** HMI 210 Residential Construction III – Course Plan**

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| Week | Outcomes | Format | Hours | Topic/Content | Readings | Assignments | Assessment | Resources |
| 1,2 | 1,2 | LectureLab | 26 | ***Interior wall and ceiling finishing***Describe Wallboard cutting, nailing and adhesive techniquesCharacteristics of gypsum plaster, plastering methodsMethods for levelling and installing suspended ceilingsApply Wall and ceiling covering materialsProcedure for installing wood panelling Apply plastering methodsGypsum and metal latheLayout ceiling tile and furring strips  | Chap. 16, pp. 531-567 | Workbook chap. 16, pp. 99-105 | p. 569 quiz ques. #1-20 Practical activities | Handouts, calculators, green tag safety boots, safety glasses. Text book ***Modern Carpentry,*** along with accompanying work book.***Construction materials as arranged by instructor***: drywall, mud, cement board |
| 3,4 | 1,2 | LectureLab | 26 | ***Finish flooring***Describe Strip, plank and unit block wood flooringProcedure for hardboard, particle and wafer board, plywood underlaymentApplyLayout and install strip flooring | Chap. 17,pp. 571-594 | Workbook chap. 17, pp. 107-111 | p. 595 quiz ques. #1-15Practical activities | As above and various flooring samples, underlays and adhesives |
| 5 | 1,3 | LectureLab | 13 | ***Doors and interior trim***Explain The difference between panel and flush-type doorsSteps for hanging the doorIdentifyHow door frames and casings are installedName lock parts and describe typical installation proceduresPocket and bypass types of sliding doorsThe order in which window members should be appliedApplyCut, fit and nail baseboard trim, window trim and interior door jambs | Chap. 19, pp. 619-644 | Workbook chap. 19, pp. 119-125 | p. 645 quiz, ques. # 1-20Practical activities | As above and mouldings, door frames, casings, hinges and door knobs |
| 6,7 | 1,4 | LectureLab  | 26 | ***Cabinetry*** Describe Types of cabinetrySelecting prefab cabinetryCommon alternative procedures for building cabinets on the jobThree types of drawer guidesMaterial choices for cabinet shelves and doorsHow to install a plastic laminate surfaceApplyInstall prefabricated base and wall cabinetsLayout and frame a cabinet from drawingsInstall plastic laminate to a surfaceBuild and install a cabinet drawer, face frame and sliding doors | Chap. 20, pp. 647-674 | Workbookchap. 20, pp. 127-133 | p. 674 quiz, ques. # 1-15Practical activities | As above and various types of wood, laminated plywood |
| 8 | 1,2 | LectureLab | 13 | ***Painting, finishing and decorating***IdentifySafety rules applying to painting and finishingProper tools for painting and finish decoratingPerformProper procedures for painting, finishing and wallpaper hangingPrepare surfaces for paintingApplyTrade related math to estimate paint coverageProper cleaning and storing of equipmentPrimer coat and finish coat | Chap. 21,pp. 677-702 | Workbookchap. 21,pp. 135-137 | p. 702 Testques. # 1-20 Practical activities | As above and patching material, sanding tools, paint, brushes and caulking |
| 9 | 1,4 | LectureLab | 13 | ***Chimneys and fireplaces***ExplainHow masonry chimneys are constructed around a flue lining Procedures for construction of a chimney, hearth, walls and throatCommon types of factory built fireplacesIdentify Parts of a typical masonry fireplaceConsiderations for installing factory-built fireplace unitsApply Calculate the flue area of a given fireplaceInstall a prefabricated flue | Chap. 22,pp. 705-719 | Workbookchap. 22,pp. 139-143 | p. 720 quiz,ques. # 1-10Practical activities | As above and masonry tools, mortar, flue pipe.Certified fireplace and wood stove inspector |
| 10 | 1,6 | LectureLab | 13 | ***Post-and- beam construction***Describe Advantages and disadvantages of post-and-beam constructionSpecifications for supporting postsHow roof and floor planks should be selected and installedExplainTraverse and longitudinal beams PerformSketch basic construction details of stressed skin panels and box beamsIdentifyNailing and bolting patterns | Chap. 23,pp. 721-738 | Workbookchap. 23,pp. 145-149 | p. 738 Test, ques. # 1-10 Practical activities | As above and engineered and laminated materials |
| 11 | 1,7 | Lecture Lab | 13 | ***Systems-built housing***Describe Technology of systems-built housingIdentify Variety of factory built components that are utilized in a systems-built homeDifferentiate between the basic types and systems-built structuresTerms used in the systems-built housing industryMethod of moving systems-built housing Apply Systems-built plansExplain erection sequence of a panelized home | Chap. 24,pp. 741-755 | Workbookchap. 24,pp. 151-153 | p. 756 Test,ques. # 1-10Practical activities | As above and various types of systems, hangers, bolts and nailing |
| 12 | 1,8 | LectureLab | 13 | ***Passive solar construction***DescribeThe difference between passive and active solar constructionA solar retrofit on an older homeDefine Conduction, convection, radiation and thermal siphoning Apply Calculate the amount of glazing and storage needed for a passive solar systemLocate a dwelling for maximum solar gainDesign and install various passive solar systems | Chap. 25pp. 757-774 and chap.26 pp. 797-798 | Workbookchap. 25,pp. 155-158 | p. 775 Test,ques. # 1-10Practical activities | As above and a selection of passive solar drawings |
| 13 | 1,9 | LectureLab | 13 | ***Remodelling, renovating and repairing***Identify Different types of residential construction by visual inspectionBearing wallsAccepted methods in replacing all types of doorsDescribe Proper sequence of renovations or repairRepair and replace deteriorated components and systemsHow to remove parts of a structure without damaging the total structureDetermine loads and calculate the correct header size for a spanApplyInstall and support headers, concealed headers and saddle beamsMake repairs to wood and asphalt shingles | Chap. 26pp. 777-801 | Workbook chap. 26,pp. 159-162 | p. 801 Test,ques. # 1-15Practical activities | As above and various demolition tools both hand and light power tools |
| 14 | 1,10 | LectureLab | 13 | ***Building decks and porches***Identify Different types of decks and porchesAdvantages and disadvantages of different structural and decking materialsDifferences between deck and porch constructionApply Select and install the appropriate types of fasteners for deck constructionPrepare a site, layout and construct a deck | Chap. 27pp. 803-819 | Workbookchap. 27,pp. 163-164 | p. 819 Test, ques. # 1-10Practical activities | As above and various decking materials and fasteners used for decks and porches including composites |
| 15 | 1,2,3,4,5,6,7,8,9,10 | Lecture / lab | 4 | ***Building project completion***Complete term project work and all practical activities |  |  | Practical activities***Final test*** |  |
| 16 | 1,2,3,4,5,6,7,8,9,10 | Lecture | 4 | ***Review***; take up and discuss final test / assignments / practical activities / sharing and feedback |  |  |  |  |