Maulana Abul Kalam Azad University of Technology, WB
(Formerly known as West Bengal University of Technology)
Proposed Syllabus for B.Sc. (Interior Designing)
Effective from academic session 2023-24

Semester 5

Course Name : Landscape Design

Mode: Offline **Credits: (3L+2P)**
SUB CODE: BID 501 & 591

Aim of the Course: To equip students with a comprehensive understanding of landscape design principles, historical context, and practical skills, enabling them to creatively and sustainably plan, design and visualize functional outdoor spaces that enhance both natural and built environments

Course Objectives:

- To develop an understanding about the importance of functionality and aesthetics of landscaping.
- To enhance knowledge about its planning, various plant types & care & maintenance.
- To become aware of the various materials related to landscaping.
- To communicate effectively in graphic, written, and verbal formats.
- To understand the relationship of the history and theory of landscape architecture.
- To acquire knowledge of the basic fundamentals of environmental design, particularly the implications of social and natural factors.
- To apply design principles in a range of sites and scales.

Sl. No.	Course Outcomes	Mapped Modules
CO1	Students will gain foundational knowledge of landscape design, including its history, key designers, and core elements like hardscapes, softscapes, materials, and plant selection, enabling them to conceptualize basic outdoor spaces effectively	M1
CO2	Students will understand and apply the fundamental elements and principles of landscape design, enabling them to create visually cohesive and well-balanced outdoor spaces.	M2
CO3	Students will be able to evaluate key environmental and site-specific factors—such as location, climate, topography, and soil—and apply a structured design process to develop functional and aesthetically appealing landscape plans.	M3
CO4	Students will learn to assess site-specific factors and follow systematic steps in developing effective and sustainable landscape design plans.	M4
CO5	Students will gain knowledge of various plant forms and types used in landscape design, including trees, shrubs, ground covers, and indoor plants. They will understand the aesthetic, functional, and ecological roles of each plant type and learn how to select and apply them effectively in different landscape contexts.	M5
CO6	Students will understand the spatial organization of landscape areas—foreground, private living, and service zones—and learn to design functional, well-structured outdoor environments that cater to both aesthetic and practical needs	M6

CO7	Students will learn to select and integrate appropriate outdoor furniture and lighting solutions to enhance functionality, comfort, and ambiance across different landscape zones, including foreground, private, and service areas	M7
CO8	Students will develop practical skills in creating landscape design drawings, including topographic interpretation, conceptual sketches, and detailed representations of landscape elements and structures.	M8

Learning Outcome/Skills:

- **Fundamental Understanding:** Grasp core concepts of landscape design, including its history, key architects, and foundational elements and principles.
- **Design Literacy:** Identify and apply essential design elements (color, line, form, texture, scale) and principles (unity, balance, proportion, rhythm, simplicity) to create harmonious outdoor spaces.
- **Site Analysis:** Evaluate site-specific factors such as location, climate, soil, topography, and water availability to inform sustainable and functional landscape planning.
- **Topographic Interpretation:** Read and interpret landforms and contour maps to visualize and integrate natural terrain into design concepts.
- **Plant Knowledge:** Recognize various plant forms and types, understanding their aesthetic and functional roles in landscape compositions.
- **Spatial Organization:** Understand and plan the spatial dimensions of landscapes, including foreground, private living, and service areas, for practical and aesthetic outcomes.
- **Outdoor Furnishings and Lighting:** Select and integrate appropriate furniture and lighting solutions to enhance usability, comfort, and ambiance in different landscape zones.
- **Technical Drawing Skills:** Develop practical abilities in landscape drawing, including conceptual sketches, topographic representation, use of design symbols, and creating detailed sectional elevations for effective communication of design ideas.

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Module Number	Content	Total Hours	% of questions	Bloom Level (applicable)	Remarks, if any
THEORY					
M1	Introduction to Landscape Designing	10	15	1, 2, 3	NA
M2	Fundamentals of Landscape design	10	20	1, 2, 3	NA
M3	Landscape Designing	5	20	1, 2, 3	NA
M4	Topographic Form & Design Technique	5	10	1, 2, 3	NA
M5	Plant Forms and Types	5	10	1, 2, 3	NA
M6	Dimensions of Landscape Space	5	10	1, 2, 3	NA
M7	Outdoor Furniture and Lighting	5	15	1, 3, 6	NA
Total Theory		45			
PRACTICAL					
M8	**Practical Project Work**	30			NA
TOTAL		75	100	-	

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Detailed Syllabus

Module 1- Introduction to Landscape Designing:

- What is landscape Design?
- Historical & Contextual References
- Architectural Landscape designers & their work.
- Hardscapes and Softscapes
- Materials, plants and furniture

Total Hours:10

Module 2- Fundamentals of Landscape design:

- Elements of Landscape Design (Color, Line, Form, Texture, Scale ,etc.)
- Principles of Landscape Design (Unity, Balance, Proportion, Rhythm, Repetition,Transition, Focalization, Simplicity, etc.)

Total Hours:10

Module3- Landscape Design:

- Factors Affecting Planning of Landscaping (Location & orientation, climatic conditions, land profile, soil type, water sources, drainage, elements & principles of design)
- Steps in Developing a Landscape Design.

Total Hours:5

Module 4-: Topographic Form & Design Technique:

- The interpretation of the shape and features of the surface of the Earth to enable visualization of designs and design ideas.

Total Hours:5

Module 5- Plant Forms and Types:

- Trees, plants, hedges, flowers, lawns, vines, creepers, Indoor plants, bonsai)

Total Hours:5

Module 6- Dimensions of Landscape Space:

- Foreground area (boundary, pathways, parking, arches, porch etc.)
- Private living area (recreational area, play area, outdoor seating etc.)
- The service area (cleaning area, drying area, garbage area, disposal, water supply, kitchen, garden)

Total Hours:5

Module 7- Outdoor Furniture and Lighting:

- Foreground area (boundary, pathways, parking, arches, porch etc.)
- Private living area (recreational area, play area, outdoor seating etc.)
- The service area (cleaning area, drying area, garbage area, disposal, water supply, kitchen, garden)

Total Hours:5

Module 8(Practical) - Practical Project Work:

- Sheetwork on Elements and Principles of Drawing
- Sheetwork on Topographic Forms
- Conceptual Drawings
- Symbols of Landscape Design
- Trees and Foliage, Pools, Fountains, Paving, Buildings, Roads and Sidewalks
- Drawings and Sectional Elevation.

Total Hours:30

References:

1. Bose T K, Tropical Garden Plants, Kolkata, Horticulture & Allied Publishers, 1991
2. Cedric Crocker, All About Landscaping, Ortho Books.
3. Faulkner R & Faulkner S, Inside Today's Home, New York, Holt Rinehart & Winston Inc., 1960
4. Hooguett Fickle, The Garden, The Netherlands, Rebo Production, Lisse 1977
5. Learner J M, The Complete Home Landscape Designer.
6. Trivedi, P &Chawdhury B, Home Gardening, New Delhi, India, Council of Agricultural Research, 1983
7. The Fundamentals of Landscape Architecture 2nd Edition by Tim Waterman (Author)

Websites: https://www.curbed.com/2016/5/23/11700166/landscape-garden-design-101

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Syllabus of B.Sc. (Interior Designing)
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Course Name : Model Making

Mode: Offline
SUB CODE: BID502 & 592
Credits:(3L+2P)

Aim of the Course: To enable students to learn how to create accurate, scaled physical models that effectively represent interior spaces and design ideas. It helps in visualizing concepts, improving spatial understanding, and communicating designs clearly to clients and stakeholders. The course also develops creativity, precision, and problem-solving skills essential for successful interior design projects

Course Objectives:

- Develop practical skills in designing in 3 Dimensions, exploring relationships between form and space.
- Develop making skills and understanding of various model making materials, suitable applications and representations for visual interpretations of buildings, interiors and products.
- Develop an understanding of the function of space through 3 dimensional interpretations of structure and form.
- Develop critical design thinking and evaluative processes in relation to desired objectives and design Realization.
- Develop action planning skills for future learning.

Sl. No.	Course Outcomes	Mapped Modules
CO1	Students will understand the role of model making in interior design, identify different types of models and select appropriate ones for design phases and gain familiarity with basic tools and materials safely.	M1
CO2	Students will be able to identify and draw various basic geometric shapes and apply surface development techniques to create accurate 3D models. They will also gain practical skills in paper cutting and model assembly using flaps and edge-to-edge joining methods.	M2
CO3	Students will learn to analyze and break down moderately complex objects into basic 3D shapes for model-making. They will develop skills in composing and constructing accurate 3D models using fundamental geometric forms.	M3
CO4	Students will learn to create scaled furniture models that complement interior space models and use materials creatively to suggest textures and finishes.	M4
CO5	Students will understand various types of circulation through the design and development of a functional maze. They will enhance spatial planning and model-making skills using sunboard and analyze light and shadow by documenting the model at different times of the day.	M5
CO6	Students will understand the role of lighting in enhancing model presentation and add detail and realism by including accessories and lighting.	M6

CO7	Students will develop presentation skills and confidence in showcasing design models.	M7
CO8	Students will develop practical skills in creating interior design drawings and detailed model making	M8

Learning Outcome/Skills:

- **Understand the significance of scale models** in communicating and developing interior design concepts.

- **Translate 2D plans into 3D physical models** with precision, proportion, and aesthetic appeal.

- **Select and manipulate a wide range of materials** to represent real-life interior elements effectively.

- **Apply creative thinking** to visually and physically express furniture, materials, textures, lighting, and accessories.

- **Present and document models professionally**, including photography, layout, and verbal presentation

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Module Number	Content	Total Hours	% of questions	Bloom Level(applicable)	Remarks, if any
THEORY					
M1	Introduction to Model Making	5	15	1, 2, 3	NA
M2	Basic shapes by using surface development skill (like cube, cone, sphere etc.)	10	20	1, 2, 3	NA
M3	3d composition using basic shapes	5	20	1, 2, 3 , 4, 5	NA
M4	Furniture and Fixtures Modeling	5	10	2, 3 , 4 , 5	NA
M5	Maze design	5	10	2, 3 , 4 , 5 , 6	NA
M6	Lighting and Accessories in Models	5	10	1, 2, 3 , 6	NA
M7	Presentation and Evaluation of Models	10	15	2, 3, 4, 6	NA
PRACTICAL					
M8	**Practical Final Project**	30			NA
TOTAL		75	100	-	

Detailed Syllabus

Module 1- Introduction to Model Making:

- Definition and importance of model making in interior design
- Types of models: Conceptual, presentation, working, and prototype models
- Materials and tools overview
- Understanding scale in interior design (1:50, 1:25, 1:20, etc.)
- Converting real measurements to scale

Total Hours:5

Module 2- Basic shapes by using surface development skill (like cube, cone, sphere etc.)

- Identification of different shapes
- Draw as per requirement
- Surface development
- Knowing different paper cutting techniques
- Using flaps/edge to edge joining technique

Total Hours:10

Module 3- 3d composition using basic shapes

- Identifying an object with complex structures
- Dividing a structure into various basic shapes
- Making a model using those shapes

Total Hours:5

Module 4-: Furniture and Fixtures Modeling:

- Representing furniture and fixtures in scale
- Simplification vs. detailed modeling
- Use of materials to represent different textures

Total Hours:5

Module 5- Maze design

- Design a maze which help to understand different types of circulation
- Make the model of the same by using sun board
- Photograph it in different time of the day.

Total Hours:5

Module 6- Lighting and Accessories in Models:

- Basics of lighting in interior spaces
- Incorporating lighting elements in models (LEDs, fiber optics)
- Modeling accessories for enhanced presentation

Total Hours:5

Module 7- Presentation and Evaluation of Models:

- Techniques for presenting models professionally
- Photography and documentation of models

Total Hours:10

Module 8(Practical) - Practical Final Project:

- Client Brief
- Concept Board
- Mood Board
- Civil Plan
- Flooring Layout
- Furniture Plan
- Elevation
- Create a complete interior design model of a given space (e.g., living room, office space, retail store) incorporating furniture, materials, lighting, and finishes.
- Prepare a presentation including drawings, materials explanation, and model photos.

Total Hours:30

References:

https://www.arch2o.com/architectural-model-complete-guide/ http://www.modelmakers-uk.co.uk/students-advice http://www.instructables.com/id/How-to-make-an-Architectural-Model-by-hands/

Books:

Architectural Model Building: Tools, Techniques, and Materials 1st Edition by Roark T. Congdon (Author) - ISBN-13: 978-1563677731
Model Making (Architecture Briefs) 1st Edition by Megan Werner (Author) - ISBN-13: 978-1568988702

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Course Name: Professional Industry Internship (SESSIONAL)

Mode: Offline

SUB CODE: SEC581 **Credits: 4**

Aim of the Course: To provide students with real-world exposure to the professional design environment, enabling them to apply academic knowledge and creative skills in practical settings. The internship bridges the gap between classroom learning and industry practices, fostering a deeper understanding of client interaction, design development, project execution, teamwork, and professional ethics.

Course Objectives:

- To enable the students to get first hand practical industry training experience.
- To gain practical industry training from skill industry professionals.
- To allow students to be able to integrate the theoretical knowledge into practical situation.
- To develop students ability in industry working practices and conditions.
- To develop students documentation and written skills in terms of report writing.
- To develop written presentation skills in the form of a case study document.
- To develop students practical design skills in the contexts of industry based projects.
- To develop skills and experience in working within industry constraints.
- To develop professional industry practice design skills.

Sl. No.	Course Outcomes	Mapped Modules
CO1	Students will gain practical exposure to real-world interior design practices, applying academic knowledge to live projects. They will develop technical skills, professional communication, and an understanding of project execution in a studio or site environment.	M1
CO2	Students will be able to effectively document and reflect on their internship experience, demonstrating their learning, contributions, and professional growth through a structured report.	M2

Learning Outcome/Skills:

By the end of the internship, students will be able to:

- Understand the workflow and operations of a professional interior design practice.
- Apply design principles and software skills to real-time projects and client requirements.
- Participate in project stages such as conceptualization, drafting, material selection, and site execution.
- Communicate effectively with clients, team members, and vendors in a professional setting.
- Reflect critically on professional experiences through reports, logs, and portfolio documentation.
- Demonstrate professionalism, time management, and adaptability in a design studio or on-site environment.

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Module Number	Content	Total Hours	% of questions	Bloom Level(applicable)	Remarks, if any
M1	Introduction to Professional Practices in the Creative Industries	15	-	1,2,3,4,5,6	NA
M2	Industry Internship Planning and Documentation	10	-	1,2,3,4,5	NA
M3	Industry-Linked Live Projects	15	-	1,2,3,4,5	NA
M4	Portfolio Development and Technical Skills	10	-	1,2,3,4	NA
M5	Final Internship Report	10	-	1,2,3,4,5,6	NA
	TOTAL	60	100	-	

Detailed Syllabus

Duration: A professional industry practical Internship at an Interior Design or Architectural Firm or Real Estate/ Promoters / Construction Firm or Furniture Design Unit.Students to work on a given practical design project or project sections within professional constraints and contexts as set by the firm. Students will follow a design process to industry standards and produce a full interior design project (or part of varied design projects) with supporting research, photos and written information and diary/planner recording the full internship and project development.

Module 1: Introduction to Professional Practices in the Creative Industries

- Understanding the structure and functioning of the design industry.
- Roles and responsibilities of a designer within a professional environment.
- Workplace ethics, communication, and teamwork in industry settings.
- Career exploration and preparation for internship placement

Total Hours: 15

Module 2: Industry Internship Planning and Documentation

- Research and identification of suitable industry placements.
- Preparation of resumes, portfolios, and interview skills.
- Securing internships through professional correspondence.
- Documentation of internship objectives, goals, and expectations

Total Hours: 10

Module 3: Industry-Linked Live Projects

- Working on live industry briefs aligned with student specialization.
- Development of concepts through research, brand analysis, and ideation.
- Creative execution of design solutions for real-world applications.
- Incorporation of industry feedback and iterative development

Total Hours: 15

Module 4: Portfolio Development and Technical Skills

- 2D portfolio creation: research, design development, and final presentation.
- Application of drawing, CAD, and other digital tools for design execution.
- Presentation of projects reflecting internship experience and brand alignment.
- Development of a cohesive and professional design portfolio

Total Hours: 10

Module 5 -Submission Requirements:

- Final Internship Report (min. 15 pages including images/sketches)
- Offer Letter/Joining Letter
- Attendance Sheet signed by mentor
- Employer Feedback/Evaluation Form
- Completion certificate/Work experience letter

Total Hours:10