

	MAHATMA GANDHI UNIVERSITY Kottayam, Kerala Undergraduate Programmes (HONOURS) 2024 Admission Onwards
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SYLLABUS						
SIGNATURE COURSE						
Name of the College	Mount Carmel College, Karukadam,Kothamangalum					
Faculty/ Discipline	Textiles					
Programme	-					
Course Coordinator	Anupama Subash					
Contributors	Amrutha K M, Anu Mathew					
Course Name	WET PROCESSING TECHNIQUES FOR TEXTILES					
Type of Course	VAC					
Specialization title	This Signature Course does not have a specialization.					
Course Code	MG3VACTXLA02					
Course Level	200					
Course Summary	The course offers a detailed exploration of the methods and procedures used in applying liquid chemicals and dyes to textiles. It covers all key stages of wet processing from pre-treatment through to finishing highlighting both conceptual knowledge and practical application.					
Semester	3	Credits			3	Total Hours
Course Details	Learning Approach	Lecture	Tutorial	Practical	Others	
		3	0	0	0	45
Pre-requisites, if any						

Course Outcomes (CO)

Number of COs		5	
CO No.	Expected Course Outcome	Learning Domains *	PO No
1	Differentiate between preparatory and aesthetic fabric finishes.	U	PO4, PO6, PO10
2	Discuss the types of functional finishes and their applications.	U	PO4, PO6, PO10
3	Outline the dyeing process along with its different stages.	U	PO4, PO6, PO10
4	Explain the printing process and categorize its various methods.	U	PO4, PO6, PO10
5	Develop a detailed project report reflecting insights gained from the industrial visit.	A	PO4, PO6, PO7, PO10

*Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)

CO-PO Articulation Matrix

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10
CO 1	-	-	-	2	-	2	-	-	-	3
CO 2	-	-	-	2	-	3	-	-	-	3
CO 3	-	-	-	2	-	3	-	-	-	3
CO 4	-	-	-	2	-	2	-	-	-	3
CO 5	-	-	-	3	-	3	2	-	-	3

'0' is No Correlation, '1' is Slight Correlation (Low level), '2' is Moderate Correlation (Medium level) and '3' is Substantial Correlation (High level).

Course Content

Content for Classroom transaction (Units)

Module	Units	Course Description	Hrs	CO No.
1	Fabric Finishes: Types, Techniques, and Applications			
	1.1	Overview of Fabric Finishes: Preparatory finishes such as sizing, singeing, desizing, scouring, and bleaching.	3	["1"]
	1.2	Aesthetic Finishes: Processes that enhance fabric appearance, including mercerization, calendaring, tentering, flocking, shearing, and napping.	3	["1"]
	1.3	Functional Finishes: Performance-oriented finishes like water-repellent and waterproof treatments, flame-retardant finishes, durable press finishes, and shrink-resistant treatments.	4	["2"]
2	Textile Dyeing and Printing: Classifications, Methods, and Techniques			
	2.1	Dyeing – Types of Dyes: Classification of dyes into natural and synthetic (acid, basic, direct, sulphur, vat, naphthol, disperse, and reactive dyes).	6	["3"]
	2.2	Dyeing Methods: Fibre Dyeing: Techniques such as stock, top, and dope dyeing. Yarn Dyeing: Includes methods like skein and package dyeing. Fabric Dyeing: Processes such as winch, jet, beam, jig, cross, union, batch, and pad dyeing. Garment Dyeing: Involves dip dyeing and tumble dyeing.	7	["3"]
	2.3	Printing Techniques: Block printing, screen printing, roller printing, rotary printing, discharge printing, and duplex printing.	7	["4"]
3	Industrial Visit and Project Report on Textile Processing			
	3.1	Conduct a group visit to a textile industry to observe the finishing, dyeing, and printing processes in operation, and prepare a collaborative project report detailing the findings and insights from the visit.	15	["5"]

Teaching and Learning Approach	Classroom Procedure (Mode of transaction) Lecture and Industrial Visit
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Assessment Types	MODE OF ASSESSMENT Mode of Assessment: Theory
	A. Continuous Comprehensive Assessment (CCA) • Theory - 25 Marks Oral Presentation/ Quiz/ Home Assignment and Industrial Visit Report
	B. End Semester Evaluation (ESE) • Theory - 50 Marks Assessment Methods - Written Examination Duration of Examination - 1.50 Hrs Pattern of examination for Theory - Non-MCQ Different parts of written examination - Part - A , B , C , D , E Answer Type: ◦ PART - A ◦ MCQ - (10 out of 10) - $10 \times 1 = 10$ ◦ PART - B ◦ Fill in the blanks - (10 out of 10) - $10 \times 1 = 10$ ◦ PART - C ◦ One Word or One Sentence - (10 out of 10) - $10 \times 1 = 10$ ◦ PART - D ◦ Short answer - (5 out of 6) - $5 \times 2 = 10$ ◦ PART - E ◦ Long Answer - (2 out of 4) - $2 \times 5 = 10$

References

- 1. Corbman, B. P. (1983). Textiles: Fiber to Fabrics. McGraw-Hill.
- 2. Kogent Learning Solutions Inc. (2010). Comdex Fashion Design, Vol 1, Fashion Concepts.
- 3. Joseph, M. L. (1988). Essentials of Textiles. Holt, Rinehart, And Winston.
- 4. Jerde, J. (1992). Encyclopedia of Textiles.

Suggested Readings

- 1. Kadelph, S. J., and Marcketti, S. B. (2017). Textiles. Pearson.
- 2. Hargrave, H. (1997). From Fiber to Fabric. C and T Publishing Inc.

Affidavit

- We, Mount Carmel College, Karukadam, Kothamangalam and Anupama Subash, agree to permit the use of our proposed course syllabus by other faculty members within the same discipline for course delivery at their respective institutions.
- We, Mount Carmel College, Karukadam, Kothamangalam, agree to appoint a new course coordinator for the proposed WET PROCESSING TECHNIQUES FOR TEXTILES in the event of the unavailability of the currently nominated coordinator. This appointment will ensure the continued coordination of course delivery, assessments, and all related academic responsibilities necessary for the successful implementation of the signature course, for as long as the college offers this programme.
- We, Mount Carmel College, Karukadam, Kothamangalam and Anupama Subash, declare that no part of this signature course submitted here for approval has been taken from the course content developed by, or from any of the course titles prepared by, the BoS/expert committee in the same discipline under our University.