



BANGALORE UNIVERSITY

**REGULATIONS GOVERNING
THE BACHELORS DEGREE COURSE
IN
FASHION AND APPAREL DESIGN**

BANGALORE UNIVERSITY

REGULATIONS GOVERNING THE BACHELORS DEGREE COURSE IN FASHION AND APPAREL DESIGN

1. **TITLE OF THE DEGREE:** The degree shall be called Bachelor of Science in Fashion & Apparel Design (B.Sc. FAD).
2. **ELIGIBILITY FOR ADMISSION:**
 - a. A candidate seeking admission to first year B.Sc. Degree in Fashion & Apparel Design shall have passed the pre-university examination of pre-university Board of Karnataka or any other examination considered as equivalent with an aggregate of 35% and above marks.
 - b. Candidates with three years Diploma in Textile Technology / Costumes & Fashion Design or any other three years diploma considered as equivalent and recognized by the state / central government shall be eligible for admission to the III Semester of B.Sc. Fashion & Apparel Design course.
3. **DURATION OF THE DEGREE COURSE:** The duration of study for B.Sc. Degree in Fashion & Apparel Design shall be three academic years comprising six semesters.
4. **MEDIUM OF INSTRUCTION:** Medium of instruction and examination in all the optional subjects shall be English.
5. **ATTENDANCE:** A candidate shall be permitted to appear for the University examination only if he / she puts in attendance as per University regulations.
6. **DURATION TO COMPLETE THE COURSE:** A candidate who fails to complete the course within a period of three years shall complete the same within the six years from the date of joining the course.
7. **SCHEME OF INSTRUCTION AND EXAMINATION:** Appended herewith.
8. **INTERNAL ASSESSMENT:**
 - a. Internal assessment marks shall be based on tests, attendance, assignments, and presentations conducted during each semester.
 - b. The marks of internal assessment for each subject shall be communicated to the University atleast 15 days before the commencement of examination and the Registrar (Evaluation) shall have access to the records of such periodical assessment. It must be published on the notice boards of the colleges for the information of students.
9. **ASSESSMENT OF PROJECT WORK:** A project shall be undertaken by each candidate after the V Semester under the supervision of a qualified staff and a report

shall be submitted to the University before the commencement of VI Semester examinations. The University shall evaluate the projects for 80 marks and conduct viva-voce for 20 marks.

10. MINIMUM FOR A PASS: No candidate shall be declared to have passed the examination unless he/she obtains not less than
 - a. 35% marks in written examination and 40% marks in aggregate of written examination and internal assessment put together.
 - b. 40% marks in practical examination.
 - c. 40% marks in project.
 - A. SUCCESSFUL CANDIDATES SHALL BE CLASSIFIED AS FOLLOWS:
 - a. 60% and above – First class
 - b. 50% and above but less than 60%- Second class
 - c. 35% and above but less than 50%- Pass class
 - B. CLASS AND RANK:
 - a. For obtaining class, marks obtained in all the semesters shall be considered
 - b. For ranking, only those candidates who have passed in all the semesters in the first attempt shall be considered.
 - C. CARRYOVER PROVISION: A candidate shall be allowed to carryover the subjects as per the University regulations for regular degree courses.

11. REPITITION OF SEMESTER: A candidate is permitted to repeat the semester in the next academic year if he/she has shortage of attendance in that semester.

Sd/-
Chairman-BOS
B.Sc. Fashion & Apparel Design

B.Sc. FASHION & APPAREL DESIGN

I SEMESTER

SCHEME OF INSTRUCTION AND EXAMINATION

| Paper Code | Subject | Theory | | | | Practicals | | | Total Marks |
|--------------|--------------------------------------|--------------------|-------------------|---------------------------------|---------------------|--------------------|-------------------|---------------------|-------------|
| | | No of Hrs/ Week | Max Exam Marks | Internal Assessment marks | Duration of Exam | No of Hrs/ Week | Max Exam Marks | Duration of Exam | |
| FAD 101 | Language I | 4 | 90 | 10 | 3 | - | - | - | 100 |
| FAD 102 | Language II | 4 | 90 | 10 | 3 | - | - | - | 100 |
| FAD 103A | Fiber & Yarn Science | 3 | 60 | 10 | 3 | | | | 100 |
| FAD 103B | | | | | | 3 | 30 | 3 | |
| FAD 104A | Elements of Design and fashion | 3 | 60 | 10 | 3 | | | | 100 |
| FAD 104B | | | | | | 3 | 30 | 3 | |
| FAD 105A | Basics of Pattern Making & Sewing | 3 | 60 | 10 | 3 | | | | 100 |
| FAD 105B | | | | | | 3 | 30 | 3 | |
| TOTAL | | | | | | | | | 500 |

II SEMESTER

SCHEME OF INSTRUCTION AND EXAMINATION

| Paper Code | Subject | Theory | | | | Practicals | | | Total Marks |
|--------------|-----------------------------------|-------------------|-------------------|---------------------------------|---------------------|-------------------|-------------------|---------------------|-------------|
| | | No of Hrs/Week | Max Exam Marks | Internal Assessment marks | Duration of Exam | No of Hrs/Week | Max Exam Marks | Duration of Exam | |
| FAD 201 | Language -I | 4 | 90 | 10 | 3 | - | - | | 100 |
| FAD 202 | Language -II | 4 | 90 | 10 | 3 | - | - | | 100 |
| FAD 203A | Fabric Analysis | 3 | 60 | 10 | 3 | | | | 100 |
| FAD 203B | | | | | | 3 | 30 | 3 | |
| FAD 204A | Basics of Garment Construction | 3 | 60 | 10 | 3 | | | | 100 |
| FAD 204B | | | | | | 3 | 30 | 3 | |
| ADL 2S1 | Computer Fundamentals | 4 | 100 | - | 3 | - | - | - | 100 |
| TOTAL | | | | | | | | | 500 |

III SEMESTER

SCHEME OF INSTRUCTION AND EXAMINATION

| Paper Code | Subject | Theory | | | | Practicals | | | Total Marks |
|--------------|--|----------------|----------------|---------------------------|------------------|----------------|----------------|------------------|-------------|
| | | No of Hrs/Week | Max Exam Marks | Internal Assessment marks | Duration of Exam | No of Hrs/Week | Max Exam Marks | Duration of Exam | |
| FAD 301 | Language I | 4 | 90 | 10 | 3 | - | - | - | 100 |
| FAD 302 | Language II | 4 | 90 | 10 | 3 | - | - | - | 100 |
| FAD 303A | Fashion Art Design | 3 | 60 | 10 | 3 | | | | 100 |
| FAD 303B | | | | | | 3 | 30 | 3 | |
| FAD 304A | Pattern Making & Clothing Construction | 3 | 60 | 10 | 3 | | | | 100 |
| FAD 304B | | | | | | 3 | 30 | 3 | |
| FAD 305A | Wet Processing | 3 | 60 | 10 | 3 | | | | 100 |
| FAD 305B | | | | | | 3 | 30 | 3 | |
| | Indian Constitution | 4 | 100 | - | 3 | - | - | - | 100 |
| TOTAL | | | | | | | | | 600 |

IV SEMESTER

SCHEME OF INSTRUCTION AND EXAMINATION

| Paper Code | Subject | Theory | | | | Practicals | | | Total Marks |
|--------------|------------------------------|----------------|----------------|---------------------------|------------------|----------------|----------------|------------------|-------------|
| | | No of Hrs/Week | Max Exam Marks | Internal Assessment marks | Duration of Exam | No of Hrs/Week | Max Exam Marks | Duration of Exam | |
| FAD 401 | Language I | 4 | 90 | 10 | 3 | - | - | - | 100 |
| FAD 402 | Language II | 4 | 90 | 10 | 3 | - | - | - | 100 |
| FAD 403A | Traditional Textile Art | 3 | 60 | 10 | 3 | | | | 100 |
| FAD 403B | | | | | | 3 | 30 | 3 | |
| FAD 404A | Historic Costumes | 3 | 60 | 10 | 3 | | | | 100 |
| FAD 404B | | | | | | 3 | 30 | 3 | |
| FAD 405 | Entrepreneurship Development | 4 | 90 | 10 | 3 | - | - | - | 100 |
| SESS41 | Environmental Studies | 4 | 100 | - | 3 | - | - | - | 100 |
| TOTAL | | | | | | | | | 600 |

V SEMESTER
SCHEME OF INSTRUCTION AND EXAMINATION

| Paper Code | Subject | Theory | | | | Practicals | | | Total Marks |
|--------------|-------------------------------|----------------|----------------|---------------------------|------------------|----------------|----------------|------------------|-------------|
| | | No of Hrs/Week | Max Exam Marks | Internal Assessment marks | Duration of Exam | No of Hrs/Week | Max Exam Marks | Duration of Exam | |
| FAD 501A | Fashion Accessories | 3 | 60 | 10 | 3 | | | | 100 |
| FAD 501B | | | | | | 3 | 30 | 3 | |
| FAD 502A | Garment Surface Ornamentation | 3 | 60 | 10 | 3 | | | | 100 |
| FAD 502B | | | | | | 3 | 30 | 3 | |
| FAD 503A | Textile Testing | 3 | 60 | 10 | 3 | | | | 100 |
| FAD 503B | | | | | | 3 | 30 | 3 | |
| FAD 504A | Apparel Production | 3 | 60 | 10 | 3 | | | | 100 |
| FAD 504B | | | | | | 3 | 30 | 3 | |
| FAD 505A | Apparel Computer Aided Design | 3 | 60 | 10 | 3 | | | | 100 |
| FAD 505B | | | | | | 3 | 30 | 3 | |
| FAD 506 | Fashion Business Management | 4 | 90 | 10 | 3 | - | - | - | 100 |
| TOTAL | | | | | | | | | 600 |

VI SEMESTER
SCHEME OF INSTRUCTION AND EXAMINATION

| Paper Code | Subject | Theory | | | | Practicals | | | Total Marks |
|--------------|--------------------------------|----------------|----------------|---|------------------|----------------|----------------|------------------|-------------|
| | | No of Hrs/Week | Max Exam Marks | Internal Assessment marks | Duration of Exam | No of Hrs/Week | Max Exam Marks | Duration of Exam | |
| FAD 601A | Apparel Quality Assurance | 3 | 60 | 10 | 3 | | | | 100 |
| FAD 601B | | | | | | 3 | 30 | 3 | |
| FAD 602A | Portfolio Presentation | 3 | 60 | 10 | 3 | | | | 100 |
| FAD 602B | | | | | | 3 | 30 | 3 | |
| FAD 603 | Non Woven & Technical Textiles | 4 | 90 | 10 | 3 | - | - | - | 100 |
| FAD 604 | Apparel Export Documentation | 4 | 90 | 10 | 3 | | | | 100 |
| FAD 605 | Shop Floor Management | 4 | 90 | 10 | 3 | | | | 100 |
| FAD 606 | Project | | 80+20 | (80 marks- project evaluation & 20 marks for viva voce) | | | | | 100 |
| TOTAL | | | | | | | | | 600 |

**I SEMESTER
FIBRE AND YARN SCIENCE**

**Theory
FAD103A**

Total no. of hours - 48

Objectives

To impart the knowledge of fibres, sources, their identification and properties
To provide students with the knowledge of yarn science and their properties

| | |
|---|---------------|
| Unit 1 Introduction to textile fibers-Definition, Sources, Classification and properties of textile fibres | 4 hrs |
| Unit 2 Polymers - Polymerization, degree of Polymerization, different types of polymers- addition and condensation, orientation and crystallinity, characteristics of fiber forming polymers, general physical and chemical properties of fibers. | 6 hrs |
| Unit 3 Cellulose fibers-Cotton, flax, kapok, hemp, ramie- Properties and end uses Protein fibers-Silk, Wool – Properties and end uses | 8 hrs |
| Unit 4 Regenerated cellulose fibers- Viscose Rayon, Acetate Rayon, Tencel- properties and end uses. | 4 hrs |
| Unit 5 Synthetic fibers-Nylon, polyester, acrylic and modacrylic- properties and end uses. Polyethylene, polypropylene, olefin, Elastomeric fibers (spandex and lycra)- End uses. | 8 hrs |
| Unit 6 Spinning process for staple fibers (cotton and wool), Ring spinning and rotar spinning, carded and combed yarns, woolen and worsted yarns | 10 hrs |
| Unit 7 Texturisation - types (simplex and complex yarns) and uses. Blends- types, uses of blended fabrics. | 6 hrs |
| Unit 8 Sewing threads- Types and properties. | 2 hrs |

References

1. E.P.G. Gohl, L. D. Velensky, "Textile Science" CBS Publishers and Distributors, 2003
2. A.J. Hall. "The standard hand book of Textiles", Wood head Publishing 8th edition 2004

3. P.V. Vidyasagar, "Hand Book of Textiles", A. Mittal Publications, 2005
4. Sara J. Kadolph, "Textiles", Prentice Hall, 10th edition 2007
5. J. Gordon Cook, "Hand Book of Textile Fibres", Vol- II Man Made Fibers, Wood Head Publishing.
6. Bernard P. Corbman, "Textiles Fiber to Fabric" McGrawhill Publications, 6th Edition 1983
7. Gilbert R. Merrill, "Cotton Opening and Picking" Universal Publishing Corporation, 1999
8. Gilbert R. Merrill, "Cotton Combing" Universal Publishing Corporation, 1999
9. Gilbert R. Merrill, "Cotton Ring Spinning" Universal Publishing Corporation, 1999
10. Gilbert R. Merrill, "Cotton Drawing and Roving" Universal Publishing Corporation, 1999
11. S.P. Mishra, "A text Book of Fibre Science & Technology," New Age International Ltd.

FIBRE AND YARN SCIENCE

Practicals
FAD103B

16 practicals of 3 hrs each

| | |
|--|----------|
| Unit 1 | 7 |
| Identification of Textile fibres- Microscopic appearance (longitudinal and cross-sectional) and burning tests. | |
| Solubility tests for fibres- Cellulosic, Protein and Synthetic. | |
| Unit 2 | 3 |
| Visual identification of spun, filament, cords, cable and fancy yarns. | |
| Unit 3 | 2 |
| Fibre blend analysis | |
| Unit 4 | 4 |
| Line sketches of conventional spinning - Cotton and wool | |

ELEMENTS OF DESIGN AND FASHION

Theory

FAD: 104A

Total No. of Hours: 48

Objectives

To enable students to gain knowledge of design, textile design and fashion
To understand the fashion design concept and process.

Unit: 1

6 Hrs

Design: Elements and principles of Design-Definition, importance and application.

Unit 2

6 Hrs

Colour: Prang colours, Pantone colours, colour wheel, values scale, grey scale, colour schemes, its importance and application.

Unit: 3

6 Hrs

Design and Textile: Various types of textile design and their features, function and application-Woven, Knitted and printed design.

Unit: 4

8 Hrs

Design and Fashion: Textile and garment designers and their importance and activities. Professional practice of design.

Unit: 5

8 Hrs

Elements of Fashion process: Fashion origin, evolution- with examples from different eras till French revolution. Fashion cycles. Fashion theories and terminologies.

Unit: 6

8 Hrs

Elements of Fashion illustration: Introduction to Fashion illustration-History, importance, artists and illustrators of national and international repute.

Unit 7

6 Hrs

Art appreciation: study of art history from 90's till date. Study of different artists and their technique

References:

1. Piper, David, "The Joy of Art", – Mitchell Beazley Publishers, 1984.
2. Stanyer, Peter, "The Complete Book of Drawing Techniques" – Arcturus Publishing Limited for Book Mart Limited 2003
3. Edith Tomory, "A History of Fine Arts in India and the West" – Orient Longman Publishers 1982, reprinted 1999.
4. Hideaki Chijiwa, Colour harmony- "A Guide to creative colour Combination".
5. Helln Goworek, "Drawing Course a step by step Guide" Blackwell Publications.
6. HW. Janson & Anthony Janson, "History of art" the western tradition, revised 6th edition, Upper saddle river
7. Roy C. Craven, "Indian Art", Thames & Hudson.

ELEMENTS OF DESIGN AND FASHION

Practicals

FAD 104 B

16 practical of 3 Hrs each

Unit: 1

02

Introduction to art media and its applications. Free hand sketching technique, cross-hatching, criss cross, scribbling, stripling

Unit: 2

04

Perspective drawing and rendering objects using different art media- wet and dry of objects, natural and human figures. Effect of light.

Unit: 3

02

Elements and principles of design-Colour schemes, colour wheel grey scale, value scale.

Unit: 4

02

Drawing and colouring of Motifs –Natural, Stylised, Geometric and Abstract.

Unit: 5

02

Design manipulation Enlarging, reduction and various types of design layouts.

Unit: 6

02

Colour rendering of fabric swatches-Woven, knitted, and printed.

Unit: 7

02

Fashion illustration: Basic sketching of 6,8,10 head figures –stick, block and flesh figure of child, female and male.

BASICS OF PATTERN MAKING & SEWING

Theory

Total no of Hours: 48

FAD 105A

Objectives:

To impart skills in basic techniques of pattern making

To provide the knowledge of different machines used for sewing.

Unit 1

8 hrs

Introduction to pattern making & clothing construction. Terminology- notches, grain, grain line, construction lines, perforations, center front line, center back line, bias, true bias, bust line, waist line, seat line, seam, seam allowance, jog seams, darts, dart points, direction of dart excess, dart shape at pattern edge.

Unit 2

8 hrs

Tools for pattern making and clothing construction- measuring tools, marking tools, cutting tools, sewing tools, pressing tools, different weights of paper, different types of needles, different types of threads,

Unit 3 **8 hrs**
Figure types & figure analysis (leg types, arm types, shoulders, abdomen, bust back relationship, waist hip relationship and stance). Body garment relationship. Standardization, importance of body measurements, sizing-zero to plus size.

Unit 4 **8 hrs**
Pattern Making - drafting, draping, flat pattern techniques - principles, advantages & disadvantages. Flat pattern techniques- pivot, slash & spread method

Unit 5 **6 hrs**
Commercial patterns - definition, importance, advantages, disadvantages and understanding of their sizes, interpretation of the commercial patterns

Unit 6 **10 hrs**
Introduction to sewing machines, history of sewing machines, Single needle machine, Double needle machine - overlock machine, button hole machine, button fixing machine - their suitability and function, commonly use and special attachments used in sewing machine.

References

1. Helen J Armstrong, Pattern Making for Fashion Design, Prentice Hall
2. Harold Carr & Barbara Latham, The Technology of Clothing Manufacture, Oxford Pub., USA, 1994
3. Gerry Cooklin, Introduction to Clothing Manufacture, Blackwell Science, UK, 1991
4. Metric Pattern cutting & Grading by Winfred Aldrich.

BASICS OF PATTERN MAKING & SEWING

Practical **16 practicals of 3 hrs each**
FAD 105 B

Unit 1 **02**
Sewing machine- different kinds-functions-uses-attachment-practice on paper, stitching on fabric (straight, curves & corners)

Unit 2 **02**
Body ideals- size charts- infant, children, men, women (standard measurement)

Unit 3 **02**
Drafting of master slopers using standard measurement-Infant (1 age group), Children- pre schooler 2-6 years (1 age group), Women (medium size), Men (medium size)

Unit 4 **06**
Preparation of muslin blocks

Unit 5 **04**
Flat pattern techniques and its application- pivot & slash spread (single dart series, two' double dart series, radiating, graduating, parallel and conversion of darts to tucks, pleats, gathers, seams)

II SEMESTER FABRIC ANALYSIS

Theory
FAD203 A

Total no. of hours - 48

Objectives:

To impart knowledge of fabric manufacture and fabric characteristics
To enable students to understand fabric structures and to analyse them.

Unit 1

4 hrs

Fabric making- Introduction, basics of different methods of fabric formation (weaving, knitting and non woven).

Unit 2

6 hrs

Loom- Parts and functions of a loom (primary and secondary motions), warping and pirn winding, Sizing.

Unit 3

4 hrs

Types of looms- Handloom/Power loom, Shuttle loom/ Shuttle less looms (Projectile, Rapier, Water jet and Air jet looms.

General characteristics of woven fabrics- Yarn, count of yarn and fabric, grain, balance, selvedge and its types.

Unit 4

4 hrs

Fabric design- Design, draft, peg plan and denting plan.

Unit 5

6 hrs

Elementary weaves- glossary and characteristics of

Plain weave – variation (rib and basket variations)

Twill weave- variation (RHT, LHT, Pointed/Chevron and Herring bone)

Satin weave- variation (sateen)

Graphical representation of the above weaves.

Unit 6

8 hrs

Figured weaves

Dobby- mechanism, types- honeycomb, huck-a-back, bird's eye and uses.

Jacquard- mechanism, types- damask, brocade, tapestry and uses.

Crepe weave- mechanism, types- true crepe, balanced and warp crepe and uses.

Pile weave- mechanism, types- warp pile, weft pile, corduroy and uses.

Leno- lappet (extra set of warp), swivel (extra set of weft)

Unit 7

4 hrs

Fabrics- Handloom, Power loom, Khadi - History, importance, types of fibers used and application.

Unit 8 **6 hrs**
Knitting- mechanism, characteristics, types and uses. Differences between knitted and woven.

Unit 9 **6 hrs**
Other methods of fabric making- Felts, fur, knotting, braiding- construction methods and uses.

References

1. Ormerod A, “ Modern Preparation and Weaving machinery”, Woodhead Publication, 2004
2. W.S. Murphy, “Textile Weaving & Design”, Abhishek Publication, 2003
3. J. Gordon Cook, Hand Book of textiles Fibers Vol I & II”, Woodhead Publication
4. Amjden C.A “Navaho Weaving Its techniques and History”, Abhishek Publication.
5. Z.J. Grosicki, “ Watson’s Textile Design & Colour, 7th Edition, Woodhead Publication
6. W.S. Murphy, “Handbook of weaving” Abhishek Publication
7. Deborah Chandler, “Learning to weave”, Interweave Press, 1995
8. J.J. Pizzuto, “Fabric Science” 6th Edition, Fairchild Publications

FABRIC ANALYSIS

Practicals
FAD 203 B

16 practicals of 3hours each

Unit-1 **4**
Identification of weaves- Collection of fabrics for basic weaves- sample, uses with checkerboard design.
Figured weaves- samples and uses.

Unit-2 **6**
Analysis of fabrics- design, draft, denting and lifting plan for plain, twill and satin, honeycomb, huck-a-back, mock leno.

Unit-3 **4**
Knitted fabrics- diagrammatic representation for weft knit- single jersey, interlock and rib

Unit-4 **2**
Collection of various types of fabrics based on application- apparel, upholstery and furnishings.

BASICS OF GARMENT CONSTRUCTION

Theory
FAD 204 A

Total no of hours: 48

Objectives:

To introduce the concept of garment making.

To impart knowledge and skills required for garment components.

Unit 1

5 hrs

Sewing techniques- Methods of machine stitching and its importance, Basic hand stitches- basting, running, tacking, hand overcast, button hole, hemming stitches- plain & blind hemming,

Unit 2

5 hrs

Seam & seam finishes- Definition, terminologies-seam, seam line, seam allowance, seam length, seam width, types of seams and seam finishes and their application.

Unit 3

6 hrs

Fullness- darts, dart equivalent, tucks, pleats, gathers & style lines – definition, terms, types and its applications

Unit 4

6 hrs

Yokes-Definitions, purpose, types-with fullness & without fullness. Pocket-patch, welt in seam.

Unit 5

6 hrs

Sleeves- Definition, terms, classification, types-gathered, bell, kimono, raglan & construction.

Unit 6

6 hrs

Collars - Definition, terms, classification, types –peterpan, turtle neck, shawl, Chinese, shirt & its construction.

Unit 7

6 hrs

Skirts – Basic-flared, circular, gathered, pleated, basic waist band application.

Unit 8

8 hrs

Fasteners- Definition, types.

Finishes-Edge, piping, facing (bias facing, shaped facing).

Plackets- definition, types

References

1. Bane Allyne, Flat pattern design, M C Graw-Hill Pub. USA
2. Winfred Aldrich, “Metric Pattern Cutting”, Black Well Science, UK
3. Helen J. Armstrong, “Pattern making for fashion design” Prentice Hall

BASICS OF GARMENT CONSTRUCTION

Practicals
FAD 204 B

16 practicals of 3 hrs each

| | |
|---|----------|
| Unit 1 | 2 |
| Sewing techniques - Basic hand stitches- basting, running, tacking, hand overcast, button hole, hemming stitches - plain & blind hemming, slip stitch, tailor's tack. Machine sewing techniques- edge stitching, top stitching, shirring, and gathering | |
| Unit 2 | 2 |
| Seam & seam finishes- Plain, flat fell, French, turned & stitched, lapped, double top, pinked, over lock, hand overcast & pinked and stitched | |
| Unit 3 | 2 |
| Fullness- darts, tucks, pleats, gathers, style lines | |
| Unit 4 | 2 |
| Yokes-With and without fullness | |
| Unit 5 | 2 |
| Sleeves- plain, gathered, raglan, kimono | |
| Unit 6 | 2 |
| Collars- peter pan, turtle neck, Chinese, shawl, shirt | |
| Unit 7 | 2 |
| Fasteners- press buttons, hook & eye, shirt button & button holes & zips | |
| Unit 8 | 2 |
| Finishes- neckline finishes- facing, shaped facing and piping/binding. Placket finishing- continuous/ one piece, bound/ two piece placket | |

**III SEMESTER
FASHION ART DESIGN**

**Theory
FAD 303 A**

Total teaching hrs - 48

Objectives

- To help students understand the fundamentals and principles of figure design.
- To understand different illustration techniques and dynamics of figure sketching.

Unit: 1

6 hrs

Design development: Motif, pattern and design manipulation, -inspiration from nature and history.

Unit: 2

8 hrs

Fashion design: Definition, understanding garment design, its features functions and application in various categories of dress-based on Age and activity. Type- Casual, Formal and Ethnic.

Unit: 3

8 hrs

Garment details: Features and function and application. Different types of collar, sleeve, pockets, cuff, yoke and their visual impact on various figure types, to create optical illusion.

Unit: 4

6 hrs

Flat sketch: Its importance and application. Drawing flat sketches and specs. Designer sketching. Ways of layout, flats for kids, women and men's wear.

Unit: 5

6 Hrs

Fashion, Dress and Accessories: Elements and principles of design in dress, accessories and fashion. Its importance and application.

Unit: 6

8 Hrs

Designers and artists of national and international repute and their creation. National designers-Ritu Beri, Rohit Bal, Ritu Kumar, JJ Valya, Manoviraj Khosla, International Designers-Gucci, Tommy Hilfiger, Donna Karan, Varsachae.

Unit:7

6 hrs

Fashion clothing psychology: Pattern recognition and perception, Gest alt factors, subjective factors in selection of clothing. Personality, attitude and motivation.

References

1. "Signs and symbols their design and meaning"- Translated by- Andrew Bluhm, Studio Editions
2. "Fashion Design and illustration for women, Men and children" by Patrick John Ireland
3. "Fashion sketch book"4th edition – by Bina Abling, Om Publications.
4. "Fashion Design Drawing course", by Caroline Tathan, Julian Seaman, Thames & Hudson.
5. "Psychology of clothing" by Bush. G, London 1990

FASHION ART DESIGN

Practicals **16 practical of 3 hrs. each**
FAD 303 B

| | |
|---|----------|
| Unit 1 | 2 |
| Basic human proportions, Anatomy and model drawing-8, 10, 12 head theory- Straight, slash, motion posture. | |
| Unit: 2 | 2 |
| Body figures and features-Hair styling, eye, face, arm, legs. (4 each) | |
| Unit 3 | 3 |
| Fabric rendering- woven- (2 swatches), on croqui (2 Nos.). Fabric rendering- Knits- (2 swatches), on croqui (2 Nos.). Fabric rendering- printed- (2 swatches), on croqui (2 Nos.) | |
| Unit 4 | 3 |
| Garment details- collars, cuffs, sleeves, yokes, necklines, pockets (3 each) Style manipulation Illustrations of skirt, trouser, gowns, frocks, shirt, jackets. | |
| Unit: 5 | 2 |
| Figure stylization- reducing of figure from 8 head to 6 head and elongation of Figure from 8 head to 10 head, 12 head (2 each). | |
| Unit: 6 | 2 |
| Figure foreshortening with 3D- effect (2 each) Figure composition –Theme based (2 each). | |
| Unit 7 | 2 |
| Sketching – folds and curves of different fabric drapes. | |

PATTERN MAKING & CLOTHING CONSTRUCTION

Theory **Total no of hours: 48**
FAD 304 A

Objectives

- To introduce the garment constructional particulars.
- To familiarize students with clothing construction for different age groups

Unit 1 **8 hrs**
Definition of layout, importance, principles, types of layout, importance of fabric estimation, advantages, methods of estimating material requirement for garment- easy method & formula method of estimation

Unit 2 **6 hrs**
Handling special fabric-factors for consideration while making patterns & garment construction using special fabrics-stretch fabrics, knit, checks, plaids, velvet, leather, fur & lace

| | |
|---|--------------|
| Unit 3 | 4 hrs |
| Interlining-interfacng- materials, types, properties, applications. | |
| Unit 4 | 8 hrs |
| Draping- definition, terminology, principles of draping. Dress form- preparation & uses, measurement & tools used for draping, basic draping techniques- front, back, skirt front, skirt back. Dresses- bias, cowl & princess line. | |
| Unit 5 | 8 hrs |
| Intimate garments- Introduction, materials used & types of fitting for men's innerwear briefs & trunk. Women's innerwear brassier & panties. | |
| Unit 5 | 4 hrs |
| Fitting- principles of fitting, standards for a good fit, e-fitting | |
| Unit 6 | 6 hrs |
| Pattern alteration techniques- pivot, slash & seam method-length- width- front-back-sleeve-shirt-skirt-trousers | |
| Unit 7 | 4 hrs |
| Grading — definition, principles, types & importance | |

References

1. Bane Allyne, Flat Pattern Design, McGraw Hill pub., USA
2. Winfred Aldrich, Metric Pattern Cutting, Blackwell Science, UK.
3. Patric Taylor et.al., Grading for the Fashion Industry, Stanley Thomas Ltd., 1990
4. Helen J Armstrong, The Art of Fashion Draping, Fairchild's pub., 2003

PATTERN MAKING & CLOTHING CONSTRUCTION

Practicals **16 practicals of 3 hrs each**
FAD 304 B

| | |
|--|----------|
| Unit 1 | 6 |
| Designing & construction of garments with style features using drafting, flat pattern technique- infant jabla, waistline frock for girls and bush shirt for boys | |
| Unit 2 | 3 |
| Designing & construction of garments with style features, women's wear using drafting, flat pattern technique-Casual wear- Kameez, Salwar/chudidhar. | |
| Unit 3 | 2 |
| Designing with style features and constructing designer choli using draping technique | |
| Unit 4 | 3 |
| Designing & construction of casual wear for men using drafting, flat pattern technique | |
| Unit 5 | 2 |
| Grading of patterns | |

WET PROCESSING

Theory
FAD 305A

Total no. of hours- 48

Objectives

To impart knowledge of textile and garment wet processing

To introduce students to various chemicals, dyes and auxiliaries used for chemical processing

Unit 1

4 hrs

Introduction to wet processing, sequence of wet processing operations for cotton, silk and wool. Equipments and machineries used for wet processing.

Unit 2

6 hrs

Preparatory processes: singeing, scouring, degumming, bleaching and mercerization

Unit 3

8 hrs

Dyeing- Introduction, classification and application of dyes, direct, basic, acid, vat, reactive and disperse dyes. Methods of dyeing: stock, yarn, piece and union.

Unit 4

6 hrs

Printing methods- block, screen, roller, styles- direct, resist, discharge and transfer.

Unit 5

4 hrs

After treatments for dyed and printed goods- washing, steaming and drying.

Unit 6

8 hrs

Finishes- definition, types.

Basic/routine- Tentering, carbonizing, decatizing, sanforising, weighting.

Functional/special-waterproof, soil repellent, antimicrobial, enzymatic, fire proof, calendering

Unit 7

6 hrs

Garment processing and finishing. Garment dyeing, types of washing machines, centrifuge and drying.

Unit 8

6 hrs

Care of fabrics- Principles of laundering, Stain removal, various solvents used and different methods of washing, application of friction, light pressure, suction and tumble wash, soaps and detergents.

References

1. A.J. Hall “ The Standard Hand Book of Textiles”, Woodhead Publication, 2004
2. J.E. Smith “ Textile Processing –Printing, Dyeing, Abhishek Publishing,2003
3. Kate Broughton, Textile Dyeing”, Rockport publishers,1996
4. W.S. Murphy, “Textile Finishing”, Abhishek Publication,2000
5. Rosi Robinson, “ Creative Batik”, Search Press, 2004
6. Janice Gunner, “ Shibori for textile Artists”, Batsford London

WET PROCESSING

Practicals
FAD 305 B

16 practical of 3hrs each

| | |
|---|----------|
| Unit 1 Desizing and Scouring | 2 |
| Unit 2 Bleaching of cotton and wool- Using hydrogen peroxide | 3 |
| Unit 3 Dyeing of yarns with - direct, acid, reactive and vat dyes. | 6 |
| Unit 4 Block printing-direct and reactive dyes Screen printing- direct and reactive dyes Tie and dye- direct dyes Batik- reactive dyes | 4 |
| Unit 5 Stain removal of oil, soil, grease, blood and beverages. | 1 |

**IV SEMESTER
TRADITIONAL TEXTILE ART**

| Theory FAD 403 A | Total no. of hours- 48 |
|---|-------------------------------|
| Unit 1 Introduction to traditional textile art. | 4 hrs |
| Unit 2 Study of historical designs of different countries and their influence on textiles-Persian, Mughal, Egyptian, Chinese, Japanese and Roman | 8 hrs |
| Unit 3 An overview on influence of religion, art, trade, royalty and culture in Indian textiles. | 5 hrs |
| Unit 4 Symbolic motifs - Paisley, creeping vine, lotus, tree of life, fish, tortoise, elephant, conch, colours, peepal leaf, protective elements, temple motif, lion, goose, peacock, swan, geometric motifs, god and goddesses, etc. | 8 hrs |
| Unit 5 Traditional textiles of India- types and uniqueness Woven- Brocades of Banaras, Baluchuri, Chanderi, Tanchoi, Kanjivaram, himru, amru, mashrus and Dacca muslins. Dyed- Tie & dye, ikat, double ikat, bandhini Printed- block printed fabrics Applied- Dyed and Painted textiles (Kalamkari, Madhubani, Wali) | 8 hrs |
| Unit 6 Design developing - study of motif, design and pattern - geometric, natural/realistic, conventional, abstract and stylized, design modification. | 4 hrs |
| Unit 7 Development of design- Motif, design, pattern and repeats- drop repeat (full drop, $\frac{1}{4}$, $\frac{1}{2}$, $\frac{2}{3}$, $\frac{3}{4}$ th drop), brick repeat, mirror repeat (vertical, horizontal, vertical and horizontal). Combination of different motifs in a pattern, pattern arrangements- Bases- ogee leaf base, diagonal base, square base, vertical, horizontal, counter change and borders. | 8 hrs |
| Unit 8 Repeats emphasizing colour theory, composition and elements of art and principles of design in relation to traditional textiles. | 3 hrs |

References

1. Z.J. Grosicki, "Watson's Textile Design & Colour, 7th Edition," Woodhead publishing Ltd, 2004
2. Susanne Hahn, "A Complete Guide to Silk Painting", Search Press, 1995
3. Kazz Ball & Valerie Janitch, "Hand Painted Textiles", A. David & Charles Craft Book 1991
4. John Gillow & Nicholas Bernad, "Traditional Indian Textiles". Thames & Hudson, 1993
5. Martand Singh, "Saris of India- Bihar & West Bengal", Wiley Eastern Ltd.1993
6. Rta Kapur chishti & Amba Sanyal, "Saris of India -Madhya Pradesh," Wiley Eastern Ltd,1989
7. Madhu Priya, " An innovative Collection of Indian Textile designs," Honesty Publishers & Distributors
8. Satheesan, "Innova-Indian Ethnic designs", Honesty Publishers & Distributors, 2004
9. Lebeau Dirand & Corbett, "Fabrics The decorative Art of Textiles," Thames & Hudson, 2004

TRADITIONAL TEXTILE ART

Practicals

FAD 403 B

16 practicals of 3hrs each

| | |
|--|----------|
| Unit 1 | 1 |
| Tools and equipments used for traditional textile design- dyeing, printing, painting. | |
| Unit 2 | 3 |
| Design-Structural and Decorative, Development of design using element of art and principles of design for textile materials. | |
| Unit 3 | 4 |
| Design organization emphasizing repeats- drop, block, brick, mirror and its variations. | |
| Unit 4 | 4 |
| Saree designing- border, all over and pallu. | |
| Unit 5 | 3 |
| Adaptation of traditional designs to present trends in apparel. (Men, Women). | |
| Unit 6 | 1 |
| Folio Presentation of various woven, applied, dyed and printed textiles- 4 samples from each type and end use. | |

HISTORIC COSTUMES

Theory

Total teaching hrs – 48 hrs

FAD 404 A

Objectives

To acquaint students with different types of costumes.

To enhance the students' knowledge regarding accessories and Jewellery of different eras.

Unit: 1

6 hrs

Introduction to origin & functions of clothing. Indus Valley civilization, Vedic age

Unit: 2

10 hrs

Costumes of the world – Egyptian, Roman, Greek, Japanese, American, French.

Costume and fashion of different eras- Victorian to II world war

Unit: 3

10 hrs

Middle Ages-Mauryan, Guptas, Satavahanas, Kushans.

Unit: 4

6 hrs

Mughal Influence

Unit: 5

8 hrs

Influence of change in costumes – Women and Men at war, between war and post war.

Equality between men & women, sexual revolution, French revolution.

Unit: 6

8 hrs

Costumes of the different regions in India.

References

1. "Traditional Indian costumes & textiles", by – Dr. Parul Bhatnagar, Abhishek Publication.
2. "The Costumes and textiles of India", by - Jamila Brij Bhusan, Taraporevala- Bombay.
3. "Master piece of Indian jewellery", by - Jamila Brij Bhusan, Taraporevala- Bombay
4. "A history of Fashion in the 20th Century", by - Konemann
5. "Survey of historical costumes, A History of western dress", by- Phyllis Tortora, Keith Eubank, Fairchild Publication
6. "Traditional Indian Textiles", by- John Gillow, Necholas Barnard, Thames & Hudson

HISTORIC COSTUMES

Practicals

16 practical of 3 hrs. each

FAD 404 B

Unit: 1

3

Sketching costumes and accessories for men and women for the following; Indus Valley civilization and Vedic age

Unit: 2

5

Sketching costumes and accessories for men & women for the following: Egyptian, Roman, Greek, Japanese, American

Unit: 3 4
Sketching costumes and accessories for men & women for the following: Mauryan, Kushan, Gupta, Mughal

Unit: 4 4
Sketching costumes and accessories for men and women for the following – regional costumes of India – East, West, North & South (Two each)

ENTREPRENEURSHIP DEVELOPMENT

Theory **Total No. of Hours 64**
FAD 405

Objectives

- To develop entrepreneurship skills among the students
- To familiarize the students with the process and procedure of setting up new enterprises.

Unit-1 **10 hrs**
Introduction to entrepreneurship, development of entrepreneurship, role of entrepreneurs in development of apparel and fashion industry, entrepreneurship with reference to fashion and apparel industry in India.

Unit-2 **10 hrs**
Entrepreneurial support by state, central financial institutions, organizations. Government policies with reference to textile and apparel industry.

Unit -3 **10 hrs**
Business planning- Starting a new venture related to apparel industry, essentials of a successful centre.

Unit-4 **16 hrs**
Location & plant layout-factors influencing plant location, building, structure, lighting, ventilation, material handling, availability of labour, material management and transportation.

Unit -5 **14 hrs**
Industrial sickness and remedies, tax planning, VAT, Patent Rules, Factory Act, Minimum wages, knowledge of exemptions & deductions

Unit-6 **4 hrs**
Environmental considerations and social responsibilities

References

1. RajaGopal, Entrepreneurship & Rural markets
2. H.B.S press, Harward Business Review on Entrepreneurship, Harward business review, USA
3. Michele Gananger, Fashion Entrepreneurship Retail Business planning.
4. Harrell.W. For Entrepreneurs only, Career Publishing.
5. Jain G R & Gupta D, New Initiatives in Entrepreneurship Education & Training

**V SEMESTER
FASHION ACCESSORIES**

**Theory
FAD 501 A**

Total teaching hrs – 48 hrs

Objectives

- To impart knowledge on fashion accessories and creativity.
- To provide opportunity for skill development in designing accessories.

| | |
|---|--------------|
| Unit 1 Introduction to Fashion accessories- Definition, History, Classification. | 4 hrs |
| Unit 2 Accessories with garments – Traditional & Contemporary styles Types of accessories – head wear/head gear, handbags, gloves, hats, scarves, ties, bows, belts, foot wear-shoes/sandals/slip ons. | 8 hrs |
| Unit 3 Material & Process-Design development, material, sourcing, production. | 8 hrs |
| Unit 4 Jewellery design – Definition, types – gold, silver, terracotta, Menakari, Kundan, Thevva Jewellery, platinum, zardosi, swaroski, junk, bridge etc. | 8 hrs |
| Unit 5 Traditional Indian jewellery –Temple, traditional, Mughal, Contemporary jewellery | 8 hrs |
| Unit 6 Gems – Introduction to gemology, Types of gems & its classification Qualities of gems & healing power of gems | 6 hrs |
| Unit 7 New trends & marketing of accessories & Jewellery. | 6 hrs |

References:

1. “Quick style”, by- Christine Kunzerlman.
2. “Know your Fashion Accessories” by- Celia Stall-meadows, Fair child publication.
3. “Master piece of Indian jewellery”, by- Jamila Brij Bhusan, Taraporevala- Bombay

FASHION ACCESSORIES

Practicals **16 practical of 3 hrs each**
FAD 501 B

- Unit: 1** **4**
Sketching & rendering of accessories – headgear, footwear, handbags, ties, belt, gloves, Hats.
- Unit: 2** **2**
Sketching & rendering of jewellery – ear wear, nose wear, hand wear, neck wear, arm wear, finger ring, anklet etc
- Unit: 3** : Sketching of Accessories – Women, Men, Children (on croquie)
- Unit: 4** **4**
Creation of accessories – Theme based – headgear, earring, hand wear, neck wear, finger wear, anklet, waist wear, footwear.
- Unit: 5** : Folio on Accessories – Fiber, thread, buttons, wood, leather **2**

GARMENT SURFACE ORNAMENTATION

Theory **Total teaching hrs – 48 hrs**
FAD 502 A

Objectives

- To impart knowledge on various traditional embroideries of India
- To gain practical knowledge on different embroideries of India.

- Unit: 1** : Introduction to Traditional embroideries **4 hrs**
- Unit: 2** **12 hrs**
Traditional Indian embroidery- History, types of embroidery of different states of India – Kutch, Kathiwar, Sindh, Pulkari, Kantha, Kasuthi, Chamba rumal, Gold & Silver embroidery, Zardosi, Chikankari, Kashida - Material, motifs, colour, stitches, technique, relevance
- Unit: 3** **10 hrs**
Tribal Embroidery- Introduction, Types –Nagaland, Manipuri, Lambadi, Thoda with their traditional influence, symbolism, techniques, fabric, stitches & colour combination
- Unit: 4** : Patch work, Applique, Quilting- Introduction, tools, material & techniques. **6 hrs**
- Unit: 5** **8 hrs**
Crochet – Introduction, tools, material, techniques and types
Knitting – Basic, Texture, Rib, Diagonal, Lace pattern, Cable pattern, Cross, Knotted
- Unit: 6** : Special techniques-Braiding, Hooking, Smocking, Bead & Sequins. **8 hrs**

References

1. Shaylaja.D. Naik: Traditional Embroideries of India-APH Corp, New Delhi 1996
2. Sheila Paine: Embroidered Textile –Thames & Hudson Ltd.1990
3. Usha Srikant : Ethnic Embroideries of India
4. Savithri Pandit: Indian Embroidery

GARMENT SURFACE ORNAMENTATION

Practicals **16 practical of 3 hrs. each**

FAD 502 B

| | |
|--|----------|
| Unit 1 | 3 |
| Embroidery – basic embroidery stitch – Straight stitch-Stem, Back, feature stitch; Flat stitch-Satin, Cross; Loop stitch – Herring Bone, Feather stitch; Knotted stitch-French knot, Bullion Knot. | |
| Unit 2 : Knitting – Basic- Pearl, Knit, Garter, Stocking, Rib | 5 |
| Unit 3 : Crochet – Single & Double | 2 |
| Unit 4 : Applique, Quilting, Patch work, Smocking, Braiding, Hooking, Lace and Ribbon work. | 2 |
| Unit: 5 | 4 |
| Traditional embroidery – Kutch, Kathiawar, Kasuthi, Chikankari, Kantha, Kashida.Pulkari, tribal embroidery | |

TEXTILE TESTING

Theory **Total no. of hours- 48**
FAD 503A

| | |
|--|---------------|
| Unit 1 | 6 hrs |
| Introduction to textile testing, objectives of testing, Selection of samples for testing- factors to be governed- fiber sampling, yarn sampling, fabric sampling methods, Terminologies | |
| Unit 2 | 6 hrs |
| Moisture relations- Regain, moisture content, humidity, standard atmosphere. Wet and dry hygrometer, factors affecting regain of textile materials, effects of regain on fiber properties. | |
| Unit 3 | 6 hrs |
| Fiber testing- measurement of fiber length, comb sorter, fibro graph, measurement of fiber fineness- air flow instruments, measurement of maturity of cotton. | |
| Unit 4 | 8 hrs |
| Yarn testing- yarn count, Yarn twist, twist direction, amount of twist, effects of twist on fabric properties, measurement of twist. Yarn evenness- causes of irregularity, effects of irregularity, measurement of irregularity. | |
| Unit 5 | 10 hrs |
| Fabric testing- fabric dimensions- length, width, thickness, determination of fabric weight, cover factor, air permeability, stiffness, drape, crease resistance, abrasion resistance, pilling. | |

Unit 6 **4 hrs**
Determination of colour fastness to laundering, rubbing, light and perspiration.

Unit 7 **8 hrs**
Tensile testing of textiles- Terminology and definition- load, elongation, stress, strain, yield point, work of rupture, elastic recovery. Tensile strength, Tear strength and Bursting strength

References

1. J.E .Booth, "Principles of Textile Testing," CBS Publishers and Distributors, 1996
2. B.P. Saville, "Physical testing of Textiles", Woodhead Publishing Ltd. 1999
3. Pradeep V. Mehta, "Managing Quality in Apparel Industry," New Age international Ltd.
4. J.N. Mandal, D.G. Divshikar," A Guide to Geo Textiles Testing," New Age International Ltd
5. Arindam Basu, Textile Testing, SITRA Publications.

TEXTILE TESTING

Practicals
FAD 503 B

16 practicals of 3hrs each

Unit 1 **2**
Fibre testing: fibre length, fineness, maturity of cotton.

Unit 2 **4**
Yarn testing: yarn count, yarn twist, yarn strength

Unit 3 **2**
Fabric construction particulars: aerial weight, thickness, thread count, cover factor.

Unit 4 **6**
Evaluation of fabric properties: bending, tensile strength, tear strength, crease recovery, pilling.

Unit 5 **2**
Determination of colour fastness- washing, sunlight and rubbing.

APPAREL PRODUCTION

Theory
FAD 504 A

Total No. of Hrs: 48

Objectives

To introduce the students to various departments of an apparel industry
To impart skills in apparel production

Unit 1: **4 hrs**
Introduction to Apparel production

Unit 2: **6 hrs**
Sampling department- importance of sampling department, objectives, types of sample- size set, fit sample, prototype sample, production sample

Unit 3: **10 hrs**
Cutting department: Machineries, fabric laying, marker preparation, sorting, numbering & bundling, Fusing department- methods of fusing, fusing machines

Unit 4: **8 hrs**
Production department: selection of production system- progressive bundle system, unit production system, modular manufacturing, piece work. Production planning

Unit 5: **8 hrs**
Finishing & pressing department, Trimming department, packing department

Unit 6: **6 hrs**
Industrial Engineering - Method study & Work study, Ergonomics, Standard time calculation, Balancing

Unit 7: **6 hrs**
Apparel accessories & components - fasteners, labels, support materials, decorative trims, tapes & packing materials

References

1. Chutler A J, Introduction to clothing Production Management, Blackwell Science, UK, 1998
2. Harold Carr & Barbara Latham, The Technology of Clothing Manufacture, Oxford Pub., USA, 1994
3. Rajesh Bheda, Managing productivity in the Apparel Industry, CBS pub., New Delhi, 2003
4. Ruth E C, Apparel Manufacturing & Sewn Product Analysis

APPAREL PRODUCTION

Practicals FAD 504 B

16 Practical of 3hrs each

| | |
|---|---|
| Unit 1: Analysis of spec sheet | 2 |
| Unit 2: Stitching of executive suit- Skirt and jacket using block including consumption & calculation | 4 |
| Unit 3: Stitching of formal shirt using block including consumption & calculation | 4 |
| Unit 4: Stitching of trouser using block including consumption & calculation | 4 |
| Unit 5: Folio on all accessories & components | 2 |

APPAREL COMPUTER AIDED DESIGN

Theory FAD-505 A

Total no. of Hours: 48

Objectives

To acquaint students with CAD and CAM based applications in Textiles and Apparel Industry.

To impart knowledge of computer applications in design, draft, cut, production and Management information systems.

Unit-1 **9 hrs**

Introduction to CAD, Fundamentals of CAD design process and application. Computer process planning, functions, types benefits of CAP, MRP

Unit-2 **10 hrs**

CAD applications in Fabric pattern designing, modifications for size and fit, making, grading, computerized marker making and marker efficiency using pattern making softwares.

Unit-3 **6 hrs**

Fabric lay planning, its types, manual and computerized cutting, sorting and labelling, bundling.

Unit-4 : Software applications in production department, garment designing. **5 hrs**

Unit-5 **10 hrs**

CAD Technology for customization, inventory management, Product data management system (PDM system)

Unit -6**8 hrs**

Computer aided Quality control, terminologies, inspection methods, its uses.

Reference books

1. Mikell. P. Groover, Emory W. Zimmers, Jr, "CAD/CAM Computer Aided Design and Manufacturing", Printice Hall of India Pvt. Ltd.
2. Alison Beazley & Terry bond, "Computer Aided Pattern Design and Product development." Blackwell Science, 2004
3. Carr H & Barbara Latham. B, "Technology of clothing manufacture," 3rd edition, Black well science Publication 2000
4. Winfred Aldrich, "CAD In clothing and textiles, Blackwell Science, 1994
5. Taylor P, "Computers in Fashion industry," Heineman publishers, 1990
6. Veinsinet D D , "Computer aided drafting and Design Concept & Applications, 1987

APPAREL COMPUTER AIDED DESIGN**Practicals****16 practicals of 3 hrs each****FAD-505 B****Unit -1****3**

Development of Concept Board (Mood board), Client / Customer Board, Colour Card & Textured Effects, Logo Design (Label, Tags etc. used in ready to wear apparel).

Unit – 2**4**

Motifs development- Symmetrical/asymmetrical, Balanced/unbalanced, repeat (arrangements) 3/4 drop, ½ drop, H/V, 1/3 drop H/V, ¼ drop H/V
Drop Reverse, design placements on borders, pallu & allover.

Unit-3**3**

Design Croquie and draping of the same on Men's. Women's & children's casual, party, night, sports, Office/Formal wear. (One Each)

Unit-4**3**

Designing of Garments for children-A-line, Yoke frock, Bush shirt, trouser, Shorts. (Size 4, 6 and 8)
Women's-Salwar Kameez, Dart tops, Skirts, Trousers, Gown (Size 8 & 10)
Men's – Shirt, Jacket, Trouser, kurta (Size 38, 40, 42)

Unit-5**3**

Sloper development and Manipulation using any Pattern Making Software.
Manipulation of darts, seam allowance, notches, hem line manipulation of Grain lines.

FASHION BUSINESS MANAGEMENT

Theory
FAD 506

Total No of Hours-64

Objectives

To develop and deliver effective presentations, conduct and participate in meetings and use the specific tactics to improve negotiation skills
To impart knowledge of merchandising in fashion industry

| | |
|--|---------------|
| Unit: 1 Communication Process- Definition, types, scope, process, problems Networks of communication, intra and intercultural communication | 10 hrs |
| Unit: 2 Fashion Promotion, Media Planning & Production Communication through different media - media ethics, press notes Fashion Advertising & Public Relations, Image management – Brand building, Fashion centers & Trade shows | 12 hrs |
| Unit-3 Introduction to Merchandising, terminologies, concept and application of merchandising, types of merchandisers | 6 hrs |
| Unit-4 Apparel industry framework, apparel manufacturer, buying houses, apparel exporters, apparel supply chains and retail segments. | 6 hrs |
| Unit-5 Sampling-Importance, presentation, counter samples, importance of time in sampling, sample costing and preparation of quotations | 10 hrs |
| Unit-6 Order confirmation, line planning, style planning, production and quality planning. Sourcing of fabrics, accessories, lead time for the supplies, cost, production of prototype and production sampling. | 8 hrs |
| Unit-7 Retailing merchandiser, concepts, Quick response, Just in Time, Merchandising calendar, trend analysis, forecast analysis, concepts of apparel product lines, planning, directing, co- ordinating and controlling. | 12 hrs |

References

1. Grace I. Kunz, Merchandising: Theory, principles and practices, Fairchild publication
2. Elaine Stone, Dynamics of Fashion, Fair Child Publication
3. Phillip Kotler, Marketing Management, Pearson Prentice Hall,
4. Tim Jackson & David Shaw, Fashion Buying & Merchandising Management,
5. M.S. Shesahdri, Apparel marketing & Merchandising, MS Publication, Bangalore.

VI SEMESTR
APPAREL QUALITY ASSURANCE

Theory
FAD 601 A

Total no. of hours- 48

Objectives

To acquaint students with the quality control and quality assurance practices
To acquaint students with quality testing procedures.

Unit 1

10 hrs

Introduction to quality control: definition of quality, importance of quality assurance, fabric inspection, IPQC, AQL, MIL standards and final inspection.

Unit 2

8 hrs

Concepts of TQM, tools used for quality assurance.

Unit 3

6 hrs

Care labels, international care labeling system, Japan/Canada/British care labeling systems. Eco labels.

Unit 4

10 hrs

Accessories testing, inspecting garments using measuring tapes / without using measuring tapes, Spec sheet analysis, button quality testing, packing of shirt and identifying faults.

Unit 5

10 hrs

Applying quality assurance Programmes in fabric, cutting and production department.

Unit 6 : Fabric defects, causes & remedies

4 hrs

References

1. J.E. Booth, "Principles of Textile Testing," CBS Publishers & Distributors
2. Kenneth L. Arnold & Michael Holler, "Quality Assurance Method & Technologies," McGraw Hill Publishers, USA
3. Pradeep V. Mehta & Satish Bharadwaj, "Managing Quality in Apparel Industry," New Age International, Ltd. 1998
4. Amubhai Patel, "Towards Zero defect," Meena Publishers

APPAREL QUALITY ASSURANCE

Practicals

FAD 601 B

16 practical of 3hrs each

Unit 1 : Fabric inspection (4 & 10 point)

4

Unit 2 : Designing and inspection of apparel care labels, contents, dimensions and position.

4

Unit 3 : Identification of fabric and garment defects.

2

Unit 4

6

Preparation of spec sheets for children, men and women's wear
Faults in apparels, packing a shirt and identifying faults.

PORTFOLIO PRESENTATION

Theory
FAD 602 A

Total teaching hrs – 48 hrs

Objectives

To make students understand the importance of portfolios and presentations
To impart practical skills for portfolio presentation.

| | |
|---|---------------|
| Unit: 1 Port folio – Definition, different revolution, types Fashion forecasting and its importance | 8 hrs |
| Unit: 2 Fashion portfolio- advertisement & promotion | 6 hrs |
| Unit: 3 Sources of information & literature on fashion clothing- Indian & International. | 4 hrs |
| Unit: 4 Fashion categories Clothing categories based on age, gender, season & occasion, styling, price, size range for men's, women's, kids wear | 8 hrs |
| Unit: 5 Product Development Inspiration board, Mood Board, Color Board, Story Board, Theme Board, Client Board, Swatch board, Spec sheet | 10 hrs |
| Unit: 6 Material Management & Presentation Skills Costing & Spec for Portfolio collection | 6 hrs |
| Unit: 7 Fashion Photography – Methods, types, location, lighting & its importance. | 6 hrs |

References :

1. J Jarnow and KG Dickenson, "Inside the Fashion Business" Prentice Hall
2. Gini stephens Frings "Fashion- from concept to consumer" Pearson Education
3. Jerligan Easterling "Fashion Merchandising and Marketing" Pearson Education
4. Polly Guerin "Creative fashion Presentations" Fairchild Publications
5. Drake/ Spoons/Greenwald "Retail fashion promotion and Advertising"

PORTFOLIO PRESENTATION

Practicals **16 practical of 3 hrs each**
FAD 602 B

| | |
|---|----------|
| Unit 1 | 5 |
| Theme Based portfolio presentation – 4 collections of 2 ensembles of each based on themes | |
| Unit 2 : Presentation of your designs inspired by any designer of your choice | 2 |
| Unit 3 | 4 |
| Preparation of Portfolio of one collection –5 garments Mood board, Story board, colour board, texture board, client board, logo, flat patterns. Development of Costing & Spec with style, colour, design details, fabric, trims etc | |
| Unit 4 | 5 |
| Preparation of Folio on Fashion Photography. Indoor Location, Outdoor Location. Based on Location, time, Lighting | |

NONWOVEN AND TECHNICAL TEXTILES

Theory **Total No. of Hours-64**
FAD 603

Objectives

- To acquaint students with the application of Non woven & technical textiles in industry
- To impart knowledge of technical textiles with their properties and applications.

| | |
|---|---------------|
| Unit-1 | 10 hrs |
| Introduction to non-woven and technical textiles, terminologies, scope of non-woven & technical textiles in India. | |
| Unit-2 | 12 hrs |
| Classification of non-woven-felt, film, stitch, bounded, leather, foam, braiding, multicomponent fabric-its manufacture & applications. | |
| Unit-3 : Important technical textiles and their applications | 12 hrs |
| Unit-4 : Intelligent textiles and their applications. | 8 hrs |
| Unit-5 : Nano technology in woven and non woven textiles. | 10 hrs |
| Unit-6 : Performance fibers and their application-optical fibers, silicon fibers. | 10 hrs |

References :

1. Menachem Lewin & Jack Preston, Hand book of Fiber Science & Technology Volume III, High technology fibers Part A; Marcel Dekker. Inc 1993
2. Menachem Lewin & Jack Preston, Hand book of Fiber Science & Technology Volume III, High technology fibers Part B; Marcel Dekker. Inc 1993
3. Menachem Lewin & Jack Preston, Hand book of Fiber Science & Technology Volume III, High technology fibers Part C; Marcel Dekker. Inc 1993
4. Sarah.E Braddock and Marie O'Mahony;" Techno textiles - Revolutionary fabrics for fashion & design"; Thames & Hudson 2002

APPAREL EXPORT DOCUMENTATION

Theory **Total No of Hours 64**
FAD 604

Objectives

- To acquaint students with export and import trade
- To impart the regulative & legislative laws governing EXIM trade

| | |
|---|---------------|
| Unit-1 Introduction to export documentation, objectives, terminologies | 10 hrs |
| Unit-2 Current scenario of Indian Apparel Industry, Globalization & its effects. | 8 hrs |
| Unit-3 Documentation – Principal documents, auxiliary documents, documents for claiming export assistance. | 16 hrs |
| Unit-4 Balance of payment, deficit & surplus in BOP, debits & credits, risk coverage, insurance and ECGC, buyer-exporter incentives. | 6 hrs |
| Unit-5 India's foreign trade policy-Exim policy, Role of Govt. institutions in export promotion | 8 hrs |
| Unit-6 Export credit-short, medium & long term export credits, packing credit, negotiation of bills, role of terms of payment in international trading. | 10 hrs |
| Unit-7: Quality control and pre-shipment inspection, clearance of cargo and customs export clearance, containerization and exchange of documents | 6 hrs |

REFERENCES:

1. Darliekoshy, Effective Export marketing of Apparel, Global business press.
2. N. Kumar, R. Mittal, "Export Management", Anmol Publication Pvt. Ltd, New Delhi
3. P. Subba Rao, "Introduction to International Business", Himalaya publication
4. Richard M. Jones "The Apparel Industry" 2 Edition, Black well Science
5. Philip Kotler, Marketing Management, Pearson Prentice Hall

SHOP FLOOR MANAGEMENT

Theory
FAD 605

Total No of Hours-64

Objectives

To acquaint the students for better managerial skills on shop floor.
To enable the students to understand the intricacies of retail business.

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| Unit -1 | 4 hrs |
| Introduction to shop floor management and terminologies. | |
| Unit -2 | 10 hrs |
| Fashion Retailing-History, Scope, Importance. Types of retailing – (Domestic & International), techniques. | |
| Unit -3 | 12 hrs |
| The Store Window display, Exterior of store, Illumination. Masking and Proscenia Mannequins and 3D Dressing. Props & promotions on floor. Visual merchandising and colour pallets. | |
| Unit-4 | 10 hrs |
| Store interior planning – Store interiors and display locations, fixture & dressings, Purchase display systems. | |
| Unit -5 | 10 hrs |
| Store management – types of stores, planning, layout and storing | |
| Unit -6 | 6 hrs |
| Inventory control – definition, types, importance, remedies. | |
| Unit-7 | 12 hrs |
| Brand Building-Competitive strategies and survey, market research, fashion promoting and advertising, Trade shows, Exhibitions, Fashion shows, Trade organizations | |

References

1. Laura L Bliss, Study Guide Visual Merchandising and Display III edition, 1995-Fairchild Publications.
2. Castelino. M. Fashion Kaleidoscope, Rupa & Co. 1994.
3. Gibson. G. Vedomani, Retail Management, Jaico Publishing House, Bangalore
4. Elaine Stone, The Dynamics of Fashion, Fair Child Publication
5. Brenda Sternquist, International Retailing, Fairchild Publication, New York
6. Martin. M. Pegler, Store Window No.14, No 12, Visual reference Publishers, NewYork
7. Jonny Tucker, “Retail Desire” Rotovision SA UK

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