

THIRUVALLUVAR UNIVERSITY
BACHELOR OF SCIENCE
B.Sc., INTERIOR DESIGN AND DECOR
(With effect from 2022 - 2023)

The Course of Study and the Scheme of Examinations

S. No.	Part	Study Components		Ins. Hrs / week	Credit	Title of the Paper	Maximum Marks		
		Course Title					CIA	Uni. Exam	Total
SEMESTER I									
1.	I	Language	Paper-1	6	4	Tamil/Other Languages	25	75	100
2.	II	English (CE)	Paper-1	6	4	Communicative English I	25	75	100
3.	III	Core Theory	Paper-1	6	4	Design Basics	25	75	100
	III	Core Practical	Practical-1	3	0	Design Basics Practical	0	0	0
4.	III	Allied -1	Paper-1	4	3	Applied Arts on Textiles-I	25	75	100
	III	Allied- 1	Practical-1	3	0	Applied Arts on Textiles practical	0	0	0
5.	III	PE	Paper 1	6	3	Professional English I	25	75	100
6.	IV	Environmental Studies		2	2	Environmental studies	25	75	100
		Sem. Total		36	20		150	450	600
SEMESTER II									
7.	I	Language	Paper-2	6	4	Tamil/Other Languages	25	75	100
8.	II	English (CE)	Paper-2	4	4	Communicative English II	25	75	100
9.	III	Core Theory	Paper-2	4	4	Colour and Lighting	25	75	100
10.	III	Core Practical	Practical-1	3	2	Design Basics Practical	25	75	100
11.	III	Allied-1	Paper-2	4	3	Applied Arts on Textiles-II	25	75	100
12.	III	Allied Practical - 1	Practical-1	3	2	Applied Arts on Textiles Practical	25	75	100
13.	III	PE	Paper 1	6	3	Professional English II	25	75	100
14.	II	NMSDC I : Language Proficiency for Employability	Paper-1	2	2	Effective English	25	75	100
15.	IV	Value Education		2	2	Value Education	25	75	100
16.	IV	Soft Skill		2	1	Soft Skill	25	75	100
		Sem. Total		36	27		250	750	1000
SEMESTER III									
17.	I	Language	Paper-3	6	4	Tamil/Other Languages	25	75	100
18.	II	English	Paper-3	6	4	English	25	75	100
19.	III	Core Theory	Paper-3	4	4	Computer Aided Design - I	25	75	100
	III	Core Practical	Practical-2	3	0	Computer Aided Design	0	0	0

						practical			
20.	III	Allied-2	Paper-3	4	3	Interior Design Studio and Building system Technology-I	25	75	100
	III	Allied Practical - 2	Practical-2	3	0	Interior Design Studio Practical	0	0	0
21.	IV	Skill Based Subject	Paper-1	2	2	Draftsmanship	25	75	100
22.	IV	Non-Major Elective	Paper-1	2	2	Basics of Interior Design-I	25	75	100
		Sem. Total		30	19		150	450	600
SEMESTER IV									
							CIA	Uni. Exam	Total
23.	I	Language	Paper-4	6	4	Tamil/Other Languages	25	75	100
24.	II	English	Paper-4	6	4	English	25	75	100
25.	III	Core Theory	Paper-4	4	4	Planning the life space	25	75	100
26.	III	Core Practical	Practical-2	3	3	Computer Aided Design practical	25	75	100
27.	III	Allied-2	Paper-4	4	3	Interior Design studio and Building system Technology-II	25	75	100
28.	III	Allied Practical - 2	Practical-2	3	2	Interior Design Studio Practical	25	75	100
29.	IV	NMSE III : Digital Skills for Employability	Paper-2	2	2	Office Fundamentals	25	75	100
30.	IV	Non-Major Elective	Paper-2	2	2	Basics of Interior Design-II	25	75	100
		Sem. Total		30	24		200	600	800
SEMESTER V									
31.	III	Core Theory	Paper-5	4	4	Furniture in Interiors	25	75	100
	III	Core Practical	Practical-3	3	0	Furniture and Furnishings Practical	0	0	0
32.	III	Core Theory	Paper-6	4	4	Computer Aided Design- II	25	75	100
	III	Core Practical	Practical-4	3	0	Google Sketch Up practical	0	0	0
33.	III	Core Theory	Paper-7	4	4	Floriculture and Landscaping	25	75	100
	III	Core Practical	Practical-5	3	0	Floriculture and Landscaping Practical	0	0	0
34.	III	Core Theory	Paper-8	4	4	Fundamentals of Architecture	25	75	100
35.	III	Internal Elective	Paper-1	3	3	(to choose 1 out of 3) A. Consumer and Merchandising B. Kitchen Design C. House Keeping and Front Office	25	75	100

						Management			
36.	IV	Skill Based Subject	Paper-3	2	2	Residential space designing	25	75	100
		Sem. Total		30	21		150	450	600
SEMESTER VI									
37.	III	Core Theory	Paper-9	3	3	Soft Furnishings	25	75	100
38.	III	Core Theory	Paper-10	3	3	Applied Arts	25	75	100
39.	III	Core Theory	Paper-11	2	2	Commercial Space Designing	25	75	100
40.	III	Core Practical	Practical-3	3	3	Furniture and Furnishing Practical	25	75	100
41.	III	Core Practical	Practical-4	3	3	Google Sketch up practical	25	75	100
42.	III	Core Practical	Practical-5	3	3	Floriculture and Landscaping Practical	25	75	100
43.	III	Compulsory Project	Project	5	5	Individual / Group Project	25	75	100
44.	III	Internal Elective	Paper-2	3	3	(to choose 1 out of 3) A. Professional Practice B. Environment control in Interiors C. Fine - Arts Drawing and Painting	25	75	100
45.	III	Internal Elective	Paper-3	3	3	(to choose 1 out of 3) A. Ergonomics B. Green Building Technology C. Entrepreneurial Development	25	75	100
46.	IV	Skill based paper	Paper-3	2	2	Commercial Space Designing			
47.	V	Extension Activities		0	1		100	0	100
48.		NMSE III : Employability Readiness		0	0	(to choose 1 out of 3) A. Naandi B. Unnati C. Quest D. Izapy E. IBM Skillsbuild	--	--	--
		Sem. Total		30	31		325	675	1000
		Grand Total			142				4600

THIRUVALLUVAR UNIVERSITY, VELLORE – 632 115
B.Sc., INTERIOR DESIGN AND DECOR - 2022-2023 onwards

The following details should be given before syllabus of each programme (UG & PG degree)

Programme Objectives: (5 Points Compulsory)

1. Prepare students for higher studies and assisting in their bright career.
2. Expose the students to different developments showed in industries.
3. Develop their ability to apply the knowledge of design principles in day-to-day life.
4. Exhibit the ability, behavioural skills required for successful social adaptation, work in groups, apply knowledge and ideas effectively in writing and verbally.
5. Acquire the ability in independent and life-long learning in the broadest context of socio-technological changes.

Programme Educational Objectives: (5 Points Compulsory)

1. Assist value-based holistic and comprehensive learning by integrating traditional and innovative learning practices to match the standards in their career.
2. Train students with appropriate skills required to adapt better to the ever-changing global scenario and gain access to versatile career opportunities in multidisciplinary domains.
3. Provide a conducive environment to set free their hidden talents, nurture the spirit of critical thinking and encourage them towards higher education.
4. The skills of observations and drawing logical inferences from the space planning.
5. Improve communication and management skills, especially in providing product design.

Programme Specific Outcomes: (10 Points Compulsory)

1. Acquires comprehensive knowledge of the principles of design, elements of art principles, Furniture and Furnishings, Computer Aided Design, Residential space planning, and Fine - Arts Drawing and Painting.
2. Demonstrates an understanding of the application of the art principles of design, textiles, Floriculture, and landscaping.
3. Develop skills to plan, prepare the space in an efficient way to an individual and commercial place.
4. Develop skills to participate productively in consumer and merchandising, house keeping and front office management and Entrepreneurship skills.
5. Demonstrate the ability to use technology (ICT tools) effectively for communication and professional purposes in the field of Interior design studio and building system technology, planning the life space, Draftsman ship and Google SketchUp.
6. Use critical thinking, creativity, and communication skills to educate community on the recommended modifications in the Ergonomics and Green building technology.
7. Display competence to serve as an interior designer, academicians who can recognize and redefine the space related problems that address the global environment by using green materials appropriately.

8. Apply practical skills in various aspects like principles of design, Lighting and Accessories, Floriculture, Fine arts, Furniture, surface finishes and furnishings in Interiors.
9. Explore their original and creative skills through various medium and technologies in Considering the role of art making in the larger social context.
10. Involve, communicate, and engage in professional practice in utilizing resources properly and develop entrepreneurship skills.

Programme Outcomes: (10 Points Compulsory)

On completion of the Programme, the learner is able to:

1. A strong understanding of basic concepts of design principles to an advanced level.
2. Capacity to identify, analyze and design space to provide efficient solutions by interpretation of data.
3. Perfect gain insight into an interior design field for production of quality.
4. Make them able to express ideas persuasively in written and oral form to develop their leadership qualities.
5. Apply appropriate knowledge and modern tools of software for solving problems.
6. Demonstrate professional and ethical attitude with enormous responsibility to serve the society.
7. Compilation and interpretation of interiors data using computer software.
8. Demonstrate, solve and an understanding of major concepts in all disciplines of Interior Design.
9. Train students in professional skills related to Software Industry.
10. Develop interdisciplinary approach among the students.

THIRUVALLUVAR UNIVERSITY, VELLORE – 632 115
B.Sc., INTERIOR DESIGN AND DÉCOR – 2022-2023 onwards

Semester: I

Paper type: Core Theory

Paper code:

Name of the Paper: Design Basics

Credit: 4

Total Hours per Week: 6

Lecture Hours: 90

Tutorial Hours: 90

Practical Hours: -

Course Objectives:

To enable the students to

1. Identify the design types.
2. Understand the elements and principles of design.
3. Learn the importance of art elements in the creation of new design.
4. Learn the application of principles of design in creating beautiful interiors.
5. Develop design motifs and apply in interiors.

Course Outcomes: (five outcomes for each unit should be mentioned)

1. After studied unit-1, the student will be able to Identify artistically appealing interiors as a designer.
2. After studied unit-2, the student will be able to Create objects with good design.
3. After studied unit-3, the student will be able to Apply the various elements of design in producing an interior.
4. After studied unit-4, the student will be able to Using the elements and principles knowledge to interiors.
5. After studied unit-5, the student will be able to Create tastefully decorated interiors with good motifs.

Matching Table (Put Yes / No in the appropriate box)

Unit	i. Remembering	ii. Understanding	iii. Applying	iv. Analyzing	v. Evaluating	vi. Creating
1	Yes	Yes	No	Yes	Yes	No
2	Yes	Yes	No	Yes	Yes	Yes
3	Yes	Yes	Yes	Yes	No	Yes
4	Yes	Yes	Yes	Yes	No	Yes
5	Yes	Yes	Yes	Yes	Yes	Yes

Unit-1: (50 to 100 contents)

Teaching Hours: 20

Interior Design – Meaning and concepts. Objectives of aesthetic planning - Beauty, expressiveness, functionalism and economy. Good taste – meaning, role and importance of good taste. Need for developing skill in aesthetics. Place of interior design in the modern era – changing trends and salient features.

Unit-2: (50 to 100 contents)

Teaching Hours: 20

Design–Definition, meaning, purpose of design. Types - Structural design and decorative design and their characteristics. Classification of decorative design – Naturalistic design, conventional design, geometric design, abstract design, historic design, and biomorphic design.

Unit-3: (50 to 100 contents)

Teaching Hours: 15

Elements of design - Line and direction, Form and Shape, Size, Colour, Light, Pattern, Texture and Space. Application of elements of design in interior and exterior.

Unit-4: (50 to 100 contents)

Teaching Hours: 15

Principles of design –Balance, Rhythm, Emphasis, Harmony, Proportion – meaning, and its application in the interior and exterior of houses and other commercial buildings.

Unit-5: (50 to 100 contents)

Teaching Hours: 20

Motif - meaning. Development of design from motifs and application of motifs in interior decoration. Man, as a consumer of design. Qualities and role of a good interior designer. Career options for interior designers.

Internal Assessment Methods: (The following items may be brought under test, seminar and assignment framework)

- a. Book review and research paper review, syllabus and curriculum review.
- b. Data collection and paper writing practices: books level, field study level. Using the course study for society and nature development – exercise
- c. Workshops, preparing technical term dictionaries from textbooks and reference books.
- d. Preparing question paper by the candidates: objective type, descriptive type, training can be given by the teacher
- e. Forming digital library: collecting text and reference books, course material.
- f. Villages, institutions, various people groups may be adopted by the departments of the colleges for practicing their theoretical study. Innovative methods may be implemented in the practices and report can be written for documentation, further discussion and research.
- g. Extracurricular and cultural activities may be framed through the syllabus content.
- h. Grouping students for self-discussion, self-learning process.
- i. Following institution and intellectual and writing reports in the course field.

- j. Bloom Taxonomy may be introduced for teaching, learning and evaluation process within the framework of question setting pattern and internal assessment pattern.
- k. For application-oriented study: Villages, Institutions, various people groups may be adopted by the departments of the colleges for practicing their theoretical study. Innovative methods may be implemented in the practices and report can be written for documentation, further discussion, and research.
- l. Extracurricular activities may be framed through their syllabus content.
- m. Bring the industries to the campus. Bring the students to the industry.
- n. Ph.D., Research Methodology is applicable to write project report and any kind of research reports like assignment, seminar papers, case study reports, etc.

Text Books:

1. Seetharaman, P and Pannu, P. Interior Design and Decoration, CBS Publishers and Distributors, New Delhi
2. Faulkner, S. and Faulkner,R, (1987), Inside Today’s Home, Rinehart Publishing company, Newyork.

Reference Books:

1. Faulkner, S. and Faulkner,R, (1987), Inside Today’s Home, Rinehart Publishing company, Newyork.
2. Caroline cliftenet. al., The Complete Home Decorator, Portland House New York.
3. Seetharaman, P and Pannu, P. Interior Design and Decoration, CBS Publishers and Distributors, New Delhi.
4. Pratap R.M (1988), Interior Design Principles and Practice, Standard Publishers Distribution, Delhi.
5. Goldstein, Art in Everyday life, Oxford and IBH Publishing House.

Course Material: website links, e-Books and e-journals:

1. <https://study.com/academy/lesson/what-are-the-seven-elements-of-art-definition-examples.html>
2. <https://thevirtualinstructor.com/artfundamentals.html>
3. <http://ecoursesonline.iasri.res.in/mod/page/view.php?id=120889>
4. <https://www.slideshare.net/KKIIMMII/aesthetics-13339798>
5. <https://www.curbed.com/2016/7/21/12228858/interior-design-decorating-principles>
6. <https://justdecorate.wordpress.com/2014/06/19/the-most-popular-interior-design-motifs-and-their-symbolic-meaning/>

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
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CO1	S	S	S	S	-	S	-	S	S	S
CO2	S	S	S	S	-	S	-	S	S	M
CO3	S	S	S	M	-	M	-	S	S	M
CO4	S	S	S	M	-	M	-	S	S	M
CO5	S	S	S	S	-	S	-	S	S	S

PO – Programme Outcome, CO – Course outcome
S – Strong, M – Medium, L – Low (may be avoided)

THIRUVALLUVAR UNIVERSITY, VELLORE – 632 115

B.Sc., INTERIOR DESIGN AND DÉCOR – 2022-2023 onwards

Semester: I

Paper type: Allied 1

Paper code:

Name of the Paper: Applied Arts on Textiles-I Credit: 4

Total Hours per Week: 4

Lecture Hours: 60

Tutorial Hours: 60

Practical Hours: -

Course Objectives:

To enable the students to

1. Understand the types of fibres, yarns and basic weaves
2. Understand art and apply its principles in the creation and selection of textiles.
3. Know about the effects of various textile finishes.
4. Develop design in textiles and apply the same on materials.
5. Application of art principles in different fabrics.

Course Outcomes: (five outcomes for each unit should be mentioned)

1. After studied unit-1, the student will be able to Understand the types of fibres, yarns and basic weaves.
2. After studied unit-2, the student will be able to create textile designs by apply its principles.
3. After studied unit-3, the student will be able to be familiar with effects of various textile finishes.
4. After studied unit-4, the student will be able to create and a design on textile materials.
5. After studied unit-5, the student will be able to implement the art principles on different fabrics.

Unit	i. Remembering	ii. Understanding	iii. Applying	iv. Analyzing	v. Evaluating	vi. Creating
1	Yes	Yes	No	Yes	Yes	Yes
2	Yes	Yes	Yes	Yes	Yes	Yes
3	Yes	Yes	Yes	Yes	Yes	Yes
4	Yes	Yes	No	Yes	Yes	Yes
5	Yes	Yes	Yes	Yes	Yes	No

Unit-1: (50 to 100 contents)**Teaching Hours: 12**

Fundamentals of textiles – fiber – meaning, Types – filament fibre and staple fibre. Classification – natural – vegetable fibre, animal fibre, mineral fibre and manufactured fibre, Yarn – meaning, yarn twist- S twist, Z twist, yarn count, classification – single, ply, cord and novelty yarns. Properties of cotton fibre. Manufacturing process of cotton yarns.

Unit-2: (50 to 100 contents)**Teaching Hours: 12**

Fabric construction – Weaving – meaning, Major parts of a loom – warp beam, headles, harnesses, reed, shuttles, cloth roll. Basic weaving operation –weaving process - shedding, picking, beating up, taking up and letting off. Types of weaves – Basic weave – plain – basket and ribbed, Twill - herringbone and satin - sateen. Fancy weave – Jacquard.

Unit-3: (50 to 100 contents)**Teaching Hours: 14**

Dyeing and printing – Dyes- definition, types- natural dyes and synthetic dyes, Mordants – meaning. Dyeing –meaning, stages of dyeing- fiber dyeing, yarn dyeing and fabric dyeing. Textile printing – meaning, Hand printing techniques–block printing, screen printing and stencil printing. Machine printing- roller printing, screen printing, heat transfer printing and blotch printing.

Unit-4: (50 to 100 contents)**Teaching Hours: 12**

Fabric Finishes – definition, Meaning of aesthetic finish and functional finish. importance of textile finishes, Effects of different finishing process on fabrics – bleaching process, tendering process, mercerizing process, sanforizing process, napping process, calendaring process and sizing process. Special finishes – water repellent, fire proof, moth proof, antimicrobial, and stain proof.

Unit-5: (50 to 100 contents)**Teaching Hours: 10**

Application of art principles – harmony, balance, proportion, rhythm, and emphasis in the selection of soft furnishings in interiors. Use of elements of design – line, size, shape, form, colour, texture and pattern in the selection of fabric for interiors. Application of relate colour harmonies and contrasting colour harmonies in different fabrics.

Textbook:

1. Unit-1: Textiles – fibre to fabric, corbmann B P , International students edition, McGraw Hill book Co, Singapore 1985.
2. Unit-2: Textiles – fibre to fabric, corbmann B P , International students edition, McGraw Hill book Co, Singapore 1985.
3. Unit-3: Fundamentals of Textiles and their Care- SusheelaDantyagi , Orient Longmann Ltd (1980).
4. Unit-4: Textiles – fibre to fabric, corbmann B P , International students edition, McGraw Hill book Co, Singapore 1985.
5. Unit-5: Textiles fabrics and their Selection – Wingate I B, Allied publishers Ltd, Chennai.

Reference Book:

1. Chambers B.G. "Colour and Design, Fashion in Men's and Women's Clothing and Furnishings". Prentice Hall, Inc, New York, 1951.
2. Gisela Heix, Fabric Painting, B.T.Batsford Ltd., London, 1972.
3. Mehta R.S., Masterpieces of Indian Textiles, D.B.Taraporewala Sons and Co.Pvt.Ltd. Bombay, 1970.
4. Jasleen Dhamija, The Indian folk, Arts and crafts, National Book Trust India, New Delhi, 1992.
5. Mary Mathews, Bhattarams reprographics, Pvt.Ltd., Chennai 1974.

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	S	S	S	-	S	-	S	S	S
CO2	S	S	S	S	-	S	-	S	S	M
CO3	S	S	S	M	-	M	-	S	S	M
CO4	S	S	S	M	-	M	-	S	S	M
CO5	S	S	S	S	-	S	-	S	S	S

PO – Programme Outcome, CO – Course outcome
S – Strong, M – Medium, L – Low (may be avoided)

THIRUVALLUVAR UNIVERSITY, VELLORE – 632 115

B.Sc., INTERIOR DESIGN AND DÉCOR – 2022-2023 onwards

Semester: II

Paper type: Core Theory

Paper code:

Name of the Paper: Color and Lighting

Credit: 4

Total Hours per Week: 5

Lecture Hours: 90

Tutorial Hours: 90

Practical Hours: -

Course Objectives:

To enable the students to

1. Learn the concepts of colour and lighting
2. Learn skills in using colour and light in functional context
3. Know about Various colour Systems and colour Harmonies
4. Impart knowledge in recent trends in colour and lighting.

Course Outcomes (five outcomes for each unit should be mentioned)

1. After studied unit-1, the student will be able to Identify artistically appealing interiors as a designer.
2. After studied unit-2, the student will be able to Create objects with good design.
3. After studied unit-3, the student will be able to Apply the various elements of design in producing an interior.
4. After studied unit-4, the student will be able to Using the elements and principles knowledge to interiors.
5. After studied unit-5, the student will be able to Create tastefully decorated interiors with good motifs.

Matching Table

Unit	i. Remembering	ii. Understanding	iii. Applying	iv. Analyzing	v. Evaluating	vi. Creating
1	Yes	Yes	No	Yes	Yes	No
2	Yes	Yes	No	Yes	Yes	Yes
3	Yes	Yes	Yes	Yes	No	Yes
4	Yes	Yes	Yes	Yes	No	Yes
5	Yes	Yes	Yes	Yes	Yes	Yes

Unit-1: (50 to 100 contents)**Teaching Hours: 18**

Interior Design – Meaning and concepts. Objectives of aesthetic planning - Beauty, expressiveness, functionalism and economy. Good taste – meaning, role and importance of good taste. Need for developing skill in aesthetics. Place of interior design in the modern era – changing trends and salient features.

Unit-2: (50 to 100 contents)**Teaching Hours: 20**

Design–Definition, meaning, purpose of design. Types - Structural design and decorative design and their characteristics. Classification of decorative design – Naturalistic design, conventional design, geometric design, abstract design, historic design, and biomorphic design.

Unit-3: (50 to 100 contents)**Teaching Hours: 18**

Elements of design - Line and direction, Form and Shape, Size, Colour, Light, Pattern, Texture and Space. Application of elements of design in interior and exterior.

Unit-4: (50 to 100 contents)**Teaching Hours: 18**

Principles of design –Balance, Rhythm, Emphasis, Harmony, Proportion – meaning, and its application in the interior and exterior of houses and other commercial buildings.

Unit-5: (50 to 100 contents)**Teaching Hours: 16**

Motif - meaning. Development of design from motifs and application of motifs in interior decoration. Man, as a consumer of design. Qualities and role of a good interior designer. Career options for interior designers.

Textbook:

1. Seetharaman, P and Pannu, P. Interior Design and Decoration, CBS Publishers and Distributors, New Delhi
2. Faulkner, S. and Faulkner,R, (1987), Inside Today's Home, Rinehart Publishing company, Newyork.

Reference Book:

1. Faulkner, S. and Faulkner,R, (1987), Inside Today's Home, Rinehart Publishing company, Newyork.
2. Caroline cliftenet. al., The Complete Home Decorator, Portland House New York.
3. Seetharaman, P and Pannu, P. Interior Design and Decoration, CBS Publishers and Distributors, New Delhi.
4. Pratap R.M (1988), Interior Design Principles and Practice, Standard Publishers Distribution, Delhi.
5. Goldstein, Art in Everyday life, Oxford and IBH Publishing House.

Course Material: website links, e-Books and e-journals:

1. <https://www.shiftelearning.com/blog/how-do-colors-influence-learning>
2. <https://www.canva.com/learn/website-color-schemes/>
3. <https://www.tcpi.com/psychological-impact-light-color/>
4. <https://www.leefilters.com/lighting/colour-list.html>
5. <https://www.lampshoponline.com/advice/top-ten-tips-for-restaurant-lighting>
6. https://www.designingbuildings.co.uk/wiki/Lighting_in_commercial_buildings

Mapping with Programme Outcomes

Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	S	S	S	-	S	-	S	S	S
CO2	S	S	S	S	-	S	-	S	S	M
CO3	S	S	S	M	-	M	-	S	S	M
CO4	S	S	S	M	-	M	-	S	S	M
CO5	S	S	S	S	-	S	-	S	S	S

PO – Programme Outcome, CO – Course outcome
S – Strong, M – Medium, L – Low (may be avoided)

THIRUVALLUVAR UNIVERSITY, VELLORE – 632 115

B.Sc., INTERIOR DESIGN AND DÉCOR – 2022-2023 onwards

Semester: II

Paper type: Core Practical

Paper code: CPID23

Name of the Paper: Design Basics Practical

Credit: 2

Total Hours per Week: 3

Lecture Hours:

Tutorial Hours:

Practical Hours: 45

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Course Objectives:

To enable the students to

1. Develop Designs using different lines on different media.
2. Learn the application of principles and Art Elements of design in creating beautiful interiors.
3. Learn the basic anthropometric postures.
4. Applying Design concepts and creating designs.
5. Evaluating art objects on basis of elements and art of design.
6. Develop design motifs and apply in interiors.
7. Application of art principles in interior room arrangement.

Course Outcomes: (five outcomes for each unit should be mentioned)

1. After studied unit-1, the student will be able to Identify the types of lines used to create designs.
2. After studied unit-2, the student will be able to Apply the design principles in two dimensional and three dimensional compositions
3. After studied unit-3, the student will be able to Know about anthropometric measurements of human figure.
4. After studied unit-4, the student will be able to Apply the various elements of design in producing an interior
5. After studied unit-5, the student will be able to Create tastefully decorated interiors with good motifs.

CONTENTS:

1. Introduction to lines, types of lines and their application using different media.
2. Application of design principles in two dimensional and three dimensional compositions.
3. Sketching and drawing of design composition using grids.
4. Basic anthropometric - average measurements of human body in different postures, its proportion and graphic representation.

5. Apply design concepts in developing greeting card, saree border, floor decorations – flower carpet and rangoli.
6. Evaluate the given art objects.
7. Develop a motif suitable for foot mat, window grill, table mat and furnishing materials.
8. Apply the art principles in arrangement of: Living room, drawing room, pooja room, bedroom, adolescent boys or girl's room, children's room and birthday party.
9. Submission of Record.

Reference Book:

1. Faulkner, S. and Faulkner,R,(1987), Inside Today's Home, Rinehart Publishing company, Newyork.
2. Caroline cliftenet. al., The Complete Home Decorator, Portland House New York.
3. Seetharaman, P and Pannu, P. Interior Design and Decoration, CBS Publishers and Distributors, New Delhi
4. Pratap R.M (1988), Interior Design Principles and Practice, Standard Publishers Distribution, Delhi.
5. Goldstein, Art in Everyday life, Oxford and IBH Publishing House.

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	M	M	S	-	M	-	S	S	S
CO2	S	S	S	S	-	M	-	S	S	S
CO3	S	S	S	M	-	M	-	S	S	S
CO4	S	S	S	M	-	M	-	S	S	S
CO5	S	S	S	S	-	S	-	S	S	S

PO – Programme Outcome, CO – Course outcome
 S – Strong, M – Medium, L – Low (may be avoided)

THIRUVALLUVAR UNIVERSITY, VELLORE – 632 115

B.Sc., INTERIOR DESIGN AND DÉCOR – 2022-2023 onwards

Semester: II

Paper type: Allied Paper code: CAID 22

Name of the Paper: Applied Arts on Textiles-II

Credit: 3

Total Hours per Week: 4 Lecture Hours: 60 Tutorial Hours: 60 Practical Hours: -

Course Objectives:

To enable the students to

1. Understand the types of printing methods and embroidery.
2. Know about the surface enrichment of fabrics.
3. Learn the embroideries of different states of India.
4. Understanding Knitting and its types.
5. Understanding design concepts for specific body types

Course Outcomes: (five outcomes for each unit should be mentioned)

1. After studied unit-1, the student will be able to prepare samples for various hand embroidery stitches
2. After studied unit-2, the student will be able to use various surface enrichment methods on fabrics.
3. After studied unit-3, the student will be able to acquire knowledge on embroideries of different states of India
4. After studied unit-4, the student will be able to gain knowledge about knitting and its types.
5. After studied unit-5, the student will be able to recognizing the design of specific body types.

Matching Table

Unit	i. Remembering	ii. Understanding	iii. Applying	iv. Analyzing	v. Evaluating	vi. Creating
1	Yes	Yes	Yes	Yes	Yes	No
2	Yes	Yes	Yes	Yes	Yes	Yes
3	Yes	Yes	Yes	Yes	Yes	Yes
4	Yes	Yes	Yes	Yes	No	No
5	Yes	Yes	No	Yes	Yes	Yes

Unit-1: (50 to 100 contents)**Teaching Hours: 12**

Types of stitches in embroidery. Temporary embroidery stitches – types – even basting, uneven basting, diagonal basting, tailor's basting. Permanent embroidery stitches – types - running stitch, back stitch, overcast stitch, over hand stitch, stem stitch, chain stitch, satin stitch, blanket stitch, button hole stitch, and lazy daisy stitch. Uses of embroidery stitches.

Unit-2: (50 to 100 contents)**Teaching Hours: 12**

Surface enrichment of fabrics – Embroidery- meaning, importance, difference between hand embroidery and machine embroidery, Applique work, cut work, drawn thread work, sequins, Mirror work, Crocheting and Tatting.

Unit-3: (50 to 100 contents)**Teaching Hours: 12**

Various embroideries of different states of India. Unique features and motifs of folk embroidery – Phulkari - Punjab, Kasuti - Karnataka, Kantha – West Bengal, Heer - Gujarat, Kashmiri embroidery - Kashmir, Chambarumal – Himachal Pradesh, Chikankari – Uttar Pradesh, Toda embroidery – Tamil Nadu, and Zardosi embroidery.

Unit-4: (50 to 100 contents)**Teaching Hours: 12**

Knitting – meaning, properties of knitted fabric. Warp knit and Weft knit – meaning. Types of knitting – machine and hand knitting – flat knitting and circular knitting. Common stitches used in hand knitting - plain stitch, rib stitch, interlock stitch, and purl stitch.

Unit-5: (50 to 100 contents)**Teaching Hours: 12**

Study of figure irregularities - stout figure, thin figure, slender figure, narrow shoulders, broad shoulders, round shoulders, large bust, flat chest, large hip, large abdomen, round face, large face, small face, prominent forehead and what can be done through various elements of design and optical illusion to minimize the effect.

Textbook:

1. Unit-1: Textiles – fibre to fabric, corbmann B P , International students edition, McGraw Hill book Co, Singapore 1985.
2. Unit-2: Textiles – fibre to fabric, corbmann B P , International students edition, McGraw Hill 11 book Co, Singapore 1985.
3. Unit-3: Fundamentals of Textiles and their Care- SusheelaDantyagi , Orient Longmann Ltd (1980).
4. Unit-4: Textiles – fibre to fabric, corbmann B P , International students edition, McGraw Hill book Co, Singapore 1985.
5. Unit-5: Textiles fabrics and their Selection – Wingate I B, Allied publishers Ltd, Chennai.

Reference Book:

1. Chambers B.G. “Colour and Design, Fashion in Men’s and Women’s Clothing and Furnishings”.Prentice Hall, Inc, New york ,1951.
2. Gisela Heix, Fabric Painting, B.T. Batsford Ltd.,London ,1972.

3. Mehta R.S., Masterpieces of Indian Textiles, D.B.Taraporewala Sons and Co.Pvt.Ltd. Bombay, 1970.
4. Jasleen Dhamija, The Indian folk , Arts and crafts, National Book Trust India , New Delhi, 1992.
5. Mary Mathews, Bhattarams reprographics, Pvt.Ltd., Chennai 1974. Goldstein, Art in Everyday life, Oxford and IBH Publishing House.

Course Material: website links, e-Books and e-journals:

1. https://www.brainkart.com/article/Temporary-stitches_1790/.
2. http://www.suembroidery.com/articles/hand_embroidery_machine_embroidery.htm.
3. <https://thedesigncart.com/blogs/news/types-of-embroidery>.
4. <https://blog.nobleknits.com/blog/2018/10/17/how-many-types-of-knitting-are-there>.
5. <https://www.textileschool.com/251/knitted-fabrics-and-types/>.
6. <https://www.perfectlybasics.com/style-file-figure-problems-and-solutions0457010000002025.aspx>.
7. <https://bellatory.com/clothing/womenfiguresshapes>

Mapping with Programme Outcomes

Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	S	S	S	-	S	-	S	S	S
CO2	S	S	S	S	-	S	-	S	S	M
CO3	S	S	S	M	-	M	-	S	S	M
CO4	S	S	S	M	-	M	-	S	S	M
CO5	S	S	S	S	-	S	-	S	S	S

PO – Programme Outcome, CO – Course outcome
 S – Strong, M – Medium, L – Low (may be avoided)

Reference Book:

1. Chambers B.G. "Colour and design, Fashion in Men's Women's Clothing and furnishings" Prentice Hall. Inc. Newyork, 1951.
2. Erwin, Kinchen and Peter, "Clothing for Moderns" 6thedn, McmillanPublishingcompare, In. Newyork, 1976.
3. Gisela Hein, "Fabric printing", B.T. Batsford Ltd, London, 1972.
4. Shailaja D.N. "Traditional Embroideries of India" South Asia Books, 1996.
5. Hamyln, "JasleenDhamija, "The Indian Folk, Arts and Crafts", National Book Trust India, New Delhi, 1992.

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	S	S	S	-	S	-	S	S	S
CO2	S	S	S	S	-	S	-	S	S	M
CO3	S	S	S	S	-	M	-	S	S	M
CO4	S	S	S	S	-	M	-	S	S	S
CO5	S	S	S	S	-	S	-	S	S	S

PO – Programme Outcome, CO – Course outcome

S – Strong, M – Medium, L – Low (may be avoided)

THIRUVALLUVAR UNIVERSITY, VELLORE – 632 115

B.Sc., INTERIOR DESIGN AND DÉCOR – 2022-2023 onwards

Semester: III

Paper type: Core Theory

Paper code: CID31

Name of the Paper: Computer Aided Design I

Credit: 4

Total Hours per Week: 4 Lecture Hours: 60 Tutorial Hours: 60 Practical Hours: -

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Course Objectives:

To enable the students to

1. Learn the basic concepts of the AutoCAD Software.
2. Learn to draw different types of lines by using AutoCAD commands.
3. Learn to draw simple floor plan using AutoCAD commands.
4. Understand the use of 3D modelling.
5. Develop the ability to construct accurate 2D geometry and complex 3D shapes

Course Outcomes: (five outcomes for each unit should be mentioned)

1. After studied unit-1, the student will be able to Understand the basic concepts and Commands in AutoCAD
2. After studied unit-2, the student will be able to create different objects using modification tools.
3. After studied unit-3, the student will be able to create floor plan using different drafting commands.
4. After studied unit-4, the student will be able to understand the 3D modelling concepts and tools.
5. After studied unit-5, the student will be able to get knowledge on rendering tools.

Matching Table

Unit	i. Remembering	ii. Understanding	iii. Applying	iv. Analyzing	v. Evaluating	vi. Creating
1	Yes	Yes	Yes	Yes	Yes	Yes
2	Yes	Yes	Yes	Yes	Yes	Yes
3	Yes	Yes	Yes	Yes	Yes	Yes
4	Yes	Yes	Yes	Yes	Yes	Yes
5	Yes	Yes	Yes	Yes	Yes	Yes

Unit-1: (50 to 100 contents)**Teaching Hours: 15**

Introduction to Auto CAD - Auto CAD system requirements, AutoCAD GUI-Title bar, Menu bar, toolbar, UCS, Layout tab, Command Entry, Status bar, Task bar General commands - New, open, save, save as, close, exit - Point fixing methods-line using absolute co-ordinate system, relative rectangular co-ordinate system and relative polar co-ordinate system, circle, arc, ellipse, rectangle, polygon.

Unit-2: (50 to 100 contents)**Teaching Hours: 10**

Modification tools-Erase, copy, move, scale, rotate, trim, extend, array, offset, mirror, break, stretch - Inquiry tools - ID, DIST, AREA, LIST, Hatching, poly line, ploy line edit, spline - spline edit, multiline, multiline edit.

Unit-3: (50 to 100 contents)**Teaching Hours: 15**

Drafting settings, function keys, text, text style, text edit, multi text, colour, line type, line weight, zoom, pan, view, solid, donut, fillet, chamfer, layering concept - Dimensions - Linear, align, angular, radius, diameter, baseline, continue, leader - Dimension edit, Dimension styles-lines and arrows tab, fit tab, primary units, alternate units, Tolerances - Layout of drawing sheets and title block.

Unit-4: (50 to 100 contents)**Teaching Hours: 10**

Introduction to 3D Modeling - point fixing method - absolute co-ordinate systems, relative cylindrical and relative spherical co-ordinate systems. Types of model - wire frame model, surface model and solid models - Standard primitive tools - Box, cone, wedge, torus, cylinder, sphere. Boolean operation - union, subtract, Intersect, Interference, Extrude, Revolve.

Unit-5: (50 to 100 contents)**Teaching Hours: 10**

Lighting - Types of light - point light, spot light, Distant light, Camera - free and target camera. Materials, rendering.Data exchange - import and export of models.

Textbook:

1. Teach Yourself Auto CAD, GIBBS, BPE Publication New Delhi.

Reference Book:

1. Teach Yourself Auto CAD, GIBBS, BPE Publication New Delhi.
2. Inside Auto CAD.
3. Omura, G. 2005, Mastering Auto CAD 2005 and Auto CAD LT 2005, BPB Publications, New Delhi.
4. Saxena, S. (2003), A first Course in Computers, Vikas Publishing house, New Delhi.

Course Material: website links, e-Books and e-journals:

1. http://nimi.gov.in/nimi/forms/nimicart_listproduct.aspx?idCategory=205
2. <https://targetstudy.com/iti/trade/26-draughtsman-civil/>
3. https://study.com/draftsman_course.html
4. <https://en.wikipedia.org/wiki/Drafter>
5. <https://computechpublications.in/product/draughtsman-civil-th-pr-sem-1-to-4-rev-ed/>
6. <https://www.next.cc/journey/tools/architectural-lettering>
7. <https://mech.iitm.ac.in/part1.pdf>

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	S	S	S	-	S	-	S	S	S
CO2	S	S	S	S	-	S	-	S	S	M
CO3	S	S	S	M	-	M	-	S	S	M
CO4	S	S	S	M	-	M	-	S	S	M
CO5	S	S	S	S	-	S	-	S	S	S

PO – Programme Outcome, CO – Course outcome
S – Strong, M – Medium, L – Low (may be avoided)

THIRUVALLUVAR UNIVERSITY, VELLORE – 632 115

B.Sc., INTERIOR DESIGN AND DÉCOR – 2022-2023 onwards

Semester: IV **Paper type: Core Practical** **Paper code: CPID45** **Name**
of the Paper: Computer Aided Design Practical **Credit: 3**

Total Hours per Week: 3 **Lecture Hours:** **Tutorial Hours:** **Practical Hours: 45**

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Course Objectives:

To enable the students to

1. Able to Draw different types of Lines using AutoCAD Commands
2. Learn to draw simple floor plan using AutoCAD commands.
3. Create text and to draw elevation for the floor plan.
4. Learn about basic 3D Modeling.
5. Application of various rendering techniques

Course Outcomes (five outcomes for each unit should be mentioned)

1. After studied unit-1, the student will be able to make different types of lines using AutoCAD commands.
2. After studied unit-2, the student will be able to identify the use of inquiry tools and modification tools.
3. After studied unit-3, the student will be able to write various types of text and dimensions in drawings.
4. After studied unit-4, the student will be able to understand about 3D modelling.
5. After studied unit-5, the student will be able to apply rendering techniques.

CONTENTS:

1. Creating line using point fixing methods.
2. Drawing circle, arc, ellipse, rectangle, polygon using different methods.
3. Creating a plan and use of modification tools such as erase, copy, move, scale, rotate, trim, extend, array, offset, mirror, break and stretch.
4. Creating text using text style, text edit, line type, and weight.
5. Use of zoom, pan, view command in a drawing.
6. Drawing a floor plan with settings, layers and dimensions, and to scales'
7. Drawing elevation, cross sectional view for the floor plan.
8. Submission of Record.

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	S	S	S	S	S	S	S	S	S
CO2	S	S	S	S	S	S	S	S	S	S
CO3	S	S	S	S	S	M	S	S	S	M
CO4	S	S	S	S	S	M	S	S	S	S
CO5	S	S	S	S	S	S	S	S	S	S

PO – Programme Outcome, CO – Course outcome
S – Strong, M – Medium, L – Low (may be avoided)

THIRUVALLUVAR UNIVERSITY, VELLORE – 632115

B.Sc., INTERIOR DESIGN AND DÉCOR – 2022-2023 onwards

Semester: III

Paper type: Allied 2

Paper code: CAID32

Name of the Paper: INTERIOR DESIGN STUDIO AND BUILDING SYSTEM

TECHNOLOGY-I

Credit: 3

Total Hours per Week: 4 Lecture Hours: 60 Tutorial Hours: 60 Practical Hours: -

Course Objectives:

To enable the students to

1. Gain an understanding on various materials, their types and application in building construction.
2. Acquire knowledge about the construction techniques used in buildings.
3. Know about various types of doors and windows
4. Understand Vertical circulation in a building
5. Learn the requirements for installing Rain Water Harvesting system

Course Outcomes: (five outcomes for each unit should be mentioned)

1. After studied unit-1, the student will be able to gain knowledge in various types of building construction and materials
2. After studied unit-2, the student will be able to learn about various construction techniques in buildings used in brick bonding, flooring and roofing.
3. After studied unit-3, the student will be able to identify various types of doors, windows, arches and partitions.
4. After studied unit-4, the student will be able to design vertical transportation for a building.
5. After studied unit-5, the student will be able to acquire about the ways of storing rain water by installing rain water harvesting system.

Matching Table

Unit	i. Remembering	ii. Understanding	iii. Applying	iv. Analyzing	v. Evaluating	vi. Creating
1	Yes	Yes	Yes	Yes	Yes	No
2	Yes	Yes	Yes	Yes	Yes	Yes
3	Yes	Yes	Yes	Yes	Yes	Yes
4	Yes	Yes	Yes	Yes	No	Yes
5	Yes	Yes	No	Yes	Yes	Yes

Unit-1: (50 to 100 contents)**Teaching Hours: 12**

Building materials used for construction - Types and uses of stone - granite, marble, lime stone, sand stone, slate and basalt; brick - types, properties and uses, timber - methods of seasoning, mortar, concrete - nominal proportion for various works and curing process, glass - Fibre glass, float glass, glass blocks, perforated glass, safety glass, obscured glass, heat excluding glass and wired glass; wood based materials - veneer, plywood, fibre boards, particle board; metals - steel and aluminium

Unit-2: (50 to 100 contents)**Teaching Hours: 12**

An introduction to various construction techniques in buildings. Brick bonds - Key terms - bed, course, header, stretcher, bond, quoin, queen closer, king closer, bat; Types - Stretcher, Header, English and Flemish; Flooring - Hard - stone, wood, brick, concrete, terrazzo and mosaic, Soft - carpets and rug, Resilient - vinyl, linoleum, rubber and cork. Roof - Flat roof - Concrete and Madras terrace roof; Pitched roof - Key terms - rafter, purlins, hip, ridge, eaves, pitch and Gable; Types - Lean to, Couple roof, King post, Queen post and Mansard. Roof coverings for pitched roofs - thatch, wood shingles, tile, asbestos cement sheet, GI corrugated sheet and slate.

Unit-3: (50 to 100 contents)**Teaching Hours: 12**

Details of Doors - Hinged, Sliding, Swing, Paneled, Louvered, Glazed, Revolving, Flush, wire gauged and Collapsible; Windows - Casement, Double hung, Pivoted, Sliding, Glazed, Bay, Corner, Clerestory, Dormer, Gable and Skylights; Lintels and Arches - Key terms - Voussoirs, Intrados, Extrados, Span, Crown, Rise, Keystone and Abutment, Types - Flat, Segmental, Semicircular, Horse shoe, Pointed, Venetian, Florentine, Relieving, Stilted and Semi elliptical; Partitions - timber, R.C.C and Metal.

Unit-4: (50 to 100 contents)**Teaching Hours: 12**

Structures for Vertical circulation in a building - Staircase - Key Terms - tread, riser, step, stringer, baluster, balustrade, newel post, handrail, landing, nosing and flight; Straight, Turning - quarter turn, half turn - dog legged and open newel, three quarter turn, Circular - spiral and helical, bifurcated stairs; Elevators - traction, hydraulic, pneumatic and capsule elevators, Escalators - parallel and criss cross; Ramps.

Unit-5: (50 to 100 contents)**Teaching Hours: 12**

Rain water harvesting - meaning, purpose, benefits of using rainwater harvesting system, components of rain water harvesting system - roof catchment, gutters, down pipes, first flushing pipe, filter unit, storage unit and percolation pits, Methods - surface run off method and roof top rain water harvesting method. Uses, merits, demerits and precautions in installing the system.

Text Books:

1. Unit-1: Rangwala, (Thirty Eighth Edition, 2011). Engineering Materials (Material Science), Charotar Publishing House Pvt Ltd, Anand.
2. Unit-2: Dr. B.C. Punmia, Ashok Kumar Jain and Arun Kumar Jain, (Tenth edition). Building Construction. Laxmi Publications (P) Ltd.
3. Unit-3: S.S. Bhavikatti, (2012). Building Construction, Vikas Publishing Home Pvt Ltd.
4. Unit-4: P.C. Varghese, (May 2013). Building Construction, PHI Learning Private Limited.
5. Unit-5: S.C. Rangwala, (Eighteenth Edition, 2003). Water Supply and Sanitary Engineering (Environmental Engineering), Charotar Publishing House, Anand.

References:

1. P. Purushothama Raj, Building Construction Materials and Techniques, Pearson Education India.
2. G.C. Sahu, Joygopal Jena, Building Materials and Construction, McGraw-Hill Education
3. Michael S. Mamlouk and John P. Zaniewski, Materials for Civil and Construction Engineers, Pearson; 4 edition (12 January 2016)
4. Rob Avis P. Eng and Michelle Avis P. Eng, Essential Rainwater Harvesting: A Guide to Home-Scale System Design (Sustainable Building Essentials Series), New Society Publishers (December 11, 2018)
5. Anthony Zagelow and Gilbert Garden Publishing, Rainwater Harvesting and Use: Understanding the Basics of Rainwater Harvesting (Water Conservation, Resource Management, Crisis, water storage, water security Book 1), Gilbert Garden Publishing (23 September 2014)
6. Alisa Goetz, Up, Down, Across: Elevators, Escalators, and Moving Sidewalks, Merrell Publishers (September 1, 2003)
7. Antonio Corcuera, Door and Window Design, teNeues Media GmbH & Co. KG; Multilingual edition (1 May 2006)
8. William P. Spence, Constructing Staircases, Balustrades & Landings: (Building Basics Series), Sterling (November 1, 2000)

Journal:

Journal of Construction and Building Materials, Hybrid Publication.

E- Materials:

1. <http://bieap.gov.in/pdf/buildingmaterialsconstruction.pdf>
2. www.mppcb.nic.in/rwh.htm
3. <http://ocw.mit.edu/courses/architecture/4-461-building-technology-i-materials-and-construction-fall-2004/lecture-notes/>
4. <http://seminarprojects.org/c/building-materials-and-construction-notes-pdf>
5. <http://www.aboutcivil.org/engineering-materials.html>
6. <https://www.cedengineering.com/userfiles/Building%20Elevators.pdf>
7. <https://www.hebelifte.de/images/PDF/Englisch/Ramp-calculation.pdf>
8. http://www.vssut.ac.in/lecture_notes/lecture1424085991.pdf
9. https://www.academia.edu/9182843/Lintel_and_Arches_Details_of_Construction_
10. <https://nptel.ac.in/content/storage2/courses/105105104/pdf/m9120.pdf>
11. <https://www.aboutcivil.org/Floors.html>
12. <http://www.slcdocs.com/historicpreservation/GuideRes/Ch7.pdf>
13. <https://www.civilengineeringx.com/super-structures/doors-and-windows/>
14. <https://theconstructor.org/building/types-bonds-brick-masonry-flemish-english-wall/11616/>
15. <http://www.yourarticlelibrary.com/water/rain-water-harvesting-in-india-need-methods-and-other-details/20917>

Mapping with Programme Outcomes

Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	S	S	S	-	S	-	S	S	S
CO2	S	S	S	S	-	S	-	S	S	M
CO3	S	S	S	M	-	M	-	S	S	M
CO4	S	S	S	M	-	M	-	S	S	M
CO5	S	S	S	S	-	S	-	S	S	S

PO – Programme Outcome, CO – Course outcome
S – Strong, M – Medium, L – Low (may be avoided)

THIRUVALLUVAR UNIVERSITY, VELLORE – 632 115

B.Sc., INTERIOR DESIGN AND DÉCOR – 2022-2023 onwards

Semester: IV

Paper type: Allied Practical - 2

Paper code: CPID46 Name of the Paper: Interior Design Studio Practical Credit: 2

Total Hours per Week: 3 Lecture Hours: Tutorial Hours: Practical Hours: 45

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Course Objectives:

To enable the students to

1. Acquaint with symbols and to impart necessary drafting skills to express design ideas.
2. Develop the creative potential of the students through design exercise.
3. To help the students understand the design process through applications.

Course Outcomes: (five outcomes for each unit should be mentioned)

1. After studied unit-1, the student will be able to Draw geometric shapes with dimensional compositions.
2. After studied unit-2, the student will be able to develop design for furniture arrangements.
3. After studied unit-3, the student will be able to apply orthographic and Isometric drawings in floor plan and elevation.
4. After studied unit-4, the student will be able to Apply to perspective drawings with one point and two point scale.
5. After studied unit-5, the student will be able to apply rendering and presentation in various fields.

CONTENTS:

1. Drawing two dimensional compositions of simple geometric shapes (triangles, rectangles, circles).
2. Architectural lettering.
3. Rules for dimension.
4. Use of scales.
5. Title block
6. Orthographic drawings - Floor plan, elevation and cross-section of a building
7. Isometric drawings -- table, chair, sofa, bed, rooms - living, dining, bedroom and kitchen
8. Perspective drawings - Vanishing point method - one point perspective and two point perspective
9. Submission of record.

Reference Book:

1. Maureen Mitton, (2004). Interior Design Visual Presentation, A Guide to Graphics, Models and Presentation Techniques, Second Edition. John Wiley and Sons, USA.
2. Julie K. Rayfield, (1994). The Office Interior Design Guide - An Introduction for Faculty and Design Professionals. John Wiley and Sons, New York.
3. Mary V. Knackstedt, (2002). The Interior Design Business Handbook. USA.
4. Thomas Wells Schaller, (1997). The Art of Architectural Drawing, Van Nostrand Reinhold, USA.
5. Fabio Schillaci (2008). Construction and Design Manual - Architectural Renderings, DOM publishers, USA.

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	S	S	S	-	S	-	S	S	M
CO2	S	S	S	S	-	S	-	S	S	S
CO3	S	S	S	S	-	M	-	S	S	M
CO4	S	S	S	S	-	M	-	S	S	S
CO5	S	S	S	S	-	S	-	S	S	S

PO – Programme Outcome, CO – Course outcome
S – Strong, M – Medium, L – Low (may be avoided)

Unit-1: (50 to 100 contents)**Teaching Hours: 7**

Introduction to Draftsmanship. Drawing office organization, layout of drawing studio. Need for training, Duties of a draftsman. Determining needs and wishes of the client. Relationship between two dimensional and three dimensional diagrams.

Unit-2: (50 to 100 contents)**Teaching Hours: 7**

Drafting tools and Techniques - Drawing table and Boards, Introduction, How to handle Handling paper and pencil, Types of scales, Tools for curves and irregular forms - Drawing aids.

Drafting mediums - Tracing paper, tracing cloth, water color paper, sketch paper, vellum, polyester film.

Unit-3: (50 to 100 contents)**Teaching Hours: 6**

Lines - types of lines, thickness of lines, hatching of section. Lettering - requirements of good lettering, size of letters and numerals space between letters, recommended height of letters, lettering technique.

Unit-4: (50 to 100 contents)**Teaching Hours: 5**

Dimensioning - general principles, precaution in dimensioning, method of placing dimensions, unit of dimensioning, method of executing dimension, arrow heads.

Unit-5: (50 to 100 contents)**Teaching Hours: 5**

Geometrical constructions Technical sketching - introduction - importance of freehand sketching, principles of free hand sketching

Textbook:

1. Birdie. G.S and Birdie.J.S (2003), Civil Draughtsmanship, Theory and Practice. DhanpatRai Publishing company (P) Ltd., New Delhi
2. Natrarajan.K.V (1994), A Text book of Engineering Drawing, self - publication, Chennai

Reference Book:

1. Pratap. R.M (1988), Interior Design, Principles and Practice, Standard Publishers, distribution, Delhi.
2. Birdie. G.S and Birdie.J.S (2003), Civil Draughtsmanship, Theory and Practice. DhanpatRai Publishing company (P) Ltd., New Delhi.
3. Venugopal.K. (2004) Engineering Graphics, 5th edition, New Age International Publishers, New Delhi.
4. Frank M. Rines, (2006) ,Landscape Drawing in Pencil (Dover Art Instruction) Kindle Edition

5. Oscar SchutteTeale(2009), How To Do Architectural Drawing - A Text Book And Practical Guide For Students In Architectural Draftsmanship Paperback - Import.
6. Malik & G.S. Meo- 2014 Draughtsman Civil Theory & Practical Paperback - 5th Edition Asian Publisher. New Delhi

Course Material: website links, e-Books and e-journals:

1. http://nimi.gov.in/nimi/forms/nimicart_listproduct.aspx?idCategory=205
2. <https://targetstudy.com/iti/trade/26-draughtsman-civil/>
3. https://study.com/draftsman_course.html
4. <https://en.wikipedia.org/wiki/Drafter>
5. <https://compuetechpublications.in/product/draughtsman-civil-th-pr-sem-1-to-4-rev-ed/>
6. <https://www.next.cc/journey/tools/architectural-lettering>
7. <https://mech.iitm.ac.in/part1.pdf>

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	S	S	S	-	S	-	S	S	S
CO2	S	S	S	S	-	S	-	S	S	M
CO3	S	S	S	M	-	M	-	S	S	M
CO4	S	S	S	M	-	M	-	S	S	M
CO5	S	S	S	S	-	S	-	S	S	S

PO – Programme Outcome, CO – Course outcome
 S – Strong, M – Medium, L – Low (may be avoided)

THIRUVALLUVAR UNIVERSITY, VELLORE – 632115

B.Sc., INTERIOR DESIGN AND DÉCOR – 2022-2023 onwards

Semester: IV

Paper type: Core paper 4

Paper code: CID41

Name of the Paper: PLANING THE LIFE SPACE

Credit: 4

Total Hours per Week: 4 Lecture Hours: 60 Tutorial Hours: 60 Practical Hours: -

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Course Objectives:

To enable the students to

1. Learn about concept of space and need for space in house
2. Develop skill in drawing house plan for different income groups.
3. Learn about division of space in house
4. Learn about the and principles of house plan
5. Know about methods of construction and types of construction.

Course Outcomes: (five outcomes for each unit should be mentioned)

1. After studied unit-1, the student will be able to understand about concept of space and need for space in house
2. After studied unit-2, the student will be able to draw about different types of house
3. After studied unit-3, the student will be able to gain knowledge in division of space in house
4. After studied unit-4, the student will be able to gain knowledge in principles of house plan
5. After studied unit-5, the student will be able to understand about methods of construction and types of construction.

Matching Table

Unit	i. Remembering	ii. Understanding	iii. Applying	iv. Analyzing	v. Evaluating	vi. Creating
1	Yes	Yes		Yes	No	No
2	Yes	Yes		Yes	No	No
3	Yes	Yes		Yes	Yes	Yes
4	Yes	Yes		Yes	Yes	Yes
5	Yes	Yes		Yes	Yes	Yes

Unit-1: (50 to 100 contents)**Teaching Hours: 12**

Space for living - Concept of space, factors influencing living space, Location and Orientation, Planning objectives- utility, economy, beauty and character. Need for space, space occupancy. Merits and demerits of owned and rented house.

Unit-2: (50 to 100 contents)**Teaching Hours: 12**

Significance of housing - functions of house, selection of site, Types of house plans- site plan, floor plan, elevation, cross-section, perspective view. Satisfaction in - individual houses, multi -storied flats, row houses, one room apartments.

Unit-3: (50 to 100 contents)**Teaching Hours: 12**

Division of space - private space, public space, work space and traffic space- definition, utility, determinants of space planning. Utility space - laundry facilities.

Unit-4: (50 to 100 contents)**Teaching Hours: 12**

Principles of House plan - Aspect, orientation, prospect, privacy, grouping, roominess, flexibility, circulation, furniture requirements, sanitation, practical considerations.

Unit-5: (50 to 100 contents)**Teaching Hours: 12**

Methods of construction - Types of construction - meaning, basic knowledge in types of construction - load bearing and non-load bearing or framed structure. Cast in Site and Prefabrication - advantages and limitations.

References:

1. Prabhakar, L.V. (1998), Vasthu- The User's Manual, The Avenue Press, Chennai.
2. Despande, R.S. (1974), Build Your Own Home, United Book Corporation, Poona.
3. Riggs, R. (1992), Materials and Components of Interior Design, Prentice Hall of India Pvt.Ltd, New Delhi.
4. Rao, C.H.G. (1995), Plants for Small Houses, Jai Ganesh offset Printers, chennai.
5. Faulkner, R, and Faulkner s. (1987), Inside Today's Home, Rinehart Publishing Company, Newyork.

E - Materials:

1. <https://www.engelvoelkers.com/en-pt/portugal/blog/the-advantages-and-disadvantages-of-houses-and-flats/>
2. <https://www.makaan.com/iq/rent-property/advantages-and-disadvantages-of-renting-a-house>
3. <http://www.yourarticlelibrary.com/home-management/planning-a-residential-house-9-principles/47825>
4. <https://theconstructor.org/construction/modern-methods-of-construction/17487/>

5. https://www.designingbuildings.co.uk/wiki/Modern_methods_of_construction
6. <https://theconstructor.org/practical-guide/building-plans-types/24963/>
7. https://en.wikipedia.org/wiki/House_plan

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	S	S	S	-	S	-	S	S	S
CO2	S	S	S	S	-	S	-	S	S	M
CO3	S	S	S	M	-	M	-	S	S	M
CO4	S	S	S	M	-	M	-	S	S	M
CO5	S	S	S	S	-	S	-	S	S	S

PO – Programme Outcome, CO – Course outcome
 S – Strong, M – Medium, L – Low (may be avoided)

THIRUVALLUVAR UNIVERSITY, VELLORE – 632115
B.Sc., INTERIOR DESIGN AND DÉCOR – 2022-2023 onwards

Semester: IV

Paper type: Allied 2

Paper code: CAID42

**Name of the Paper: INTERIOR DESIGN STUDIO AND BUILDING SYSTEM
TECHNOLOGY-II**

Credit: 3

Total Hours per Week: 4 Lecture Hours: 60 Tutorial Hours: 60 Practical Hours: -

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Course Objectives:

To enable the students to

1. Learn the importance of acoustical design for buildings.
2. Analyze the features of lighting methods and their resulting effects in interiors.
3. Understand the requirements of providing good ventilation in a building.
4. Learn electrical and plumbing service for a building.
5. Summarize and study the rules and bye laws for constructing a building.

Course Outcomes: (five outcomes for each unit should be mentioned)

1. After studied unit-1, the student will be able to understand the importance of acoustical design for building
2. After studied unit-2, the student will be able to gain knowledge in features of lighting methods used in building
3. After studied unit-3, the student will be able to learn about requirements of providing good ventilation in a building
4. After studied unit-4, the student will be able to gain knowledge in electrical and plumbing service for building
5. After studied unit-5, the student will be able to learn about summarize the building bye laws.

Matching Table

Unit	i. Remembering	ii. Understanding	iii. Applying	iv. Analyzing	v. Evaluating	vi. Creating
1	Yes	Yes	No	Yes	No	No
2	Yes	Yes	Yes	Yes	No	No
3	Yes	Yes	Yes	Yes	Yes	Yes
4	Yes	Yes	Yes	Yes	Yes	Yes
5	Yes	Yes	Yes	Yes	Yes	Yes

Unit-1: (50 to 100 contents)**Teaching Hours: 12**

Acoustics - Definition, objectives and requirements of good acoustics, Acoustical defects and remedies - echoes, reverberation, sound foci and dead spots; Noise and its effects: Sound absorption - sound absorbent materials, qualities of acoustic materials, guidelines for good acoustical design of auditorium, recording studio and broadcasting station. Cavity wall construction for sound insulation.

Unit-2: (50 to 100 contents)**Teaching Hours: 12**

Illumination - principles of illumination, effects of good and bad lighting, lighting load for various activities in a house, Glare and its effects, Types of lamps - incandescent, tungsten halogen, fluorescent and HID lamps; Lighting methods in interiors - direct, indirect, diffused, ambient, task and accent lighting; Architectural lighting methods - cove, valance, cornice, track and soffit lighting.

Unit-3: (50 to 100 contents)**Teaching Hours: 12**

Ventilation-definition, importance, types of ventilation-natural and mechanical, guidelines for natural ventilation - wind effect and stack effect. Mechanical ventilation - Air conditioning - Need, purpose, principles of air conditioning system and Components - refrigerant, compressor, condenser, expansion valve and evaporator working principle of air conditioning system. Types of air conditioning - Window, Split, Centralized and Packaged system. Application of HVAC in buildings.

Unit-4: (50 to 100 contents)**Teaching Hours: 12**

Electrical services - three phase and single phase system, distribution of electricity within a building, importance of Earthing, Electrical safety devices, simple electrical layouts. Plumbing services - one pipe and two pipe methods of drainage system, guidelines for laying drainage system, traps, vent pipe, sanitary apparatus - wash basin, sink, bath tub, urinals, flushing cistern and water closets.

Unit-5: (50 to 100 contents)**Teaching Hours: 12**

Building By-laws - definition, importance, objectives and characteristics. National Building Code and its role in building construction. Key terms - classification of buildings, building lines, plot area, plot coverage, carpet area, built-up area, open space requirements around buildings, FSI, standards for height, setback, frontage, circulation, ventilation, parking, lift capacity for a building.

Text Books :

1. **Unit-1:** Robert D. Finch, Introduction to Acoustics, Pearson Education India; First edition (25 April 2016)
2. **Unit-2:** J R Coaton and A. M. Marsden, Lamps and Lighting, Architectural Press; 4 edition (1 November 1996)
3. **Unit-3:** P.N. Ananthanarayanan, Basic Refrigeration and Air Conditioning, McGraw Hill Education; Fourth edition (1 May 2013)

4. **Unit-4:** Rangawala .S.C., Water supply and sanitary Engineering, Publishing house, Roorkee.
5. **Unit-5:** Town and Country Planning Organisation, (2016). Model Building Bye Laws. Ministry of Urban Development

Reference books:

1. F. Alton Everest, Master Handbook of Acoustics, McGraw-Hill/Tab Electronics
2. Frank J. Fahy, Foundations of Engineering Acoustics, Academic Press, September 19th 2000.
3. Gary Gordon, Interior Lighting for Designers, Wiley; 4 edition (January 28, 2003).
4. Mark Karlen, Lighting Design Basics, Wiley
5. Andrew D. Althouse, Carl H. Turnquist, Alfred F. Bracciano, Modern Refrigeration and Air Conditioning, Goodheart-Willcox; Twentieth Edition, Textbook edition (January 29, 2016)
6. W. Larsen Angel, HVAC Design Sourcebook, McGraw-Hill Education; 1 edition (October 26, 2011)
7. Brian Scaddan, Electrical Installation Work
8. L. V. Ripka, Plumbing Design and Installation, Amer Technical Pub; 4 edition (30 June 2011)
9. S. Deolalikar, Plumbing: Design and Practice, McGraw Hill Education (12 July 2001)
10. Ajit Prakashan's Model Building Bye-Laws, 2016

E- Materials:

1. https://mycourses.aalto.fi/pluginfile.php/137584/mod_resource/content/1/Lecture%204_Room%20acoustics_2015.pdf
2. <https://www.bdcnetwork.com/enhanced-acoustical-design>
3. https://www.troldtekt.com/Product-properties/Good-acoustics/Advanced_acoustics/Good-acoustics
4. https://www.academia.edu/1746322/lighting_principles_in_interior_design_of_management_spaces
5. <https://www.zumtobel.com/PDB/teaser/EN/lichthandbuch.pdf>
6. https://www.energy.gov/sites/prod/files/2013/12/f5/sustainable_guide_ch5.pdf
7. http://www.unep.fr/ozonaction/information/mmcfiles/7799_e_University_Course_Lecture_%20Notes.pdf
8. <https://www.ncbi.nlm.nih.gov/books/NBK143277/>
9. <http://ncert.nic.in/textbook/pdf/iepg101.pdf>
10. <https://theconstructor.org/building/types-of-plumbing-drainage-systems-buildings/13117/>
11. <https://www.mepwork.com/2018/12/electrical-design-for-buildings-notes.html>

12. <https://www.bidnet.com/bneattachments/?/400719539.pdf>
13. <http://mohua.gov.in/upload/uploadfiles/files/MBBL.pdf>
14. <https://www.scribd.com/document/422193669/BYE-LAWS-notes-pdf>
15. [http://www.erieconstructioncouncil.com/plan_room_documents/Plumbing%20Bid%20Set%20\(13\).pdf](http://www.erieconstructioncouncil.com/plan_room_documents/Plumbing%20Bid%20Set%20(13).pdf)

Mapping with Programme Outcomes

Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	S	S	S	-	S	-	S	S	S
CO2	S	S	S	S	-	S	-	S	S	M
CO3	S	S	S	M	-	M	-	S	S	M
CO4	S	S	S	M	-	M	-	S	S	M
CO5	S	S	S	S	-	S	-	S	S	S

PO – Programme Outcome, CO – Course outcome
 S – Strong, M – Medium, L – Low (may be avoided)

THIRUVALLUVAR UNIVERSITY, VELLORE – 632 115
B.Sc., INTERIOR DESIGN AND DÉCOR – 2022-2023 onwards

Semester: V

Paper type: Core Paper 5

Paper code:

Name of the Paper: Furniture in Interiors

Credit: 4

Total Hours per Week: 4 Lecture Hours: 60 Tutorial Hours: 60 Practical Hours:

Course Objectives:

To enable the students to

1. Gain knowledge on selection, arrangement, care and maintenance of furniture
2. Differentiate types and styles in furniture - use and process in furniture construction, joints.
3. Know about different furniture materials and finishes.
4. Knowledge on construction of furnitures
5. Understand about different types of furnitures and polishes

Course Outcomes:

1. After studied unit-1, the student will be able to Gain knowledge to Identify and select furniture for different areas of residence
2. After studied unit-2, the student will be able to Analyse the furniture for the process involved, joints, joineries used and finishes applied in furniture construction
3. After studied unit-3, the student will able to Differentiate or interpret the styles in furniture
4. After studied unit-4, the student will gain Knowledge on construction of furniture
5. After studied unit-5, the student will know about the Care and maintain furniture used in a given area.

Matching Table

Unit	i. Remembering	ii. Understanding	iii. Applying	iv. Analyzing	v. Evaluating	vi. Creating
1	Yes	Yes	No	Yes	Yes	Yes
2	Yes	Yes	Yes	Yes	Yes	Yes
3	Yes	Yes	Yes	Yes	Yes	Yes
4	Yes	Yes	No	Yes	Yes	Yes
5	Yes	Yes	Yes	Yes	Yes	No

Unit-1: (50 to 100 contents)**Teaching Hours: 12**

Introduction to furniture. Meaning and importance, Styles of furniture - traditional, contemporary and modern design. Classification - Furniture for comfort, rest and relaxation, work and storage, built-in and portable, Factors influencing furniture decisions - family needs, preferences, availability, principles of design and financial limit. Factors to be considered in furniture selection and tips to buy furniture.

Unit-2: (50 to 100 contents)**Teaching Hours: 12**

Materials used in furniture construction - Familiar furniture materials - Wood - teak, rose wood, walnut, cedar, mahogany, pine, birch, sal, ply wood, veneers bamboo, cane, metals, plastics, leathers, fabrics, glass

Unit-3: (50 to 100 contents)**Teaching Hours: 12**

Steps involved in construction of wooden furniture - Shaping, carving, turning, fluting, reeding and joining of furniture - types of joints - Upholstered furniture - meaning, upholstering - types, method and materials used.

Unit-4: (50 to 100 contents)**Teaching Hours: 12**

Selection and Arrangement of furniture—Factors to be considered in the selection of furniture, buy man ship, arrangement of furniture for various rooms - Living room, dining room, bedroom, kitchen, study room, office.

Unit-5: (50 to 100 contents)**Teaching Hours: 12**

Care and maintenance of furniture. Care of different types of furniture - wood, metals, plastic, and cane. Furniture polishes - types, natural and synthetic varnishes, other types of furniture finishes.

References:

1. Gandotra V, Shukul M and JaiswalN,(2011). Introduction to Interior Design and Decoration, New Delhi: Dominant publishers, India.
2. Premavathy .S,(2005) Interior Design and Decoration, New Delhi: CBS Publishers and Distributors, India.
3. Stuart. L,(2013) Furniture Design: An Introduction to Development, Materials and Manufacturing, Laurence King Publishing, London.
4. Stepat, D.D, (1971), Introduction to Home furnishings, The Mac MillanCo,NewYork.
5. Wilhide, E and Cope stick, I. (2000) contemporary decorating, conron octopus Ltd., London.
6. Levine M (1998), Living rooms, Rockport publishers, USA.
7. Faulkner. R and Faulkner. S, (1987), Inside today's home, Rinehart Winston, New York.
8. Mullick.P, (2000), Textbook of Home science, Kalyani publishers, NewDelhi.

Text Books:

1. Interior Design, (1996) John F. Pile, Harry N. Abrams Inc Publishers, New York
2. Residential Interior Design Course, (2001) Maureen Mitton, Courtney, John Wiley & Sons., London
3. The Encyclopedia of Furniture, (1997) Joseph Aronson, Crown Publishers, New York
4. Interior Design & Decoration, Premavathy Seetharaman and Parveen Pannu (2000), Prentice Hall
5. Interior Design, (2012) Francis D.K. Ching, John Wiley & Sons, New York
6. Time Saver Standards for Interior Design (2000), Joseph De Chiara, McGraw Hill, New York.

E- Materials:

1. <https://www.pinterest.com/freehandarch/living-room-references/>
2. <https://tympanus.net/codrops/2010/04/27/60-interior-design-and-furniture-websites-for-your-inspiration-2/>
3. <https://www.luxdeco.com/blogs/styleguide/popular-interior-design-styles>
4. <https://www.decoraid.com/blog/interior-design-history>
5. <https://www.dezeen.com/interiors/offices-interiors/>
6. https://www.researchgate.net/figure/Materials-and-finishes-proposed-for-selected-furniture-design_tbl1_228933679
7. <https://www.sciencedirect.com/science/article/pii/S0261306905002736>
8. <https://www.slideshare.net/Diwakarkushwaha5/types-of-materials-using-to-make-furnitures-interior-design-vi-sem-2017>
9. https://www.idec.org/files/M_Anderson&J_Pengilly_2.pdf
10. <https://mondecasa.com.sg/5-popular-materials-used-for-outdoor-furniture-manufacturing/>

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	S	S	S	-	S	-	S	S	S
CO2	S	S	S	S	-	S	-	S	S	M
CO3	S	S	S	M	-	M	-	S	S	M
CO4	S	S	S	M	-	M	-	S	S	M
CO5	S	S	S	S	-	S	-	S	S	S

PO – Programme Outcome, CO – Course outcome

S – Strong, M – Medium, L – Low (may be avoided)

Contents:

1. Develop different types of furniture design with regard to activity
2. Evaluate the furniture in terms of materials, construction details, design, uses, care and maintenance, age group, hours of use, durability and budget.
3. Developing furniture templates for different furniture.
4. Planning furniture layouts for different rooms and activities using templates - Living room, bed room and dining room.
5. Collection of furniture for different activities, different materials, market survey of furniture, making cutouts of furniture
6. Types of stitches, seams, Constructing samples of different pleats-knife, box, cartridge, loop, eyelets
7. Construct curtains using different types of pleats, collecting fabric samples for different basic and fancy weaves
8. Surface enrichment for cushion cover, pillow cover, napkin and table cloth with - mirror work, applique, fabric painting and embroidery
9. Preparation of Record

Text Books:

1. Anita .T, (2011), "Textiles for Apparel and Home Furnishing", New Delhi:SonaliPublications,India.
2. Kharuna.S, (2012), "Fabrics for Fashion and Textile Design", New Delhi:Sonali Publications, India.
3. Chaudhari.S.N, (2006), "Interior Design", Jaipur: Aavishkar Publisher, India.

Reference Books:

1. Stepat.D.Van, (1991), "Introduction to Home Furnishing", New York: The MacMillan Company.
2. Premavathy .S, Sonia.B and Preeti. M, (2005), "An Introduction to Family Resource Management", New Delhi: CBS Publishers & Distributors,India.

E-Materials:

1. <http://www.itraveluk.co.uk/photos/showphoto/photo/2747.php> [img]<http://www.itraveluk.co.uk/photos/data/1015/thumbs/neolithic-furniture.jpg> [img][url]
2. <http://chestofbooks.com/home-improvement/furniture/Period/Jacobean-Period-1603-1688-Part-2.html>
3. <http://www.maysvalues.co.uk/casestudy/09.html>
4. <http://chestofbooks.com/home-improvement/furniture/Period/Chapter-IV-Queen-Anne-And-Early-Georgian-1702-1750.html>

5. metal<http://www.museumfurniture.com/georgeI/>
6. <http://www.museumfurniture.com/georgeII/>
7. <http://www.museumfurniture.com/georgeIII/>
8. http://www.mobisharb.com/Mobisharb_Museum_Art_
9. <http://www.life.com/image/50541241>
10. <http://chestofbooks.com/home-improvement/furniture/How-To-Collect-Old-Furniture/Chapter-VII-The-Nineteenth-Century.html>
11. http://homersoddinthe.blogspot.com/2009_08_01_archive.html
12. <http://www.victorianweb.org/art/design/clutter1.html>

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	S	S	S	-	S	-	S	S	S
CO2	S	S	S	S	-	S	-	S	S	M
CO3	S	S	S	M	-	M	-	S	S	M
CO4	S	S	S	M	-	M	-	S	S	M
CO5	S	S	S	S	-	S	-	S	S	S

PO – Programme Outcome, CO – Course outcome

S – Strong, M – Medium, L – Low (may be avoided)

Unit-1: (50 to 100 contents)**Teaching Hours: 12**

Introduction to 3D modeling - point fixing method - Absolute co-ordinate systems, relative cylindrical and relative spherical co-ordinate systems. Types of models - wire frame model, surface model and solid model.

Unit-2: (50 to 100 contents)**Teaching Hours: 12**

Standard primitive tools - Box, cone, wedge, torus, cylinder, sphere - Boolean operations - union, subtract, intersect, interference

Unit-3: (50 to 100 contents)**Teaching Hours: 12**

2D to 3D conversion - Extrude, revolve. Lighting - point light, spot light, direct light. Camera - free and target camera.

Unit-4: (50 to 100 contents)**Teaching Hours: 12**

Rendering and special effects - Materials, Rendering still images, rendering animations, changing background colour and adding background images. Data exchange - import and export of models.

Unit-5: (50 to 100 contents)**Teaching Hours: 12**

Google Sketch Up - Introduction, Different versions of Sketch Up, Sketch Up 3D warehouse, applications of Sketch Up.

References:

1. Teach Yourself Auto CAD, GIBBS, BPE Publication New Delhi.
2. Inside Auto CAD.
3. Omura, G. 2005, Mastering Auto CAD 2005 and Auto CAD LT 2005, BPB Publications, New Delhi.
4. Saxena, S. (2003), A first Course in Computers, Vikas Publishing house, New Delhi.

E- Materials:

1. <https://thesourcecad.com/autocad-commands/>
2. <https://en.wikipedia.org/wiki/SketchUp>
3. <https://www.howtogeek.com/364232/what-is-sketchup/>
4. <https://www.educba.com/autocad-function-keys/>
5. <https://www.cadtutor.net/tutorials/autocad/basic-3d.php>
6. <https://thesourcecad.com/autocad-basic-3d-practice-drawing-tutorial/>
7. www.computeraideddesignguide.com › basic-tools-in-3d-in-autocad

Mapping with Programme Outcomes

Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	S	S	S	-	S	-	S	S	S
CO2	S	S	S	S	-	S	-	S	S	M
CO3	S	S	S	M	-	M	-	S	S	M
CO4	S	S	S	M	-	M	-	S	S	M
CO5	S	S	S	S	-	S	-	S	S	S

PO – Programme Outcome, CO – Course outcome

S – Strong, M – Medium, L – Low (may be avoided)

2. Move, copy, rotate and scaling, simple array technique.
3. Modelling technique - push pull, follow me, Offset and intersecting geometry.
4. Making Groups and components.
5. Introducing paint bucket, material editor, texture and bitmaps.
6. Creating scenes and new styles saving it.
7. Submission of record.

Mapping with Programme Outcomes

Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	S	S	S	-	S	-	S	S	S
CO2	S	S	S	S	-	S	-	S	S	M
CO3	S	S	S	M	-	M	-	S	S	M
CO4	S	S	S	M	-	M	-	S	S	M
CO5	S	S	S	S	-	S	-	S	S	S

PO – Programme Outcome, CO – Course outcome

S – Strong, M – Medium, L – Low (may be avoided)

THIRUVALLUVAR UNIVERSITY, VELLORE – 632 115
B.Sc., INTERIOR DESIGN AND DÉCOR – 2022-2023 onwards

Semester: V

Paper type: Core Paper 7

Paper code:

Name of the Paper: Floriculture And Landscaping

Credit: 4

Total Hours per Week: 5 Lecture Hours: 90 Tutorial Hours: 90 Practical Hours:

Course Objectives:

To enable the students to

1. Understand the importance of plants in landscape gardening.
2. Gain knowledge on propagation methods
3. Obtain practical knowledge in home gardens and indoor plants.
4. Know the importance of Landscaping
5. Study the modern trends in Gardening.

Course Outcome:

1. After studied unit-1, the student will be able to do floral arrangements based on principles and elements of design.
2. After studied unit-2, the student will be able to classify flowering and ornamental plants.
3. After studied unit-3, the student will be able to make different types of floral arrangements.
4. After studied unit-4, the student will be able to design and plan landscape garden.
5. After studied unit-5, the student will be able to acquire knowledge on modern trends in gardening.

Matching Table

Unit	i. Remembering	ii. Understanding	iii. Applying	iv. Analyzing	v. Evaluating	vi. Creating
1	Yes	Yes	No	Yes	Yes	Yes
2	Yes	Yes	Yes	Yes	Yes	Yes
3	Yes	Yes	Yes	Yes	Yes	Yes
4	Yes	Yes	No	Yes	Yes	Yes
5	Yes	Yes	Yes	Yes	Yes	Yes

UNIT – I**Teaching Hours: 20**

Floriculture - Meaning, concept and importance. Ornamental plants - classification - annuals, biennials and perennials. Flowering and foliage shrubs, trees, climbers and creepers, cacti and succulents, ferns, palms, hardy bulbs and tender bulbs.

UNIT – II**Teaching Hours: 20**

Flower arrangement - importance, materials needed, steps, components of flower arrangement, basic principles, basic shapes, styles Ikebana - history, materials required, general rules and basic styles of Ikebana Dry arrangement - preservation of plant materials - foliage and flowers, prolonging the vase life of flowers, garland and other floral ornament.

UNIT – III**Teaching Hours: 15**

Ornamental plant protection methods - cultural, chemical and mechanical. Pest and disease control. Care and maintenance of ornamental plants.

UNIT – IV**Teaching Hours: 20**

Landscaping - Meaning and importance, Types of garden, garden components, garden design - formal and informal, principles of landscape gardening - Lawn - importance, preparation, methods of cultivation, use, maintenance, types of lawn. Indoor plants - potting and repotting techniques.

UNIT – V**Teaching Hours: 15**

Modern trends in gardening - Terrace Garden, Rock Garden, Terrarium, and Bonsai culture. Developing ornamental plants in Home garden for flats - roof garden, hanging garden.

References:

1. Ross, R. (1999), Colorful Gardening - Climbers, Ryland Peters and Small, London.
2. Ross, R. (1999), Colorful Gardening - Bulbs, Ryland Peters and Small, London.
3. Scott - James, A. (1995), Perfect Plant Perfect Garden, Corner Octopus Limited, London.
4. Too good, A. (1995), Designing with House Plants, Grange Books Publication, London.
5. Carter, G. (1977), Gardening with Containers, Ryland Peter and Small, London.
6. Desh raj (2017) Floriculture at a glance, Kalyani publishers
7. G. S. Randhawa , A.N. Mukhopadyay, A. Mukhopadhyay , 1998 Floriculture in India, Jai deep publishers Delhi.
8. R.A.Preece,(1992), Designs on the Landscape, CBS publishers, NewDelhi

E-Materials:

1. <https://vikaspedia.in/agriculture/farm-based-enterprises/floriculture>

2. https://megagriculture.gov.in/PUBLIC/floriculture_objectives.aspx
3. <https://en.wikipedia.org/wiki/Floriculture>
4. <https://www.landscapingnetwork.com/landscape-design/what-is.html>
5. <https://www.thespruce.com/what-is-landscaping-2130991>

Mapping with Programme Outcomes

Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	S	S	S	-	S	-	S	S	S
CO2	S	S	S	S	-	S	-	S	S	M
CO3	S	S	S	M	-	M	-	S	S	M
CO4	S	S	S	M	-	M	-	S	S	M
CO5	S	S	S	S	-	S	-	S	S	S

PO – Programme Outcome, CO – Course outcome

S – Strong, M – Medium, L – Low (may be avoided)

THIRUVALLUVAR UNIVERSITY, VELLORE – 632 115
B.Sc., INTERIOR DESIGN AND DÉCOR – 2022-2023 onwards

Semester: V

Paper type: Core Practical 5 Paper code:

Name of the Paper: Floriculture and Landscaping Practicals Credit: 4

Total Hours per Week: 5 Lecture Hours: 90 Tutorial Hours: 90 Practical Hours:

Course Objectives:

To enable the students to

1. Gain knowledge on arranging flowers using design principles.
2. Understand different types of free style flower arrangement
3. Study the varieties of other arrangements.
4. Develop skills on drawing landscape plans for different area.
5. Knowledge of arranging flowers for different accession.

Course Outcomes:

1. After studied unit-1, the student will be able to do floral arrangements based on principles and elements of design.
2. After studied unit-2, the student will be able to classify flowering and ornamental plants.
3. After studied unit-3, the student will be able to make different types of floral arrangements.
4. After studied unit-4, the student will be able to design and plan landscape garden.
5. After studied unit-5, the student will be able to acquire knowledge on modern trends in gardening.

Matching Table

Unit	i. Remembering	ii. Understanding	iii. Applying	iv. Analyzing	v. Evaluating	vi. Creating
1	Yes	Yes	No	Yes	Yes	Yes
2	Yes	Yes	Yes	Yes	Yes	Yes
3	Yes	Yes	Yes	Yes	Yes	Yes
4	Yes	Yes	No	Yes	Yes	Yes
5	Yes	Yes	Yes	Yes	Yes	Yes

Practical:

1. Arranging flowers using design Principles - balance, proportion and scale, focal point, emphasis, rhythm and harmony.
2. Arranging different types of free style flower arrangement - line, mass, line and mass, miniature, floating, hanging, circular, triangular, crescent, Hogarth curve
3. Ikebana - Principles involved in arranging flowers and arranging Japanese method of flower arrangements
4. Other varieties of arrangements - dry arrangements, fruit arrangement, vegetable arrangements.
5. Arranging flowers for various occasions - wedding, reception, bouquets, hair decorations, garlands and button holes
6. Drawing landscape plans suitable for different areas
7. Record

E-Materials:

1. <https://vikaspedia.in/agriculture/farm-based-enterprises/floriculture>
2. https://megagriculture.gov.in/PUBLIC/floriculture_objectives.aspx
3. <https://en.wikipedia.org/wiki/Floriculture>
4. <https://www.landscapingnetwork.com/landscape-design/what-is.html>
5. <https://www.thespruce.com/what-is-landscaping-2130991>

Mapping with Programme Outcomes

Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	S	S	S	-	S	-	S	S	S
CO2	S	S	S	S	-	S	-	S	S	M
CO3	S	S	S	M	-	M	-	S	S	M
CO4	S	S	S	M	-	M	-	S	S	M
CO5	S	S	S	S	-	S	-	S	S	S

PO – Programme Outcome, CO – Course outcome

S – Strong, M – Medium, L – Low (may be avoided)

THIRUVALLUVAR UNIVERSITY, VELLORE – 632 115
B.Sc., INTERIOR DESIGN AND DÉCOR – 2022-2023 onwards

Semester: V

Paper type: Paper 8

Paper code:

Name of the Paper: Fundamentals of architecture Credit: 4

Total Hours per Week: 5 Lecture Hours: 90 Tutorial Hours: 90 Practical Hours:

Course Objectives:

Enable the students to

1. Learn the form of construction in architecture.
2. Gain knowledge on western architecture and Indian architecture.
3. Learn the features of modern architectures and the influence of vaasthusastra in building construction.
4. Study about Indian and Buddhist Architecture
5. Know about modern architecture

Course Outcome:

1. After studied unit-1, the student will be able to identify the history and development of architecture.
2. After studied unit-2, the student will be able to understand the elementary forms of construction.
3. After studied unit-3, the student will be able to explore the architectural masterpieces of other countries.
4. After studied unit-4, the student will be able to learn the characteristics of Indian architecture.
5. After studied unit-5, the student will be able to know the recent trends in architecture.

Matching Table

Unit	i. Remembering	ii. Understanding	iii. Applying	iv. Analyzing	v. Evaluating	vi. Creating
1	Yes	Yes	No	Yes	Yes	Yes
2	Yes	Yes	Yes	Yes	Yes	Yes
3	Yes	Yes	Yes	Yes	Yes	Yes
4	Yes	Yes	No	Yes	Yes	Yes
5	Yes	Yes	Yes	Yes	Yes	Yes

UNIT - I**Teaching Hours: 15**

Introduction to architecture - Definition and meaning, importance, principles of architecture. Development of Historic architecture.

UNIT – II**Teaching Hours: 20**

Elementary forms of construction - arch, post, lintel, cantilever roofing techniques - truss, vaults and domes. Egyptian and Mesopotamian architecture - Formation and development, characteristic features, typical examples.

UNIT - III**Teaching Hours: 20**

Architectural masterpieces of other countries Greek - Acropolis and Parthenon; their contribution to the development of post and lintel system-doric, ionic and Corinthian orders. Roman - Forum, Pantheon and Colosseum ; their contribution to the development of arches and domes. Gothic - Chartres cathedral; their contribution to the development of vaults.

UNIT - IV**Teaching Hours: 20**

Indian Architecture - Buddhist - characteristic features - Stambha, Stupa - Sanchistupa, Viharas and chaityas. North - Sun temple, Lingaraja temple, Ajantha and Ellora Caves, Tajmahal, Lotus Temple-its architectural features. South - Brihadeshwar temple, Meenakshi Amman Temple, Rock cut Temples - Mahabalipuram - its architectural features. Islamic architecture - characteristic features.

UNIT - V**Teaching Hours: 15**

Modern architecture - modern materials and new techniques, Great Architects of modern age - Le Corbusier, Mies Vander Rohe, Frank Lloyd Wright-and their outstanding buildings. Influence of vasthusastra in modern construction, Organic architecture.

References:

1. Satyamurthy (1991), Handbook of Indian Architecture, Ashish publishing house, New Delhi.
2. Rai, M. and Jaisingh, M.P (1986), Advances in building materials and construction, Roorkee Central Building Research Institute.
3. Prabhakar, L.U (1998), Vastu- The User's Manual, The Avenue Press, Chennai.
4. Indian Temples (1995), Oxford University Press, London.
5. Foster, M (1989), The Principles of Architecture: styles, structure and design, New Burlington, London.

E-Materials:

1. https://en.wikipedia.org/wiki/History_of_architecture
2. https://en.wikipedia.org/wiki/Frank_Lloyd_Wright
3. <https://study.com/academy/lesson/organic-architecture-definition-architects.html>
4. https://www.ducksters.com/history/ancient_greece/architecture.php
5. https://en.wikipedia.org/wiki/Cave_Temples_of_Mahabalipuram
6. gharpedia.com › [blog](#) › [modern-architecture](#)

Mapping with Programme Outcomes

Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	S	S	S	-	S	-	S	S	S
CO2	S	S	S	S	-	S	-	S	S	M
CO3	S	S	S	M	-	M	-	S	S	M
CO4	S	S	S	M	-	M	-	S	S	M
CO5	S	S	S	S	-	S	-	S	S	S

PO – Programme Outcome, CO – Course outcome

S – Strong, M – Medium, L – Low (may be avoided)

UNIT – I**Teaching Hours: 20**

Consumer Behaviour - Definition, Influence on consumer behavior, Consumer impact on marketing strategy, Methods of data collection, Consumer motivation, perception and attitude, consumer knowledge and memory, classification of consumer, Consumer rights and responsibilities, classification of consumer goods, Buyers, customers and consumers and consumer behavior.

UNIT – II**Teaching Hours: 20**

Merchandising - Meaning, significance and elements involved in merchandising - grading, branding, labeling, packaging and standardization. Merchandising and distribution - Importance, selection of channels, channels of distribution of goods, techniques of merchandising - selling methods. Concept of commercial art and merchandising - Meaning, classification, development of commercial art. Recent trends - art, architecture and display. Significance of display - interior and exterior.

UNIT – III**Teaching Hours: 15**

Visual Merchandising and Promotion- Principles, procedures and sources of information essential for marketing and promoting retail merchandise sales. Experience in planning, executing and evaluating promotion plans - Visual Merchandising Display - Importance, Visual merchandising as a communication tool, Relation between VMD and Store Layout, Store front design, Elements of Exterior and Interior Store Design.

UNIT – IV**Teaching Hours: 15**

Advertisement - Definition, importance, classification, features of good advertisement, preparation and techniques. Advertisement media - selection, Classification and types, poster - importance, characteristics, steps and techniques in poster making. Marketing - Definition, Market Segmentation, Bases for segmenting consumer markets, Industrial markets. Online marketing. Salesmanship - concept, definition, types and qualities of salesman - techniques of salesmanship.

UNIT – V**Teaching Hours: 20**

Visual Display - Classification of Displays, Music and Lighting, Sophistication in VD enhanced customer buying decision, Interiors with respect to brand. Create a good image of the store and provide a unique, comfortable and happy shopping experience for its consumers.

Window Display — Meaning and Scope, Promotional Display Vs. Institutional Display, Guidelines for effective window display.

References:

1. Hayden Noel, (2009). Consumer Behaviour, AVA Publishing, Singapore.
2. SujaRavindran Nair, (2014). Consumer Behaviour, Himalaya Publishing House, New Delhi.
3. Tony Morgan, (2008). Visual Merchandising - Window and in Store Displays for Retail, Laurance Publishing, London.
4. Pattanchetti, C.C., Reddy. P.N., (1995), Marketing, Rainbow Publisher, Coimbatore.
5. Nair, R. (1994), Marketing, Sultan Chand and Sons Educational Publishers, New Delhi.
6. Nisra, M.N. (1994), Sales Promotion and Advertising Management, Himalaya Publishing House, Bombay.
7. Virender S Poonia. (2010). Advertising Management. Gyan Publishing House, Delhi.
8. BholanathDutta, (2011). Salesmanship, Himalaya Publishing House, Chennai.

E- Materials:

1. <https://www.omniconvert.com/blog/consumer-behavior-in-marketing-patterns-types-segmentation.html>
2. <http://www.yourarticlelibrary.com/marketing/market-segmentation/consumer-behaviour-meaningdefinition-and-nature-of-consumer-behaviour/32301>
3. https://www.researchgate.net/publication/307862958_Consumer_Behaviour_Text_and_Cases_1st_Edition
4. <https://www.amazon.in/Visual-Merchandising-2nd-Tony-Morgan/dp/1856697630>
5. <http://www.economicdiscussion.net/advertising/types-of-advertising-media/31785>
6. <http://www2.cs.ucy.ac.cy/~nicolast/courses/cs435/various/p-design.htm>
7. <https://www.apoposter.com/poster-design/>
8. <https://www.feedough.com/market-segmentation-definition-basis-types-examples/>
9. http://www.pondiuni.edu.in/storage/dde/downloads/markiii_cb.pdf
10. <https://www.unibox.co.uk/news-inspiration/types-importance-of-window-displays>
11. http://content.inflibnet.ac.in/data-server/eacharya-documents/56b0853a8ae36ca7bfe81449_INFIEP_79/73/ET/79-73-ET-V1-S1__unit_7.pdf
12. https://books.google.co.in/books?id=6yh6abc1mxEC&pg=PP7&dq=books+for+advertisement&source=gbs_selected_pages&cad=3#v=onepage&q=books%20for%20advertisement&f=false
13. <http://www.himpub.com/documents/Chapter875.pdf>

Mapping with Programme Outcomes

Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	S	S	S	-	S	-	S	S	S
CO2	S	S	S	S	-	S	-	S	S	M
CO3	S	S	S	M	-	M	-	S	S	M
CO4	S	S	S	M	-	M	-	S	S	M
CO5	S	S	S	S	-	S	-	S	S	S

PO – Programme Outcome, CO – Course outcome

S – Strong, M – Medium, L – Low (may be avoided)

UNIT – I**Teaching Hours: 15**

Kitchen planning - Functions performed in a kitchen, types of kitchen, principles of planning kitchen - orientation and location, ventilation, storage needs, work triangle, colour, light and safety.

UNIT – II**Teaching Hours: 20**

Kitchen geometry - work heights and space dimension of different work areas and storage areas, Clearance space for various work areas, anthropometric measurements of an individual worker and its application to kitchen layout designing.

UNIT – III**Teaching Hours: 15**

Materials and finishes - Various materials and finishes used in kitchen - floor, walls, ceiling, sink, platforms, storage - their advantages and disadvantages.

UNIT – IV**Teaching Hours: 20**

Essential services needed in a kitchen. Water supply - hot and cold, tapping, water purifiers. Electricity services - electric current, exhaust fans, electrical equipment and their locations. Drainage services - Waste water drainage system, Solid waste disposal.

UNIT – V**Teaching Hours: 20**

Kitchen storage - principles of kitchen storage, Maximum and minimum reaches, storage areas in kitchen and its dimensions, hand operated tools and their location. Care and maintenance of storage.

References:

1. Alexander, N.J (1972), Designing Interior Environment, Havanouich Inc.,
2. Faulkner, R., and Faulkner. S, (1987), Inside Today's Home, Rinehart Publishing Company, New york.
3. Riggs, R. (1992) Materials and Components of Interior Design, Prentice - Hall of India Pvt Ltd., New Delhi.
4. Allen dizik (1988), A Concise Encyclopedia of Interior Design, 2nd edition, van nos - trend reinbold, Newyork.
5. Varghese.M.A. etal., (1994), Ergonomics in Kitchen Design, Bombay.

E- materials:

1. <https://www.addspacewerkz.com/5-importance-of-a-functional-kitchen/>
2. <https://www.webstaurantstore.com/article/6/commercial-kitchen-design.html>
3. <https://opentextbc.ca/basickitchenandfoodservicemanagement/chapter/factors-affecting-working-performance/>

4. <https://www.houseplanshelper.com/kitchen-design-layout.html>
5. <https://gharpedia.com/blog/which-are-the-best-materials-finishes-to-use-in-modular-kitchen/>
6. <https://www.acthomeservices.com/7-essential-things-need-kitchen/>
7. <https://www.slideshare.net/MANOJ0202/electrical-services-in-kitchen-and-dining>
8. <https://www.forkly.com/kitchen-hacks/20-space-saving-accessories-for-the-kitchen/>
9. <https://www.vendhq.com/blog/store-layout-design/>

Mapping with Programme Outcomes

Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	S	S	S	-	S	-	S	S	S
CO2	S	S	S	S	-	S	-	S	S	M
CO3	S	S	S	M	-	M	-	S	S	M
CO4	S	S	S	M	-	M	-	S	S	M
CO5	S	S	S	S	-	S	-	S	S	S

PO – Programme Outcome, CO – Course outcome

S – Strong, M – Medium, L – Low (may be avoided)

THIRUVALLUVAR UNIVERSITY, VELLORE – 632 115

B.Sc., INTERIOR DESIGN AND DÉCOR – 2022-2023 onwards

Semester: V Paper type: Paper 1 (Internal Elective) Paper code:

Name of the Paper: C. Housekeeping and Front Office Management Credit: 4

Total Hours per Week: 5 Lecture Hours: 90 Tutorial Hours: 90 Practical Hours

Course objectives:

To enable the students to

1. Know the organizational structure of a Housekeeping department.
2. Improve skills in organization of work and prepare for housekeeping jobs.
3. Understand the functions of housekeeping department.
4. Study the maintenance of bedding
5. Gain knowledge on front office

Course Outcome:

After studied unit-1, the student will be able to

1. After studied unit-1, the student will be able to appraise the role of housekeeping in various buildings.
2. After studied unit-2, the student will be able to identify the housekeeping areas in a building.
3. After studied unit-3, the student will be able to develop personal abilities in housekeeping to work in commercial establishments.
4. After studied unit-4, the student will be able to practice personal grooming and etiquette.
5. After studied unit-5, the student will be able to adopt good waste management practices as an efficient housekeeping method.

Matching Table

Unit	i. Remembering	ii. Understanding	iii. Applying	iv. Analyzing	v. Evaluating	vi. Creating
1	Yes	Yes	No	Yes	Yes	Yes
2	Yes	Yes	Yes	Yes	Yes	Yes
3	Yes	Yes	Yes	Yes	Yes	Yes
4	Yes	Yes	No	Yes	Yes	Yes
5	Yes	Yes	Yes	Yes	Yes	Yes

UNIT – I**Teaching Hours: 20**

Introduction to Housekeeping Department - Objectives, Organizational Structure of Housekeeping department (small, medium, large), Duties of Housekeeping personnel, Housekeeping as a Profession.

UNIT – II**Teaching Hours: 20**

Housekeeping in different Institutions - commercial sector and welfare sectors departments that housekeeping Co-ordinates with-reception, catering, interior decoration and other related departments.

UNIT – III**Teaching Hours: 15**

Functions of Housekeeping department - Desk control, records and registers, key types and control of keys, service pantry-location and essential features, lost and found, fire, emergency and first aid.

UNIT – IV**Teaching Hours: 15**

General maintenance - Cleanliness of all the rooms, furniture, furnishings and accessories. Bed and bedding size, care and cleaning of beds, bed linen, blankets, bedspreads and mattress, and pillow cover.

UNIT – V**Teaching Hours: 20**

Introduction to front office, layout of front office and different front office equipment, importance of front office in hospitality industry, duties and responsibility, ideal qualities of a front office staff and job description of a front office assistance.

References:

1. Branson, J.C. & Lennox, M (1992), Hotel, Hostel and Hospital Housekeeping, Arnold Heinaman, U.S.A.
2. Lillicrap, D.R and Cousins, J.A (1994), Food and Beverage Service, London
3. Faulkner, R. and Faulkner, S. (1997), Inside Today's Home, Rinehart Publishing company, New York.
4. Binnie, R and Boxal, D.J, (1972), Housecraft Principles and Practice, Pitman Publishing, London.
5. Andrews, S, (1985), Hotel Housekeeping - Training Manual, Tata McGraw Hill Publishing company Ltd, New Delhi.

E- materials:

1. <https://en.wikipedia.org/wiki/Housekeeping>
2. https://www.tutorialspoint.com/hotel_housekeeping/hotel_housekeeping_principles.htm
3. <https://www.resortdata.com/housekeeping-management/>
4. https://www.tutorialspoint.com/front_office_management/front_office_management_introduction.htm
5. <https://www.slideshare.net/yoganandagk/front-office-management-70577624>

Mapping with Programme Outcomes

Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	S	S	S	-	S	-	S	S	S
CO2	S	S	S	S	-	S	-	S	S	M
CO3	S	S	S	M	-	M	-	S	S	M
CO4	S	S	S	M	-	M	-	S	S	M
CO5	S	S	S	S	-	S	-	S	S	S

PO – Programme Outcome, CO – Course outcome

S – Strong, M – Medium, L – Low (may be avoided)

THIRUVALLUVAR UNIVERSITY, VELLORE – 632 115
B.Sc., INTERIOR DESIGN AND DÉCOR – 2022-2023 onwards

Semester: V

Paper type: Paper 3 Skill Based Subject Paper code:

Name of the Paper: Residential Space Designing

Credit: 4

Total Hours per Week: 5 Lecture Hours: 90 Tutorial Hours: 90 Practical Hours

Course Objectives:

To enable students to

1. Understand the concept of space.
2. Learn to draw house plan.
3. Acquire knowledge on institutions supporting housing activities in the Country.
4. Develop skill to draft house plans for various income groups.
5. Gain knowledge on housing situation in India.

Course Outcomes:

After completion of the course the student will be able to

1. After studied unit-1, the student will be able to demonstrate knowledge of space designing and its principles
2. After studied unit-2, the student will be able to use basic principles of spatial lay out to create well designed residential floor plans
3. After studied unit-3, the student will be able to analyze and apply client's needs to create effectively well designed floor plans
4. After studied unit-4, the student will be able to understand the factors that influence the buying, building or the renting of houses
5. After studied unit-5, the student will be able to identify key issues in housing finance, affordability and technology systems.

Matching Table

Unit	i. Remembering	ii. Understanding	iii. Applying	iv. Analyzing	v. Evaluating	vi. Creating
1	Yes	Yes	No	Yes	Yes	Yes
2	Yes	Yes	Yes	Yes	Yes	Yes
3	Yes	Yes	Yes	Yes	Yes	Yes
4	Yes	Yes	No	Yes	Yes	Yes
5	Yes	Yes	Yes	Yes	Yes	Yes

UNIT – I**Teaching Hours: 20****Factors Influencing Interior Residential Spaces**

Space for Living - concept of life space - Biological needs, ecological concerns, cultural influences, Psychological effects - privacy, personal space, territoriality, crowding, Planning a space - people, location and orientation, resources available, Planning objectives - utility, economy, beauty and character

UNIT – II**Teaching Hours: 30****Planning Space - Concept, Components And Methods**

Concept of Housing - functions of house, Factors considered in selection of site, principles of planning, Components of building - foundation, flooring, walls, ceiling and roof, Methods of construction - load bearing and framed structure, Levels of construction, Allocation of space for various activities - Social space, work space and private space. Types of plans - source of plan, site plan, floor plan, cross sections, elevation, perspective view and landscape plans - Housing problems in India - causes and remedial measures. Desirability of owning and renting.

UNIT – III**Teaching Hours: 10****Drafting House Plans**

Symbols; standards used in drawing house plans, Drawing house plans for various income group - low, middle and high, Reading and judging house plans

UNIT – IV**Teaching Hours: 20****Institutions Supporting Housing**

Financial institutions - HDFC, HUDCO, Nationalised Bank and LIC, Research Institutions - NBO, CBRI, SERC, Standards Institutions - Need for standardisation, types of standards, BIS and its role.

UNIT-V**Teaching Hours: 10****Housing Situation in India**

Types of housing, housing scenario, housing problems-causes and remedial measures, Housing schemes in India.

Text books:

1. Arora.S.P and Bindra S.P, (2005), Building Construction, Delhi: DhanpatRaiPulications,India.
2. VeenaGandotra and Sarjoo Patel,(2006), 'House for Family Living', New Delhi: Dominant Publishers,India.
3. Bhavikatti,S.S and Chitawadgi,M.V, (2017), 'Building and Drawing', Hubli.
4. Maureen Mitton, (2004), 'InteriorDesignVisual Presentation-A Guide to Graphics,Models and Presentation Techniques',New Jersey: John Wiley and Sons,USA.

References :

1. Jankowsky, Wanda, (2001), 'Modern Kitchen Work Book', New Delhi: Rockport Publishers, India.
2. Raychaudhuri Dutt, Debjani ,(2002), 'How Best to Plan and Build Your Home: A Total Guide for the Owner', Jaipur: Pustak Mahal, India.
3. Tolpin, Jim,(2001), 'New Family Home Creating the Perfect Home for Today and Tomorrow', New Delhi: Taunton Press,India
4. UshaShrikant,(2002), 'Designs for a Lifetime', Chennai: Honesty Publishers, India.

E-Materials :

1. <https://www.wiley.com/en-us/Residential+Interior+Design%3A+A+Guide+To+Planning+Spaces%2C+3rd+Edition-p-9781119013976>
2. <https://www.firstinarchitecture.co.uk/space-planning-basics/>
3. https://books.google.co.in/books/about/Residential_Interior_Design.html?id=bBgWCgAAQBAJ&redir_esc=y
4. https://books.google.co.in/books/about/Space_Planning_for_Commercial_and_Reside.html?id=htE1FN2oNc8C&redir_esc=y

Mapping with Programme Outcomes

Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	S	S	S	-	S	-	S	S	S
CO2	S	S	S	S	-	S	-	S	S	M
CO3	S	S	S	M	-	M	-	S	S	M
CO4	S	S	S	M	-	M	-	S	S	M
CO5	S	S	S	S	-	S	-	S	S	S

PO – Programme Outcome, CO – Course outcome
 S – Strong, M – Medium, L – Low (may be avoided)

UNIT – I**Teaching Hours: 12**

Soft furnishings - Meaning, Importance - relationship of furnishings with space, selection and use of furnishings - functional and decorative. Study of Basic hand stitches – Temporary - Even basting, uneven basting and hemming - Permanent – Running, Back, Overcast, Over hand, Whip and Slip. Seams and Seam finishes.

UNIT – II**Teaching Hours: 12**

Furnishings in interiors - Types of living room linen - slip covers, cushion covers, Bed linen bed spread, bed sheet, pillow covers, comforter, duvet cover, quilt cover, bed throws, bed skirts. Table linen - table cloth, place mat, table napkins and apron, kitchen napkins and towels. Selection, use and care of household linen.

UNIT – III**Teaching Hours: 12**

Types of windows - Dormer, Ranch, Picture, Window wall, Double hung, Sliding, Casement, Awning, Bay, Bow, French window, Arch window. Window Treatments: Hard - Blinds, Shades, Shutters, Lambrequin, short screens - Soft - Curtains and Draperies - One way draw, Tieback, Crisscross, Casement, Glass curtain. Tier, Cafe, valance, swag, cornice and Double hung draw.

UNIT – IV**Teaching Hours: 12**

Carpets & Rugs, Accent and Spot rugs. Rugs based on shapes and sizes. Carpets based on construction - woven and non-woven materials. Repair work - mending, darning & patch work. Care and maintenance of soft furnishings - stain removal, mending and darning, laundering.

UNIT - V**Teaching Hours: 12**

Requirements and cost of Furnishings, Listing the basic requirements of furnishings for different rooms, estimating the materials for construction of curtains and draperies, formulating a budget for furnishing a home.

Textbooks:

1. Anita.T, (2011), “Textiles for Apparel and Home Furnishing”, New Delhi: Sonali Publications, India.
2. Kharuna.S, (2012), “Fabrics for Fashion and Textile Design”, New Delhi: Sonali Publications, India.
3. Chaudhari.S.N, (2006), “Interior Design”, Jaipur: Aavishkar Publisher, India.
4. Philips B, (2000). Hamlyn book of decorating, octopus publishing Ltd, London.
5. Clifton.c. etal (1991). The complete Home decorator conran octopus Ltd, London.
6. Luke. H., (1996). Soft furnishings, New Holland publishers Ltd, Singapore.
7. Wilhide, E and Copestick, I. (2000). Contemporary decorating, conran octopus Ltd., London. Levine M (1998). Living rooms, Rockport publishers, USA.
8. Mary Mathews, (1996). Practicals Clothing Construction Part I and Part II Cosmic Press

References:

1. Stepat.D.Van, (1991), “Introduction to Home Furnishing”, New York: The MacMillan Company.
2. Premavathy .S, Sonia.B and Preeti. M, (2005), “An Introduction to Family Resource Management”, New Delhi: CBS Publishers & Distributors,India.
3. Rose Sinclair, (2015), “Textiles and Fashion-Materials, Design and Technology”, UK: Wood head Publishing Limited-Elsevier.
4. Hillard.E, (2000), “Brilliant Colourat Home”, London- Kyle Eathie Ltd, NewYork.
5. Philips B, (2000), Hamlyn book of decorating, octopus publishing Ltd,London.
6. Clifton.c. etal (1991), The complete home decorator conran octopus Ltd, London.
7. Luke. H., (1996), soft furnishings, New Holland publishers Ltd, Singapore.
8. Stepat, D.D, (1971), Introduction to Home furnishings, The Mac Millan Co,NewYork.
9. Wilhide, E and Copestick, I. (2000) contemporary decorating, conron octopus Ltd., London.
10. Levine M (1998), Living rooms, Rockport publishers, USA.

E- Materials:

1. <https://pdfs.semanticscholar.org/9a28/e4db15eda5985c465162820f975ba1d4bbd8.pdf>
2. <http://peartreeinteriors.co.uk/references/>
3. <https://www.britannica.com/technology/soft-furnishings>
4. <https://en.wikipedia.org/wiki/Upholstery>
5. <http://ajast.net/data/uploads/2143.pdf>

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	S	S	S	-	-	-	S	-	S
CO2	S	S	S	S	-	-	-	S	-	S
CO3	S	S	S	S	-	-	-	S	-	S
CO4	M	S	S	S	-	-	-	S	-	S
CO5	-	S	S	S	-	-	-	S	-	S

PO – Programme Outcome, CO – Course outcome

S – Strong, M – Medium, L – Low (may be avoided)

THIRUVALLUVAR UNIVERSITY, VELLORE – 632 115
B.Sc., INTERIOR DESIGN AND DÉCOR – 2022-2023 onwards

Semester: VI

Paper type: Core Theory Paper 10

Paper code:

Name of the Paper: APPLIED ARTS

Credit: 4

Total Hours per Week: 6

Lecture Hours: 60

Tutorial Hours: 60

Practical Hours:

Course Objectives:

To enable the students to

1. Understand the techniques of art forms and developing skills.
2. Apply art and its principles in the creation and selection of art objects.
3. Analyze about the different styles of artcrafts.
4. Apply the principles in creating art objects for home decoration.
5. Evaluate different types of table settings.

Course Outcome:

1. After studied unit-1, the student will be able to appreciate art and evaluate art objects.
2. After studied unit-2, the student will be able to understand the process of enriching wood, metal, ceramics and glass.
3. After studied unit-3, the student will be able to create craft items like macramé, collage, decoupage and basket weaving
4. After studied unit-4, the student will be able to understand the importance, selection and placement of accessories.
5. After studied unit-5, the student will be able to know the different styles of food service.

Matching Table

Unit	i. Remembering	ii. Understanding	iii. Applying	iv. Analyzing	v. Evaluating	vi. Creating
1	Yes	Yes	No	Yes	Yes	No
2	Yes	Yes	Yes	Yes	Yes	Yes
3	Yes	Yes	Yes	Yes	Yes	Yes
4	Yes	Yes	Yes	Yes	Yes	Yes
5	Yes	Yes	Yes	Yes	Yes	Yes

UNIT – I**Teaching Hours: 12**

Applied arts - Meaning and significance of art in the home. Functions of art - motivated and non-motivated function. Factors affecting art forms - Geography, community, materials, individuality, technology, Psychology and financial resource. Art appreciation - meaning, developing skills for appreciation of art, Evaluation of art objects - Basic guidelines in evaluating art objects.

UNIT - II**Teaching Hours: 12**

Enrichment of different materials. Wood - methods of shaping and decorating - printing, varnish, shellac, lacquer. Woodwork - cutting, turning, carving, Inlay - Enrichment of metals - embossing or repousse, chasing, engraving, inlaying, stamping, gilding, enamelling, and electroplating - Ceramics - Definition, Types - earthenware, stoneware, chinaware, porcelain and terracotta. Ornamentation on ceramics - painting, glazing, carving, graffito and Mishima - Glass Enrichment - etching, engraving, cutting, enamelling, painting. Use of glass in home.

UNIT – III**Teaching Hours: 12**

Mosaic - meaning, creating art pieces with mosaics - direct and indirect method. Papier-mâché - meaning, origin and process, Basket weaving - meaning, types of basketry methods: coiling, plaiting, twining, and wicker - Craft - Macrame - meaning, materials and types of knots. Decoupage - materials used, and process of decoupage craft, Fabric painting - techniques, Glass painting, Oil painting - ingredients, techniques - glazing, impasto, scumbling, and all prima. Collage - meaning, types - paper, fabric, assemblage, digital.

UNIT – IV**Teaching Hours: 12**

Accessories - Meaning, importance, Types - functional accessories and decorative accessories, Factors to be considered while selecting accessories - Proportion, harmony, colour, line and form, texture, expressiveness, theme of room, cost. Placement of accessories - guiding principle - style of room, principles of design, background space, stability of objects. Hanging pictures and picture mounting - square, rectangle - vertical and horizontal.

UNIT – V**Teaching Hours: 12**

Table setting - types - formal table setting, informal table setting and buffet table setting. Principles of table setting, Table decoration and table appointments - meaning, types and uses. Styles in food service - Indian - Thali service. Types of Western food service- English, French, Russian, American, Gueridon. Buffet service - meaning, advantages and disadvantages of Buffet food service.

Text Books:

1. Unit-1: Faulkner, R. (1986) Art Today, Zory Field and Hill, New York.
2. Unit-2 : Faulkner,S. and Faulkner,R.(1987), Inside Today's Home, Rinehart Publishing Company, New York.
3. Unit-3 : Reader's Digest (1991), Crafts and Hobbier
4. Unit-4: Gangodra,V. and ManeeshaShukul(2010), Introduction to Interior Design and decoration, Dominant Publishers and Distributors, New Delhi.
5. Unit-5: Sudhir Andrews (2013),Food and Beverage Service: A Training Manual, Tata McGraw-Hill Education, New Delhi.

E- Materials:

1. <https://en.wikipedia.org/wiki/Art>
2. <https://en.wikipedia.org/wiki/Collage>
3. <https://www.artyfactory.com/art-appreciation.html>
4. <https://nomliving.com/blogs/thingswedo/pottery-and-ceramics-a-brief-explanation>
5. <https://www.webrestaurantstore.com/blog/2852/restaurant-table-settings.html>
6. <https://www.creativebloq.com/art/painting-techniques-artists-31619638>
7. www.yarnspirations.com › How-To › Basics

References:

1. Evans, A (1973), Man the Designer, The Macmillan Company, New York.
2. Faulkner, R. (1986) Art Today, Zory Field and Hill, New York.
3. Holmes, O (1982) - A Grammer of Arts, the Macmillan Company.
4. French, B (1969) - Principles of Collage, Mills and Bean, London.
5. Reader's Digest (1991), Crafts and Hobbier.
6. Singaravelavan,R. (2016),Food and Beverage Service, 2nd edition, Oxford University Press.

Magazines :

1. Inside Outside
2. Society Interiors

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	S	S	S	-	-	-	S	-	S
CO2	S	S	S	S	-	-	-	S	-	S
CO3	S	S	S	S	-	-	-	S	-	S
CO4	S	S	S	S	-	-	-	S	-	S
CO5	S	S	S	S	-	-	-	S	-	S

PO – Programme Outcome, CO – Course outcome

S – Strong, M – Medium, L – Low (may be avoided)

THIRUVALLUVAR UNIVERSITY, VELLORE – 632 115
B.Sc., INTERIOR DESIGN AND DÉCOR – 2022-2023 onwards

Semester: VI

Paper type: Core Practical - 3

Paper code: Name of the Paper: Furniture Design Practicals Credit: 3

Total Hours per Week: 3 Lecture Hours: - Tutorial Hours: 0 Practical Hours: - 45

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Course Objectives

To enable the students to

1. Understand the basic guidelines of furniture design
2. Familiarize the different types of materials used in designing furnishings
3. Planning furniture layouts for different rooms and activities using templates.
4. Making scaled model of furniture and making cutouts of furniture.
5. Preparation of records – collection of furniture for different activities, different materials, market survey of furniture.

Course Outcomes:

After completion of the course, the student will be able to

1. After studied unit-1, the student will be able to understand the design details of a furniture and summarize the templates and proportions.
2. After studied unit-2, the student will be able to analyze the materials used for construction of cabinets.
3. After studied unit-3, the student will be able to understand the features of various types of furniture design.
4. After studied unit-4, the student will be able to develop scaled model of furniture and make cutouts of furniture.
5. After studied unit-5, the student will be able to apply art principles in furniture design

Matching Table (Put Yes / No in the appropriate box)

Unit	i. Remembering	ii. Understanding	iii. Applying	iv. Analyzing	v. Evaluating	vi. Creating
1	Yes	Yes	Yes	Yes	Yes	No
2	Yes	Yes	Yes	Yes	Yes	Yes
3	Yes	Yes	Yes	Yes	Yes	Yes
4	Yes	Yes	Yes	Yes	Yes	Yes
5	Yes	Yes	Yes	Yes	Yes	Yes

UNIT – I Human Factors**Teaching Hours: 9**

Study of furniture Design involved in the design of Sofa, settee, couch, etc. Cot, bedside lockers, wardrobes Cupboards, shelves Bunk beds, study table Display.

UNIT – II Principles of Design & Detailing's**Teaching Hours: 9**

Concepts in bedroom & living room interiors – various layout of these spaces – the use of furniture and accessories to create a certain type of ambience.

Form – Colour - Symbols

Materials & finishes – Wood, Glass, Metal, Plastics and Upholstery - include various finishes.

Fabrication Techniques involved Multiple Utility Oriented Approaches to Furniture Design.

UNIT – III Types of Furniture**Teaching Hours: 9**

Types of furniture – Built in furniture – Movable furniture – Systems furniture – Specially Designed furniture – Readymade furniture – Modular, Knockdown & Economy Furniture.

Traffic pattern and furniture layout for residence, commercial and office areas.

UNIT – IV Carpentry**Teaching Hours: 9**

Introducing the techniques of planning, chiseling & jointing in timber to learn the use of hand tools. Exercise involving the design of simple furniture and making a scaled model of the furniture.

UNIT – V Projects**Teaching Hours: 9**

Designing & detailing of

Residential Furniture – Seating, Sleeping, Storage & Children's furniture

Commercial furniture – Showcases, Counters, Display units, Restaurant furniture, Bar furniture

Office furniture – Adjustable desks & storage, Mobile & Resilient chairs, Portable chairs, Movable Tables, Lounge seating.

Textbooks:

1. Interior Design, John F. Pile, Harry N.Abrams Inc Publishers, New York
2. Interior Design Course, Mary Gilliat Coyran, Octopus Ltd., London
3. The Encyclopaedia of Furniture, Joseph Aronson, Crown Publishers, New York
4. Interior Design & Decoration, Sherril Whiton, Prentice Hall
5. Interior Design, Francis D.K. Ching, John Wiley & Sons, New York
6. Office Furniture, Susan S.Szenasy, Facts on file Inc, New York

7. Time Saver Standards for Interior Design, Joseph De Chiara, McGraw Hill, New York.

Reference Book:

1. Interior Design, (2012) Francis D.K. Ching, John Wiley & Sons, New York
2. Time Saver Standards for Interior Design (2000), Joseph De Chiara, McGraw Hill, New York.
3. A history of interior design – 2nd edn – 2005 – John Wiley & Sons.Inc
4. Jeannie Ireland (2009), History of Interior Design, air child publications, illustrated ed., Jim Postell, Furnitute Design , Wiley publishers, 2007.
5. Robbie.G. Blakemore, (2005), History of Interior Design and Furniture. From Ancient Egypt to Nineteenth – Century Europe, Wiley Publishers.

Course Material: website links

1. http://homes.ieu.edu.tr/ffd301/INSTRUCTOR%20PRESENTATIONS/FFD301_Presentation01_history_of_furniture.pdf
2. <https://catalogimages.wiley.com/images/db/pdf/9781118090787.excerpt.pdf>
3. Illustrated History of Furniture - From the Earliest to the Present Time by Frederick Litchfield, Truslove, Hanson & Comba, digitized 2006
4. <https://koalaliving.com.au/blog/golden-ratio-design-template>

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	S	S	S	-	S	-	S	S	S
CO2	S	S	S	S	-	S	-	S	S	M
CO3	S	S	S	M	-	M	-	S	S	M
CO4	S	S	S	M	-	M	-	S	S	M
CO5	S	S	S	S	-	S	-	S	S	S

PO – Programme Outcome, CO – Course outcome

S – Strong, M – Medium, L – Low (may be avoided)

THIRUVALLUVAR UNIVERSITY, VELLORE – 632 115
B.Sc., INTERIOR DESIGN AND DÉCOR – 2022-2023 onwards

Semester: VI

Paper type: Core Practical - 4

Paper code:

Name of the Paper: Google Sketchup Practical

Credit: 3

Total Hours per Week: 3

Lecture Hours: -

Tutorial Hours: 0

Practical Hours: - 45

Course Objectives: To enable the students to

1. Understand computer laboratory-based training course intended to upgrade the presentation skill of the students to enable them to produce high quality, photo – realistic drawings & walk through.
2. Develop 3D home to model interiors of buildings through software.
3. Develop and modify building elements.
4. Analyze materials suitable for furniture
5. Create 3D buildings walkthrough path.

Course Outcome: After completion of the course, the student will be able to

1. Understand the concept, Principles, and tools for drawing.
2. Draw and modify building elements.
3. Apply materials suitable for furniture
4. Create 3D home architect Walkthrough path.
5. Prepare projects for 3D home designs.

Matching Table (Put Yes / No in the appropriate box)

Unit	i. Remembering	ii. Understanding	iii. Applying	iv. Analyzing	v. Evaluating	vi. Creating
1	Yes	Yes	No	Yes	Yes	No
2	Yes	Yes	No	Yes	Yes	Yes
3	Yes	Yes	Yes	Yes	No	Yes
4	Yes	Yes	Yes	Yes	No	Yes
5	Yes	Yes	Yes	Yes	Yes	Yes

UNIT 1 Introduction To Sketchup & Its Tools**Teaching Hours: 9**

Starting a drawing – Concepts – Principles tools for drawing, modification, construction, camera, walkthrough, sandbox etc – breaking edges, google toolbar.

UNIT 2 Use & Management of Sketchup**Teaching Hours: 9**

Model setting and managers – colours and materials – entities – making input & output – technical information – common tasks – applications.

UNIT 3 Introduction To 3d Home Architect**Teaching Hours: 9**

Starting a drawing – Drawing walls, windows, doors, staircases, columns, roof etc. modifying the properties of doors, windows etc. – applying materials, colour.

UNIT 4 Applications of 3d Home Architect**Teaching Hours: 9**

Adding furniture, fittings etc. - camera positions & viewing angles – rendering views with trees, cars, people etc. – Choosing a suitable walkthrough path & creation of the same.

UNIT 5 Exercises Using Interior Design Studio Projects**Teaching Hours: 9**

Exercises in the use of Sketchup & 3D Home Architect for the designs.

Text Books:

1. User manual & tutorials of Google Sketch Up software.
2. User manual & tutorials of 3D Home Architect software.

Reference Books:

1. Designs for 20th century Interiors – Fiona Leolie, VH Publications, London.
2. Interior Design; The New Freedom, Barbaralec Diamonstein, Rizzoli International Publications, New York, 1982.

Course Material: website links, e-Books and e-journals:

1. <https://www.sketchup.com/>
2. https://3dvinci.net/ccp0-prodshow/SSS_InteriorDesign_PDF.html
3. <https://books.apple.com/us/book/remodeling-with-sketchup/id581631540>
4. https://www.amazon.com/Rendering-SketchUp-Presentation-Architecture-Landscape-ebook/dp/B00B9VZ2MU/ref=sr_1_5?s=books&ie=UTF8&qid=&asin=B00B9VZ2MU&revisionId=bfa4d7c0&format=1&depth=1

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	S	S	S	S	-	S	S	S	S
CO2	S	S	S	S	S	-	S	S	S	S
CO3	S	S	S	S	S	-	S	S	S	S
CO4	S	S	S	S	S	-	S	S	S	S
CO5	S	S	S	S	S	-	S	S	S	S

PO – Programme Outcome, CO – Course outcome

S – Strong, M – Medium, L – Low (may be avoided)

THIRUVALLUVAR UNIVERSITY, VELLORE – 632 115
B.Sc., INTERIOR DESIGN AND DÉCOR – 2022-2023 onwards

Semester: VI

Paper type: Core Practical - 3

Paper code: Name of the Paper: Floriculture and Landscaping Practical Credit: 3

Total Hours per Week: 3 Lecture Hours: - Tutorial Hours: 0 Practical Hours: - 45

Course Objectives: To enable the students to

1. Gain knowledge on raising garden with Plants and trees of flowers and shrubs.
2. Understand the methods of gardening aspects.
3. Identify various ornamental flowers, shrubs and trees.
4. Design interior landscape with special emphasis on the choice.
5. Analyzing landscaping elements and their application in interior spaces

Course Outcomes:

1. After studied unit-1, the student will be able to create garden design with various plants and trees
2. After studied unit-2, the student will be able to develop designs for gardening landscape.
3. After studied unit-3, the student will be able to arrange ornamental flowers with theme.
4. After studied unit-4, the student will be able to select suitable plants for various places.
5. After studied unit-5, the student will be able to estimate and create mini-Floriculture landscape.

Matching Table

Unit	i. Remembering	ii. Understanding	iii. Applying	iv. Analyzing	v. Evaluating	vi. Creating
1	Yes	Yes	Yes	Yes	Yes	Yes
2	Yes	Yes	Yes	Yes	Yes	Yes
3	Yes	Yes	Yes	Yes	Yes	Yes
4	Yes	Yes	Yes	Yes	Yes	Yes
5	Yes	Yes	Yes	Yes	Yes	Yes

UNIT – I Interior Landscaping**Teaching hours: 9**

Identification of important flowering plants, shrubs and other ornamental plants.

classification of plants, indoor plants and their functions, layout & components, Floriculture – commercial, ornamental, Selection of plants & pest control.

UNIT – II Physical Requirements of Plants**Teaching hours: 9**

Preparation of cutting, layering, budding and grafting. Techniques to meet physical requirements.

UNIT – III Interior Landscaping Elements & Principles**Teaching hours: 9**

Various interior landscaping elements – water bodies - pools, fountains, cascades Plants, rocks, artifacts, paving & lighting, Design guidelines- plant texture & colour, plant height, plant spacing.

UNIT – IV Types of Garden**Teaching hours: 9**

Courtyard design, An outdoor room design, Terrace Garden and Vertical Garden

UNIT – V Exercise on Interior Landscape**Teaching hours: 9**

Visit to Landscape Garden and maintaining a model landscape area and making estimates.

Text Books:

1. User manual & tutorials of Google Sketch Up software.
2. User manual & tutorials of 3D Home Architect software.

Reference Books:

1. Time saver standards for landscape architecture.
2. Planting design by Theodore D.Walker, VNR Publications New York.
3. Landscaping Principles and Practices by Jack E.Ingels, Delmar Publishers.

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	S	S	S	-	S	-	S	-	S
CO2	S	S	S	S	-	S	-	S	-	S
CO3	S	S	S	S	-	S	-	S	-	S
CO4	S	S	S	S	-	S	-	S	-	S
CO5	S	S	S	S	-	S	-	S	-	S

PO – Programme Outcome, CO – Course outcome

S – Strong, M – Medium, L – Low (may be avoided)

PROJECT

Compulsory Project

The students must take up a Group / Individual project in the field of Interior Design and Decoration and report should be submitted at the end of VI semester. (Group will not be exceeding five students).

Project planning, project scheduling and project controlling, Role of Decision in project, Method of planning and programming, Human resource aspects of project handling.

THIRUVALLUVAR UNIVERSITY, VELLORE – 632 115
B.Sc., INTERIOR DESIGN AND DÉCOR – 2022-2023 onwards

Semester: VI

Paper type: Internal Elective Paper - 2

Paper code:

Name of the Paper: A. Professional Practice

Credit: 3

Total Hours per Week: 3

Lecture Hours: 45

Tutorial Hours: 45

Practical Hours:

Course Objectives:

To enable the students to

1. Plan residential interiors and commercial interiors.
2. Gain knowledge in estimating and costing.
3. Understand the preparation of quotation and tenders.
4. Gain experience in Professional ability of an interior designer.
5. Develop techniques in planning, programming and management of a project.

Course Outcome:

1. After studied unit-1, the student will be able to differentiate different types of residential buildings.
2. After studied unit-2, the student will be able to understand the factors involved in commercial space designing.
3. After studied unit-3, the student will be able to understand the types of estimates and quantity surveying methods and Prepare detail estimation.
4. After studied unit-4, the student will be able to learn the importance and uses of specification in construction.
5. After studied unit-5, the student will be able to know the difference between tenders, quotation and contract.

Matching Table

Unit	i. Remembering	ii. Understanding	iii. Applying	iv. Analyzing	v. Evaluating	vi. Creating
1	Yes	Yes	Yes	Yes	Yes	No
2	Yes	Yes	Yes	Yes	Yes	No
3	Yes	Yes	Yes	Yes	Yes	No
4	Yes	Yes	Yes	Yes	Yes	No
5	Yes	Yes	Yes	Yes	Yes	No

UNIT – I**Teaching hours: 9**

Residential Interior design - meaning, types of residential buildings - single family homes, condominiums, multi-family homes, apartments and flats, penthouses, studio flats, villas, farmhouses, huts, eco-friendly homes. planning for residential interiors - living room, dining room, kitchen, bedroom, children's room, bathroom.

UNIT – II**Teaching hours: 9**

Commercial interiors - meaning, Role of commercial interior designers, Types of Office Layouts- cubicle, low partition, team-based, open-plan, hybrid, co-working, home office - prospects and constraints. Factors to be considered in commercial interior designing - versatility of space, aesthetics, technology implementation, personalized spaces and safety. Space planning for office interiors - cabinets, conference rooms.

UNIT – III**Teaching hours: 9**

Estimation - Definition of estimates, need for estimation, Types of estimates - approximate, detailed, revised, supplementary, repair, annual maintenance and sub-estimate. Types of approximate estimate. Preparation of detailed estimate. Measurement of materials - units and mode of measurement, rules for measurements. Quantity surveying - methods of taking out quantities- long wall-short wall, centre line, partially centre line and short wall. Analysis of rates, schedule of items, schedule of quantities.

UNIT – IV**Teaching hours: 9**

Specifications - definition, importance of specification, uses of specification, types of specification - General, detailed, special, restricted or recommended and manufactures. Principles of drafting specifications, requirements of specifications, points to be included in the specifications. Sources for information regarding the specification.

UNIT – V**Teaching hours: 9**

Tenders and quotations - Tenders - meaning, objectives of tendering, contents of a tender notice, types of tender, tender document, preparation of tenders, methods of inviting tender-public, e-tendering, limited tender, single tender, nomination. Quotations - meaning, Contracts - meaning, types - measurement contracts, lump sum, cost plus fee, turnkey, labour, day work, unit price, target cost, time and material.

Text Book:

1. Faulkner, R. (1986) Art Today, Zory Field and Hill, New York.
2. SamKubba, Space Planning for Commercial and Residential, McGraw-Hill Professional (2003)
3. Arulmanickam A.P. and T.K. Palaniappan (1993), Estimating and Costing, Pratheeba
4. Publishers, Coimbatore.

E- Material:

1. <https://en.wikipedia.org/wiki/Art>
2. <https://www.artyfactory.com/art-appreciation.html>
3. <http://expertrealttycompany.blogspot.com/2015/04/what-are-five-principal-types-of.html>
4. <http://www.civilprojectsonline.com/civil-projects/purpose-of-specifications-and-types-of-specifications/>
5. <https://www.basiccivilengineering.com/2018/07/types-estimate-types-estimates-prepared-various-stages-project.html>
6. <https://www.redfin.com/resources/difference-between-building-types>
7. <https://www.opuskinetic.com/2019/04/4-types-of-tender-and-tendering-processes/>

References:

1. Deshpande, R.S. (1995); Modern Ideal Homes for India, Deshpande Publication, Poona.
2. Tessie, A., (1986), The House, its Plan and Use, J.B. Lippincett, New York.
3. Day P.G. (1982), A guide to Professional Architectural and Industrial Scale Model Building, Eagle wood cliffs, N.J. Prentice Hall.
4. Indian Standards Institutions (1983), National Building Code of India ISI rol, 1 New Delhi, MarakBhavan.
5. Arulmanickam A.P. and T.K. Palaniappan (1993), Estimating and Costing, Pratheeba Publishers, Coimbatore.
6. Dutta, B.N., “Estimating and Costing in Civil Engineering”, UBS Publishers & Distributors Pvt. Ltd., 2003 2. K
7. Kohli, D.D and Kohli, R.C., “A Text Book of Estimating and Costing (Civil)”, S.Chand & Company Ltd., 2004
8. Faulkner,S. and Faulkner,R.(1987), Inside Today’s Home, Rinehart Publishing Company, New York

Magazines:

1. Inside Outside
2. Society Interiors

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	S	S	S	-	S	-	S	-	S
CO2	S	S	S	S	-	S	-	S	-	S
CO3	S	S	S	S	-	S	-	S	-	S
CO4	S	S	S	S	-	S	-	S	-	S
CO5	S	S	S	S	-	S	-	S	-	S

PO – Programme Outcome, CO – Course outcome

S – Strong, M – Medium, L – Low (may be avoided)

THIRUVALLUVAR UNIVERSITY, VELLORE – 632 115
B.Sc., INTERIOR DESIGN AND DÉCOR – 2022-2023 onwards

Semester: VI Paper type: Internal Elective Paper - 2

Paper code: Name of the Paper: B. Environmental control in Interiors Credit: 3

Total Hours per Week: 3 Lecture Hours: 45 Tutorial Hours: 45 Practical Hours:

Course Objectives:

To enable the students to

1. Understand the importance of environment control in the interiors.
2. Acquire knowledge on the different types of heating and cooling systems.
3. Determine thermal insulation material requirement in a room.
4. Learn about HVAC system in buildings.
5. Identify acoustic materials in order to reduce Noise pollution.

Course Outcome:

1. After studied unit-1, the student will be able to manage and control elements of environment in Interiors.
2. After studied unit-2, the student will be able to understands the importance of airflow in the buildings.
3. After studied unit-3, the student will be able to apply thermal insulation materials in interiors.
4. After studied unit-4, the student will be able to explore types of air condition application.
5. After studied unit-5, the student will be able to relates sound absorbent material in the required field.

Matching Table (Put Yes / No in the appropriate box)

Unit	i. Remembering	ii. Understanding	iii. Applying	iv. Analyzing	v. Evaluating	vi. Creating
1	Yes	Yes	No	Yes	Yes	No
2	Yes	Yes	Yes	Yes	Yes	No
3	Yes	Yes	Yes	Yes	Yes	No
4	Yes	Yes	Yes	Yes	Yes	No
5	Yes	Yes	Yes	Yes	Yes	No

UNIT – I**Teaching hours: 9**

Environment control - meaning of environment, importance of environment control, advantages, Elements to be controlled in the interiors - Temperature, air quality, sound, light, sanitation. Measures for the Control of Indoor Environments, selection of the site, architectural design, selection of materials, Impact of environment on health and sanitation.

UNIT – II**Teaching hours: 9**

Ventilation - Definition, Functional requirements of a ventilation system, importance, airflow through buildings - Air flow, Heat flow and Moisture Flow. Humidity - Definition, humidity control, Humidification process. Types of ventilation - Natural - Indoor air quality, Energy saving, Green house, Sick Building Syndrome and mechanical - Exhaust fan, Air filters, Space heating and cooling system. Guidelines for natural ventilation.

UNIT – III**Teaching hours: 9**

Thermal Insulation - General principles, Need for room heating, types of heating system - central heating, Radiant, forced air; Window insulation film, Thermal conductivity, Thermal Resistance (R), Insulation Work, Solar system - Active solar system and passive solar system. Construction insulating materials - Wood Fibre, Fibre Glass, Hemp, Cellular glass, Straw, Glass mineral wool, Phenolic Foam and Aerogel.

UNIT – IV**Teaching hours: 9**

Air conditioning - Meaning, HVAC Principles, need for air-conditioning, air conditioning applications, types of air conditioning - Central air conditioning, Window type room air condition. Essentials of an air-conditioned system and its Uses.

UNIT – V**Teaching hours: 9**

Acoustics and sound insulation - Definition, objectives, requirements of good acoustics, properties of sound, common acoustical defects; Sound absorption - sound absorbent materials, qualities of acoustic material, general principles in acoustical design.

References:

1. Encyclopedia of Occupational Health and Safety from the International Labour Office - Part IV, Indoor Environmental Control, Fourth Edition,
2. Nathan Rice, (2015). Thermal Insulation: A Building guide, NY Research Press, 2015.
3. Faulkner, S., and Faulkner. R, (1987), Inside Today's Home, Rinehart Publishing Company, New York.
4. Park, K (1995), Textbook of Preventive and Social Medicine, Banaridas Bhanot Publishers, Jabalpur.
5. Punnia, B.C (1995), A. Textbook of Building Construction, Lakshmi Publication Pvt. Ltd., New Delhi.

E - Materials:

1. <http://www.ilocis.org/documents/chpt45e.htm>
2. <https://basel.pnnl.gov/information/building-science-introduction-air-flow>
3. <https://www.slideshare.net/VijeshKumarV1/architecture-air-movement>
4. <https://www.slideshare.net/NooruleInieOsman/ventilation-system-25941705>
5. <http://www.greenspec.co.uk/building-design/insulation-materials-thermal-properties/>
6. <https://www.thermaxxjackets.com/difference-between-hot-and-cold-insulation-materials/>

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	S	S	S	-	-	-	S	-	S
CO2	S	S	S	S	-	-	-	S	-	S
CO3	S	S	S	S	-	-	-	S	-	S
CO4	S	S	S	S	-	-	-	S	-	S
CO5	S	S	S	S	-	-	-	S	-	S

PO – Programme Outcome, CO – Course outcome

S – Strong, M – Medium, L – Low (may be avoided)

THIRUVALLUVAR UNIVERSITY, VELLORE – 632 115
B.Sc., INTERIOR DESIGN AND DÉCOR – 2022-2023 onwards

Semester: VI Paper type: Internal Elective Paper - 2

Paper code: Name of the Paper: C. Fine Arts – Drawing and Painting Credit: 3

Total Hours per Week: 3 Lecture Hours: 45 Tutorial Hours: 45 Practical Hours:

Course Objectives:

To enable the students to

1. Explore variety of drawing media and techniques.
2. Develop skill in drawing using different tools.
3. Apply different media for painting.
4. Illustrate designs using various techniques
5. Summarize colour combination in creating focal points.

Course Outcomes:

1. After studied unit-1, the student will be able to develop design with various drawing equipments.
2. After studied unit-2, the student will be able to explore various drawing and painting media.
3. After studied unit-3, the student will be able to consider the role of modern art in the larger social context.
4. After studied unit-4, the student will be able to recognize and apply various colour, texture in developing designs.
5. After studied unit-5, the student will be able to create personal works of art, which demonstrate an introductory level of understanding of the painting discipline.

Matching Table

Unit	i. Remembering	ii. Understanding	iii. Applying	iv. Analyzing	v. Evaluating	vi. Creating
1	Yes	Yes	No	Yes	Yes	No
2	Yes	Yes	Yes	Yes	Yes	No
3	Yes	Yes	Yes	Yes	Yes	No
4	Yes	Yes	Yes	Yes	Yes	No
5	Yes	Yes	Yes	Yes	Yes	No

UNIT – I**Teaching hours: 9**

Drawing Equipment - Supports - Canvas, Boards, Panels and papers - water colour and oil painting - Brushes-water colour and oil paint - Developing design on various supports with different brushes.

UNIT – II**Teaching hours: 9**

Drawing Media - Pencils - Charcoal - Pastels - Crayons - Pen and Ink - Markers and fibre tip pens - Accessories - drawing with different media - Painting media - Water colour, gouache, tempera, acrylics, oil paints, binders, diluents, mediums, palettes, and accessories. Developing wall hangers.

UNIT – III**Teaching hours: 9**

Modern Art: Realism, Impressionism, Post-impressionism, Art Nouveau, Fauvism, Cubism, Futurism, Expressionism, surrealism, Abstract art.

UNIT – IV**Teaching hours: 9**

Techniques of drawing - Line - Points - Tone - Wash - Texture - Developing greeting cards using different techniques. Colour and composition - Colour-language, tonal value, mixing, colour expression and colour contrast - Composition-creating focal points.

UNIT – V**Teaching hours: 9**

Painting - Mural - Ajanta, Miniature - Moghul, Kangra - Rajasthan. Contribution of Foreign artists to art - Michelangelo and Leonardo Da Vinci. Indian artists - Raja Ravi Varma and R.K.Laxman. Madras school - K.C.S.Panikar.

References:

1. Gair, A, 1999 Artists' Manual, Hopper Collins Publishers, London.
2. Holt, F.T. and Smith, S. 1997. The Artists Manual - Equipments, Materials, Techniques, Grange Books, London.
3. Malhotra and Malhotra, 2001, Drawing Techniques, Blue Bird Books, Delhi.
4. Monahan, P., Seligman, P. and Clouse, W. 2003, Arts School - A Complete Painters Course, Chancellor Press, London.
5. Stanyer, P. 2003. The Complete Book of Drawing Techniques, Areturus Publishing Limited for Book Mark Limited, Leicester.

E - Materials:

1. https://www.researchgate.net/publication/220876920_MAI_painting_brush_an_interactive_device_that_realizes_the_feeling_of_real_painting
2. <http://www.historyofpencils.com/drawing-tools/>
3. <https://www.oxfordartonline.com/page/impressionism-and-post-impressionism/impressionism-and-postimpressionism>
4. <https://www.creativebloq.com/art/drawing-techniques-7-fundamentals-pencil-drawing-71621181>
5. <https://mymodernmet.com/basic-drawing-techniques/>
6. <https://www.quora.com/How-is-mural-painting-different-from-miniature-painting>
7. <https://earlybirdbooks.com/oil-and-marble-excerpt>

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	S	S	S	-	-	-	S	-	S
CO2	S	S	S	S	-	-	-	S	-	S
CO3	S	S	S	S	-	-	-	S	-	S
CO4	S	S	S	S	-	-	-	S	-	S
CO5	S	S	S	S	-	-	-	S	-	S

PO – Programme Outcome, CO – Course outcome

S – Strong, M – Medium, L – Low (may be avoided)

THIRUVALLUVAR UNIVERSITY, VELLORE – 632 115
B.Sc., INTERIOR DESIGN AND DÉCOR – 2022-2023 onwards

Semester: VI

Paper type: Internal Elective Paper - 3

Paper code:

Name of the Paper: A. Ergonomics

Credit: 3

Total Hours per Week: 3

Lecture Hours: 45

Tutorial Hours: 45

Practical Hours:

Course Objectives:

To enable the students to

1. Gain knowledge on importance of ergonomics in work effectiveness.
2. Design work areas using ergonomic principles.
3. Know the anthropometric dimension of workers and work height.
4. Simplify work efficiency with various work simplification techniques.
5. Adapt environmental factor to maximize and work performance and safety.

Course Outcomes:

1. After studied unit-1, the student will be able to distinguish the terms ergonomics and anthropometry.
2. After studied unit-2, the student will be able to relate significance of anthropometry to workplace design.
3. After studied unit-3, the student will be able to identify Anthropometric dimension of workers at work and at rest.
4. After studied unit-4, the student will be able to comprehend interrelationship of posture and work on productivity.
5. After studied unit-5, the student will be able to adhere to safety principles during work performance.

Matching Table (Put Yes / No in the appropriate box)

Unit	i. Remembering	ii. Understanding	iii. Applying	iv. Analyzing	v. Evaluating	vi. Creating
1	Yes	Yes	No	Yes	Yes	No
2	Yes	Yes	Yes	Yes	Yes	No
3	Yes	Yes	Yes	Yes	Yes	No
4	Yes	Yes	Yes	Yes	Yes	No
5	Yes	Yes	Yes	Yes	Yes	No

UNIT – I**Teaching hours: 9**

Concept of ergonomics - Definition, characteristics, importance, factors involved - worker, work place, tools and equipment, environment, climate. Design of workplace - Activity analysis, designing work areas based on ergonomic principles

UNIT – II**Teaching hours: 9**

Musculoskeletal Disorder (MSD) - Kyphosis, Lordosis, Scoliosis, strain, tendinitis, joints, ligaments. Carpel Tunnel Syndrome, Back, neck, knee problem. Stress - Definition, types, and coping techniques.

UNIT – III**Teaching hours: 9**

Anthropometry - Definition, types - Static and Dynamic dimensions. Anthropometric dimension of workers at work and at rest, normal and maximum vertical and horizontal reaches, work heights when seated and standing, worker in relationship with workspace and activities.

UNIT – IV**Teaching hours: 9**

Improving work efficiency - Concept of efficiency, principles and techniques of work simplification, effective use of body mechanics, Posture involved in different activities - sitting, standing, lying down, change of posture, Movement - lifting, pulling and pushing, problems of posture - squatting and cross-legged problems. Exercises for kyphosis, lordosis, scoliosis postural problems.

UNIT – V**Teaching hours: 9**

Environmental factors - Noise - Noise guidelines, noise reduction materials. Temperature - Heat stress, Heat strain, Materials used for thermal comfort, Heat exchange - conduction, convection, radiation.

References:

1. Barner, R.M., (1980), Motion and Time Study, Design and Measurement of work, John Wiley, New York.
2. Borgert, E. (1982) Housecraft - Principles and Practices, Issac Pitman, London.
3. Chaffin, D.B. and Andersson, G.B.J. (1984) Occupational Biomechanics, John Wiley, New York.
4. Cromwell, L. Weibell, F.J. and Pfeirffer, E.A. (1991) Biomedical Instrumentation and
5. Measurements, Prentice Hall, New Delhi.

E - Materials:

1. researchgate.net/publication/327542735_ERGONOMIC_DESIGN_OF_WORKPLACE
2. <https://www.workdesign.com/2012/08/ergonomics-and-workplace-design/>
3. <https://www.healthline.com/health/musculoskeletal-disorders>
4. <https://www.workdesign.com/2012/08/ergonomics-and-workplace-design/>
5. <https://www.slideshare.net/vimal333/anthropometry-15401067>
6. https://nptel.ac.in/content/storage2/nptel_data3/html/mhrd/ict/text/112107249/lec53.pdf
7. <https://www.managementstudyguide.com/workplace-efficiency.htm>
8. <https://www.who.int/docstore/peh/noise/Comnoise3.htm>
9. <http://www.euro.who.int/en/health-topics/environment-and-health/noise/environmental-noise-guidelines-for-the-european-region>

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	S	S	S	-	S	-	S	-	S
CO2	S	S	S	S	-	S	-	S	-	S
CO3	S	S	S	S	-	S	-	S	-	S
CO4	S	S	S	S	-	S	-	S	-	S
CO5	S	S	S	S	-	S	-	S	-	S

PO – Programme Outcome, CO – Course outcome

S – Strong, M – Medium, L – Low (may be avoided)

THIRUVALLUVAR UNIVERSITY, VELLORE – 632 115
B.Sc., INTERIOR DESIGN AND DÉCOR – 2022-2023 onwards

Semester: VI

Paper type: Internal Elective Paper - 3

Paper code:

Name of the Paper: B. Green Building Technology Credit: 3

Total Hours per Week: 3

Lecture Hours: 45

Tutorial Hours: 45

Practical Hours:

Course Objectives:

To enable the students to

1. Understand the importance of green building technology.
2. Learn the significance of using solar devices.
3. Practice Green building techniques to protect our health.
4. Interpret the materials and finishes used in green building.
5. Acquired knowledge in recent green building materials and to trap rainwater

Course Outcome:

1. After studied unit-1, the student will be able to understand the green building concepts.
2. After studied unit-2, the student will be able to learn the characteristics of green building materials.
3. After studied unit-3, the student will be able to know the green building practices.
4. After studied unit-4, the student will be able to importance of solar energy utilization.
5. After studied unit-5, the student will be able to know the methods of rain water harvesting.

Matching Table

Unit	i. Remembering	ii. Understanding	iii. Applying	iv. Analyzing	v. Evaluating	vi. Creating
1	Yes	Yes	No	Yes	Yes	No
2	Yes	Yes	Yes	Yes	Yes	No
3	Yes	Yes	Yes	Yes	Yes	No
4	Yes	Yes	Yes	Yes	Yes	No
5	Yes	Yes	Yes	Yes	Yes	No

UNIT – I**Teaching hours: 9**

Green building technology - Meaning, concept, need for developing green building concept in India, importance of green building technology, benefits of green buildings - environmental benefits, economic benefits, social benefits, Disadvantages of green buildings, impact of green building on human health and natural environment.

UNIT – II**Teaching hours: 9**

Sustainable building materials - meaning, Characteristics of sustainable materials. Materials and finishes used in green building - Bamboo, straw bale, recycled plastic, wood, dimension stone, Recycled stone, non-toxic metals, Earth blocks-compressed, rammed and baked; flax linen, sisal, wood fibres, cork, coconut, non- VOC paints and polyurethane block. Vermiculites - meaning and commercial uses.

UNIT – III**Teaching hours: 9**

Green building practices and technologies. Site planning and design, Energy Efficiency - Passive Solar Design- advantages, use of thermostats, doors, windows and insulating materials, Materials Efficiency - recyclable materials, Operations and Maintenance Optimization, Water Efficiency - Porous paving schemes, landscaping and plumbing, Indoor Environmental Quality Enhancement - lighting, ventilation and low VOC paints, Waste Reduction.

UNIT – IV**Teaching hours: 9**

Renewable energy resources - meaning, importance of renewable energy resources, solar energy - advantages and disadvantages, principles and functions of solar devices - solar room heater - construction and working , solar lights - components, working principles, benefits and uses, solar water heater - components, working principles, and usage, solar air conditioning system - meaning, working mechanism.

UNIT – V**Teaching hours: 9**

Water conservation technology - need for water conservation, Difference between water conservation and water efficiency, Strategies to save water at home, Rain water harvesting - meaning, importance of rain water harvesting, requirements of rain water harvesting structure, methods of rain water harvesting systems - surface run off and Roof top rain water harvesting, advantages, Grey water usage.

Text Books:

1. Unit - 1: Nilesh Y. J (2016), Green and Smart Buildings: Advanced Technology Options (Green Energy and Technology) , Springer; 1st ed.
2. Unit - 2: Faulkner,S. and Faulkner,R.(1987), Inside Today's Home, Rinehart Publishing Company, New York.
3. Unit - 3: Charles J. Kibert, (2008),Sustainable Construction: Green Building Design and Delivery, John Wiley and sons.
4. Unit - 4: Rai, G.D. (1995), Solar Energy Utilization, Khanna Publishers, New Delhi.
5. Unit - 5: Rob Avis P and Michelle A.P.(2018), Essential Rainwater Harvesting: A Guide to Home-Scale System Design New Society Publishers.

E- Material:

1. <https://theconstructor.org/building/elements-of-green-building/5375/>
2. <https://theconstructor.org/water-resources/methods-of-rainwater-harvesting/5420/>
3. <https://www.greenbuilt.org/about/importance-of-green-building/>
4. <https://chillsairconditioning.com/how-does-solar-air-conditioning-work/>
5. <https://en.wikipedia.org/wiki/Vermiculite>
6. https://en.wikipedia.org/wiki/Solar_lamp
7. <https://homeguides.sfgate.com/importance-renewable-resources-energy-79690.html>
8. https://en.wikipedia.org/wiki/Solar_air_heat
9. https://openei.org/wiki/Solar_space_heating
10. <https://home.howstuffworks.com/solar-air-heaters1.htm>

References:

1. Rai G.D (1996), Solar Energy Utilization, Khanna Publishers, Delhi.
2. Riggs, J.R. (1992) Materials and Components of Interior Design, Regents Hall, New Jersey.
3. Faulkner, R., and Faulkner. S, (1987) Inside Today's Home, Rinehart publishing House, Newyork.
4. Roa, M.P. (1998), Interior Design, Principles and Practice, Standard Publishers, Delhi.
5. Despande, R.S, (1974) Build Your Own Home, United Book Corporation, Poona.

Magazines:

1. Inside Outside
2. Society Interiors

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	S	S	S	-	S	-	S	-	S
CO2	S	S	S	S	-	S	-	S	-	S
CO3	S	S	S	S	-	S	-	S	-	S
CO4	S	S	S	S	-	S	-	S	-	S
CO5	S	S	S	S	-	S	-	S	-	S

PO – Programme Outcome, CO – Course outcome

S – Strong, M – Medium, L – Low (may be avoided)

THIRUVALLUVAR UNIVERSITY, VELLORE – 632 115
B.Sc., INTERIOR DESIGN AND DÉCOR – 2022-2023 onwards

Semester: VI **Paper type: Internal Elective Paper - 3**
Paper code: **Name of the Paper: C. Entrepreneurial Development** **Credit: 3**
Total Hours per Week: 3 **Lecture Hours: 45** **Tutorial Hours: 45** **Practical Hours:**

Course Objectives:

To enable the students to

1. Develop entrepreneurial skills.
2. Analyze the environment related to small scale industry and business.
3. Understand the process and procedures of setting up small enterprises.
4. Develop Management skills for entrepreneurship development.
5. Formulate project proposal.

Course Outcomes:

1. After studied unit-1, the student will be able to understand entrepreneurship development, enterprise and its types
2. After studied unit-2, the student will be able to identify the factors affecting entrepreneurship development.
3. After studied unit-3, the student will be able to learn various agencies supporting entrepreneurship development.
4. After studied unit-4, the student will be able to understand the phases in project life cycle.
5. After studied unit-5, the student will be able to know the different stages of project formulation and project report.

Matching Table (Put Yes / No in the appropriate box)

Unit	i. Remembering	ii. Understanding	iii. Applying	iv. Analyzing	v. Evaluating	vi. Creating
1	Yes	Yes	No	Yes	Yes	No
2	Yes	Yes	No	Yes	Yes	No
3	Yes	Yes	Yes	Yes	Yes	No
4	Yes	Yes	Yes	Yes	Yes	No
5	Yes	Yes	Yes	Yes	Yes	No

UNIT – I**Teaching hours: 9**

Entrepreneurship - Entrepreneur, Enterprise and Entrepreneurship - meaning, Types of Entrepreneur - innovative, imitative or adoptive, Fabian, drone. Need for Entrepreneurship, transition from income generation to self employment and Entrepreneurship, qualities of a good entrepreneur, problems of entrepreneurs - traditional society, lack of infrastructure facility, lack of favourable environment, socio-cultural factors, monopoly, resource related obstacles, lack of technology, corruption.

UNIT – II**Teaching hours: 9**

Factors influencing entrepreneurial development - Economic factor - capital, labour, raw materials, market and infrastructure, Legal factors - , Socio - caste, family background, education, attitude of society and cultural value, Economic factors - wages, interest rates, governmental policies, tax rates, and inflation, Psychological - need achievement, motives, withdrawal of status respect, Political - Government policy, corruption, political stability and employment laws, Technological factors- internet and automated process, Environmental factors - climate change, pollution, availability of natural resources and waste disposal.

UNIT – III**Teaching hours: 9**

Agencies supporting entrepreneurial Development Programme - Small Industries Development Corporation (SIDCO), District Industries center (DIC), The Tamil Nadu Industrial Investment Corporation Limited (*TIIC*), Entrepreneurship Development Institute of India (EDII), State Industries Promotion Corporation of Tamil Nadu Ltd (SIPCOT), Khadi and Village Industries Commission (KVIC), Small Industries Development Organization (SIDO). Institutional Finance to Entrepreneurs - IDBI, ICICI, RBI, LIC, ITCOT.

UNIT – IV**Teaching hours: 9**

Project identification and classification - Meaning of Projects, Project identification - definition, Project Classification - Quantifiable and non-quantifiable projects, sectoral projects, techno-economic projects, and service projects. Internal and External constraints in project identification, Project objectives, Project life cycle - Initiation phase, Planning phase, Execution phase, Controlling and monitoring phase, Project closure.

UNIT – V**Teaching hours: 9**

Project formulation - meaning, Concept, Need, Elements. Stages of Project formulation - Feasibility Analysis, Techno-Economic Analysis, Project Design and Network Analysis, Input Analysis, Financial Analysis, Cost-Benefit Analysis, Pre-Investment Analysis. Project selection, Appraisal format, Check list for feasibility report, Planning commission guidelines, Project Report - meaning. Writing a project report - content of a Detailed Project Report.

Text Books:

1. Unit - 1: Gupta C.B, and Srinivasan N.P, Entrepreneurship Development in India, Sultan Chand & Sons, New Delhi, 2004
2. Unit - 2: Gupta C.B, and Srinivasan N.P, Entrepreneurship Development in India, Sultan Chand & Sons, New Delhi, 2004
3. Unit - 3: Vasant Desai, Project Management and Entrepreneurship, Himalaya Publishing House, New Delhi, 2000.
4. Unit - 4: Vasant Desai, Project Management and Entrepreneurship, Himalaya Publishing House, New Delhi, 2000.
5. Unit - 5: Gupta C.B, and Srinivasan N.P, Entrepreneurship Development in India, Sultan Chand & Sons, New Delhi, 2004

E- Material:

1. <https://www.wrike.com/project-management-guide/project-lifecycle/>
2. <https://www.wrike.com/project-management-guide/faq/what-are-project-objectives-in-project-management/>
3. www.entrepreneurindia.co › project-identification
4. https://www.researchgate.net/publication/332255136_Factors_Influencing_Entrepreneurship_Development
5. <https://www.mavenlink.com/resources/what-is-the-professional-services-project-life-cycle>
6. <https://explore.easyprojects.net/blog/how-to-write-a-project-report>
7. <https://sites.google.com/somaiya.edu/entrepreneurshipdevelopment/process-of-entrepreneurship-development/specialised-entrepreneurship-development-agencies>

References:

1. Gupta C.B, and Srinivasan N.P, Entrepreneurship Development in India, Sultan Chand & Sons, New Delhi, 2004.
2. Chunawalla S.A, Sales Management, Himalayan Publishing House, New Delhi, 1991.
3. Vasant Desai, Project Management and Entrepreneurship, Himalaya Publishing House, New Delhi, (2000).
4. Sethurajan.S., 2003. Principles of Entrepreneurship Development, Vimal Publishers, Coimbatore
5. Radha.V., 2007. Entrepreneurial Development, Prasanna and Co., Chennai

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	-	-	S	S	-	S	-	S	-	S
CO2	-	-	S	S	-	S	-	S	-	S
CO3	-	-	S	S	-	S	-	S	-	S
CO4	-	-	S	S	-	S	-	S	-	S
CO5	-	-	S	S	-	S	-	S	-	S

PO – Programme Outcome, CO – Course outcome

S – Strong, M – Medium, L – Low (may be avoided)

THIRUVALLUVAR UNIVERSITY, VELLORE – 632 115
B.Sc., INTERIOR DESIGN AND DÉCOR – 2022-2023 onwards

Semester: VI **Paper type: Skill based paper - 4**

Paper code: **Name of the Paper: Commercial Space Designing** **Credit: 3**

Total Hours per Week: 3 **Lecture Hours: 45** **Tutorial Hours: 45** **Practical Hours:**

Course Objectives:

To enable the students to

1. Design commercial spaces as per the needs.
2. Learn the importance of Merchandizing.
3. Distinguish display techniques.
4. Study psychology of window display.
5. Acquire knowledge on retail space.

Course Outcomes:

1. After studied unit-1, the student will be able to recognize the role of art in merchandising.
2. After studied unit-2, the student will be able to identify techniques of display.
3. After studied unit-3, the student will be able to make various types of window display.
4. After studied unit-4, the student will be able to design commercial space for various uses.
5. After studied unit-5, the student will be able to create retail space for different requirements of customers.

Matching Table (Put Yes / No in the appropriate box)

Unit	i. Remembering	ii. Understanding	iii. Applying	iv. Analyzing	v. Evaluating	vi. Creating
1	Yes	Yes	No	Yes	Yes	No
2	Yes	Yes	Yes	Yes	Yes	No
3	Yes	Yes	Yes	Yes	Yes	No
4	Yes	Yes	Yes	Yes	Yes	No
5	Yes	Yes	Yes	Yes	Yes	No

UNIT – I**Teaching hours: 9**

Commercial Art and its importance in Merchandising. Meaning and definition of commercial art, Development of commercial art. New trends, Steps in Merchandising and art display. Role of commercial art in Merchandising.

UNIT – II**Teaching hours: 9**

Commercial display and Techniques - Interior Display - general Arrangement, principles and factors, types and merchandise display, types of lighting arrangements in commercial buildings.

UNIT – III**Teaching hours: 9**

Window Display - Meaning, basic principles, factors of window display, window arrangement -window art, psychology of window display, Techniques and importance. Types of window display - Closed, Open, Island, Elevated, Shadowbox, Corner and Semi-Closed displays

UNIT – IV**Teaching hours: 9**

Introduction to commercial space. Definition of commercial space, types of commercial space -Office Space, Retail space, Hospitality space, Health care, Education, Entertainment and Relaxation, Religious ,Banks and Financial Institutions, functions and need, Design Process -Programming, Conceptual planning, Design Development, Construction documents, Construction administration, Evaluation, Factors to be considered in Commercial space design, Recent trends in commercial space design.

UNIT – V**Teaching hours: 9**

Retail Space - Introduction to Retail space, Types of Retail outlets, Types of Retail Layout - Straight plans, Angular plans, Geometrical plans and Diagonal plans. Principles of Retail store design - Eye catching Visual Merchandising, Slowing the customer journey in the store, Customer pathway, Steering the customer to the right of the store, Creativity and Innovation, Aerating the store design, Optimize space. Elements of Store Design - Exterior, Interior, Atmosphere, Fixture, Merchandise, People.

References:

1. Gupta, C.B., Dr. Nair, Rajan 2003, Marketing Management, Sultan Chand &Som, New Delhi.
2. Joseph, D.C., Julies, P. and Martiv, Z. 1992, Time Saver Standards for Interior Design and Space Planning, New York.
3. Nair, R. 2002, Marketing, Sultan Chand and Sons Publisher, New Delhi.
4. Pattanchetti, C.C. Reddy, P.N. 1995, Marketing, Rainbow publishers, Coimbatore.

E Materials:

1. <https://www.smartsheet.com/retail-merchandising>
2. <https://sinalite.com/printersuccess/visual-merchandising-7-steps-to-revitalize-your-print-shop/>
3. <https://www.digitalvidya.com/blog/display-advertising/>
4. <https://www.warehouse-lighting.com/blogs/lighting-application-suggestions/different-types-of-office-lighting>
5. <https://www.unibox.co.uk/news-inspiration/types-importance-of-window-displays>
6. <https://smallbusiness.chron.com/psychology-visual-merchandising-66054.html>
7. <https://timesofstartups.com/more/factors-consider-planning-office-design-layout/>
8. <https://accountlearning.com/selection-of-office-building-important-factors-to-be-considered/>

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	S	S	S	-	S	-	S	-	S
CO2	S	S	S	S	-	S	-	S	-	S
CO3	S	S	S	S	-	S	-	S	-	S
CO4	S	S	S	S	-	S	-	S	-	S
CO5	S	S	S	S	-	S	-	S	-	S

PO – Programme Outcome, CO – Course outcome

S – Strong, M – Medium, L – Low (may be avoided)
