

Residential Construction II – Course Plan

Week	Outcomes	Format	Hours	Topic/Content	Readings	Assignments	Assessment	Resources
1,2	1,2	Lecture	6	Wall and ceiling framing	Chap. 9	Workbook	p. 281 Test	Handouts, calculators,
				<u>Identify</u>	pp. 253-	Chap. 9, pp.	ques. #1-15	green tag safety boots,
				The main parts of wall frame	280	49-54		safety glasses.
				Rough openings doors and windows				Text book <i>Modern</i>
				<u>Explain</u>				Carpentry, along with
				Methods of forming the outside				accompanying work
				corners and partitions				book.
				Estimating materials required				Construction materials
		Lab	9	Describe construction and erection				as arranged by
				of wall sections and partitions				instructor.
				Plate and stud layout				
				Apply				
				Trade related math			Practical	
				Concepts of plate layout			activities	
				Construct and erect wall sections				
				Double plate and wall sheeting				
				Special framing and house wraps				
				Ceiling framing and blocking				

3,4	1,2	Lecture	6	Roof framing	Chap. 10	Workbook	p. 326 Test	As above and roof
				Explain Various types of roofs	pp. 283-	Chap. 10,	ques. #1-20	framing materials as
				Parts of a common rafter	325	pp. 55-63		provided, framing
				The terms slope and pitch				square, skill saw
				Design and erection of trusses				
				<u>Identify</u>				
				Trade related math				
				Roof supports				
				Layout terms and principles and				
				Rafter sizes and using a rafter table				
				Framing plans				
		Lab	9	<u>Perform</u>			Practical	
				Use framing and speed squares			activities	
				Apply				
				Layout a common rafter				
				Erecting a gable roof and gable end				
				frame				
				Hip and valley rafters including jack				
				rafters				
				Applying math estimating				

5,6	1,2,3	Lecture	4	Roofing materials and methods	Chap. 12	Workbook	pp. 393-394	As above and roofing
				<u>Identify</u>	рр. 343-	Chap. 12,	ques. #1-25	materials (asphalt and
				List various roofing materials	392	pp. 67-74		wood shingles, nails)
				commonly used				
				Define roofing terms				
				<u>Describe</u>				
				Prepare a roof deck				
				Procedures for both asphalt and				
				wood shingles				
				Application procedures for a built-up				
				roof				
		Lab	6	Apply			Practical	
				Demonstrate correct nailing patterns			activities	
				Demonstrate the proper positioning				
				of gutters				
				Estimate materials required for a				
				specific roofing job				

7,8	1,2,4	Lecture	4	Windows and exterior doors	Chap. 13	Workbook	p. 433 Test	As above and window
				<u>Describe</u>	pp. 395-	Chap. 13,	ques. # 1-20	and door samples,
				Window and door fabrication	432	pp. 75-80		installation materials
				Window frame adjustments for wall				
				thickness				
				Procedures for installing a				
				replacement window				
				<u>Identify</u>				
				Various types of windows				
				Window schedule				
				Procedures for installing standard				
				windows				
				Construction of garage door frames			Practical	
		Lab	6	Apply			activities	
				Calculate required rough openings				
				Prepare a rough opening for				
				installation of a door frame				
				Select appropriate garage door				
				hardware				

9,10	1,5	Lecture	4	Exterior wall finishes	Chap. 14	Workbook	pp. 481-482	As above and samples
				Describe	pp. 435-	Chap. 14,	Test, ques.	of various exterior
				Parts of a cornice and rake	480	pp. 81-87	#1-25	material
				Cornice and rake construction				
				How wood siding and shingles are				
				applied				
				Proper application of bevelled siding				
				Exterior insulation and finish systems				
				<u>Identify</u>				
				Various brick and stone, masonry				
				materials and tools				
				Installation of insulation board and				
				stucco				
		Lab	6	Apply			Practical	
				Estimate the amount of siding on a			activities	
				structure				
				Installation techniques for various				
				siding materials				

11,12	1,6	Lecture	4	Thermal and sound insulation	Chap. 15	Workbook	p. 528 Test	As above and various
				<u>Describe</u>	pp. 485-	Chap. 15,	ques. # 1-20	types of insulation and
				Principles of conduction, convection	527	pp. 89-97		vapour barriers
				and radiation				
				Types of insulation				
				Methods of controlling moisture				
				problems				
				Construction that raise STC ratings in				
				desired areas				
				<u>Identify</u>				
				Technical terms relating to thermal				
				and acoustical properties				
				Interpret thermal ratings charts				
				Principle of condensation				
		Lab	6	Apply			Practical	
				Select appropriate areas for			activities	
				insulation in a given structure				
				Procedures for installing batt and				
				blanket, fill, rigid insulation				
				Formula for R rating				

13,14	1, 7	Lecture	4	Interior stair construction	Chap. 18	Workbook	p. 616 Test	As above and staircase
				Discuss	pp. 597-	Chap. 18,	ques. # 1-10	materials and hand
				Interior stair design	615	pp. 113,		railings
				Review		prepare for		
				Various types of stairs		final test		
				Stair parts and terms				
		Lab	6	<u>Perform</u>			Practical	
				Calculate the rise-run ratio, number			activities	
				and size of risers and stairwell length				
				Apply (continued from HMI 114)				
				Prepare sketches of types of				
				stringers for interior stairs				
				Layout stringers for a given stair rise				
				and run				
				Splitting angles for mitre cuts				
				Using stock interior stair parts				
				Identifying the angles on preformed				
				hand railing stock				
				Prepare staircase hand rails				
				Layout of winder stairs				
15	1,2,3,4,5,	Lecture,	5	Building project completion			Practical	
	6,7	lab		Complete term project work and all			activities	
				practical activities			Final test	
16	1,2,3,4,5,		5	Review; take up and discuss final test				
	6,7			/ assignments / practical activities /				
				sharing and feedback				