

Marks	Grade Point	Letter Grade	Marks	Grade Point	Letter Grade
80>	4.00	A+	55-59	2.75	B-
75-79	3.75	A	50-54	2.50	C+
70-74	3.50	A-	45-49	2.25	C
65-69	3.25	B+	40-44	2.00	D
60-64	3.00	B	0-39	0.00	F



Daffodil Polytechnic Institute, Institute Code: 50238  
 Lesson Plan – Academic session: April 2022 August 2022

Subject Teacher : Md.Ashikur Rahman (Instructor)  
 Subject Name : ADVANCED KNITTING AND NON-WOVEN  
 Subject Code : 1975  
 Technology : Textile  
 Semester : 7<sup>th</sup>  
 Reference Book : Advanced knitting and non-woven (Publisher: prime Prokashani)

Mark Distribution (for 200 Marks)			
Theory Marks		Practical Marks	
Midterm	20	PC	25
Class test	05	PF	25
Quiz test	05	-	-
Final	120	-	-
<b>Total</b>	<b>150</b>	<b>Total</b>	<b>50</b>

## INTENTION

- TO DEVELOP ADVANCE THE STUDENTS ABLE KNOWLEDGE OF KNITTING FUNDAMENTALS.
- TO ENABLE TO UNDERSTAND THE CONCEPTS OF KNITTING MACHINERY.
- TO MAKE UNDERSTAND THE KNOWLEDGE OF KNIT FABRIC CONSTRUCTION.
- TO DEVELOP THE KNOWLEDGE OF QUALITY CONTROL OF KNIT FABRICS.
- TO DEVELOP THE KNOWLEDGE OF NON-WOVEN FABRIC.

## SHORT DESCRIPTION

KNITTING FUNDAMENTALS DEVELOPED WARP & WEFT KNITTING FABRIC; MULTI-AXIAL FABRICS; NON-WOVEN FABRICS; BONDING MATERIAL; FIBROUS RAW MATERIAL & PRODUCTION OF NON-WOVEN FABRICS

Lectur e	Chapter	Supporting Equipment	Topic	Benefits
01	1. Understand the knitting fundamentals	Knit Fabric  YouTube video link or direct showing video( mandatory in class)	1. Define the term knitting process. 2. Mention the classification of knitting process. 3. Describe the different structural fabrics with diagram, loop, stitch, plain stitch, purl	THE KNITTING FUNDAMENTALS

			stitch, needle loop, sinker loop, tuck loop, Float stitch, warp knitted laps, tuck, miss stitch, overlap, under lap, Closed lap, open lap.	
02	1. Understand the knitting fundamentals	<b>Knit Fabric</b> <b>YouTube video link or direct showing video( mandatory in class)</b>	4. Describe the arrangement of structural elements i.e. Plain knitted fabrics, double knitted fabrics, double knitted rib fabrics, double knitted interlock fabrics, double knitted purl fabrics.	THE KNITTING FUNDAMENTALS
03	<b>Quiz Test</b>		<b>Chapter : 1</b> <b>(Theory and practical based)</b>	The knitting fundamentals.
04	2.Understand the high quality weft knitting production	<b>YouTube video link or direct showing video ( mandatory in class)</b>	1. Describe the high quality cotton knit goods production. 2. Describe the production of knit goods from yarn containing manmade fiber. 3. State the uses of linear and nonlinear cams in weft knitting. 4. Discuss the automation of weft knitting industry.	High quality weft knitting production
05	2.Understand the high quality weft knitting production	<b>Calculator, Machine diagram</b>	Calculate the production of weft knitting	Calculation of the production of weft knitting.

06	<b>Quiz Test</b>		<b>Chapter : 2 (Theory and practical based)</b>	High quality weft knitting production.  Calculation of the production of weft knitting.
<b>07</b>	3. Understand the single jersey jacquard.	<b>Single Jersey fabric</b>	1. State the term of weft knitting jacquard.  2. Describe the colored stitch design in weft knitting.	Single jersey jacquard.
08	4. Understand the multi-axial knitted fabric construction.	<b>Multi-axial knitted fabric</b>  <b>YouTube video link or direct showing video ( mandatory in class)</b>	Define the term of multi-axial knitted fabric.  Describe the multiracial Rachel knitting machine  Mention the uses of multi-axial fabrics.	The multi-axial knitted fabric construction.
09	<b>Class Test</b>		<b>Chapter : 3 &amp; 4 (Theory and practical based)</b>	Single jersey jacquard.  The multi-axial knitted fabric construction.
<b>10</b>	5. Understand the development of warp knitting machine.	<b>YouTube video link or direct showing video ( mandatory in class)</b>	1. Define the term "multiple guide warp knitting machine".  2. Mention the product of multiple guide warp knitting machine  3. Describe the multiple guide warp knitting machine.  4. Describe the warp knitted fabric faults with their remedies.	The multiple guide warp knitting machine.
<b>11</b>	<b>Class Test</b>		<b>Chapter : 5 (Theory and practical based)</b>	The development of warp knitting machine.
<b>12</b>	<b>Review class</b>		<b>Chapter:01 (Regarding students problem)</b>	

13	Review class		<b>Chapter:02</b> (Regarding students problem)	
14	Review class		<b>Chapter:03</b> (Regarding students problem)	
15	Review class		<b>Chapter:04</b> (Regarding students problem)	
16	Review class		<b>Chapter:05</b> (Regarding students problem)	
17	Presentation	Laptop, projector	<b>Short presentation by individual student.</b>	Be confident on practical life.
18	Model Test		<b>Chapter : 1- 5 (Theory and practical based)</b>	

### Mid Examination

19	6. Understand the Non-woven.	<b>YouTube video link or direct showing video ( mandatory in class)</b>	1. Define the term "non-woven fabrics". 2. State the history of non-woven fabrics. 3. Discuss the characteristic and properties of non-woven fabrics. 4. Distinguish between woven & non-woven fabrics.	Non-woven.
20	6. Understand the Non-woven.	<b>YouTube video link or direct showing video ( mandatory in class)</b>	5. Describe the binding & bonding techniques of non-woven fabrics. 6. Discuss the arrangement of the fiber in the non-woven fabrics. 7. List the binding elements of non-woven fabrics. 8. Mention the classification of non-woven fabrics 9. State the characteristics of laminated fabrics.	Non-woven.
21	<b>Quiz Test</b>		<b>Chapter: 6 (Theory and practical based)</b>	Non-woven.
22	7. Understand the adhesives and bonding.	Fiber, glue etc	1. Define adhesive and bonding. 2. State the functions of bonding process. 3. Discuss the testing adhesion stickiness'. 4. Mention the problems of adhesives.	Adhesives and bonding.

			5. Describe the adhesive substances of non-woven fabrics.	
23	Quiz Test		<b>Chapter : 7 (Theory and practical based)</b>	Adhesives and bonding.
24	8. Understand the fibrous raw materials.	<b>YouTube video link or direct showing video ( mandatory in class)</b>	1. State the term fibrous raw material 2. State the function of the fibers in non-woven fabrics. 3. Describe the properties of fibrous for matrices. 4. Discuss the requirements of the fibers for non-woven fabrics.	The fibrous raw materials.
25	Class Test		<b>Chapter : 8 (Theory and practical based)</b>	The fibrous raw materials.
26	9. Understand the Production of non-woven fabrics.	<b>YouTube video link or direct showing video ( mandatory in class)</b>	1. Show the flow chart of producing non-woven fabric 2. Discuss the flow process of non- woven fabric production. 3. Discuss the principles of production of mechanically bonded non-woven fabric.	Production of non-woven fabrics.
27	9. Understand the Production of non-woven fabrics.	<b>YouTube video link or direct showing video ( mandatory in class)</b>	4. Discuss the principles of production stitch bonding without binding thread with binding thread. 5. Mention the uses of non-woven fabrics.	Production of non-woven fabrics.
28	Class Test		<b>Chapter : 9 (Theory and practical based)</b>	Process of non- woven fabric production.
29	Review class		<b>Chapter:06 (Regarding students problem)</b>	
30	Review class		<b>Chapter:07 (Regarding students problem)</b>	
31	Review class		<b>Chapter:08 (Regarding students problem)</b>	
32	Review class		<b>Chapter:09 (Regarding students problem)</b>	
33	Presentation	<b>Laptop, projector</b>	<b>Short presentation by individual student.</b>	Be confident on practical life.

34	Model Test		Chapter : 06-09 (Theory and practical based)	
<b>Semester Final</b>				