



## FORMAT FOR COURSE CURRICULUM

**Course Title: FUNDAMENTALS OF TEXTILES – I**

**Course Level: UG**

**Credit Units: 02**

**Course Code:**

L	T	P/S	SW/F W	TOTAL CREDIT UNITS
2	0	-	-	2

**Course Objectives:** The first semester of this 3 year program is emphasized on the fundamentals of fiber and yarn as they affect aesthetics and end use performance. The course begins with an introduction and the overview of the textile industry and how it relates and appreciates the close relationship of the fashion and textile industry.

**Pre-requisites: 12<sup>th</sup> pass**

### Course Contents/Syllabus:

	Weightage (%)
<b>Module I The Overview of Textile Industry</b> Introduction to textiles, major segments of the textile industry, market planning for apparels, Primary and secondary sources of fabric buying and selling of finished fabric.	<b>15%</b>
<b>Module II The Textile Fibers</b> Definitions of fibers, yarns and fabric, sources of fibers, classification of fibers on the basis of origin and length, Natural Fibers & Manmade fibers - properties, end uses and Identification of fibers.	<b>15%</b>
<b>Module III Introduction to Yarns</b> Spinning Process, Classification of yarns, Types of Yarn – Spun, Filament, Mixtures, Blends, Single, Ply yarns, Woolens, Worsteds, Novelty yarns, textured yarns. Yarn twist & Yarn count.	<b>15%</b>
<b>Module IV: Weaving process</b> Definition, Loom – Types, parts & various motions of loom. Types of weaves – Basic and Decorative, Preparation of samples of different weaves Selvedge, Identifying warp and weft; face and back of a fabric, defects	<b>20%</b>

<b>Module V: Knitting process</b>	<b>20%</b>
Knitting –Types of knits & knitting. Types of knitting stitches. Identify and classify knitted fabrics under warp & weft knits, Knitting Defects	
<b>Module VI: Other types of textiles</b>	<b>15 %</b>
Bonded and Foam laminated fabrics, Film fabrics: Coated fabrics, Metallic plated, flocked fabrics, quilted fabrics, Lace and Nets	

**Student Learning Outcomes:** By the end of this course, students will be able to

- Define and identify the various products and processes of textile industry
- Identify various types of fibers using different identification techniques
- Classify different types of yarns as per their structure, properties and end uses
- Define and identify the different types of fabric structures Classify and identify basic knitting stitches
- Able to categorize various fabric as per their appearance, properties and end use
- 

**Pedagogy for Course Delivery:**

- Power point presentation
- Videos/animated files of various process involved
- Field Based Learning
- Case Based Learning

**Lab/ Practicals details, if applicable: NA**

**Assessment/ Examination Scheme:**

<b>Theory L/T (%)</b>	<b>Lab/Practical/Studio (%)</b>	<b>End Term Examination</b>
100%		Theory

**Theory Assessment (L&T):**

<b>Continuous Assessment/Internal Assessment</b>					<b>End Term Examination</b>
<b>Components (Drop down)</b>	<b>Class tset</b>	<b>Project</b>	<b>Attendance</b>	<b>External exam</b>	
<b>Weightage (%)</b>	15	10	5	70	

**Lab/ Practical/ Studio Assessment: NA**

	Continuous Assessment/Internal Assessment				End Term Examination		
<b>Components (Drop down)</b>							
<b>Weightage (%)</b>							

### **Text & References:**

#### *Text:*

- Joseph M, Essentials of Textiles.
- Gohl EPG & L D Vilnsky, Textile Science.
- Corbman B P, Fiber to fabric

#### *References:*

- Gilow J, World Textiles.
- Tortora P, Understanding Textiles.
- Kadolph & Langford, Textiles.

### **Any other Study Material:**

- Shoin K, World Textile Collection.
- Thames & Hudsan, Book of Silk.
- Thames & Hudsan, Carpet & textile Pattern.