

Branch Name:	Faculty of Design
Program Code:	MS102
Course Name:	Fabric Studies
Course Code:	22-FMM106-1C
Pre-requisite Course:	

Course Objectives:

- To develop an understanding of textile fibers, yarns, and fabric construction methods used in the fashion industry.
- To familiarize students with the physical and aesthetic properties of fabrics and their end-use applications.
- To enable identification and analysis of different types of woven, knitted, and non-woven fabrics.
- To develop knowledge of fabric performance, care, and maintenance for apparel and textile products

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	4	-	-	-	-	09	25	09	25	50

Subject Contents:

Sr No.	Topic	Total Hours	Weightage (%)
1	Introduction to Textile Fibers and Yarns • Introduction to textiles and fabric studies • Classification of textile fibers: Natural and Man-made fibers • Properties and characteristics of textile fibers • Yarn manufacturing process • Types of yarns: Simple, novelty, and blended yarns • Yarn count and yarn twist	6	25%
2	Fabric Construction Techniques • Introduction to fabric construction • Weaving: Basic weaves (Plain, Twill, Satin) • Knitting: Weft knitting and Warp knitting • Non-woven fabrics and their applications • Comparison of woven, knitted, and non-woven fabrics	6	25%
3	Fabric Properties and Identification • Physical properties of fabrics: Strength, durability, elasticity, absorbency • Aesthetic properties: Texture, luster, drape, handle • Fabric identification methods • Fabric analysis and end-use suitability • Common apparel fabrics and their applications	6	25%

4	Fabric Performance, Care, and Selection - Fabric performance and comfort characteristics - Factors affecting fabric quality - Fabric care and maintenance - Care labeling and textile symbols - Fabric selection for fashion apparel and lifestyle products	6	25%
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Reference Books:

Sr. No.	Books
1	Fundamentals of Textiles and Their Care – G. K. Ghosh, PHI Learning Pvt. Ltd., 2005.
2	Introduction to Textile Fibres – H. V. Sreenivasa Murthy, Woodhead Publishing India, 2008.
3	Fabric Structure and Design – M. P. Grover & D. S. Tyagi, Walia Book House, 2015.
4	Textile Science – Vilensky Gohl & L. D. Vilensky, CBS Publishers & Distributors, 2017.

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

CLO	Description	Bloom's Taxonomy Level
CLO1	Classify textile fibers and yarns based on their characteristics, properties, and applications.	1 Remembering
CLO2	Differentiate between woven, knitted, and non-woven fabrics and explain their construction methods.	2 Understanding
CLO3	Analyze the physical and aesthetic properties of fabrics for various apparel and textile end uses.	3 Applying
CLO4	Identify and evaluate different fabrics using appropriate testing and fabric analysis techniques.	4,5 Evaluate, Analyse
CLO5	Select suitable fabrics for fashion products considering performance, care requirements, sustainability, and consumer needs	3 Applying

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