
4	Tamersek	Willow									
4.54	Yew	Cottonwood									
		Elm :							•		
		Gums									
	· - 1 · · ·	Hackberry	i I								
		Hickories									
		Locurt									
		Magnolia									•
Please via	rage and the second	Oaks									
a jugar	and the second	Sycamore		i							
A San North		Walnut									
		Yellow -									
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COURSE	CARPENTRY	-	BASIC
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D. 1 4 7 4 4 4 4 4 4	Daga Janaka	
DUTTUTUE	Products	

	OBJEC	TIVE NO. 7.0 (cont'd)		Building Products
				· ·
		INTERMEDIATE PERFORMANGE OBJECTIVES	NO.	CRITERION MEASURES
	7. 2	The learner will ident- fy with 80% accuracy the given use, manu- facturing and size class	7.2	Write and identify the use, manufacturi and size class factory or shop lumber.
新聞の (A)		factory or shop lumber. Use classification: 1) Structural lumber 2) Factory and shop lumber 3) Yard lumber Size Classification:	10 g to 250	
	70 1144 24 - 144 24 - 144	1) Rough or nominalsize 2) Actual or dressed	hat a manual of a	ne del val di legal, il color de legal del composition de la composition de la color de la color de la color d
		size Manufacturing Classifi- cation:	·	is a
を表れていた。		1) Rough lumber 2) Dressed (surfaced) 1umber 3) Worded lumber		
(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	7.3	strate their knowledge of given lumber measure- ment and wood joints	7.3	Identify and construct specific wood joint in handout.
		with 80% accuracy by identifying and making specific common wood joints. Handout consist of fol-	22 -	garanni garanni
		 10wing joints: 1) Spliced (for compression) 2) Spliced (for tension)) .	
第2 日本 である。 1 日本 である。		3) Spliced (for cross strain) 4) Oblique butt joint 5) Lap Joint		
が、大大なないのである。		6) Cross lap 7) End lap joint 8) Toe nailed 9) Doweled butt	r.	20
		10) Dado		20



		in Kanada in tanàna ao amin'ny faritr'i Andrewski ao amin'ny faritr'i Andrewski ao amin'ny faritr'i Andrewski Norden ao amin'ny faritr'i Andrewski ao amin'ny faritr'i Andrewski ao amin'ny faritr'i Andrewski ao amin'ny fa Norden ao amin'ny faritr'i Andrewski ao amin'ny faritr'i Andrewski ao amin'ny faritr'i Andrewski ao amin'ny fa	managaran da kabupatèn da kabupa Babupatèn da kabupatèn da kabupa	
	COURSE . C.	ARPENTRY - B	ASIC	
THE REST WAS PERFORMANCE			Building Prod	ucts
Esperante de la companya de la comp				
PROPERTY OF THE PROPERTY OF TH		NO. CRITER	RION MEASURES	
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	INTERMEDIATE PERSORMANCE OBJECTIVES	NO.	CRITERION MEASURES
7, . (*13) jis	II) Rabbett I2) Glued and blocked I3) Plansbutt I4) Coped joint IS & Edge butt joint I6 W Battened joint I7) Doweled joint		
	ty, grven plywood con- Struction and grading with 80% accuracy. They will slist three types	7.4	List the three types of plywood panels and the five common grading.
	of plywood panels A) Veneer core B) Lumber core C) Particke board core Plywood grading N - (Highest or best)		
	A STORY OF S		
	The second secon		21



TERMINAL PERFORMANCE

DEJECTIVE NO. 8.0

Building Insulation

NO:	INTERMEDIATE PERFORMANCE OBJECTIVES	NO.	CRITERION MEASURES
		8.0	List two types of building insulation and give two examples of each.
	Given instruction on thermal building insulation the learner will list with 80% accuracy the two types of material used today and two examples of each. Types: a) Flexible Blanket & batt Loose fill b) Rigid Structural Insulation board Slab or block The learner will cor-	8.1	List two major types of building insulators and give two examples of each Define STC, and what is the best STC
	rectly define given STC (sound transmission class) and give the best STC for a home with 80% accuracy. STC (sound transmission class) scale to measure sound efficiency and a rating of 50 is desire able.		for a home.



PRICE VENC 9.0

Hardware rough & finish

oven a written test covering nail identification, nail sizing, screw dentification, bolt identification and door identification the learner accuracy.

NO.	INTERMEDIATE REFORMANCE OBJECTIVES	NO.	CRITERION MEASURES
		9.0	Identify the following nails:
			1) Common nails
			2) Box nails
			3) Finish nails
No. of Co.	Beautiful Andreas and Andreas and Andreas and Andreas		(4) Casing nails 5) Brad nails
			6) Concrete nails
		1 1+	7) Cut nails
green a		1	8) Roofing nails
			9) Shingle nails
			10) Gypsum board nails
	* ************************************		11) Masonry nails
			12) Double head nails 13) Clout nails
			14) Ratchet nails
			15) T-nails
			16) Escutcheon nails
gane Can ten			17) Tacks
			18) Staples
			19) Dowel pins
			20) Lead
			Teli whether a door is left or right han
	APPLICATE TO THE PROPERTY OF T		(Instructor will draw on board.)
	and the state of t		
V 4		√ .	
			Identify bolts and screws on handout:
			1. wood screws 1. carriage bolts
			2. metal screws 2. machine bolts
			3. lag bolts
			4. stove bolts
			23
	A Commence of the Commence of	And the state of t	participate Theorem is a second by the control of t



TERMINAL PERFORMANCE
OBJECTIVE NO. 9.0 (cont'd)

Hardware rough & finish

NO.	Intermediate Performance objectives	NO.	CRITERION MEASURES		
9.1	The learner will demon- strate his/her know-	9.1	Draw the following nails and proper use.	give	
	ledge concerning nails by listing given names		٧		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	of various common nails	:			e e e e e e e e e e e e e e e e e e e
	with 80% accuracy. 1) common nails	ļ !			1 to
	2) box nails				
	-3) finish nails 4) casing nails				, Ç.
	5) brad nail lengths		,		= 4
A SAME OF SAME	6) concrete nails 7) cut nails				
4次:	8) roofing nails 9) shingle nails				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	9) shingle nails 10) gypsum board nails		·		2 1 0 2000 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	11) masonry nails 12) double head nails				# A
	13) clout nails				
	14) ratchet nails 15) tenails	:			7.
	16) escutcheon pin				
	17) tacks 18) staples	!			
	19) dowel pins				- 설계 - 변화 - 사 : 환
	20) 1ead	,			7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
9.2	Given instruction on the various types of	9.2	List and identify common type screws, bolts, and anchors.	s of	staples,
	staples, acrews, bolts and anchors the learner				
	will identify with 80%	÷.	,		
	accuracy. (Given types below)				
	A. Staples		Section and section is a section of the section of		
	a) crosscur chisel b) inside chisel	,			### 100 miles
	表現を表現する。 発表 が表現します。 は な に に に に に に に に に に に に に				
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EGNERAL PERFORMANCE
OFFICE TEVE NO. 2 9.0 (cont'd)

Hardware rough & finish

PERFORMANCE OBJECTIVES	NO.	CRITERION MEASURES
(c) Outside chisel	V	
tind) wchisel		
B. Screws		
(a) Wood Screws		
flat head 2. round head		
Metal screws		
1. flat heads		
bead 2. oval head		
3. round head		
C) Bolts Lecarriage bolts	*	
2. machine_bolts	ir .	The section of the se
3. lag bolts	=	The second secon
4stove bolts		
(a) Anchors		
a) anchor bolts		
<pre>b) metal ties c) sleeper pins</pre>	1 - 2	
d) toggle bolts	4 - 4	
The learner will demon-	9.3	List four main types of hinges and bol
strate their knowledge on given door terms by		
identifying with 80%		
		logo and the control of the control
	φ.	haran da karantaran da kar Basar da karantaran da kar
accuracy the type of hit whinges and bolts. List	1 34 24	
accuracy the type of high himses and bolts. List four basic type of door	1 34 24	
accuracy the type of high himses and bolts. List four basic type of door hinges.	1 34 24	
accuracy the type of high himses and bolts. List four basic type of door hinges.	1 34 24	
accuracy the type of high himses and bolts. List four basic type of door hinges.	1 34 24	
accuracy the type of himses and bolts. List four basic type of door hinges. 1) full mortise 2) half mortise 3) full surface 4) half surface	1 34 24	
accuracy the type of himses and bolts. List four basic type of door hinges. hinges. 1) full mortise 2) half mortise 3) full surface 4) half surface Bolts	1 34 24	
accuracy the type of hinges and bolts. List four basic type of door hinges. 1) full mortise 2) half mortise 3) full surface 4) half surface Bolts 1: surface	1 34 24	97
accuracy the type of his hinges and bolts. List four basic type of door hinges. 1) full mortise 2) half mortise 3) full surface 4) half surface Bolts 1: surface 2: flush	1 34 24	
accuracy the type of his hinges and bolts. List four basic type of door hinges. 1) full mortise 2) half mortise 3) full surface 4) half surface Bolts 1: surface 2: flush 3: floor	1 34 24	
accuracy the type of his hinges and bolts. List four basic type of door hinges. 1) full mortise 2) half mortise 3) full surface 4) half surface Bolts 1: surface 2: flush 3: floor	1 34 24	
accuracy the type of his hinges and bolts. List four basic type of door hinges. 1) full mortise 2) half mortise 3) full surface 4) half surface Bolts 1: surface 2: flush 3: floor	1 34 24	
accuracy the type of his hinges and bolts. List four basic type of door hinges. 1) full mortise 2) half mortise 3) full surface 4) half surface Bolts 1: surface 2: flush 3: floor	1 34 24	
accuracy the type of his hinges and bolts. List four basic type of door hinges. 1) full mortise 2) half mortise 3) full surface 4) half surface Bolts 1: surface 2: flush 3: floor	1 34 24	
accuracy the type of his hinges and bolts. List four basic type of door hinges. 1) full mortise 2) half mortise 3) full surface 4) half surface Bolts 1: surface 2: flush 3: floor	1 34 24	
accuracy the type of his hinges and bolts. List four basic type of door hinges. 1) full mortise 2) half mortise 3) full surface 4) half surface Bolts 1: surface 2: flush 3: floor	1 34 24	



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DERCEDTATE OFORVANCE OBJECTIVES	NO.	CRITERION MEASURES
ten four (4) nails he learmer will cor- ectly name the penny d/size of each with 53 accuracy.	9.4	Write the penny size of the nail given to you.
dven instruction on dentifying doors whet- er they are right: and, left-hand, right- and reverse, or left- and reverse the learner	9.5	Identifying whether a door is left-hand right-hand, left-hand reverse or right-hand reverse instructor will draw or us doors available.
PU identify with 90%-ccuracy.	Vision in the second	
Country of the Countr		
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Adhesives

The learner will list the main two types of adhesives and give two examples of each with 80% accuracy.

NO.	INTERMEDIATE PERFORMANCE OBJECTIVES	NO.	CRITERION MEASURES
		10.0	List two main types of adhesives and give two examples of each.
	Given instruction on safety rules concerning adhesives, the learner will list with 80% accuracy. 1) check label for specifications 2) use good ventilation 3) no flames 4) avoid prolonged breathing 5) avoid getting near sensitive area (eyes, etc.) 6) store in cool, dry place.	10.1	List five safety rules for adhesives.
10.2	The learner will ident- ify the two types of adhesive, and give two	10.2	List the two major types of adhesive, give two examples and use.
	examples of each. 1. Glues (glue wood) a. Liquid (glue wood) b. Animal (glue wood) 2. Mastics a. Paste cement (title b. Adhesives gun (paneling))	≱7
			A
			• 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1



TERMINAL PERFORMANCE
OBJECTIVE NO. 11.0

Building Nomenclature & Blueprint Reading

Given an exploded view of platform construction the learner will label each part with 85% accuracy and given a blueprint of a residence and a work sheet the learner will read the print and fill out the worksheet with 85% accuracy.

87.5	INTERMEDIATE		27 T S Aug P
NO.	PERFORMANCE OBJECTIVES	NO.	CRITERION MEASURES
		11.0	Label the parts on a exploded view or platform construction. Fill out a work-sheet from a blueprint.
	Given instructions on scales the learner will demonstrate knowledge with 80% accuracy by defining "scale" and drawing a small box to scale according to instructor. Draw a box 1/2" = 1' - 0" 1" = 1' - 0" 3/8" = 1" - 0"		Define scale. Draw a box to scale according to instructor handout using the following scale. 1/2" = 1' - 0" 1" = 1' - 0" 3/8" = 1' - 0"
	Scale - Drawings that are reduced proportion-ly to a size that can be handled conveniently		
	The learner will ident- ify given symbols com-	11.2	Identify common symbols.
	monly found on a draw-	1.1	
	ing. 1. Brick 2. Stone 3. Concrete		
	4. Structural steel 5. Interior partitions		
	6. Glass 7. Insulation	}	
数性。()) 数性。注:)	8. Wood	İ	
	9. Sheet metal flash- ing		
Rich de la	10. Earth	ĺ	28
	11. Rock		######################################
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TERMINAL PERFORMANCE

OBJECTIVE NO. 11.0 (cont'd) Building Nomenclature & Blueprint Reading

NO E	INTERMEDIATE PERFORMANCE OBJECTIVES	NO.	CRITERION MEASURES	
1000				
11.2	12. Sand			1
	13. Gravel or cinders	İ		,
	14. Toilet 15. Septic tank			
B.	16. Gas			
	17: Water heater			
	18. Heating unit 19. Supply duct			· ·
	20. Exhaust duct		· · · · · · · · · · · · · · · · · · ·	
Ae.	21. Thermostat		•	
esi-i-	22. Refrigerator 23. Drop in Range			1.2
	24. Ceiling fixtures			
garay. Sanata	25. Wall fixture	ļ		
	26. Ceiling fan 27. Floor outlet	,		· ·
			· · · · · · · · · · · · · · · · · · ·	e-e>-
1.3	Given instruction on the	11.3	Name and identify the parts of a	i e
新 加州 解 紀。	nomenclature of building the learner will ident-		building.	•
	ify parts of a building			4. 1
	with 80% accuracy.			
	1. Roof- Gable, hip, gambrel, mansard.	F		
	2. Wall- Non-bearing,			
	bearing			•
	3. Floor- Concrete,			
	4. Foundation- Concrete		•	11-1 11-1
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TERMINAL PERFORMANCE
OBJECTIVE NO. 11.0 (cont'd)

Building Nomenclature & Blueprint Reading

NO.	INTERMEDIATE PERFORMANCE OBJECTIVES	NO.	CRITERION MEASURES
1.4	The learner will demonstrate knowledge of blue prints by naming parts of the working drawing with 80% accuracy. 1. Plans- Floor, plot 2. Elevations- Front, back, right, side, left side. 3. Sections- Thru fireplace, thru windows, thru walls. Details- Beam, kitchen, truss.	11.4	Name the following parts of the working drawings.
11.5	Given instruction on platform framing the learner with 80% accuratey will list steps in building a single story house.	11.5	List steps on building a single story house.
			30 · · · · · · · · · · · · · · · · · · ·

TERMINAL PERFORMANCE OBJECTIVE NO. 12.0

Simulated House Construction

The learner will correctly use given tools, measurements, safety rules and materials to build a storage building with 85% accuracy in each.

	INTERMEDIATE		
NO.	PERFORMANCE OBJECTIVES	NO.	CRITERION MEASURES
		12.0	Build a storage building according to blueprint.
12.1	The layout will demonstrate knowledge of a given basic hand tools, power tools and layout by constructing the following projects to within 85% accuracy as per given specifications. 1. Saw horse 2. Shoulder tool box 3. Miter box 4. Saw vise 5. Work bench 6. Stepladder 7. Straight edge 8. Door jack 9. Tool case 10. Suitcase tool box.	12.1	Make the following: 1. Saw horse 2. Miter box 3. Work bench 4. Shoulder tool box 5. Saw vise 6. Stepladder 7. Straight edge 8. Door jack 9. Tool case 10. Suitcase tool box The instructor will grade quality of finished work.
12.2	The learner will participate in the construction of a utility building, storage building, houses, or other small buildings with 85% accuracy in each of the following: A. Safety B. Blueprint reading C. Selection of materials D. Hand tool use E. Power tool use accuracy of measure		Make a utility building, storage build houses, other small buildings, as assi You will be graded on the following: A. Safety B. Blueprint reading C. Selection of materials D. Hand tool use E. Power tools use - accuracy of measment.

