

KUVEMPU UNIVERSITY
UG – HOME SCIENCE
Course Title: Fibre to Fabric (Skill Based Course)
IV Sem. BA – Home Science

Total Credits: 2:0:0

Total Contact Hours

32 Hrs.

Unit	Chapter	Syllabus	Contact Hours
Unit 1: Textile fibre and yarn construction.			9 Hrs.
1	1	Meaning, Importance and Scope of Textiles, Classification of Natural and Manmade fibre.	1 Hr.
	2	Manufacturing process and properties of Cotton, Silk, Wool, Nylon, Polyester, Classification of Yarns, Yarn Twists and Counts.	8 Hrs.
Unit 2: Fabric construction.			6 Hrs.
2	3	Parts of a Basic Loom – Shuttle, Heddle, Reed, Warp beam & Cloth Beam Basic; Weaving operation – Shedding, Picking, Beating, taking in and Letting off	2 Hrs.
	4	Basic Weaves – Plain Weave, Basket Weave, Rib, Twill, Satin, Fancy weaves –Leno, Pile and Jacquard, Methods of construction of fabric.	4Hrs.
Unit 3: Dyeing and Printing.			9 Hrs
3	5	Introduction, Principles of dyeing, Methods of dyeing; Dope, fibre Yarn, Fabric and garment methods of dyeing	4 Hrs.
	6	Natural Dyes: Classification, their application and ecological concern.	2 Hrs.
	7	Introduction to Printing and Various methods of Printing; Hand printing and Machine printing.	3 Hrs
Unit 4: Finishing.			8 Hrs.
4	8	Objectives and Classification of Finishes – Aesthetic Finishes (Singeing), Bleaching, Mercerization, Tentering, Shrinking, Weighting, Calendaring, Sizing, Embossing and Napping)	5 Hrs.
	9	Finishes for enhancing special character-Functional Finishes (Fire proof, Water proof, and Mildew proof).	3 Hrs.

Course Outcomes (COs): At the end of the course the students should be able

CO1: Understand the structure and production techniques of various natural and manmade fibres and their chemical and physical properties.

CO2: Understand conventional and non-conventional techniques of yarn spinning.

CO3: Understanding of various types of fabric forming methods.

CO4: Gain knowledge quality parameters for fibres, yarns and fabrics.

CO5: To introduce the basic scientific concept related to processing and Production of textiles

References:

1. Hollen and Saddler J (1995): Textiles Latest Ed., Mac. Millan and Co., New York
 2. Mullick P (2012): Text Book of Home Science, Kalyani Publishers, New Delhi
 3. Potter and Cob man: Fiber to Fabric
 4. Dorothy Burhan – A Textile Terminology
 5. Hert K P: Textiles fibres and their use, IBH Publishing Company
 6. Durga Denikar: Hoisehold Textiles and Laundry – Abnaram L Sons, Delhi
 7. Corbman B P (2001): Textile Fibre to Fabric, Mc. Graw Hill, New York
 8. Peter R Lord (2003): Handbook of Rarn Production, Wood head Publishing Lrd.,
 9. Kothari V K (2010), Progress in Textile Science, Vol. I, II and III, IAFL Publications, New Delhi
 10. Seema Sekhri (2011), Textbook of Fabric science, Fundamentals to finishing, PHI Learning Pvt. Ltd., New Delhi.
-