** HMI 200 Residential Construction II – Course Plan**

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| Week | Outcomes | Format | Hours | Topic/Content | Readings | Assignments | Assessment | Resources |
| 1,2 | 1,2 | LectureLab | 69 | ***Wall and ceiling framing***Identify The main parts of wall frameRough openings doors and windowsExplain Methods of forming the outside corners and partitionsEstimating materials requiredDescribe construction and erection of wall sections and partitionsPlate and stud layoutApplyTrade related mathConcepts of plate layout Construct and erect wall sectionsDouble plate and wall sheetingSpecial framing and house wrapsCeiling framing and blocking | Chap. 9 pp. 253-280 | Workbook Chap. 9, pp. 49-54 | p. 281 Test ques. #1-15Practical activities | Handouts, calculators, green tag safety boots, safety glasses.Text book ***Modern Carpentry,*** along with accompanying work book.Construction materials as arranged by instructor. |
| 3,4 | 1,2 | LectureLab | 69 | ***Roof framing***Explain Various types of roofsParts of a common rafterThe terms slope and pitchDesign and erection of trussesIdentify Trade related mathRoof supportsLayout terms and principles and Rafter sizes and using a rafter tableFraming plansPerformUse framing and speed squaresApply Layout a common rafterErecting a gable roof and gable end frameHip and valley rafters including jack raftersApplying math estimating | Chap. 10 pp. 283-325 | Workbook Chap. 10, pp. 55-63 | p. 326 Test ques. #1-20Practical activities | As above and roof framing materials as provided, framing square, skill saw |
| 5,6 | 1,2,3 | LectureLab | 46 | ***Roofing materials and methods***Identify List various roofing materials commonly usedDefine roofing termsDescribePrepare a roof deckProcedures for both asphalt and wood shinglesApplication procedures for a built-up roofApply Demonstrate correct nailing patternsDemonstrate the proper positioning of guttersEstimate materials required for a specific roofing job | Chap. 12 pp. 343-392 | Workbook Chap. 12, pp. 67-74 | pp. 393-394 ques. #1-25Practical activities | As above and roofing materials (asphalt and wood shingles, nails) |
| 7,8 | 1,2,4 | LectureLab | 46 | ***Windows and exterior doors***DescribeWindow and door fabricationWindow frame adjustments for wall thicknessProcedures for installing a replacement windowIdentifyVarious types of windowsWindow scheduleProcedures for installing standard windowsConstruction of garage door framesApply Calculate required rough openingsPrepare a rough opening for installation of a door frameSelect appropriate garage door hardware | Chap. 13pp. 395-432 | Workbook Chap. 13,pp. 75-80  | p. 433 Test ques. # 1-20 Practical activities | As above and window and door samples, installation materials |
| 9,10 | 1,5 | LectureLab | 46 | ***Exterior wall finishes***Describe Parts of a cornice and rakeCornice and rake constructionHow wood siding and shingles are appliedProper application of bevelled sidingExterior insulation and finish systemsIdentify Various brick and stone, masonry materials and toolsInstallation of insulation board and stuccoApply Estimate the amount of siding on a structureInstallation techniques for various siding materials | Chap. 14pp. 435-480 | Workbook Chap. 14,pp. 81-87 | pp. 481-482 Test, ques. #1-25 Practical activities | As above and samples of various exterior material |
| 11,12 | 1,6 | LectureLab | 46 | ***Thermal and sound insulation***Describe Principles of conduction, convection and radiationTypes of insulationMethods of controlling moisture problemsConstruction that raise STC ratings in desired areasIdentify Technical terms relating to thermal and acoustical propertiesInterpret thermal ratings charts Principle of condensationApply Select appropriate areas for insulation in a given structureProcedures for installing batt and blanket, fill, rigid insulationFormula for R rating | Chap. 15 pp. 485-527 | Workbook Chap. 15,pp. 89-97 | p. 528 Test ques. # 1-20 Practical activities | As above and various types of insulation and vapour barriers |
| 13,14 | 1, 7 | LectureLab | 46 | ***Interior stair construction***DiscussInterior stair designReview Various types of stairsStair parts and termsPerform Calculate the rise-run ratio, number and size of risers and stairwell lengthApply (continued from HMI 114)Prepare sketches of types of stringers for interior stairsLayout stringers for a given stair rise and runSplitting angles for mitre cuts Using stock interior stair partsIdentifying the angles on preformed hand railing stockPrepare staircase hand railsLayout of winder stairs | Chap. 18pp. 597-615 | Workbook Chap. 18, pp. 113, prepare for final test | p. 616 Test ques. # 1-10Practical activities | As above and staircase materials and hand railings |
| 15 | 1,2,3,4,5,6,7 | Lecture, lab | 5 | ***Building project completion***Complete term project work and all practical activities |  |  | Practical activities ***Final test*** |  |
| 16 | 1,2,3,4,5,6,7 |  | 5 | Review; take up and discuss final test / assignments / practical activities / sharing and feedback |  |  |  |  |