

## Lesson Plan

**Name of Faculty:** Sanjay Sigger, Lecturer

**Discipline:** Textile Processing

**Semester:** 5th

**Subject:** Technology of Printing III

**Lesson Plan Duration:** 15 weeks

**Work load (Lecture /Practical) per week (in hours):** Lectures—03, Practical—03

Week	Theory		Practical	
	Lecture Day	Topic (Including Assignment/ Test	Practical Day	Topic
1 <sup>st</sup>	1	Automatic Flat Bed, Screen Printing: Study of Buser Automatic flat bed screen printing machines in respect Of their working principle, operational procedures and other salient features.	1	Printing of polyester fabric with disperse dyes by thermo fixation methods
	2	Study of Buser Automatic flat bed screen printing machines in respect Of their working principle, operational procedures and other salient features.		
	3	Zimmer Automatic flat bed screen printing machines in respect Of their working principle, operational procedures and other salient features.		
2 <sup>nd</sup>	4	Zimmer Automatic flat bed screen printing machines in respect Of their working principle, operational procedures and other salient features. Advantages & limitations of flat bed screen printing.	2	Printing of polyester fabric with disperse dyes by carrier method.
	5	Rotary Screen Printing: Introduction and Principle of Rotary Screen Printing.		
	6	Working of different squeeze systems used in Rotary Screen printing machines		
3 <sup>rd</sup>	7	Working of different squeeze systems used in Rotary Screen printing machines	3	Printing of polyester fabric with disperse dyes by carrier method.
	8	Advantages of magnetic squeeze systems.		
	9	Comparison of rotary screen-printing & Roller Printing Method.		

4 <sup>th</sup>	10	Emulsion Laquer Screen method	4	
	11	Laser Engraving method		
	12	Galvano Screen method		
5 <sup>th</sup>	13	Advantages of Rotary screen printing	5	Printing of polyester fabric with pigment colour
	14	Limitations of Rotary screen printing		
	15	Printing of Woolen and Silk Materials (7 hrs) Preparation of woolen material for printing		
6 <sup>th</sup>	16	Preparation of silk material for printing .	6	Printing of silk fabric with acid dyes
	17	Printing of woolen fabric with different classes of dyes.		
	18	Printing of cotton/wool blends.		
7 <sup>th</sup>	19	Printing of slivers.	7	
	20	White & coloured discharge printing of silk.		
	21	White & coloured resist printing of silk materials		
8 <sup>th</sup>	22	Preparation of Cellulose Acetate/Triacetate	8	Printing of woolen fabric with acid dyes
	23	Printing of Cellulose Acetate & triacetate Rayon with Disperse Dye stuffs.		
	24	Preparation of polyamide fibre		
9 <sup>th</sup>	25	Printing of polyamide fibre fabrics with Acid & Metal complex dyes, Reactive dye & disperse dyes.	9	Printing of silk/woolen fabric with reactive dyes
	26	Printing of cellulose triacetate/polyamide blend with Acid & Metal complex dyes & cationic dyes.		
	27	Preparation of polyester fabrics		
10 <sup>th</sup>	28	Printing of polyester fabrics with disperse dye stuffs by direct style & discharge style	10	To study the effect of hygroscopic agent in printing
	29	Printing of polyester with disperses dye stuffs by		

		direct style.		
	30	Printing of polyester with disperse dye stuffs by discharge style		
11 <sup>th</sup>	31	Preparation of Polyester/cotton (PC), Polyester/viscous (P/V) Blended fabrics.	11	
	32	Printing of Polyester/cotton (PC), Polyester/viscous (P/V) Blended fabrics with single class of colour - Pigment printing.		
	33	Printing of Polyester/cotton (PC), Polyester/viscous (P/V) Blended fabrics with single class of colour - Pigment printing.		
12 <sup>th</sup>	34	Printing of Polyester/cotton (PC), Polyester/viscous (P/V) Blended fabrics with single class of colour - Pigment printing. Processes using two classes of colourants - Disperse/Reactive.	12	Demonstration of flat bed Printing machine in a process house/print house.
	35	Printing of Polyester/cotton (PC), Polyester/viscous (P/V) Blended fabrics with single class of colour - Pigment printing. Processes using two classes of colourants - Disperse/vat.		
	36	Printing of Polyester/cotton (PC), Polyester/viscous (P/V) Blended fabrics with single class of colour - Pigment printing. Processes using two classes of colourants . Disperse/Solublised vat		
13 <sup>th</sup>	37	Preparation of Acrylic fibre	13	To print a polyester/cotton blended fabric with suitable class of dyes
	38	Printing of Acrylic fibre, fabrics with cationic		
	39	Printing of Acrylic fibre, fabrics with disperse dyes.		
14 <sup>th</sup>	40	Printing of Acrylic/cotton blend with suitable dyes.	14	To print a woolen yarn to produce a multi colored yarn..
	41	Printing of Acrylic/nylon blend with suitable dyes.		
	42	Printing of polyester & acrylic wool blends with suitable dyes.		
15 <sup>th</sup>	43	brief description of Yarn Printing	15	

	44	brief description of Yarn Printing		
	45	brief description of Carpet Printing		
16	46	brief description of Carpet Printing	16	
	47	Advancements in textile printing; Concept of Digital Printing.		
	48	Advancements in textile printing; Concept of Digital Printing and its application		