

Branch Name:	Faculty of Design
Program Code:	MS102
Course Name:	Material Exploration
Course Code:	21-FMM101-1C
Pre-requisite Course:	

Course Objectives:

- To understand the properties, characteristics, and applications of different textile and non-textile materials used in fashion design.
- To explore various materials through hands-on experimentation and creative manipulation techniques.
- To develop the ability to select appropriate materials based on design, functionality, sustainability, and aesthetics.
- To encourage innovation by combining traditional and contemporary materials for unique fashion outcomes.

Teaching and Examination Scheme:

Teaching Scheme (Hours per week)				Evaluation Scheme (Marks)								Total (Marks)
Lecture (L)	Tutorial (T)	Practical (P)	Credit	Theory (Marks)				Practical (Marks)				
				University Assessment		Continuous Assessment		University Assessment		Continuous Assessment		
				Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
-	-	4	2	-	-	-	-	09	25	09	25	50

Subject Contents:

Sr.No	Topic	Total Hours	Weightage (%)
1	Module 1: Introduction to Materials in Design - Concept and importance of material exploration in design. - Classification of materials: natural, synthetic, and recycled materials. - Basic physical properties of materials (texture, flexibility, strength, weight). - Understanding material behaviour through observation and touch.	6	25%
2	Module 2: Exploration of Natural Materials - Study of natural materials: wood, clay, stone, and bamboo. - Techniques of shaping and forming natural materials. - Surface textures and patterns found in nature. - Creating simple forms and compositions using natural materials.	6	25%
3	Module 3: Exploration of Synthetic and Industrial Materials - Introduction to synthetic materials: plastic, acrylic, foam, and rubber. - Properties and uses of industrial materials in modern design. - Techniques such as cutting, bending, joining, and molding. - Understanding sustainability and environmental impact of synthetic materials.	6	25%

4	Module 4: Creative Application and Sustainable Material Use 1. Experimentation with recycled and waste materials. 2. Upcycling and sustainable design practices. 3. Developing 2D and 3D compositions using mixed materials. 4. Material manipulation techniques for creative outcomes.	6	25%
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Reference Books:

Sr.No.	Books
1	Handwoven Fabrics of India – Jasleen Dhamija & Jyotindra Jain (1989)
2	Textiles and Weaves of India – A. B. Chattopadhyay (1985)
3	Textile Fibre and Yarn Science – B. R. Gupta (2002)

(Course Learning Outcomes CLO): On completion of this course, the students will be able to:

CLO	Description	Bloom's Taxonomy Level
CLO1	Identify and classify various natural, synthetic, and innovative materials used in fashion and textile design.	Remembering
CLO2	Analyze the physical, aesthetic, and functional properties of different materials and their suitability for design applications.	Understanding
CLO3	Apply material manipulation and experimentation techniques to create innovative surface and structural effects.	Analyzing
CLO4	Evaluate materials based on performance, sustainability, and end-use requirements in fashion products.	Applying
CLO5	Develop material boards, samples, and prototypes to communicate design concepts effectively.	Evaluating
CLO6	Create original design solutions by integrating diverse materials through creative exploration and experimentation.	Creating

Mapping of CLOs with Pos&PSOs

Course	Program Outcomes (POs)										Program Specific Outcomes (PSOs)	
Learning Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2
CLO1		M			L						M	
CLO2	M			H		H						M
CLO3	M		M				L				H	
CLO4		H				H		M				M
CLO5			H		M			H		M	M	
CLO6	M			H		H	M					M

H:High, M:Medium, L:Low