

GUJARAT TECHNOLOGICAL UNIVERSITY

DIPLOMA IN TEXTILE MANUFACTURING TECHNOLOGY

Semester: 4

Subject Name FABRIC STRUCTURE - II

Sr.No	Course content
1.	Warp and weft pile structure. 1.1 Formation of Terry pile fabric. 1.2. Ornamentation of Terry piles. 1.3. Formation of True warp piles. 1.4 Formation of Velvet & double plush fabrics. 1.5. Formation of weft piles. - Velveteen structure. - Plain and Twill back. - Corded velveteen. (Corduoy fabric) 1.6. Factor effecting on lenght of pile & density of the pile in warp and weft pile structure.
2.	Backed cloth, its features & objects for production. 2.1 Warp backed structure. 2.2 Weft backed structure. 2.3 Wadded backed structure.
3.	Simple colour and Weave effect. 3.1. Classification of colour and weave effect. 3.2. Method of producing variety of effect in the same weave & colour. 3.3. Example of simple weave & colour combination. - Continues line effect - Hounds tooth pattern - Bird eye and spot effect - Step pattern. - All over effect.
4.	Light and colour theory. 4.1 Primary colours. 4.2 Complementary colours. 4.3 After effect. 4.4 Secondary and tertiary colours as per colour theory.
5.	Cloth analysis & relevent calculation of fancy cloth. Selection of weave according to end use of the fabric and features / Quality Particulars of special structure for Blanket, Terry Towel, Velvet, corduroy
6.	Double cloth Double cloth designing and features of double cloth with end use of the fabric.

	6.1 Method of producing double cloth structure. 6.2 Principle of tying or stitching. 6.3 Construction of point paper design for the following. -Double cloth opening in two width. -Tubular cloth. -Self stitch double cloth -Self stitch wadded double cloth -Center stitch double cloth -Cut double cloth 6.4 Loom mechanism required for producing double cloth.
7.	Gauze and Leno weave :- Gauze and Leno weave and features of leno fabric. 7.1 Principle of gauze and leno weaving. 7.2 Comparison between gauze and leno weaving and end use of the leno fabrics. 7.3 Loom mechanism required for leno weaving. 7.4 Different types of gauze and leno weave. -simple gauze or plain leno. -counter leno for point draft -Cross leno effect -Twill leno effect -Net leno effect -Russian card -Cellular shirting
8.	Damask & Brocade fabrics. 8.1 True damask structure. 8.2 General idea about loom mechanism required for damask fabric & end use of the fabric. 8.3 Construction of damask on point paper. 8.4 Simple brocade structure. 8.5 General idea about loom mechanism required for brocade fabric. 8.6 Construction of small brocade motif. 8.7 Comparison between damask and brocade structure
9.	Tapestry fabric & quilt fabric. 9.1 Simple weft tapestry design. 9.2 General idea about loom mechanism required for tapestry fabric & end use of the fabric. 9.3 Construction of following quilts. -Loose back toilet quilts. -Fast back toilet quilts. 9.4 General idea about loom mechanism required for quilt fabric & end use of the fabric.
10.	Jacquard fabric designing. 10.1 Factor affecting on Jacquard designing.

	10.2 Selection of Jacquard designing. 10.3 Preparation of Jacquard design from simple motif on point paper/computer. 10.4 General idea about different arrangement of Jacquard design.
11.	Fabric calculation. 11.1 Cloth cover. 11.2 Relation with count, weave & sort of the fabric

LABORATORY EXPERIENCES :

SR.NO.	NAME OF TOPIC/EXERCISE
1	Drawing of terry designs-true pile designs-weft piles designs.
2	Drawing of warp and weft backed designs.
3	Development of colour and weave effects-continuous line effects-hound tooth pattern-bird and spot effects-step pattern-all over effect..
4	Preparation of chart for chromatic circle for light and colour theory-formate for primary,secondary and tertiary colour for colour theory.
5	Preparation of charts for quality particulars and end use of fabrics.
6	Analysis of fabric sample-backed cloth/piles.
7	Double cloth- Self stitch / Center Stitch
8	Double cloth -Wadded Warp / Weft
9	Gauze and Leno structure
10	Damask and Brocade Fabrics
11	Tapestries structure
12	Preparation of Jacquard Design.