

# MAHATMA GANDHI UNIVERSITY

Kottayam, Kerala

# Undergraduate Programmes (HONOURS) 2024 Admission Onwards

			SYLLABUS					
		SIGN	ATURE COURSE					
Name of the College	Mount Carmel College, Karukadam,Kothamangalum							
Faculty/ Discipline	Textiles							
Programme	-							
Course Coordinator	Anupama Subash							
Contributors	Amrutha K M, Anu	Amrutha K M, Anu Mathew						
Course Name	WET PROCESSING	WET PROCESSING TECHNIQUES FOR TEXTILES						
Type of Course	VAC							
Specialization title	This Signature Cou	irse does not h	ave a specializati	on.				
Course Code	MG3VACTXLA02							
Course Level	200							
Course Summary	The course offers a chemicals and dye finishing highlighti	s to textiles. It	covers all key sta	ages of wet proces	sing from pre-tre	ying liquid eatment through to		
Semester	3	Credits			3	<b>T</b>		
Course Details	Learning	Lecture	Tutorial	Practical	Others	Total Hours		
	Approach	3	0	0	0	45		
Pre-requisites, if any				· · · · · · · · · · · · · · · · · · ·				

### **Course Outcomes (CO)**

# **MGU-UGP (HONOURS)**

	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.	А	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**

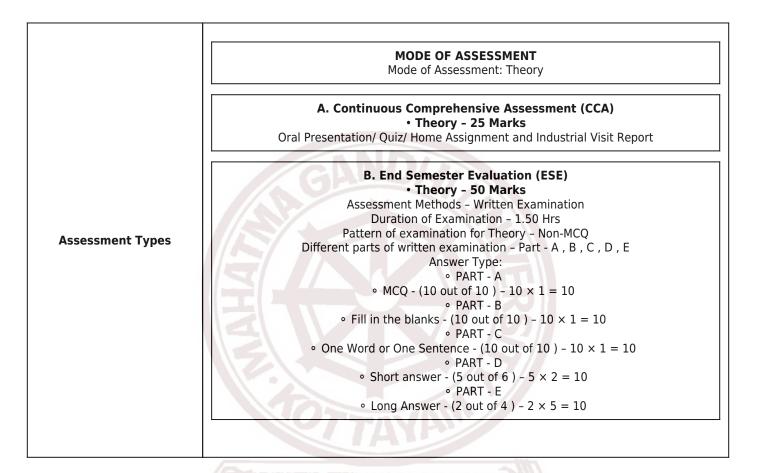
CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10
CO 1	-	-	-	2	-	2	-	-	-	3
CO 2	-	-	-	2	-	3	-	-	-	3
CO 3	-	-	-	2	-	3	-	-	-	3
CO 4	-	-	-	2	-	2	-	-	-	3
CO 5	-	-	-	3	-	3	2	-	-	3

'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**

Course Co		pom 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"]				

Lecture and Industrial Visit

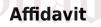


# References

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



- We, Mount Carmel College, Karukadam,Kothamangalum 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,Kothamangalum, 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,Kothamangalum 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.