

- **Singh H.** (2001). B.Sc. Practical Physics. S. Chand and Co., New Delhi.
- **Vogel** (2009). Quantitative Chemical analysis. Pearson Education, New Delhi.

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

**Bachelors in Arts with Community Sciences as Major
Category-II**

**DISCIPLINE SPECIFIC CORE COURSE – DSC-4A-HSC:
INTRODUCTION TO TEXTILE AND APPAREL DESIGN**

CREDIT DISTRIBUTION, ELIGIBILITY, PRE-REQUISITES OF THE COURSE

Course Title & Code	Credits	Credit distribution of the course			Eligibility Criteria	Prerequisite of the course
		Lecture	Tutorial	Practical		
Introduction to Textile and Apparel Design	4	3	0	1	Class XII Pass	NIL

Learning Objectives

- To introduce students to the fundamentals of textile fibres, yarns, fabrics.
- To develop a basic understanding of applied textile design techniques and Indian textile crafts.
- To familiarise with the essential terminology and processes related to apparel design and construction.
- To develop basic skills in the use of surface design techniques, body measurement, basic seam construction and finishing.

Learning Outcomes

The students would be able to:

- Classify textile fibres and list suitable examples.
- Describe the basic properties, fabric characteristics and end uses of common textile fibres and fabrics.
- Identify, describe and use the basic applied textile design techniques and categorise major Indian textile crafts as embroidered, dyed, painted/printed, and woven.
- Categorise garments and explain factors influencing garment design
- Define the essential sewing and pattern-making terminology
- Apply correct procedures for taking body measurements
- Identify and explain parts of a sewing machine, analyse common defects, and suggest suitable remedies, including proper care and safety measures.
- Demonstrate basic hand stitches and attach fasteners using appropriate techniques.
- Construct and finish plain seams using suitable seam finishing methods.

THEORY **(Credits 3; Hours 45)**

UNIT I: Fundamentals of Textiles

15 Hours

This unit provides basic understanding of textile fibres and fabrics.

- Common Textile Fibres (Origin: natural & man-made, Length: staple & filament), basic properties and end-uses
- Introduction to Spun and filament yarns
- Basic methods of fabric construction – woven, knitted, lace, non-woven
- Glossary of commonly available fabrics
- Fabric characteristics – Texture/ Hand, Weight, Width
- Application of textiles – Apparel, Home, Industry

UNIT II: Applied Textile Design Techniques

10 Hours

This unit introduces applied textile design techniques and provides an overview of major categories of Indian textile crafts.

- Introduction to applied textile design techniques – Fabric Manipulation, Surface embellishment, Dyeing and printing
- Indian textile crafts categories – Embroidered, Dyed, Painted and Printed, Woven

UNIT III: Basics of Apparel Design and Construction

10 Hours

This unit introduces garment classification, basic design considerations, construction terminology, body measurements, and the operation and care of a sewing machine.

- Garment designing according to age, climate, occasion
- Common terms: Apparel, Seam, Seam allowance, Pleats, Gathers, Tucks, Dart, Stay stitching, Yoke, Basic blocks, Pattern, Grading, Garment Ease
- Fabric Grain – types, identification and importance
- Body measurement and size chart – Correct procedure of taking body measurements.

UNIT IV: Sewing Machine Operation and Material Selection

10 Hours

This unit covers sewing machine parts and operation, along with the selection of suitable threads and needles for various fabrics.

- Main parts of a basic sewing machine and their functions, Common sewing problems & remedies, care of machine, safety measures to be taken while sewing
- Selection of threads, needles and stitch length for various fabrics

PRACTICAL **(Credits 1; Hours 30)**

1. Preparation of basic hand stitch samples (basting, hemming, back stitch, running stitch, stem stitch, chain stitch, lazy-daisy, herringbone, blanket stitch).
2. Attachment of buttons (two-hole and four-hole).
3. Application of hook and eye.
4. Preparation of body measurement chart for self
5. Construction of plain seam sample.

6. Preparation of seam finishes: edge stitched, turned and stitched, and over-locked.
7. Preparation of at least three samples, selected from one or more of the following categories:
 - a. Fabric manipulation (e.g., pleating, tucks, gathers, smocking).
 - b. Surface embellishment (e.g., embroidery, appliqué, beadwork).
 - c. Dyeing techniques (e.g., tie-dye, dip dye).
 - d. Printing techniques (e.g., block printing, stencil printing, linoleum printing, texture printing).

Essential Readings

UNIT I

This unit introduces the basic concepts of textiles, including the classification of textile fibres based on origin and length, along with their properties and end uses. It covers the basics of spun and filament yarns and the primary methods of fabric construction such as weaving, knitting, lace, and non-woven techniques. Students will also learn about commonly used fabrics, key fabric characteristics such as texture, weight, and width, and the various applications of textiles in apparel, home furnishings, and industrial products.

- **Rastogi, D., & Chopra, S.** (2017). *Textiles science*. Orient Blackswan Private Limited.
- **Sekhri, S.** (2022). *Textbook of fabric science: Fundamentals to finishing* (4th ed.). PHI Learning.
- **Tholia, A.** (2013). *Understanding fabrics: A practical approach* (2nd ed.). Sarv International.

UNIT II

This unit provides an introduction to applied textile design techniques used to enhance fabric surfaces. It includes an overview of fabric manipulation, surface embellishment, and dyeing and printing methods. The unit also introduces major categories of Indian textile crafts, including embroidered, dyed, painted and printed, and woven textiles, highlighting the diversity of traditional textile practices.

- **Cheney, N., & McAllister, H.** (2014). *Textile surface manipulation* (Textiles Handbooks). Bloomsbury Publishing India Private Limited.
- **Gupta, M.** (2015). *Traditional Indian textile*. LAP Lambert Academic Publishing.
- **Hussain, S.** (2025). *Introduction to textile design* (1st ed.). Academic Enclave.
- **Nayak, A., & Lakra, S.** (2024). *Conventional textiles and textile crafts of India*. CBS Publishers & Distributors Pvt. Ltd.
- **Sleigh-Johnson, R.** (2010). *Practical textile techniques*. A&C Black.
- **Wolff, C.** (1996). *The art of manipulating fabric*. Iola, WI: Krause Publications.

UNIT III

This unit familiarises students with the basic principles of apparel design and garment construction. It covers garment selection based on factors such as age, climate, and occasion, along with commonly used garment construction terminology. Students will learn about fabric grain, its identification and importance, and the correct procedure for taking body measurements and understanding size charts for garment design.

- **Colton V.** (1995). *Reader's Digest- Complete Guide to Sewing*. New York: The Reader's Digest Association, Inc.
- **Mohan, R., Sareen, S., & Gupta, N.** (2024). *Fundamentals of apparel design & construction: Sewing tools and techniques*. Indu Book Services Pvt. Ltd.

UNIT IV

This unit focuses on the basic operation and maintenance of a sewing machine. Students will learn about the main parts and functions of the machine, common sewing problems and their remedies, machine care, and safety measures during sewing. It also introduces the selection of appropriate threads, needles, and stitch lengths for different fabrics.

- **Bolsover, J.** (2010). *Sewing machine basics*. CICO Books.
- **Mohan, R., Sareen, S., & Gupta, N.** (2024). *Fundamentals of apparel design & construction: Sewing tools and techniques*. Indu Book Services Pvt. Ltd.

Suggested Readings

- **Barker, A. F.** (2015). *Ornamentation and textile design*. Abhishek Publications.
- **Corbman, B. P.** (1983). *Fibre to fabric (6th ed.)*. McGraw-Hill.
- **Goyal, M.** (2024). *Paridhano ka alankaran: Surface ornamentation of fabrics*. SBPD Publications.
- **INTACH.** (2023). *Textiles: The Indian story*. Talking Cub.
- **Joseph M.L.** (1988). *Essentials of Textiles (5th Edition)*. Florida: Rinehart and Winston Inc.
- **Kindersley D.** (1992). *The Complete Book of Sewing*. London: Dorling Kindersley Limited.
- **Neumann, H., Neumann, H., & Crill, R.** (2020). *Textiles of India*. Prestel Publishing.
- **Prendergast, J.** (2023). *Sewing techniques: An introduction to construction skills within the design process (Basics Fashion Design)*. Bloomsbury Visual Arts.
- **Sinclair R.** (2015). *Textiles and Fashion: Materials, Design and Technology*. New York: Woodhead Publishing Limited.
- **Stamper, A.A., S. H. Sharp and L.B. Donnell,** 1986, *Evaluating Apparel Quality*, Fairchild Publications, America
- **Verma, P.** (2003). *Vastra Vigyan Evam Paridhan*. Bhopal: Hindi Granth Academy
- https://bharatskills.gov.in/pdf/E_Books/SOT1sem_TT.pdf

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

Bachelors in Arts with Community Scienceas non-Major Category-III

DISCIPLINE SPECIFIC CORE COURSE – DSC-5-HSC: FOUNDATIONS IN HUMAN DEVELOPMENT

CREDIT DISTRIBUTION, ELIGIBILITY, PRE-REQUISITES OF THE COURSE

Course Title & Code	Credits	Credit distribution of the course			Eligibility Criteria	Prerequisite of the course
		Lecture	Tutorial	Practical		
Foundations in Human Development	4	3	0	1	Class XII	NIL