

Course Syllabus Gyanmanjari Institute of Design Semester-3

Subject: Apparel Construction-I - DDEFN13208

Type of course: Major (Core)

Prerequisite: Basic understanding of textiles and introductory garment design, including fabric types and simple stitching techniques.

Rationale: This course provides essential skills in garment construction, covering assembly systems, sewing machines, fabric estimation, and traditional Indian garment techniques to prepare students for advanced apparel design and production.

Teaching and Examination Scheme:

Teach	ching Scheme Credits Examination Marks					Examination Marks			Total
CI	T	P	С	Theory Marks Practical Marks		Theory Marks	CA	Total Marks	
				ESE	MSE	V	P	ALA	10
0	2 .	4	5	00	00	10	40	50	100

Legends: CI- Classroom Instructions; T -- Tutorial; P - Practical; C - Credit; ESE - End Semester Examination; MSE- Mid Semester Examination; V - Viva; CA - Continuous Assessment; ALA- Active Learning Activities.

Course content

Sr. no.	Course content			
	Unit—1 Introduction to Garment Assembly Systems			
1	1.1 Garment Assembly Systems A.) Individual System B.) Factory Production System			
	1.2 Garment Assembly Systems Commonly Used in India A.) Progressive Bundle System (PBS) B.) Unit Production System (UPS)			
	C.) Modular Production System (MPS)			



Unit-2 Garment Finishing Machines	
2.1 The Lock-Stitch Machine	
2.2 The Chain-Stitch Machine	
2.3 The Flat Lock or Surging Machine	
2 2.4 The Safety Overlock Machine	
2.5 The Blind-Stitch Hemming Machine	9
2.6 Button Machines	
2.7 The Buttonhole Machine	
2.8 The Feed Off Arm Sewing Machine	
2.9 The Pin Tucking Machine	
Unit-3 Fabric Consumption and Estimation	
3.1 Fabric Requirement	a garden e real
How to Calculate Fabric Required?	
3.2 How to Make Pattern Layout	
A.) Shirt	
B.) Trouser	
3 C.) Salwar D.) Kameez	
E.) Kalidar Kurta	
F.) Pyjama	
G.) Churidar Pyjama	
H.) Sari Blouse	
I.) Skirt J.) Nighty	
Unit-4 Construction of Bodice/Top	
4.1 Assembling of a Top/Bodice 4.2 Construction of Salwar and Kameez / Kurti	
A.) Construction of Salwar	× (=)
B) Construction of a Varneage / Vigeti	
4.3 Construction of a Kanteez / Kurti 4.3 Construction of Churidar and Kalidar Kurta	
A.) Construction of Churidar	
B.) Construction of Kalidar Kurta	
C.) Kurta Placket	
Unit-5 Construction of Sari Blouse and Choli blouse	
5.1 Construction of Sari Blouse	
5 5.1 Construction of Sari Blouse Placket	
5.3 Construction of Choli Blouse	



Continuous Assessment:

	Active Learning Activities	Marks
1	Total Prepare design – Make any Five Garment Finishing Machines Drawing design. Design will give by faculty and upload that in GMIU web portal	10
2	Prepare sample —Prepare any one sample of unite-3 other then you have learn in class and upload in GMIU web portal	10
3	Prepare sample —Prepare any one sample of latest Choli Blouse design other then you have learn in class and upload in GMIU web portal	10
		30

Suggested Specification table with Marks (Theory): 60

			of Theory Marks om's Taxonomy)			
Level	Remembrance (R)	Understanding (U)	Application(A)	Analyze (N)	Evaluate (E)	Create (C)
Weightage	•	-	-		-	-

Note: This specification table shall be treated as a general guideline for students and teachers. The actual distribution of marks in the question paper may vary slightly from above table.

Course Outcome:

ter learning	g the course, the students should be able to:
CO1	Understand garment assembly systems used in production.
CO2	Identify and use garment finishing machines.
CO3	Calculate fabric requirements and prepare pattern layouts.
CO4	Construct various Indian garments using standard techniques.



List of Practical

Sr. No Description		Unit No	Hrs
1	Demonstration of Individual Garment Assembly System using a basic sewing setup	1	2
2	Observation & sketching of Factory Production System layout and flow	1	2
3	Case study or simulation of Progressive Bundle System (PBS).	1	2
4	Group activity: Role-play and analysis of Unit Production System (UPS) vs Modular Production System (MPS).	1	2
5	Operation and stitching sample using a Lock-Stitch Machine.	2	2
6	Stitch a seam using a Chain-Stitch Machine	2	2
7	Practice finishing an edge using a Flat Lock or Overlock Machine	2	2
8	Demonstrate a blind hem using the Blind-Stitch Hemming Machine	2	2
9	Make a sample with button and buttonhole using Button Machines & Buttonhole Machine.	2	2
10	Create a decorative sample using the Feed Off Arm Machine or Pin Tucking Machine	2	2
11	Calculate fabric requirement & prepare layout for a Shirt.	3	2
12	Calculate fabric requirement & prepare layout for a Trouser	3	2
13	Fabric estimation and layout design for Salwar & Kameez.	3	2
14	Fabric estimation and layout design for Kalidar Kurta	3	2
15	Fabric estimation and layout for Pyjama and Churidar Pyjama	3	4
16	Fabric estimation & pattern layout for Sari Blouse	3	4
17	Prepare pattern layout for Skirt or Nighty	3	2
18	Stitch and assemble a basic Top/Bodice.	4	4
19	Cutting and construction of a Salwar	4	2
20	Cutting and construction of a Kameez / Kurti	4	2
21	Stitching of a Churidar with side seam finishing	4	2
22	Construction of Kalidar Kurta with Kurta Placket	3	2
23	Cut and stitch a basic Sari Blouse	5	2



24	Preparation of Sari Blouse Placket sample.	5	4
25	Drafting and construction of Choli Blouse	5	2
26	Create a sample of latest Choli design with creative neckline or sleeve	5	2
13	Total	-	60

Instructional Method:

The course delivery method will depend upon the requirement of content and need of students. The teacher in addition to conventional teaching method by black board, may also use any of tools such as demonstration, role play, Quiz, brainstorming, MOOCs etc.

From the content 10% topics are suggested for flipped mode instruction.

Students will use supplementary resources such as online videos, NPTEL/SWAYAM videos, e-courses, Virtual Laboratory

The internal evaluation will be done on the basis of Active Learning Assignment

Practical/Viva examination will be conducted at the end of semester for evaluation of performance of students in laboratory.

Reference Books:

- [1] The Technology of Clothing Manufacture (Harold Carr and Barbara Latham)
- [2] Introduction to Clothing Manufacture (Gerry Cooklin)
- [3] Patternmaking for Fashion Design (Helen Joseph-Armstrong)
- [4] Garment Technology for Fashion Designers (Gerry Cooklin)

