



SARVAJANIK UNIVERSITY
Sarvajnik College of Engineering and
Technology
Bachelor of Engineering



B E III Textile Technology: Semester – V

Subject Name: Textile Design & Colour

Subject Code: BTTT15503

Type of course: Open Elective Course I

Prerequisite (if any): Ability to observe and draw various objects from surrounding to create designs based on their shapes, colours and textures

List of Courses where this course will be prerequisite:

Rationale: This subject covers the Elements & Principles of Design. Also it covers various types of motifs, their arrangement, developing designs with different colours, texture and also different techniques of fabric printing, understanding of colour theory and application of colour in various textile designs

Teaching and Examination Scheme:

TEACHING SCHEME				Theory Marks			Practical Marks		Total
L	T	P	C	TEE	CA1	CA2	TEP	CA3	
3	0	2	4	60	25	15	30	20	150

CA1: Continuous Assessment (assignments/projects/open book tests/closed book tests CA2: Sincerity in attending classes/class tests/ timely submissions of assignments/self-learning attitude/solving advanced problems TEE: Term End Examination TEP: Term End Practical Exam (Performance and viva on practical skills learned in course) CA3: Regular submission of Lab work/Quality of work submitted/Active participation in lab sessions/viva on practical skills learned in course

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BSC: basic science course /ESC: Engineering Science Course /HSM: Humanities and management /PCC: Professional Core course /PEC: professional Elective course /OEC: Open Elective course/ MD: mandatory non-credit course

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Content:

Sr. No.	Content	Total Hrs
1.	Elements of art: Line, ,Size ,Shape, space, Colour, value, texture	7
2.	Units of Design: Natural Motif. Decorative Motif. Geometric Motif, abstract Motif	02
3.	Principles of Design: Repetition, alteration, harmony, gradation, contrast, dominance and subordination, balance. Origin and basis of patterns from historic and modern fabrics	08
4.	Arrangement of Figures: Free hand sketching and arrangement of motifs. Unit repeating design, half drop, diamond, ogee, weaved line, drop reverse, Stripe pattern repeat etc.	8
5.	Effect of raw material weave and finish on the appearance and ornamentation of fabrics.	2
6.	Colour & Textile Designs: Ways of ornamentation in Textiles. Role & effect of colour in the ornamentation of Textiles. Colour & weave relationship in woven fabrics. Influence of fabric characteristics (weave) on appearance of colour and design.	3
7.	Elements of Colour, Colour Harmony and Colour Modifications: Basics of Colour Theory, Colour Wheel and it's application. Modes of Colour Mixing- Additive & Subtractive. Warm & cool colours. Neutrals, Monochromatic Harmony, Analogous Harmony, Different Colour Schemes	3
8.	Tradition Textile Dyeing & Printing Techniques: Hand printing, Stencil Printing, Batik printing, Tie n dye, Block printing & Roller Printing.	8
9.	Other Textile Printing Techniques: Screen Printing, Transfer Printing & Digital Printing.	4

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Suggested Specification table with Marks (Theory):

Distribution of Theory Marks					
R Level	U Level	A Level	N Level	E Level	C Level
10	10	15	5	5	15

**Legends: R: Remembrance; U: Understanding; A: Application, N: Analyze and E: Evaluate
C: Create and above Levels (Revised Bloom's Taxonomy)**

Reference Books:

Sr no	Title of book /article	Author(s)	Publisher and details like ISBN	Year of publication	Publication Edition
1	Textile Design and Colour	William Watson.	Woodhead Publishing Limited. (85573995)	2004	7 th
2	History of Textile Design	V A Shenai	Sevak Publications, Bombay	1977	2 nd
3	Handbook of Textile Deign-principles, processes and practice	Jacquire Wilson	The Textile Institute Woodhead Publishing Limited.	2005	I

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4	Woven Structures and Design I &II	Doris Goerner	Leeds, U.K., WIRA Technology Group	1986	
6	Designer's guide to colour	Jeanne Allen	Chronicle Books; san Francisco	1986	
7	Handwoven Fabrics of India	Dhamija and Jyotindra Jain	Mapin Publishing Pvt.Ltd., Ahmedabad	1999	
8.	Instrumental Colour Measurements &Computer aided colour matching for Textiles	H. S. Shah. R. S. Gandhi.	Mahajan Book Distributors, Ahmedabad	1992	

Course Outcomes: After learning the course the students should be able to

Sr. No.	CO statement	Marks weightage	%
CO-1	Understand various elements of art & its application for textile design development	16	
CO-2	Understand different types of motif ,its development and application	6	
CO-3	Understand various, principles of designs & its application for textile design development	18	
CO-4	Compose textile designs with different bases & can analyse effect of various parameters on the appearance fabrics	20	

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CO-5	Describe the role & effect of colour as well as fabric characteristics on appearance of colour and design on fabrics.	7
CO-6	Understand colour modification and colour theory chart for textile design development	7
CO-7	Describe and create textile designs using traditional dyeing and printing techniques	18
CO-8	Describe and create textile designs using other printing techniques	8

List of Open learning website: <https://nptel.ac.in>

FOR LAB SESSIONS:

List of Experiments:

1. Identification of Textile materials by Qualitative Analysis
2. Dyeing of cotton yarn by hank/skein dyeing method
3. Creating design on fabric using Tie & Dye Technique
4. Creating a pattern on fabric using Batik/Resist Printing/Dyeing Technique
5. Application of Colour Theory
6. Development of Textile Designs using Elements of an Art.
7. Development of Textile Designs using Units of Design
8. Application of various Principles of Textile Designs
9. Composing textile designs with different bases
10. Poster Preparation on Indian traditional textiles

Major Equipment /material Needed:

Lighter/gas burner, Beaker, Glass Rod, Candle/Commercial Wax, Hank, fabric, pencils, colour medium etc.

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