

Syllabus developed
According to NATIONAL EDUCATION POLICY 2020
C.B.C.S.
for
M.Sc. (Home Science)
MASTER OF SCIENCE [HOME SC. (GENERAL)]
Clothing & Textile

Semester- IX

Theories/ Practical	Major	Subject Name	Credit (24)
Theory	1	Textile Science	4
Theory	2	Textile Industry in India	4
Theory	3	Fashion Retailing & Merchandising	4
Theory	4	Dyeing and Finishing	4
Practical	1	Dyeing and Finishing	4
Research	1	Research/ Project	4

Semester- X

Theories/ Practical	Major	Subject Name	Credit (24)
Theory	1	Textile Printing	4
Theory	2	Historic Textile	4
Theory	3	Garment Production Technique	4
Theory	4	Advance Textiles	4
Practical	1	Advance Textile	4
Research	1	Research/Project	4

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CLOTHING & TEXTILE
Semester : IX
Paper First

Subject- Textile Science

Course : Major (Compulsory)

Credit - 4 (Theory)

Objectives

1. To acquire knowledge of different Textile fibres and their properties
2. To develop an ability to test fabric and their properties
3. To understand the recent development in fibres

Unit I Recent development in fiber

- a. Acrylic and Modacrylic-fibres.
- b. Olefin fibers.
- c. Elastometric fiber, Rubber, Spandex.
- d. Glass.
- e. Metallic.
- f. Mixture and blended fabrics, Reason for mixing and blending.
- g. Qualitative and quantitative analysis of blend and pure fabrics.

Unit II Fibre and Yarn Testing

- a. Fibre Testing- Length, Linear Density, Fibre Fineness.
- b. Yarn Testing- Yarn Number, Count, Single or Lea strength, Twist, Evenness.

Unit III Fabric Testing

- a. Fabric constructing analysis- weave, ends, picks, count, weight, crimp, thickness determination etc.
- b. Porosity, air permeability and thermal conductivity of fabric.
- c. Dimensional stability of fabric-Shrinkage, laundering shrinkage, Thermal shrinkage and heat setting.

Unit IV Mechanical Properties of Fabric

- a. Breaking, Bursting and Tearing strength of fabrics, their relation of fabric and yarn construction parameters.
- b. Crease recovery.
- c. Bending stiffness and recovery.
- d. Drapability of fabric.
- e. Feel texture and handle of fabrics.
- f. Serviceability of fabrics Service wear and abrasion method of assessment.

References:

1. Booth, J.E.: Principles of Textile Testing Skinkle: Textile Testing
Garner, W.: Textile Laboratory Manual.
2. Garner & Hamby; Hand book of Textile Testing and Quality Control
Carter, H.F.: Testing Yarns and Fabrics.
3. Marsh, J.T.: Introduction to Textile Finishing.
4. Trotman, E.R.: Bleaching Dyeing and Chemical Technology of fibres
Shenai: Technology of Textile Processing Peters: Textile Chemistry
Wilhams, B.I.: Practical Textile Chemistry.

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Semester : IX
Paper- Second
Subject- Textile Industry in India

Course : Major (Compulsory)

Credit - 4 (Theory)

Objectives:

1. To acquaint students with multifaceted textile industry of India, the economic regime and the policy regulations within which textile industry is operated

Unit I Importance of Textile Industry in the Indian Economy

- a. History, Growth and developments.
- b. Problems and Prospect.
- c. Textile policy.

Unit II Textile Management Structure

- a. Organized and decentralized sector.
- b. Market structure.

Unit III Export procedure in India

- a. Export incentives.
- b. Problems in exporting textiles.
- c. Trends in Indian Exports.

Unit IV Costing and Quality Control

- a. Methods of costing check Indian fashion industry.
- b. Elements of cost for a fabric.
- c. Growth of consumerism and problems of consumer.
- d. Consumer protection & ISO certification (9000:2000).

References:

1. Aiya, H.R.: Economics of Textile and Industry in India.
2. Kali Triodkar: Export Management.
3. Dudy, V.D.: Management (if textile industries).
4. Macneal James U.: Dimensions of Consumer Behavior.
5. Tata Services Ltd.: Statistical outline of India.
6. The Indian textile journal, all India textile directory textile worlds (journal).
7. Mathur, Navin: Advertising and consumer reaction in India.

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Semester : IX
Paper Third

Subject- Fashion Retailing and Merchandising

Course : Major (Compulsory)

Credit - 4 (Theory)

Objectives:

1. To develop understanding of Retailing and Merchandising
2. To impart knowledge regarding promotion and selling

Unit I The Concept of Retailing

- a. Definition and role of retailing in Merchandising.
- b. Retail Environment types of retail store.
- c. Challenges facing Indian retail industry.

Unit II Distribution of Textile

- a. Wholesalers, Retailers and Merchandisers.
- b. Functions and methods of selling.
- c. Role of IT in Textile Industry.

Unit III Promotion of Textile Merchandise

- a. Role and Methods of Promotion.
- b. Advertising and Sales promotion techniques.
- c. Brand, Standards, Labeling and display of Merchandise.

Unit IV Technical Textiles

- a. Importance and uses of Technical Textiles.
- b. Advantages and Disadvantages of Technical Textiles.
- c. Seminar and Report Presentation.

References:

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2. The Indian textile journal, all India textile directory textile worlds (journal).
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Semester : IX
Paper : Fourth
Subject- Dyeing and Finishing

Course : Major (Compulsory)

Credit - 4 (Theory)

Objectives

1. To understand the theory of dyeing in relation to various classes of dyes and its application
2. To study the chemicals used in textiles processing and study the recent development in various finishing processes

Unit I: Classification of Dyeing

- a. History of dyestuff concept of colours and its relation to light classification and types of dye & coloring matter.
- b. Preparatory processes: Designing, Scouring, Bleaching and Mercerization
- c. Methods of application and suitability of various dyes to different fibres and their blend.

Unit II Brief Introduction about Chemical Constitution of Dyes

- a. Colour index, chemical constitution of dyes.

Unit III Dyeing Machines

- a. Dyeing Machine for fibre, yarn and fabric and industrial dyeing practices.
- b. Dyeing auxiliaries and their uses regarding dyeing soaping and washing.

Unit IV Finishing Technology

- a. Resin finishes- application and mechanism.
- b. Organdie finish.
- c. Permanent set (Durable press) finish.
- c. Stone-wash finish.
- d. Soil and oil release finish.
- e. Recent advancement in finishing.

References:

1. Broughton Kate, "Textile dyeing: The step by step guide" Rockport, 2001.
2. BHeyood, Derek, "Textile finishing : Society of dyers and colorists" 2004.
3. Shenai VA :Technology of textile finishing" Sevak publication; Mumbai 1995.
4. Vankatraman K "Chemistry of synthetic dyes" vol III, Academic press. Newwork. 1991.

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Semester : IX
Subject- Dyeing and Finishing

Course : Major (Compulsory)

Credit - 4 (Practical)

1. Preparatory processes-Dezining, Scouring and Bleaching
2. Yarn and fabric dyeing-Direct, reactive (hot and cold)
3. Synthetic fabric dyeing with disperse dye.
4. Colorfastness testing- light, washing and rubbing.

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CLOTHING & TEXTILE
Semester : X
Paper : First
Subject : Textile Printing

Course : Major (Compulsory)

Credit - 4 (Theory)

Objectives:

1. To impart the knowledge about peroration of fabric for printing
2. To inculcate awareness of the different methods of printing and appreciate the technical advantages of each

UNIT 1 Introduction to Printing

- a. Historical development of printing methods.
- b. Methods of printing- Block, Stencil, Screen, Roller, Rotary screens used at industrial level.

Unit II Principles of Printing

- a. Various methods and machinery used for printing.
- b. Thickening agents and auxiliaries for the printing paste and their suitable to various classes of fibers.

Unit III Styles of Printing

- a. Direct style resist, or discharge style and raised style.
- b. Styles and methods of printing.

Unit IV Special printing procedure and finishing

- a. Role Poly chromatic dyeing transfers, printing Carpet printing, flock printing.
- b. Social importance of clothes.
- c. Recent advancement in printing.

References:

1. Screen shot not received.
2. V.A. Shenai. Technology fo Textile Processing. Vol. IV. Sevak Publication.
3. R.S. Prayag. Technology of Textile Printing. Noyes Data Corporation.
4. Joyee Story. The Thames & Husdson Manual of Textile Printing. Thames & Husdson.
5. Vilens G. Textile Science. CBS.

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Semester : X
Paper : Second
Subject- Historic Textile

Course : Major (Compulsory)

Credit - 4 (Theory)

Objectives

1. To impart knowledge to students on historic textiles and clothing
2. To enhance the knowledge of students about psychological as well aspects of clothing
3. To create awareness of traditional costumes of India

Unit I : Origin and Selection of Clothing

- a. Theories of Clothing: Theory of Modesty, immodesty, protection, adornment, combined need and other theories.
- b. Role of clothing in psychological and personality development of human beings, self concept,.
- c. Psychological effect of clothing on children.
- d. Scope and type of designs.

Unit II Indian costumes: Historic approach from ancient period to 20th Centur

- a. Dress in Harappa and Mohan Jodaro.
- b. Dress of Aryans.
- c. Dress of 600 BC -320 BC (Buddhist, Jains).
- d. Islamic influence.
- e. British period.

Unit III Study of regional costumes of India (Men/Women)

- a. Punjab, Himachal, Kashmir, U.P, M.P., Bengal, Tamilnadu, Rajasthan, Gujarat, and Maharashtra.

Unit IV Study of Indian sarees of different types

- a. Different types of handlooms sarees.
- b. Wardrobe planning for different stages in family cycle.
- c. History of Carpets. Rugs and Durries.

References:

1. Ahury, G.S.: Indian Costumes, Popular Prakashan, Bombay
2. Bhushan Brij, J.: Costumes and Textiles of India, D.B. Taraporewala & Co. Bmobay.
3. Moti Chandra: Costumes, Textiles, Cosmetics and Chiffons in Ancient and Medieval India,.
4. Orient Publisher, New Delhi, 1973.
5. Akazi Roahan; Ancient Indian Costumes. Art Heritage, New Delhi.
6. Mary Shawn Rayan: The study in Human Behaviour.
7. Flugel, J.G: Psychology of Clothes.
Horn, H.J.: Second Skin

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Semester : X
Paper- Third

Subject- Garment Production Techniques

Course : Major (Compulsory)

Credit - 4 (Theory)

Objectives:

1. To inculcate various garment construction technique among students
2. To understand the functions of sewing machine
3. To learn about the care and maintenance of sewing machine

Unit I Spreading and Marking Technique

- a. Spreading methods, equipments and tools, types of spread.
- b. Marking method, types of marker and symbols.

Unit II Cutting Technique

- a. Definition, cutting equipment and tool: straight knife cutting machine, Rotary cutting machine, Band knife cutting machine, Die cutter, cutting drills and computerized cutting machine.
- b. Working environment and safety measures.

Unit III Sewing Technique

- a. Basic sewing machine and tools.
- b. Common problems in sewing machine and maintenance.

Unit IV Pressing Technique

- a. Purpose of pressing, pressing equipment and methods of pressing.
- b. Garment folding and packing.

References:

1. Chuter .A. J” introduction to clothing production management; Blackwell publishing, 2nd edition, 1995
2. Claric Shaffer, “sewing for the apparel industry” prentice-hall, 1st edition, 2001
3. Haupld carr & Barbara latham, “the technology of clothing manufacturer” Blackwell publishing, 4th edition, 2008
4. Thomas anna gawb, the art of sewing” USB publishers distributors Ltd. 1994

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Semester : X
Paper- Fourth
Subject- Advance Textiles

Course : Major (Compulsory)

Credit - 4 (Theory)

Objectives

1. To sensitize students about various techniques of pattern making & fitting
2. To develop an ability to analyse fabric weaving
3. To develop competency in entrepreneurship skills in textiles

Unit I : Pattern making Technique

- a. Flat pattern, draping, drafting their application, principle and limitations.
- b. Commercial pattern: Categories of pattern, pattern making, pattern envelope, pattern guide sheet.

Unit II Fitting and Handling of Special Fabric

- a. Principle of fitting, factors to be considered while fitting, common fitting problems, remedying fitting defects, special consideration in designing and layout of the garment (Print, Stripes, Checks, Lines etc.) Fabric selection studying fabric texture, hand body print;.
- b. Handling of special fabric while cutting and stitching (lace, velvet chiffon) Supporting fabrics lining, interlining, interfacing, underlining.

Unit III Fabric classification and analysis of fabric for its construction weaves

- a. Basic and decorative weaves, plain, twill and satin derivatives, dobby and jacquard, shedding and weaving pile.
- b. Principle of color and design in weaving, preparation of pattern for dobby and jacquard looms, warp and weft pile weaving.
- c. New development in woven fabrics- New loom and loom development.
- d. Textile design through weaving.

Unit IV Entrepreneurship development in textiles

- a. Definition and characteristics of an entrepreneur.
- b. Entrepreneurship development and employment promotion.
- c. Agencies for development of entrepreneurship.
- d. Establishing an enterprise and Problems.
- e. Information Sources/Schemes of assistance.

References:

1. Natalic Bray: Dress Designing
2. Mccalls: Sewing in Colour
3. Readers Digest:: Complete Guide to Sewing
4. Hepumerth: Dress Designing and Selection,
5. Singe sewing Book
6. Martin , G.M.: The Art of Costume and Personal Dress Designing
7. Brockman Helen: The Theory of Fashion Designing
8. Hillbenae, M.S. & Mansfield, C.A.: Dress Designing Draping and Flat Pattern
9. Aswani, K.T.: Fancy Weaving Mechanism
10. William Watson: Advanced Textile Desingn Hand Book on Computer
11. Aided Textile Designing, Published by WRA
12. Armstrong Helen joseph, pattern making for fashion design, 3rd edition, Prentice hall, 1999

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Credit - 4 (Practical)

1. Flat pattern design- Moving, dividing and combining dart by pivot slash and spread method.
2. Converting dart into seam line adding fullness in garment by gathers and pleats.
3. Adaptation to various designs using 'foundation pattern' Designing apparel and construction with selected dress design:-
 - a. Draping on dress form and style reading.
 - b. Preliminary draping exercise, front and back bodice.
 - c. Basic front shaping by manipulation of darts-shifting positions, multiple darts and gathers.
4. Preparation of commercial pattern envelope.