

BIKANER TECHNICAL UNIVERSITY, BIKANER



SYLLABUS OF B. DESIGN.

INTERIOR DESIGN

Effective from session 2020-21

SYLLABUS
III Semester
B.Design: Interior Design

Subject: Introduction to Marketing

Credit: 02
2L+0T+0P

Max. Marks: 100 (IA: 20, ETE: 80)
End Term Exam: 2 Hours

S.No.	Contents	Hours
1.	Unit 1: Introduction: Nature, scope and importance of marketing; Evolution of marketing; Selling vs Marketing; Marketing mix, Marketing environment: concept, importance, and components (Economic, Demographic, Technological, Natural, Socio-Cultural and Legal). Market segmentation: concept, importance and bases; Target market selection; Positioning concept, importance and bases; Product differentiation vs. market segmentation.	8
2.	Unit 2: Product: Concept and importance, Product classifications; Concept of product mix; Branding, packaging and labeling; Product-Support Services; Product life-cycle; New Product Development Process; Consumer adoption process	8
3.	Unit 3: Pricing: Significance. Factors affecting price of a product. Pricing policies and strategies. Distribution Channels and Physical Distribution: Channels of distribution - meaning and importance; Types of distribution channels; Functions of middle man; Factors affecting choice of distribution channel; Wholesaling and retailing; Types of Retailers; e-tailing, Physical Distribution.	8
	Total	24

Course Objectives:

- The objective of this course is to provide basic knowledge of concepts, principles, tools and techniques of marketing.

SUGGESTED BOOKS:

1. Kotler, Philip, Gary Armstrong, Prafulla Agnihotri and Ehsanul Haque. Principles of Marketing. 13th edition. Pearson Education.
2. Michael, J. Etzel, Bruce J. Walker, William J Stanton and Ajay Pandit. Marketing: Concepts and Cases. (Special Indian Edition)., McGraw Hill Education
3. William D. Perreault, and McCarthy, E. Jerome., Basic Marketing. Pearson Education.
4. Majaro, Simon. The Essence of Marketing. Pearson Education, New Delhi.
5. The Consumer Protection Act 1986.
6. Iacobucci and Kapoor, Marketing Management: A South Asian Perspective. Cengage Learning.
7. Dhruv Grewal, Michael Levy, Marketing, McGraw Hill Education.
8. Chhabra, T.N., and S. K. Grover. Marketing Management. Fourth Edition. Dhanpat Rai & Company.
9. Neeru Kapoor, Principles of Marketing, PHI Learning
10. Rajendra Maheshwari, Principles of Marketing, International Book House

Dr. Heelan

Pooja Gaur

Mohyaz Gaur

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III Semester
B. Design : Interior Design
Subject: INTRODUCTION TO HISTORY OF ARCHITECTURE

Credit: 02
2L+0T+0P

Max. Marks: 100 (IA: 20, ETE: 80)
End Term Exam: 2 Hours

S.No.	Contents	Hours
1	UNIT-1 Indus Valley Civilization & Mughal Architecture <ul style="list-style-type: none"> • Introduction to the Unit • Discovery and Historic excavations, Chronology, background, planning of town and cities, lifestyle, art and culture, Terracotta figurines, etc. • Development of Mughal style under the different rules covering important mosque, tombs, forts with their typical example and salient features. • Conclusion & Summary of the unit. 	4
2	UNIT-2 Buddhist, Jain and Islamic Architecture <ul style="list-style-type: none"> • Introduction to the Unit • Development characteristic features, stupa, Buddhist order, ashoka pillar, chaitya, rock cut architecture, viharas etc. Jain architecture. Influence on Islamic architecture, salient features of Islamic mosque, development of imperial style by king of slave dynasty and provincial style in different regions typical example and characteristic features. • Conclusion & Summary of the unit. 	4
3	UNIT -3 Egyptian architecture <ul style="list-style-type: none"> • Introduction to the Unit • Study of evolution of design concept, philosophy, construction techniques, materials and structural solution with the help of selected examples with reference to social cultural, geographical political and climate of place and period. • Conclusion & Summary of the unit. 	4
4	UNIT -4 Greek and Roman architecture <ul style="list-style-type: none"> • Introduction to the Unit • Study of construction techniques, materials, and structural system in Greek architecture (Arches, Vaults, flying buttresses, pinnacles etc.) • Design evolution planning principles and structural details of Romanesque architecture. Study of the orders, temples etc. • Conclusion & Summary of the unit. 	6
5	UNIT 5 Early Christian, Romanesque, Byzantine and Gothic Architecture <ul style="list-style-type: none"> • Introduction to the Unit • Study of evolution of design concept, philosophy, construction techniques, materials and structural Solution with the help of selected examples with reference to social cultural, geographical political and climate of place and period. • Conclusion & Summary of the unit. 	6
Total		24

Course Objectives:

- To develop understanding of architecture as society's primary response to simple needs and problems related to shelter a complete problems related to natural and manmade environment both in qualitative and quantities terms, also to understand evolution of Architectural styles' as response to prevalent socio-cultural, technological and intellectual complexities of societies.

SUGGESTED REFERENCE BOOKS:

- Modern Architecture: A Critical History – Frampton K
- The great ages of world architecture - G.K. Hiraskar

Dr. Neelam

Prashee Gaur

Mahesh Gaur

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SYLLABUS
III Semester
B. Design : Interior Design
Subject: INTERIOR MATERIAL STUDY - I

Credit: 02
2L+0T+0P

Max. Marks: 100 (IA: 20, ETE: 80)
End Term Exam: 2 Hours

S.No.	Contents	Hours
1	UNIT-1 Bricks Introduction to the Unit Comparison of brickwork and stone work, Composition of good brick earth-Alumina, Silica, Lime, Oxide of iron, Magnesia Harmful ingredients in brick earth-Lime, Iron pyrites, Alkaline, Pebbles, Vegetation and organic matter, etc. Classification of brick earth-Loamy, mild or sandy clay, Marls, chalky or calcareous clay, Plastic, strong or pure clay, etc. Manufacture of bricks, Qualities of good bricks, Properties of bricks, Shape of bricks, tests, classification, uses etc. Conclusion & Summary of the unit.	04
2	UNIT-2 Rocks Introduction to the Unit General introduction of rocks Classification of rocks: Geological classification, Physical classification, Chemical classification, Sources of stones. Rock-forming minerals: Igneous rocks, Sedimentary rocks Texture or structure of rock, Conclusion & Summary of the unit.	05
3	UNIT -3 Stone Introduction to the Unit Uses of stones Tests of stones Qualities of a good building stone, stone quarrying, dressing of stone Deterioration, preservation of stones Artificial stones: Forms of artificial stones, Advantages of artificial stones Conclusion & Summary of the unit.	05
4	UNIT 4: Introduction to the Unit: Converted timber, Rough timber, Standing timber, Trees for life Classification of trees: Exogenous trees, Endogenous trees Structure of a tree: Macrostructure, Microstructure Conclusion & Summary of the unit.	05
5	UNIT 5 Timber Introduction to the Unit Defects in timber, Qualities, decay and preservation of timber, Advantages of timber construction, Uses of timber, Method of seasoning, Storage of timber Conclusion & Summary of the unit.	05
Total		24

Course Objectives:

- To understand the importance of materials used in interior spaces.
- To understand the characteristics of the materials being used in the interior design industry.
- It also includes the understanding of basic building materials in Interior spaces.

SUGGESTED REFERENCE BOOKS:

- Engineering Materials – S.C. Rangwala
- Building Materials - P.C. Uarghese

Dr. Nalini

P. S. Chatterjee

Malayaj Gangwar

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SYLLABUS

III Semester

B.Design : Interior Design

Subject: BUILDING CONSTRUCTION - I

Credit: 02
0L+0T+4P

Max. Marks: 100 (IA: 60, ETE: 40)
End Term Exam: 2 Hours

S.No.	Contents	Hours
1	UNIT-1: Wooden walls, flooring and Roofing Introduction of unit Construction details of wood stud framing, wood post Types of wooden walls – structural and non-structural & beam framing and connections. Construction details of flooring of wood plank Types of wooden flooring systems & beam framing and wood decking Construction details of roofing of wood plank Types of wooden roofing - flat roof and pitched roofs. Conclusion and summary of unit.	8
2	UNIT-2: Wooden openings and Shutters Introduction of unit Door, window and ventilators – fixing of wooden frames, holdfast, horns, hinges, handles, locks etc. Conclusion and summary of unit.	8
3	UNIT -3: Bamboo Introduction of unit Construction details of Bamboo frame and joinery. Introduction to Bamboo construction systems. Conclusion and summary of unit.	8
4	UNIT 4: Foundation & Staircase Introduction of unit Construction of foundation and footings. DPC, Types of Staircase, Construction details of staircase. Conclusion and summary of unit.	12
5	UNIT 5: False Ceiling & Partitions Introduction of unit Typical details, various types of false ceiling, application of various types of materials in false ceiling. Conclusion and summary of unit.	12
Total		48

Course Objectives:

- To develop the understanding of the components of a building.
- To understand the technicalities of construction in interior spaces.
- To understand simple architectural forms.
- To study construction of different protective finishes in building design.

SUGGESTED REFERENCE BOOKS:

- Building construction- B.C.Punmia
- Building construction- S.C.Rangwala
- A Text Book of Building Construction- FRANCIS D. K. CHING
- Building Constructions (1to 4 vol.)- Mckay, W.B.
- A Text Book of Building Construction - S.P.Arora, S.P.Bindra

Dr. N. K. Nandan

Prashant Garg

Mahyag Garg

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SYLLABUS
III Semester
B. Design : Interior Design
Subject: MEASURE DRAWING

Credit: 02
0L+0T+4P

Max. Marks: 100 (IA: 60, ETE: 40)
End Term Exam: 3 Hour

S.No.	Contents	Hours
1	UNIT-I Introduction Introduction of unit Wood as a building material. Introducing the techniques of planning, chiseling & jointing in timber to learn the use of hand tools. Timber– characteristics of good timber, defects, and applications of timber like joints etc. Finishes in timber like flooring, paneling etc. Finishes to timber. Conclusion and summary of unit.	8
2	UNIT-2: The basics of Furniture Construction and Tools Introduction of unit Joints (eg. Tee-shaped joint, L-shaped joint, overlap joint, Tenon-mortice joint, halved joint, Cogge joint, Housed, notching joint, Notching joint, Bridal joint, Angle or corner joint. Measurement and measurement systems, Furniture Construction: Drawers, Cadenza, dining chairs, sofa, settee, cots detail. Preparation for finishing, Furniture Materials Specifying timber, finishes etc .) Conclusion and summary of unit.	20
3	UNIT-3: Plywood Construction Techniques Introduction of unit Plywood as a building material, Layout techniques and machining plans. Fabrication techniques - stapling, gluing. Furniture Joinery - screw joinery, nail joinery, Mortise & Tenon joints, Dovetail joints, Dowel joints, Edge joints. Conclusion and summary of unit.	20
Total		48

Course Objectives:

- To understand Simple Interior Architectural Forms.
- To understand Joinery and Construction Details Through Model Making.
- To understand prototyping through model making.

SUGGESTED REFERENCE BOOKS:

- Constructional Drawings & Architectural models – Jannsen, Karl Kramer Verlag Stuttgart
- The art of making furniture in miniature – Harry W. Smith
- Building construction Vol1 - W.B.Mckay

Dr. Neelam

Pankaj Kumar

Malay Gangwar

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SYLLABUS
III Semester
B. Design : Interior Design
Subject: MODEL MAKING

Credit: 02
0L+0T+4P

Max. Marks: 100 (IA: 60, ETE: 40)
End Term Exam: 3 Hour

S.No.	Contents	Hours
1	UNIT-1: Wooden floors and wall Paneling Introduction of unit Introduction to Types of floors, openings, staircases, roof forms etc., their characteristics, Properties and construction. Conclusion and summary of unit	4
2	UNIT-2: Furniture Model Making Exercise involving the design of simple furniture and making a model of the same. Preparation of block models of furniture using materials like wood, boards, leather, fabric, thermacol, clay, soap/wax etc.	14
3	UNIT- 3: Analysis Objective analysis of activities and spaces in a given predominant function. Its representation in graphic form. Design exercise evolving out of single functions such as ticket counters/reception offices, security offices, Kiosks, booths, Information cells etc.	15
4	UNIT-4: Design Problem One design problem to concentrate on comprehensive graphic representation to form a prelude to measure drawing. Measure drawing camp to include study of a building/group of buildings/settlements of architectural importance, involving detailed drawings, constructional details, material used to give due importance to the given context.	15
	Total	48

Course Objectives:

- To understand Simple Interior Architectural Forms.
- To understand Joinery and Construction Details Through Model Making.
- To understand prototyping through model making.

SUGGESTED REFERENCE BOOKS:

- Constructional Drawings & Architectural models – Jannsen, Karl Kramer Verlag Stuttgart
- The art of making furniture in miniature – Harry W. Smith
- Building construction Voll - W.B.Mckay

Handwritten signature: Dr. Veeran

Handwritten signature: Prashant

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SYLLABUS III Semester

B. Design: Interior design

Subject: GRAPHIC STUDY IN INTERIOR DESIGN I

Credit: 01
0L+0T+2P

Max. Marks: 50 (IA: 30, ETE: 20)
End Term Exam: 1 Hour

S.No.	Contents	Hours
1	UNIT-I Object and Nature Drawing Introduction of unit Introduction to drawing/ sketching tools (pencil grades, scales, etc.) and techniques. Implementation of drawing techniques. Outline sketching of basic objects, geometric shapes, still life with mediums like pencil (graphite, derwent, glass marking, color pencil, sketch pen, uniball pen, dry pastels, etc.) and charcoal (elementary). Outline and detailed sketches with dry and /or wet mediums. Conclusion and summary of unit.	4
2	UNIT-2: Rendering Techniques and Indoor sketching – furniture Introduction of unit Pencil and Pen render & texture techniques and application understanding. All material rendering (eg. Fabric, wood, ceramic, paper, plastics etc.) Furniture sketches with basic outline work of varied types – chair, table, wardrobe, bed, etc. Conclusion and summary of unit.	6
3	UNIT-3: Light and Shade Introduction of unit Study of light and shade with reference to objects, buildings etc. Study of skiagraphy. Conclusion and summary of unit.	6
4	UNIT-4: Composition 2D and 3D composition in Various Colour Mediums, Textures. 3 D Compositions in Plaster Of Paris, Clay, Paper, Cardboard, Etc.	6
5	UNIT-5: Anthropometry Sketching of anthros in different postures, in accordance with scale and proportion of surroundings.	2
Total		24

Course Objectives:

Development of Graphic Skills, Ability and Comprehension.
 Establishing Significance of Art in design

SUGGESTED REFERENCE BOOKS:

- Rendering with pen & ink - Robert W. Gill,
- A Foundation Course in Drawing: A Complete Program of Techniques and Skills - Peter Stayner& Terry Rosenberg
- Color theory: An essential guide to color - Walter Foster Publishing.

Dr. Heelan

Prasanna Kumar

Meloy Kumar

SYLLABUS
III Semester
B.Design : Interior Design
Subject: COMPUTER APPLICATIONS-I

Credit: 01
0L+0T+2P

Max. Marks: 50 (IA: 30, ETE: 20)
End Term Exam: 1 Hour

S.No.	Contents	Hours
1	UNIT-1 Introduction AutoCAD Introduction / Course Outline, Drafting Techniques Properly set-up drawings, Floor Plans & Elevations, Menu Tools	12
2	UNIT-2 Edit Documents, Standard CAD conventions, Create blocks Insert Dimensions, Creating & Saving Files, Set-up, To use folders Printing / plotting commands, Organize Files, File Formats – Industry Standards	12
	Total	24

Course Objectives:

To introduce students to computer aided drafting.
To learn how to produce floor plans and elevations for a residential setting.

SUGGESTED REFERENCE BOOKS:

- Residential Interior Design by Maureen Mitton & Courtney Nystuen


Dr. Neelam







SYLLABUS
III Semester
B.Design : Interior Design
Subject: PROJECT-I

Credit: 03
0L+0T+6P

Max. Marks 150 (IA: 90, ETE: 60)
End Term Exam: 3 Hours

S.No.	Contents	Hours
1.	Unit-1 : Empathize Selection of theme for design project Inspiration, mood, client, and colour board Doodling and explorations Category of garments, skills for design research,	5
2.	Unit 2: Define Define the client needs, target market, client profile, product details, and material details. Introduction to skills of interaction, communication.	30
3.	Unit 3: Ideation Research on design based on target client and market, doodling, details on specifications, detailing of design, making collection of designs for the product. Skills required are drawing, sketching, product anatomy, rendering, detailing, material rendering, product anthropology and ergonomics.	30
4.	Unit: 4 : Prototype Development of sample of the product. Production methods, machines involved, steps of production, quality standards, costing estimation.	5
5.	Unit: 5 : Test Feedback on the product, methods of marketing and promotion.	2
	Total	72

Course Objectives:

- Observe, analyze and apply the basic elements, principles and skills of visualization, presentation and actualization to, form and movements in context to space planning. .
- Develop an understanding of three dimensional representations and realization of space and planning and Present and communicate visually.

SUGGESTED BOOKS:

- Residential Interior Design by Maureen Mitton & Courtney Nystuen

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SYLLABUS
IV Semester
B. Design : Interior Design
Subject: INTERIOR MATERIAL STUDY - II

Credit: 02
2L+0T+0P

Max. Marks: 100 (IA: 20, ETE: 80)
End Term Exam: 2 Hours

S.No.	Contents	Hours
1	UNIT-1 Sand, Mud & Lime Introduction of unit Properties and characteristics of mud used for binding material in masonry Different forms of mud construction, Compressed Stabilized earth blocks (CSEB) Classification and types of lime- Quick & Process of making lime mortar for masonry Sources of lime and constituents of limestone, Slaking of quicklime, Conclusion and summary of unit.	6
2	UNIT-2 Cement & Coarse Aggregates Introduction of unit Mortars, concrete and RCC preparation, Conclusion and summary of unit.	6
3	UNIT -3 Plastic & Polymers Introduction of unit Composition, uses, properties etc. Polymerization, classification, resins, fabrication, properties, and uses of plastics. Conclusion and summary of unit.	4
4	UNIT – 4 Glass & Ceramic Introduction of unit Classification, composition, properties, types, manufacturing process, treatment of glass, varieties of glass etc. Conclusion and summary of unit	4
5	UNIT -5 Wood & it's Derivatives Introduction of unit Veneers, ply boards (advantages and disadvantages of ply boards), industrial timber, industrial form batten, baulk, board, deal, end, hog, plank, pole, quartering, scantling. Conclusion and summary of unit.	4
Total		24

Course Objectives:

- To understand the importance of materials used in interior spaces.
- To understand the characteristics of the materials being used in the interior design industry.
- It also includes the understanding of basic building materials in Interior spaces.

SUGGESTED REFERENCE BOOKS:

- Engineering Materials – S.C. Rangwala
- Building Materials - P.C. Uarghese
- Building Materials - S.K. Duggal

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Malya Gangwar

SYLLABUS

IV Semester

B. Design : Interior Design

Subject: HISTORY OF FURNITURE

Credit: 02
2L+0T+0P

Max. Marks: 100 (IA: 20, ETE: 80)
End Term Exam: 2 Hours

S.No.	Contents	Hours
1	UNIT- 1: Early Classical Periods Introduction of unit Prehistoric Cave paintings – Primitive Designs- Interiors during Egyptian, Greek, Roman, Gothic, Early Christian & Renaissance Periods. Conclusion and summary of unit.	5
2	UNIT-2: Middle Ages Introduction of unit Interiors in Romanesque, Gothic, and renaissance periods Conclusion and summary of unit.	5
3	UNIT-3: Colonial to the beginning of the 20 th Century Introduction of unit Colonial, Victorian designs, Arts & Crafts movement, Art-Nouveau, eclecticism, Frank Lloyd Wright. Conclusion and summary of unit.	5
4	UNIT-4: Bauhaus & post war modernism Introduction of unit Walter Gropius/ Bauhaus, De Stijl, Mies Van der Rohe, Le Corbusier, Art Deco, Postwar Modernism Conclusion and summary of unit.	5
5	UNIT-5: Projects Projects based on Historical Styles in Interiors & Assignments	4
	Total	24

Course Objectives:

- To develop understanding of social cultural, material and structural attributes, that shaped and architecture and interior architecture in different periods, also to study how interaction and communication with different cultures influenced and reshaped architecture and interior spaces of the world.
- To develop understanding of architecture as society's primary response to simple needs and problems related to shelter a complete problems related to natural and manmade environment both in qualitative and quantities terms, also to understand evolution of Architectural styles' as response to prevalent socio-cultural, technological and intellectual complexities of societies.

SUGGESTED REFERENCE BOOKS:

- Interior Design Course – Mary Gilliat Coyran
- Interior Design & Decoration - Sherril Whiton
- Interior Design - Francis D.K. Ching
- History of Architecture- Sir Banister Fletcher

Dr. Neelam

Prashant

Malay Gangwar

SYLLABUS
IV Semester
B. Design : Interior Design
Subject: INTERIOR FURNISHINGS

Credit: 02
0L+0T+4P

Max. Marks: 100 (IA: 60, ETE: 40)
End Term Exam: 3 Hours

S.No.	Contents	Hours
1	UNIT-1 Introduction to Textiles Introduction to the Unit Fabric, yarn and fiber structure, Fabric structure- woven- warp, weft, selvedge, knitted- course, non-woven, Fabric types and classification- woven, including plain, twill, satin, Jacquard, crepe and pile weaves, knitted- including single knit, double knit, tricot Knit, pile knit lace and net, non-woven-including felts webs and films, identification and properties of fabrics, yarns and fibers. Conclusion & Summary of the unit.	4
2	UNIT-2 Application of Elements, Principles & Colour on textiles Introduction to the Unit Application of elements and principles of design across a range of textiles. Describe and analyze elements and principles of design -furnishings, textile arts, non-apparel. Functional and aesthetic requirements and features of textile range. Fabric coloration and decoration- Principles of applying color to fabrics. Textile arts and crafts in interiors, traditional and modern materials and methods. Preparing samples on tie and die printing, batik printing, appliqué, macramé and braiding. Conclusion & Summary of the unit.	4
3	UNIT -3 Furnishings Introduction to the Unit Furnishings-classification, types of curtain, curtain construction, selection criteria relation to backgrounds in walls, floors and ceilings. Slip covers, cushion covers, bed linen and table linen Floor coverings -rugs and carpets, types selection, care and maintenance, installation of floor coverings Conclusion & Summary of the unit.	15
4	UNIT 4 Other Natural Materials Introduction to the Unit Jute or hessian – dyed jute fabric and its applications – various kinds of processed leather, its application in interior design. Conclusion & Summary of the unit	15
5	UNIT 5: Upholstery and Rugs Introduction to the Unit Study of upholstering furniture. Latest trends in the markets for furnishings. Study of carpets, rugs and durries. Conclusion & Summary of the unit.	10
	Total	48

Course Objectives:

- To develop the understanding of textiles in reference to interior spaces.
- To understand use of textiles in interior spaces.
- To understand the construction of carpets and related interior products.

SUGGESTED REFERENCE BOOKS:

- Steapat, D.D., (1971), Introduction to Home Furnishing, The Mac millon Co, New york.
- Anna.H.Rutt (1961); Home furnishing, John Wiley Eastern Pvt Ltd, Newyork.

Dr. Neelam

Prabeer Jain

Malyaj Gangwar

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SYLLABUS
IV Semester
B. Design : Interior Design
Subject: BUILDING SERVICES

Credit: 03
0L+0T+6P

Max. Marks: 150 (IA: 90, ETE: 60)
End Term Exam: 3 Hours

S.No.	Contents	Hours
1	UNIT- 1: Water Supply in Buildings Introduction to the Unit Introduction to Standard of portable water and methods of removal of impurities, Consumption or demand of water for domestic purposes, Service connection from mains, House-service design, types of pumps, cisterns for storage. Conclusion & Summary of the unit.	10
2	UNIT- 2: Building Drainage Introduction to the Unit Layout, Principles of drainage, Trap type, materials and functions, Inspection chambers, Design of Septic tanks and soak pits, Ventilation of house drains Anti- siphonage or vent pipes, One and two pipe systems Sinks, bath tub, water closets, flushing cisterns, urinals, wash basins, bidet, shower panel etc. Conclusion & Summary of the unit.	12
3	UNIT- 3: Plumbing Introduction to the Unit Common hand tools used for plumbing and their description and uses, Joints for various types of pipes, Sanitary fitting standards for public conveniences Different types of pipes and accessories for water supply, controlling fixtures like valves, taps, etc. Fittings and Choice of materials for piping: cast iron, steel, wrought iron, galvanized lead, copper, cement concrete and asbestos pipes, PVC pipes Sizes of pipes and taps for house drainage, testing drainage pipes for leakage - smoke test, water test etc., CI pipes for soil disposal and rain water drainage, Wrought iron, steel and brass pipes. Rain water disposal drainage pipes spouts, sizes of rainwater pipes. Conclusion & Summary of the unit.	20
4	UNIT- 4: Solid Waste Disposal Introduction to the Unit Solid wastes collection and removal from buildings. On-site processing and disposal methods. Aerobic and Anaerobic decomposition. Conclusion & Summary of the unit.	20
5	UNIT-5: Toilet Components Introduction to the Unit Components of a toilet & bathroom – sanitary ware - w.c, wash basin, bidet, bathtub, Jacuzzi etc. Sanitary fittings – taps, mixers, shower units. Conclusion & Summary of the unit.	10
Total		72

Course Objectives:

- To understand Simple Interior Architectural Forms.
- To understand Joinery and Construction Details Through Model Making.
- To understand prototyping through model making.
- To study water supply and sanitation in building design.
- To understand the importance and technicalities behind plumbing systems.

SUGGESTED REFERENCE BOOKS:

- Constructional Drawings & Architectural models – Jannsen, Karl Kramer Verlag Stuttgart
- The art of making furniture in miniature – Harry W. Smith
- Building construction Voll - W.B.Mckay
- Water supply and sanitary engineering - S.C. Rangwala
- Water supply and sanitary engineering - Charangith shah
- Environmental Engineering - A Kamala & DL Kanth Rao
- Environmental Engineering - Technical Teachers Training Institute (Madras)

Syllabus of B. Des. Interior Design Effective from 2020-21

Dr. Neelam

Prasanna Jain

Malya Jayasankar

SYLLABUS
IV Semester
B. Design : Interior Design
Subject: BUILDING CONSTRUCTION

Credit: 03
0L+0T+6P

Max. Marks: 150 (IA: 90, ETE: 60)
End Term Exam: 3 Hours

S.No.	Contents	Hours
1	UNIT-1 Introduction Introduction of unit Wood as a building material. Introducing the techniques of planning, chiseling & jointing in on timber to learn the use of hand tools. Timber– characteristics of good timber, defects, and applications of timber like joints etc. Finishes in timber like flooring, paneling etc. Finishes to timber. Conclusion and summary of unit.	5
2	UNIT-2: The basics of Furniture Construction and Tools Introduction of unit Joints (eg. Tee-shaped joint, L-shaped joint, overlap joint, Tenon-mortice joint, halved joint, Cogge joint, Housed, notching joint, Notching joint, Bridal joint, Angle or corner joint. Measurement and measurement systems, Furniture Construction: Drawers, Cadenza, dining chairs, sofa, settee, cots detail. Preparation for finishing, Furniture Materials Specifying timber, finishes etc .) Conclusion and summary of unit.	15
3	UNIT-3: Plywood Construction Techniques Introduction of unit Plywood as a building material, Layout techniques and machining plans. Fabrication techniques - stapling, gluing. Furniture Joinery - screw joinery, nail joinery, Mortise & Tenon joints, Dovetail joints, Dowel joints, Edge joints. Conclusion and summary of unit.	22
4	UNIT-4: Wooden floors and wall Paneling Introduction of unit Introduction to Types of floors, openings, staircases, roof forms etc., their characteristics, Properties and construction. Conclusion and summary of unit	20
5	UNIT-5: Furniture Model Making Exercise involving the design of simple furniture and making a model of the same. Preparation of block models of furniture using materials like wood, boards, leather, fabric, thermacol, clay, soap/wax etc.	10
Total		72

Course Objectives:

- To understand Simple Interior Architectural Forms.
- To understand Joinery and Construction Details Through Model Making.
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- Constructional Drawings & Architectural models – Janssen, Karl Kramer Verlag Stuttgart
- The art of making furniture in miniature – Harry W. Smith
- Building construction Voll - W.B.Mckay
- Water supply and sanitary engineering - S.C. Rangwala
- Water supply and sanitary engineering - Charangith shah
- Environmental Engineering - A Kamala & DL Kanth Rao
- Environmental Engineering - Technical Teachers Training Institute (Madras)

Syllabus of B. Des. Interior Design Effective from 2020-21

Dr. Neelam

Prabheer

Malyaj Gangwar

SYLLABUS
IV Semester
B. Design : Interior Design
Subject: COMPUTER APPLICATIONS -II

Credit: 01
0L+0T+2P

Max. Marks: 50 (IA: 30, ETE: 20)
End Term Exam: 2 Hours

S.No.	Contents	Hours
1	UNIT-I AutoCAD 3D Introduction of unit making of 3D Model, importing of model, rendering of 3D model Conclusion and summary of unit.	4
2	UNIT-2 3DS MAX Introduction of unit Development of views with application of software's rendering mechanisms. Conclusion and summary of unit.	10
3	UNIT-3 V Ray for 3DS MAX Final design project using the Auto CAD 3D and MAX tools	10
	Total	24

Course Objectives:

To introduce students to computer aided drafting.

To learn how to produce floor plans and elevations for a residential setting.

SUGGESTED REFERENCE BOOKS:

- Residential Interior Design by Maureen Mitton & Courtney Nystuen


Dr. Nalini


P. Anshu


Mahesh Gangwar



SYLLABUS
IV Semester
B. Design : Interior Design
Subject: GRAPHIC STUDY

Credit: 01
0L+0T+2P

Max. Marks: 50 (IA: 30, ETE: 20)
End Term Exam: 2 Hours

S.No.	Contents	Hours
1	UNIT-1: Three-dimensional drawing and sketches - II Introduction of unit Axonometric View- Interior views for living room, Toilet, Dining Room etc. Conclusion and summary of unit.	8
2	UNIT-2: One Point Perspective Introduction of unit One-point perspective – measured sketches with rendering. Conclusion and summary of unit.	8
3	UNIT-3: Two Point Perspective Introduction of unit Free hand sketching of Interior views for living room, Toilet, Dining Room etc. Measured sketching of Interior views for living room, Toilet, Dining Room etc. Conclusion and summary of unit.	8
	Total	24

Course Objectives:

To introduce students to computer aided drafting.

To learn how to produce floor plans and elevations for a residential setting.

SUGGESTED REFERENCE BOOKS:

- Residential Interior Design by Maureen Mitton & Courtney Nystuen

Prashant Gaur

Meloy Gangwar

Dr. N. B. B. B.

SYLLABUS
IV Semester
B.Design : Interior Design
Subject: PROJECT-II

Credit: 03
0L+0T+6P

Max. Marks: 150 (IA: 90, ETE: 60)
End Term Exam: 3 Hours

S.No.	Contents	Hours
1.	Unit-1 : Empathize Selection of theme for design project for a category in advance with previous semester Inspiration, mood, client, and colour board Doodling and explorations Category of garments, skills for design research,	12
2.	Unit 2: Define Define the client needs, target market, client profile, product details, and material details. Introduction to skills of interaction, communication.	20
3.	Unit 3: Ideation Research on design based on target client and market, doodling, details on specifications, detailing of design, making collection of designs for the product. Skills required are drawing, sketching, product anatomy, rendering, detailing, material rendering, product anthropology and ergonomics.	20
4.	Unit: 4 : Prototype Development of sample of the product. Production methods, machines involved, steps of production, quality standards, costing estimation.	10
5.	Unit: 5 : Test Feedback on the product, methods of marketing and promotion.	10
	Total	72

Course Objectives:

- Observe, analyze and apply the basic elements, principles and skills of visualization, presentation and actualization to, form and movements in context to space planning. .
- Develop an understanding of three dimensional representations and realization of space and planning and Present and communicate visually.

SUGGESTED BOOKS:

- Residential Interior Design by Maureen Mitton & Courtney Nystuen

Dr. Neelam

Prasanna

Malya Gangwar

