

Programme	B. Sc. Family and Community Science				
Course Title	TEXTILE WET PROCESSING				
Type of Course	Major				
Semester	III				
Academic Level	200- 299				
Course Details	Credit	Lecture per week	Tutorial per week	Practical per week	Total Hours
	4	3	-	2	75
Pre-requisites	Basics in Textiles Science/Fibre to Fabric				
Course Summary	The course gives fundamental knowledge in the finishing process of textiles, dyeing and printing. It helps to evaluate the need for sustainability in the industry and promotes critical thinking.				

Course Outcomes (CO):

CO	CO Statement	Cognitive Level*	Knowledge Category#	Evaluation Tools used
CO1	Develop ethical values concerning production and finishing of textiles	E	C	Instructor-created exams / Quiz
CO2	Illustrate different methods and mechanism of dyeing and printing	U & An	P	Practical Assignment / Observation of Practical Skills
CO3	Create awareness on green textiles	C	C	Assignments
CO4	Skill in producing different designs in dyeing and printing	S	C	Instructor-created exams / Home Assignments
CO5	Develop Self employment opportunities	Ap	P	Practical assessment

* - Remember (R), Understand (U), Apply (Ap), Analyse (An), Evaluate (E), Create (C)

- Factual Knowledge(F) Conceptual Knowledge (C) Procedural Knowledge (P) Metacognitive Knowledge (M)

Detailed Syllabus:

Module	Unit	Content	Hrs	Mks
I	Finishes		12	31
	1	Definition, classification, Importance, types of finishes	1	
	2	mechanical -calendaring (friction,glazing,embossing,moireingandschreinerising),tentering,shearing, napping ,singeing	2	
	3	Chemical -bleaching, mercerizing, sanforising, sizing, weighting, crepe and crinkled effect, crease resistance,	3	
	4	Durable press finish	2	
	5	crabbing, preshrinking finishes done on wool fabrics	2	
	6	special/functional - water repellency, flame proofing, mildew proofing and moth proofing	2	
II	Dyeing		11	43
	7	Dyes- definition and classification	1	
	8	Synthetic dyes-direct, acid, basic, and disperse dyes	3	
	9	Azoic, vat, sulphur, metal complex, reactive dyes	3	
	10	Natural dyes- mordants- methods of dyeing	2	
	11	Methods of dyeing- fibre, stock, yarn, piece and garment.	2	
III	Printing		10	12
	12	Printing- styles- direct, resist and discharge printing	2	
	13	Printing machines	2	
	14	Methods of printing (block, roller, screen-hand screen, flat bed screen printing and rotary screen printing)	2	
	15	Other methods- stencil, duplex, transfer	4	
IV	Textile processing and environment		12	12
	16	Environmental impacts related to cultivation, processing and uses.	2	

	17	Use of biotechnology in textile processing	2	
	18	Eco friendly fibres- jute, hemp, bamboo,	2	
	19	Organic cotton and recent trends.	2	
	20	Eco friendly practices	1	
	21	Eco labels	1	
	22	Sustainability in Textile industry	2	
V	Open Ended Module: Practical		30	
	Build a record			
	23	To dye the cotton fabric using tie and dye method using direct dyes in various designs- knotting, sun burst, square, tritik, round, pinching	25	
	24	To block print cotton fabric		
	25	To Screen print cotton fabric		
	26	To print cotton fabric by batik in 1 or 2 colours		
	27	Product development- using tie and dye/batik/block printing	5	

Mapping of COs with PSOs and POs :

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO 1	1	2	2	2	2	-	1	1	2	2	2	2	2
CO 2	1	1	2	1	2	-	1	1	2	2	2	2	2
CO 3	2	2	2	1	3	-	2	1	2	2	2	2	2
CO 4	1	1	2	1	2	-	1	1	2	2	2	2	2
CO 5	1	2	3	3		-	2	1	3	2	2	2	3

Correlation Levels:

Level	Correlation
-	Nil
1	Slightly / Low
2	Moderate / Medium
3	Substantial / High

Assessment Rubrics:

- Regular lectures, demonstrations, Exercises on observation and follow up with group discussions, case studies, ICT enabled teaching and learning experiences in terms of video lessons. Hands on experience in laboratory, Assignments (20%)
- Final Exam (70%)

References

1. Marjory L. Joseph, Introductory Textile Science, Holt Rinehart and Winston, New York.
2. Susheela Dantyagi, Fundamentals of Textiles and their care, Orient Longmans, Madras
3. Hess, Textile fibres and their Uses, Oxford IBH Publishing Company, New Delhi.
4. Porter Corbman, Fibre to Fabric, McGraw Hill Book Company, New York.
5. www.fiber2fashion.com