## **LESSON PLAN**

## **DEPARTMENT OF TEXTILE TECHNOLOGY I. T.T CHOUDWAR**

Subject: Advance Textile manufacture Semester: 6<sup>th</sup> Periods: 4/week

Name of Faculty: Sri Rajiblochana Sahoo

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

Week	Class Day	Theory / Practical Topics
1st	1 <sup>st</sup>	Brief revision on conventional loom
	2 <sup>nd</sup>	Comparative study of shuttle and shuttle less loom
	3 <sup>rd</sup>	Introduction to non conventional loom
	4th	Shuttle less loom and its importance in textile mill
2 1	1 <sup>st</sup>	Yarn preparation for shuttle less weaving
2nd	2 <sup>nd</sup>	Yarn quality parameter for shuttle less loom
	3 <sup>rd</sup>	Need of shuttle less weaving
	4th	Infrastructure requirement for modern weaving machine
	1 <sup>st</sup>	Brief idea on rapier and projectile machine
3rd	2 <sup>nd</sup>	Brief idea on fluid jet looms (Air jet)
	3 <sup>rd</sup>	Brief idea on fluid jet looms (water jet)
	4th	Quality assessment for shuttle less loom
. dls	1 <sup>st</sup>	Revolution on loom automation
4 <sup>th</sup>	2 <sup>nd</sup>	Basic concept of projectile loom
	3rd	Weft package requirement for projectile
	4th	Parts of projectile loom
-th	1 <sup>st</sup>	Passage of material in a projectile weaving machine
5 <sup>th</sup>	2 <sup>nd</sup>	Weft insertion mechanism for projectile loom
	3rd	Working of match-cam beating
	4th	Conventional selvedge vs non conventional selvedge
	1 <sup>st</sup>	Brief idea on different types of non conventional selvedge
6 <sup>th</sup>	2nd	Types of selvedge in projectile weaving
0	3rd	Modern development in projectile weft insertion system  Loom maintenance schedule
	4th	Loom maintenance schedule
7 <sup>th</sup>	1 <sup>st</sup>	Brief idea about rapier weaving
	2 <sup>nd</sup>	Classification of rapier
	3rd	Weft insertion mechanism on rapier

	4th	Rapier weaving cycle
8 <sup>th</sup>	1 <sup>st</sup>	Weft insertion mechanism for rigid rapier
	2nd	Passage of material in rapier loom
	3rd	Concept of flexible rapier
	4th	Weft insertion mechanism for single rapier
oth	$1^{\mathbf{St}}$	Weft insertion mechanism for double rapier
9 <sup>th</sup>	2 <sup>nd</sup>	Brief idea on telescopic rapier
	3 <sup>rd</sup>	Loom maintenance
	4th	Selvedge formation in rapier weaving
, th	1 <sup>st</sup>	Advantages of rapier weaving
10 <sup>th</sup>	2 <sup>nd</sup>	Concept of WIR
	3 <sup>rd</sup>	Comparative study of projectile and rapier weaving
	4th	Doubt clearing/ short fall class.
	1 <sup>st</sup>	Brief idea on fluid jet weft insertion
11 <sup>th</sup>	2 <sup>nd</sup>	Concept of air jet weaving
	3 <sup>rd</sup>	Air quality parameter
	4th	Weft quality for air jet weaving
, th	1 <sup>st</sup>	Passage of material in air jet loom
12 <sup>th</sup>	2 <sup>nd</sup>	Weft measuring device
	3 <sup>rd</sup>	Terms related to air jet pick insertion
	4th	Brief idea on confuser, profile reed
13 <sup>th</sup>	1 <sup>St</sup>	Difference between reed and profile reed
	2 <sup>nd</sup>	Weft stop motion working and principle
	3 <sup>rd</sup>	Selvedge formation in air jet weaving
	4th	Weft insertion cycle in air jet weaving
	1 <sup>St</sup>	Pick insertion cycle
14 <sup>th</sup>	2 <sup>nd</sup>	Loom maintenance
14***	3 <sup>rd</sup>	Concept of water jet weaving
	4th	Water quality parameter
<b>11</b> .	1 <sup>st</sup>	Passage of material in water jet loom
15 <sup>th</sup>	2 <sup>nd</sup>	Weft insertion cycle in water jet weaving
Ī	3 <sup>rd</sup>	Comparative study of water and air jet loom
Ī	4th	Doubt clearing/ Revision