

DISCIPLINE SPECIFIC ELECTIVE
DSE HH 3D1: Apparel Design and Construction Techniques

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the Course (if any)
		Lecture	Tutorial	Practical/ Practice		
Apparel Design and Construction Techniques	4	2	0	2	XII Pass	Pass in DSC HH 204 Fashion Studies

Learning Objectives

1. To impart knowledge regarding the basics of apparel design.
2. To make students understand various terminologies used in relation to garment components and their application in designing garments.
3. To develop a level of proficiency in making patterns for simple garments
4. To be able to independently lay patterns, cut fabric and sew a garment

Learning Outcomes

The students would be able to:

1. Develop basic knowledge of apparel design and describe its terminology.
2. Apply the knowledge of fabrics and fabric terminology to follow preparatory steps before garment cutting
3. Use and apply the concept and techniques of pattern making, laying out and cutting
4. Judicious application of knowledge for producing quality in patterns, and processes in garment assembly
5. Have basic skill in pattern making for women's clothes
6. Use and apply the concept and techniques of various seams and edge finishes

SYLLABUS OF HH 3D1

THEORY
(Credits 2; Hours 30)

UNIT I: Apparel Design with Garment Components

8 Hours

Unit Description: This unit will acquaint students with different types of garment components.

Subtopics: Garment Components: Types

- Bodices and yokes
- Necklines
- Collars
- Sleeves and cuffs
- Plackets and fasteners

- Pockets

UNIT II: Introduction to Body measurements and pattern making

6 Hours

This unit will delve into the concept, significance and techniques of body measurements, basic block and patterns.

Subtopics:

- Measurement on body – importance, procedure and precautions
- Basic Blocks and patterns – importance, types and pattern information
- Pattern making technique – Slash and spread for added fullness: gathers, pleats, flare and tucks

UNIT III: Preparation for garment construction

8 Hours

This unit provides an insight into the concepts and processes of fabric selection, terms, preparatory steps, fabric layouts, pinning, marking and cutting.

Subtopics:

- Fabric selection: characteristics, construction, drape, weights, widths and trade name
- Fabric Grain – types, identification and importance
- Preparatory steps- preshrinking, straightening and truing
- Layouts for patterns-general guidelines, basic layouts- lengthwise, partial lengthwise, crosswise, double fold, open, combination fold
- Layouts for special fabrics- Unidirectional, bold and large prints, plaids, stripes and checks, various widths of fabrics
- Pinning, marking, cutting - Tools and processes

UNIT IV: Sewing, Seams and finishing of raw edges

8 Hours

This unit offers information on sewing machines, appropriate stitching guidelines, seams and various additional techniques required for finishing seams and garment edges.

Subtopics:

- Sewing machines - types, basic parts and their function, basic operations, seam defects and remedies
- Relationship between needle, thread, stitch length & fabric weight
- Seam classification - super imposed seam, enclosed, lapped seam, bound seam, flat seam and decorative seam
- Additional techniques for straight, curved and cornered seams: clipping, notching, grading, seam balancing, trimming, under stitching, stay stitching, trimming a corner, handling unequal seams (easing)
- Edge treatments of straight & curved edges- self finish, bias strip and its importance, bias facing, bias binding, shaped facing, self-finishing, casings and finishing with trims

PRACTICAL (Credits 2; Hours 60)

1. Designing for Children's garments

- Drafting of child's basic bodice and sleeve block

- Adaptation of three bodice-short waist, standard waist and low waist
- Adaptation of sleeves- puffed and its variations, flared
- Developing collars- peter pan and its variations
- Adapting bodice to various frocks - A-line, yoked, short bodice, elongated bodice with gathers, pleats and flares

2. Sewing techniques

- Introduction to a sewing machine – Practice sewing
- Seam – Plain seam - straight and curved, cornered, French seam, Flat Felled seam
- Edge Finishing – Straight and curved (Facing and Binding)
- Construction of plackets with suitable fastener- even hem with button and button hole, continuous wrap
- Construction of any one frock with sleeve and collar

Essential readings

1. Armstrong, H.J., 2009, Pattern Making for Fashion Design, Harper Collins Publishers Inc., New York.
2. Stamper, A.A., S. H. Sharp and L.B. Donnell, 1986, Evaluating Apparel Quality, Fairchild Publications, America
3. Liechty, E.G., Potterberg, D.N., Rasband, J.A., 2010, Fitting and Pattern Alteration: A Multimethod Approach, Fairchild Publications, New York.

Suggested readings

1. Carr H. & Latham B. (1994), The Technology of Clothing Manufacture, 2nd edition, Blackwell SC.
2. Cooklin, G. (1991), Introduction to clothing manufacture, Blackwell publishing.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.