## **LESSON PLAN**

## DEPARTMENT OF TEXTILE TECHNOLOGY, ITT, CHOUDWAR

## **SUBJECT:** TEXTILE CHEMICAL PROCESSING -II **Periods:** 4/Week

## NAME OF FACULTY: Pravat Kumar Sahoo

No. of weeks/Sem as per SCTE&VT, Odisha Textile Tech/ Engg Syllabus: 15

Week	Class Day	Theory / Practical Topics
1st	1 <sup>st</sup>	Revision of TCP-I
	2 <sup>nd</sup>	Introduction to Manmade fiber dyeing
	3 <sup>rd</sup>	Different methods for Dyeing of polyester
	4th	Dyeing of polyester with disperse dyes Carrier, method
	1 <sup>st</sup>	Dyeing of polyester HTHP method
2nd	2 <sup>nd</sup>	Method of dyeing of polyester thermosol method.
	3 <sup>rd</sup>	Dyeing of cationic dye-able polyester blended fabric,
	4th	Dyeing of blended fabric, (P/C, P/W)
	1 <sup>st</sup>	Dyeing of acrylic fiber fabric
3rd	2 <sup>nd</sup>	Doubt clearing class/ Module revision.
510	3 <sup>rd</sup>	Introduction to textile printing
	5	Different stages of printing, printing ingredient
	4th	
4 <sup>th</sup>	$1^{st}$	Classification and properties of different thickeners used in printing
т	2 <sup>nd</sup>	Details of printing paste preparation
	3rd	After treatment of printed goods
	4th	Detail study about different styles of printing
	1 <sup>st</sup>	Brief study on carbonized and burnt out style
$5^{th}$	2 <sup>nd</sup>	Study about different methods of printing
	3rd	Detail study on block printing, stencil printing.
	4th	Study of screen printing and the preparation of screen
	1 <sup>st</sup>	Mechanism of Rotary and flat bed screen printing
th	2nd	Advantages and disadvantages of screen printing, screen printing defects
6 <sup>th</sup>	3rd	Study of roller printing
	4th	Different rollers used in textile printing, methods of roller engraving
	1 <sup>st</sup>	Roller print designs, advantages and disadvantages, defects
$7^{th}$	2 <sup>nd</sup>	Printing recipes for different styles and methods
	3rd	Comparative study of different methods of printing
	4th	Machineries used in textile printing
	1 <sup>st</sup>	Study of transfer printing
$8^{\text{th}}$	2nd	Brief idea on digital printing
	3rd	Study of flock, velvet, rubber, 3D printing
	4th	New development in textile printing

**SEMESTER:** 4th

	1 <sup>st</sup>	Printing of cotton fabric with suitable dyes.
$9^{th}$	2 <sup>nd</sup>	Printing of wool/silk fabric with suitable dyes.
-	3 <sup>rd</sup>	Printing of nylon fabric with suitable dyes.
-	3	Printing of polyester fabric with suitable dyes.
	1 <sup>st</sup>	Doubt clearing/ short fall class.
$10^{\text{th}}$	2 <sup>nd</sup>	Objectives of Textile finishing
-		Study on different types of finishing.
-		Idea on mechanical finishing
	1 <sup>st</sup>	Study on calendaring process
$11^{\text{th}}$	2 <sup>nd</sup>	Different types of smooth finishes
-	3 <sup>rd</sup>	Working mechanism of stenter machine
-	4th	Study of sunforization method
	1 <sup>st</sup>	Study on zero-zero finish
$12^{\text{th}}$	2 <sup>nd</sup>	Study of durable press finish
	3 <sup>rd</sup>	Recent developments in mechanical finishing machine
-	4th	Brief idea on chemical finishing
13 <sup>th</sup>	$1^{st}$	Methods of application of crease resistance finish,
15	2 <sup>nd</sup>	Methods of application of water proof and repellant finish
	3 <sup>rd</sup>	Methods of application of flame proof and repellant finish
-	4th	Study on wool carbonization
	$1^{st}$	Study of stone wash on denim fabric
$14^{\text{th}}$	2 <sup>nd</sup>	Brief idea on eco friendly textile finishing
14	3 <sup>rd</sup>	Brief study on antimicrobial finish
	4th	Mechanism of mercerization
a _th	$1^{st}$	Need of washing and drying of textile goods
15 <sup>th</sup>	2 <sup>nd</sup>	Working principle of different washing machines
	3 <sup>rd</sup>	Study of different dryers and methods of drying
	4th	Doubt clearing/ Revision

Name: Pravat Kumar Sahoo PTGF, ITT, Choudwar.