

FASHION DESIGN

&

GARMENT

TECHNOLOGY

INTRODUCTION

Fashion is dynamic and ever changing. It is one of the most powerful forces in our lives. It influences every facet of our lifestyle at a particular period in time e.g. the clothes we wear, the music we listen, the food we eat, where we go for holiday or the car we drive in etc.

Fashion is a big business and key driver for several industries e.g. apparel, accessories, textiles, automobiles etc.

The purpose of the stream of Fashion Design and Garment technology under the broad head of Professional Competency Education is to tell the students about the fundamentals of fashion design and production of garments. Fashion Design as profession includes the entire process of designing and producing fashion apparels from the fibre and yarn stage to the finished product. The papers of this course will give an overview of fashion design and elaborate on different aspects like elements of design, history of fashion, fabrics, and understanding of the body, pattern development and garment construction.

EMPLOYMENT OPPORTUNITIES

1. As beginner assistants to designers of apparel
2. As coordinators for sampling houses of apparel
3. As liaison officers between production and merchandising departments of any export/ retail set-up in the field of apparel
4. As assistants in product development department
5. The Programme will help students setup boutiques and small scale manufacturing setups.

OBJECTIVES OF THE COURSE

The main objective of the course is to develop professional competency and employable skills in the fields of Design (apparel) and technology (garment related).

The specific objectives are:

- To develop and initialize a design vocabulary, an essential tool for practicing as designers
- To introduce the students to garment making
- To understand the fashion business
- To gain knowledge of the working and interrelationships of different industries and services that comprise fashion business
- To introduce students to the world of fashion designing through pattern development
- To develop employable skills in designing of apparel
- To develop employable skills in assembly of garments
- To develop employable skills in the field of export of apparel

**SYLLABUS
CLASS XI**

Introduction to the Fashion Industry

Marks: 100 (50 – Theory, 50- Practical)

Objective of the course

- ✓ To learn appropriate fashion terminology
- ✓ To understand the fashion business
- ✓ To gain knowledge of the working and interrelationships of different industries and services that comprise fashion business
- ✓ To differentiate and appreciate the nuances of fashion terminology
- ✓ To provide a comprehensive exposure to the structure and functioning of the global fashion industry

To introduce geographical and regional cultural variations in the global apparel and life style goods industry.

Learning outcome

After finishing the course, the students shall be able

- To use appropriate terminology used in fashion world
- To understand the interrelationships in fashion business
- To get the overview of different facets of Fashion Industry
- To understand Fashion product categorization

Course content

Theory- Marks50

Chapter 1 (10)

- ❖ Fashion- definition of fashion in all its aspects.
- ❖ Style - the definition of style and differentiation from fashion.
- ❖ Trend - definition of the term, origin of trends and fashion
- ❖ Understanding the similarity and difference between design, art and craft.

Chapter 2 (10)

- ❖ The various aspects of fashion business – designing, manufacturing and retailing scenarios for apparel.
- ❖ Understanding the role of fashion professionals like designer, stylist, merchandiser and coordinator.

Chapter 3 (5)

- ❖ Product cycle and the link between yarn- fabric- garments.

Chapter 4 (5)

- ❖ Product categorization- Textiles
- ❖ Product Categorisation- accessories/ lifestyle products, Leather goods and footwear
- ❖ Product Categorization – Apparel- Menswear/ womenswear/ kidswear
- ❖ Trims and Accessories for the Fashion Industry

Chapter 5 (10)

- ❖ The glamour of fashion- Designers, Design Houses – India and abroad

Chapter 6 (5)

- ❖ The business of Fashion- Fashion centers, Brands, Stores-India and Abroad

Chapter 7 (5)

- ❖ Support Institutes for the fashion Industry -Trade Promotion Services (CMAI,AEPC,PEXCIL etc) Government and Non – Government, Testing laboratories, BTRA, SITRA, Textile committee, Handloom and Handicrafts Developments Corporation, FDCI etc.

Practical- marks 50

Recommended- Full day practical

- Survey a Department of Lifestyle store and study the products on display. Make a presentation incorporating the following information-Range of products, clientele, price range, and visual display.
- Visits to at least three support institutes and study of their working- report on the same.
- Presentation on study on designer/ design house/ brand/ store

Methodology of teaching:

Illustrated lectures with slides and visuals

Presentations

Market survey and research

Evaluation Criteria

- Theory – Written Exam for 50 marks- 3 hour
- Practical – 50 marks- 30 marks viva, file on three practical projects to be created with 10 marks internal and 10 marks external faculty.(2 hours)

Prescribed Reference text:

Concept to consumer- Gini Stephens Frings

Inside Fashion Business- Jeanette A. Jarrow, Miriam Guerrero, Beatrice Judelle

Fashion Kaleidoscope- Meher Castellino

Fashion accessories-Glenco McMillan/ Mc Graw.

McDowell, Colin, Shoes- Fashion and Fantasy, Thames and Hudson

ELEMENTS OF DESIGN & FASHION

Marks: 100 (Practical -50+ Theory-50)

Objective of the course

- ✓ To introduce the students to the basic elements of design
- ✓ To increase and build sensitivity to the forms around them
- ✓ To develop and initialize a design vocabulary, an essential tool for practicing as designers
- ✓ To introduce to the students the rudiments of sketching – perspective, shading, sizing etc
- ✓ To introduce the students to the sketching of the human form
- ✓ To introduce students to the basic elements of fashion
- ✓ To teach students about movement of fashion, fashion cycle, categories of clothing etc.
- ✓ To sensitize students about different items of garments in each category i.e. menswear, womenswear and childrenswear
- ✓ To teach students the difference between high fashion and mass fashion
- ✓ To distinguish between custom made & ready to wear

Learning outcome

After finishing the course, the students shall be able

- Demonstrate elementary knowledge of elements of design / fashion, its origin and components
- To use their developed ability to observe finer details around them
- To develop basic design language
- To understand the elements of fashion
- To be aware of movement of fashion
- To understand the fashion cycle
- To know the various categories of menswear, womenswear and childrenswear
- To understand the difference between hi-fashion & mass fashion and custom made & ready to wear.

Course content

Theory- Marks 50

Chapter 1

(10)

- Understand the concept of design.
- Elements of design
- Principles of Design
- Textures, Shapes & forms
- Colour – theories etc

Chapter 2

(15)

- Origin of Fashion
- Theories of clothing – adornment, protection, identification and ritualistic.
- Concept of fashion
 - ✓ Body decoration, painting, scarification
 - ✓ Draping – Greco-Roman, Indian and other continents
 - ✓ Stitched garments- war uniforms, amours inspired
 - ✓ Comparison of western and oriental war uniforms

Chapter 3

(10)

- Influence of world wars on fashion
- Influence of industrial revolution - custom made; mass produced.
- Automation and the various technical and scientific developments shaping the finest classless society in many centuries.

Chapter 4

(5)

- Evolution of Indian fashion in the last century.

Chapter 5

(10)

- Various categories of menswear, womenswear and childrenswear
- Menswear – shirts, trousers, formal jackets suit and sporty suit
- Womenswear- dresses, blouses, skirts, trousers, kameezes, saris, & blouses
- Kids wear – categories of children for 0-15 years and various garments like frocks, skirts, blouses, trousers, dungarees, jackets etc.
- Age group relationship to design

Practical-marks 50

- Exercises using elements of art like line, form, colour, texture, space etc. following the principles of design
- Importance of LINE as an important element of structure that determines the direction of visual interest in the context of a garment.
- Understanding the colour quality, intensity, relationship with other colours, textures, shape etc.
- Repeats, patterns and composition
- Harmony to achieve the condition in which all the elements of design work together successfully.
- Understanding of balance and proportion to enable the students to emphasize or to underplay certain elements.
- Understanding 2D & 3D forms
- Sketching – perspective, shading
- Drawing and draping the fashion figure

Methodology of teaching:

Illustrated lectures with slides and visuals

Demonstrations and individual feedback in practical

Evaluation Criteria

- Theory – Written Exam for 50 marks- 2 .5 hour paper
- Practical – 50 marks- Exam for 30 marks, File of work to be marked 10 marks external and 05 marks internal faculty, 05 marks viva. (3 hours)

Prescribed reference text:

'Grafix' by Wolfganghageney

Repeat pattern-Peter Phillips, Gillian Bunce

Design Elements 2 -Richard Hora

Kaleidoscope of fashion, by Meher Castilino

Ancient Indian Costume, by Roshan Alkazi

Concept to Consumer, by Gini Stephens Frings

Encyclopedia of Fashion details

GARMENT CONSTRUCTION I

Marks:100 (50 – Practical, 50- Theory)

Objective of the course

- ✓ To introduce the students to garment making
- ✓ To familiarize them with sewing machine & its parts
- ✓ To familiarize them with use of other sewing aids
- ✓ To teach them basic hand and machine stitches
- ✓ To teach them simple machine operations

Learning outcome

After finishing the course, the students shall be able

- To work proficiently on the sewing machine
- To rectify simple problems of the machine
- To stitch different seams on the machine
- To finish edges with hand stitches
- To make gathers, pleats and tucks on the fabric

Course content

Theory-marks 50

Chapter 1	(20)
❖ Introduction to sewing machine, its various parts	
❖ Functions of various sewing machine parts	
❖ Types of sewing machines	
Chapter 2	(5)
❖ Sewing aids.	
Chapter 3	(15)
❖ Maintenance of sewing machine	
❖ Understanding the simple problems of sewing machine and the solutions	
Chapter 4	(10)
❖ Selection of suitable needle and thread for various fabrics and suitable stitch per inch (SPI)	

Practical- marks50

- ❖ Develop proficiency in use of sewing machine
- ❖ Develop proficiency in straight, angular and curved seams.
- ❖ Basic hand stitches - basting, hemming (slant, slip, invisible), back stitch (even back, half back, prick), running stitch etc. with their end use.
- ❖ Basic machine seams used for stitching or finishing various parts of the garments like plain seam, French seam, flat fell, lapped, stitched & pinked seam, Turned & Stitch

seam/ Tailored seam, Hong Kong seam, Mock French seam, Top stitched seam, Double top stitched seam, Mock flat seam etc.

- ❖ Fabric manipulation like gathers, pleats and tucks etc.

Methodology of teaching

Illustrated lectures with slides, visuals and demonstrations wherever required.

Evaluation Criteria

- Theory – Written Exam for 30 marks- 2 hour paper
- Practical – 50 marks- Exam for 50 marks, File of work to be marked 10 marks external and 05 marks internal faculty, 05 marks viva. (4 hours)

Prescribed reference text:

Encyclopedia of Dressmaking, by Marshall Cavendish

Readers Digest book of Sewing

Encyclopedia of Sewing

FABRIC STUDY

Marks: 100 (50 – Theory, 50 - Practical)

Objective of the course

- ✓ To acquire an elementary understanding of fibres
- ✓ To understand yarns and fabric structures along with their end uses
- ✓ To develop understanding of basic techniques of value addition
- ✓ To learn appropriate surface design of fabrics

Learning outcome

After finishing the course, the students shall be able

- To use appropriate terminology used in fabrics
- To understand the various techniques of fabric structure
- To appreciate the traditional textiles of India.
- To be able to develop basic surfaces on textiles through embroideries and dyeing techniques.

Course content

Theory- marks 50

- Introduction to fibre and yarn - definition, terminologies, properties, end uses. **(10)**
- Fabric structures- woven, knitted, non wovens - definition, terminologies, properties**(10)**
- End uses of fabrics- Fabrics for apparel, home furnishing, Special Purposes **(5)**
- Surface value addition on textiles- Embroidery techniques, printing, resist dyeing techniques- Tie and Dye, Batik, Block Printing, Stencil Printing **(10)**
- Traditional textiles of India – Embroideries of states of India **(5)**
- Traditional textiles of India – Resist dye techniques in traditional Indian textiles **(10)**

Practical-marks 50

- Identify basic weaves and knits and prepare a file of various fabrics – woven, knitted, non woven.
- Basic embroidery stitches- – running, herringbone, chevron, blanket, shadow work, French knot, buttonhole, open chain, twisted chain, stamp, cross, fish bone, fly, feather, lazy daisy, couching, sheaf, filling, Jacobean, web stitch.
- Familiarization with different materials and techniques required for different surface techniques.
- Tie-dye, Batik, Block Printing, Stencil Printing techniques
- Traditional Indian embroidery (the following are to be done on different fabrics namely cotton, silk, organdy/organza, velvet)- Kantha , Kashida , Kasuti, Kutch embroidery, Zardozi

Methodology of teaching:

Lectures, Practical, Demonstrations

Industry/ field visits to craft centres, embroidery / tie-dye units

Evaluation Criteria

- Theory – Written Exam for 50 marks- 3 hour paper
- Practical – 50 marks- Exam and documentation for 20 marks (2 hrs), File of work to be marked 05 marks external and 05 marks internal faculty.

Prescribed reference text:

'Textiles' by Sara Kadolph & Anna Langford

Essentials of Textiles, by Marjorie Joseph

BASIC PATTERN DEVELOPMENT

Marks: 100 (50 – Practical, 50 - Theory)

Objective of the course

- ✓ To introduce students to the world of fashion designing through pattern development
- ✓ To explain important skill that enable the designer to convert a design sketch into a three dimensional form
- ✓ To develop basic blocks for bodice, sleeve and Indian garments
- ✓ To understand and implement the concept of test fits and to convert paper patterns into muslin

Learning outcome

After finishing the course, the students shall be able

- To understand the basic skill of pattern making
- To understand and appreciate the concept of fit and balance
- To develop basic blocks from measurement charts
- To test fit the pattern
- To develop patterns for simple designs using basic blocks

Course content

Theory marks 50

Chapter 1	(10)
❖ Understanding of body & its measurements	
❖ Methods of measuring body and dress form.	
Chapter 2	(10)
❖ Relationships of sizes and measurements.	
❖ Measurement charts	
Chapter 3	(5)
❖ Tools of pattern making.	
❖ Common terms used in pattern development.	
Chapter 4	(5)
❖ Garment details – Neckline/ collar/ sleeve/ pocket/ placket	
Chapter 5	(5)
❖ Introduction to Indian Garments	
Chapter 6	(5)
❖ Difference of pattern from drape and measurements	

Chapter 7

- ❖ Introduction to Pattern Development for womenswear - how patterns are made and developed, the importance of fit and balance and methods of achieving it.

(10)

Practical marks 50

- ❖ Basic Bodice - developed from the standard measurement chart and test fitted on the dress form. Marking the important details such as darts, seam allowances, notches, grain lines etc.
- ❖ Dart manipulation - the mechanism of shifting darts from one position to another or into a seam by slash and spread method.
- ❖ Bifurcated Indian Garments-Salwar, Churidar and its variation
- ❖ Sari Blouse-basic choli and its variations
- ❖ Basic Necklines and variations
- ❖ Marking of garment details i.e. Armholes, Necklines- V, U, round, boat, square.

- ❖ Kalidar Kurta-basic and its variations
- ❖ Kameez and its various designs
- ❖ Develop basic sleeve block and set into the armhole of the basic bodice.
- ❖ Basics of collar development and drafting basic collars like Peter Pan and Chinese.

Final product

Student will learn to develop patterns for Indian garments like salwar kameez, churidar-kalidar kurta, sari blouse and choli blouse also using basic blocks develop patterns for simple designs of skirts and blouses.

Evaluation Criteria

- Theory – Written Exam for 50 marks- 2 hour paper
- Practical – 50 marks- Exam for 30 marks (3 hrs), File of work to be marked 05 marks external and 05 marks internal faculty, 10 marks viva.

Garment Construction II

Marks:100 (50 – Practical, 50- Theory)

Objective of the course

- ✓ To assemble a garment
- ✓ To construct a bodice using different seams
- ✓ To make a placket for bodice opening
- ✓ To finish a neckline by both piping and facing and attaching a collar
- ✓ To set in a sleeve in the arm hole and finish by attaching the cuff
- ✓ To put gathers or pleats in the skirt and finish the waist with a waist band or attach a bodice
- ✓ To stitch Indian garments using appropriate seams and finishes.

Learning outcome

After finishing the course, the students shall be able

- To join various parts of the garment and construct a complete garment
- To finish a bodice with neckline & Armhole using both piping and facing
- To set in the sleeve
- To stitch a skirt
- To stitch a salwar
- To stitch a Churidar
- To stitch a kameez
- To stitch a kalidar kurta
- To stitch a sari blouse
- To stitch a choli blouse

Course content

Theory- Marks 50

- ❖ Garment Assembly systems (20)
- ❖ Garment finishing machines (button hole/button attach, bartack etc (15)
- ❖ Fabric consumptions and estimations (15)

PracticalMarks 50

- ❖ Concept of placket, various kind of plackets – continuous, diamond, shirt, placket with facing, pleated shirt placket, blouse placket, kurta placket
- ❖ Concept of slit and seam
- ❖ Concept of collar and Collar attachment - peter pan, Chinese, shirt
- ❖ Pocket – Application of pocket, patch pocket, inserted pocket, structured pocket, bound pocket, welt pocket, inseam pockets etc
- ❖ Assembling of bodice
- ❖ Yoke attachment
- ❖ Sleeve attachment
- ❖ Waist band attachment
- ❖ Constructing a skirt and blouse using pattern template.

- ❖ Constructing a salwar-kameez
- ❖ Constructing a Churidar-kalidar kurta
- ❖ Constructing a Sari blouse
- ❖ Constructing a choli blouse.

Methodology of teaching

Illustrated lectures with slides, visuals and demonstrations where ever required

Evaluation Criteria

- Theory – Written Exam for 50 marks- 2 hour paper
- Practical – 50 marks- Exam for 30 marks (4 hrs), File of work to be marked 10 marks external and 10 marks internal faculty.

Prescribed reference text:

Encyclopedia of dressmaking, by MarshallCave

Readers Digest book of Sewing

Encyclopedia of Sewing

LIST OF EQUIPMENTS AND SOFTWARE

Lab requirement for 30 students

	Desirable	Minimum/ Maxi
Batch Size	30	20/35
Lab size -		35ft x 20 ft.
AC environment	Yes	
Industrial sewing machines with power (costs at least Rs. 4,500 each)	30	One per student
Pattern Making tables (size 5 ft x 4 ft <u>cork top</u>)	8	4 students /table
Dress forms (half) (costs Rs. 8000 each)	30	one for 2 students
Steam irons @ Rs.1000	4	2
Ironing boards @ Rs. 500/-	4	2
Soft boards	All around the walls	2 in each lab/class
Stools	30	One per student
White board	1	1
Black board	1	1

Approximate cost will be Rs. 5,00,000/-

Selection criteria of school

They should have ability to provide appropriate environment, well lit and ventilated space, equipment, machinery and maintenance, trained faculty, exclusive library for the course, willingness to upgrade facility and faculty.

LIST OF READING MATERIAL

Attached to each course individually.

TEACHING STAFF AND THEIR QUALIFICATIONS

A teacher with any one of the following academic qualifications will be eligible to teach these subjects to classes XI and XII.

Since Fashion is an unconventional subject and not part of the mainstream professional education in India, it is imperative that diploma holders in fashion design be considered at par to teach the core courses along with Post-Graduates in Clothing and Textiles who will need at least 5-years relevant experience.

1. Minimum of Three-year Diploma in Fashion Design from NIFT or NID and other reputed institutes
2. Minimum of Two-year PG Diploma in Textile Design/ knitwear Design from NIFT or NID and other reputed institutes
3. M.Sc. in Clothing and Textiles with at least 5 years relevant experience in apparel industry.

COURSE COMMITTEE MEMBERS

1. **Mrs. Rathi Vinay Jha, IAS, DG- FDCI**
2. **Ms. Vandana Narang, Associate Professor – NIFT**
3. **Ms. Bhavna Kapur, Associate Professor – NIFT**
4. **Mr. S.K. Bhardwaj, Professor & Head (AA) –NIFT**
5. **Dr. Pinky Khanna, NCERT, Indore**
6. **Ms. Pooja, CII**