



HMI 200

Residential Construction II – Course Plan

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

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

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

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

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

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

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