## VIVEKANANDHA

## COLLEGE OF ARTS AND SCIENCES FOR WOMEN

ELAYAMPALAYAM, TIRUCHENGODE -Tk, NAMAKKAL DISTRICT
(Affiliated to Periyar University, Approved by AICTE, Re-accredited with 'A' Grade by NAAC)
Recognized under section 2(f) \& 12 (B) of UGC ACT 1956,
An ISO 9001:2008 Certificate Institution


DEPARTMENT OF COSTUME DESIGN \& FASHION B.SC. COSTUME DESIGN \& FASHION SYLLABUS \& REGULATIONS

FOR CANDIDATES ADMITTED FROM 2020-2021 ONWARDS UNDER AUTONOMOUS \& CBCS PATTERN

VIVEKANANDHA EDUCATIONAL INSTITUTIONS Angammal Educational Trust Elayampalayam, Tiruchengode (Tk) Namakkal (Dt)

## B.Sc., COSTUME DESIGN \& FASHION

## 1. SCOPE OF THE COURSE

B.Sc. (Costume Design \& Fashion) is a three-year Undergraduate degree program that helps the student to develop an understanding of the fashion environment and trains them to develop a range of fashion products for a targeted market segment. It also includes latest trends, cultural dynamics, and innovations in the Indian and International fashion industry. Wanting become a Fashion Designer or be part of the global fashion market, this degree gives you the necessary knowledge, skills and know how to be what you aspire.

## 2. SALIENT FEATURES

* The department of Costume Design \& Fashion course offers a broad range of careerbased programmes with up-to -date infrastructure and highly -qualified and dedicated staff members.
* It implements a comprehensive, technically -driven curriculum and evolution system to ensure that its graduates are in exclusive demand in India and globally, for their exemplary technical and professional competencies, and also for their capability to take up higher education programmes.
* It encourages active research and the spirit of innovation among its faculty and students and promotes collaborative initiatives with industry and institution of high standing.
* It respects and demonstrates the core values of equity, team work, environment-friendliness and transparency.


## 3. OBJECTIVES OF THE COURSE

## The specific objectives of the programme are:

* To Provide good theoretical knowledge and practical skills required for careers in Business
* To expose the students to industries through internship, field visit, guest lecture, and projects.
* To inculcate innovative and creative thinking among students, due to the encouragement of student research activities.
* To encourage students honing their skills through students Association activities, Effective communication and Placement training programmes.


## 4. ELIGIBILITY FOR ADMISSION

Candidates seeking admission to the first year degree course for B.Sc., Costume Design \& Fashion shall be required to have passed

Candidate seeking admission to the first year Degree of Bachelor of Science in Costume Design \& Fashion shall be required to have passed in any Higher Secondary course examination
(Regular academic or Vocational) of the State Board/CBSE/ICSE or other examination accepted as equivalent thereto by the Syndicate, subject to such other conditions as may be prescribed. Pass in any three
year Diploma in Fashion/Costume/Textile/Apparel related course is eligible to admit in direct second year of this UG course.

## 5. DURATION OF THE COURSE

- The course shall extend over a period of three academic years consisting of six semesters. Each academic year will be divided into two semesters. The first semester will consist of the period from July to November and the second semester from December to March.
- The subjects of the study shall be in accordance with the syllabus prescribed from time to time by the Board of Studies of Vivekanandha College of Arts and Sciences for Women (Autonomous) with the approval of Periyar University.
- Each subject will have six hours of lecture per week apart from practical at the end of even semester.


## 6. CONTINUOUS INTERNAL ASSESSMENT

The performance of the students will be assessed continuously and the Internal Assessment Marks will be as under:
Theory

1. Average of two tests

- 15 Marks

2. Assignment

- 5 Marks

3. Attendance

- 5 Marks

Total
25 Marks
Practical

1. Practical best average of two tests -30 Marks
2. Attendance - 5 Marks
3. Observation note - 5 Marks

Total
40 Marks

## Break-up Details for Attendance

Below 75\% - No Marks
76 to $80 \%-1$ Mark
81 to $85 \%$ - 2 Marks
86 to $90 \%$ - 3 Marks
91 to $95 \%$ - 4 Marks
96 to 100\% - 5 Marks

## PASSING MINIMUM

## INTERNAL

There shall be no passing minimum for internal

## EXTERNAL

In the end semester examinations, the passing minimum shall be $40 \%$ out of 75 Marks (30 Marks)

## 7. ELIGIBILITY FOR EXAMINATION

A candidate will be permitted to appear for the end semester examination only on earning $75 \%$ of attendance and only when his/her conduct has been satisfactory. It shall be open to grant exemption to a candidate for valid reasons subject to conditions prescribed.

## 8. CLASSIFICATION OF SUCCESSFUL CANDIDATES

Successful candidates passing the examination of language, core, allied, elective, skill based elective and non major elective courses and securing marks
a) $75 \%$ and above shall be declared to have passed the examination in first class with Distinction provided they pass all the examinations prescribed for the course at first appearance itself.
b) $60 \%$ and above but below $75 \%$ shall be declared to have passed the examinations in first class without distinction.
c) $50 \%$ and above but below $60 \%$ shall be declared to have passed the examinations in second class.
d) All the remaining successful candidates shall be declared to have passed the examinations in third class.
e) Candidates who pass all the examinations prescribed for the course at the first appearance itself and within a period of three consecutive academic years from the year of admission only will be eligible for University rank.

## 9. ELIGIBILITY FOR AWARD OF THE DEGREE

A candidate shall be eligible for the award of the degree only if she has undergone the above degree for a period of not less than three academic years comprising of six semesters and passed the examinations prescribed and fulfilled such conditions has have been prescribed therefore.

## 10. PATTERN OF QUESTION PAPER

PART- A (Objective) Answer all Questions $20 \times 1=20$ Marks

PART- B (500 words) Answer all 5 Questions (either or type) $5 \times 5=25$ Marks
PART - C (1000 words) Answer any 3 Questions (three out of five) $3 \times 10=30$ Marks

## 11. PROCEDURE IN THE EVENT OF FAILURE

If a candidate fails in a particular subject, she may reappear for the university examination in the concerned subject in subsequent semesters and shall pass the examination.

## 12. COMMENCEMENT OF THESE REGULATIONS

These regulations shall take effect from the academic year 2020-2020 i.e. for the students who are to be admitted to the first year of the course during the academic year 2020 2020 and thereafter.

## 13. TRANSITORY PROVISION

Candidates who were admitted to the UG course of Costume Design \& Fashion before 2020 - 2020 shall be permitted to appear for the examinations under those regulations for a period of three years i.e., up to and inclusive of the examination of April/May 2020. Thereafter, they will be permitted to appear for the examination only under the regulations then in force.

## B.Sc., COSTUME DESIGN \& FASHION

## VISION

To Provide a highest standard in fashion pertaining to design, technology and management with proper level of discipline.

To encourage creativity among student's body.
To draw inspiration from India's textiles and crafts focusing on emerging global trends relevant to the industry.

## MISSION

To provide a transformative educational environment for talented young women to nurture their inventive potential.

To acquire distinctive skills valuable to self, industry and society.
To Value and celebrate cultural and individual diversity in our students, faculty and alumni emphasizing the power of fellowship.

To bring forth graduates to exact standards of professional excellence and personal integrity.

## PROGRAMME EDUCATIONAL OBJECTIVES (PEO)

| Program Educational Outcomes (PEOs) |  |
| :---: | :--- |
| The B.Sc. ( Costume Design \& Fashion) program describe accomplishments that graduates are <br> expected toattain within five to seven years after Graduation |  |
| PEO1 | The student can excel in the field of Costume Design \& Fashion after the completion of the <br> Program. |
| PEO2 | The student can develop his own brands in Apparel Sector. |
| PEO3 | Start- Up of An Entrepreneur with potential is possible with new ideas towards Apparel Industry. |
| PEO4 | The student can choose to work as a freelance designer. |
| PEO5 | The student can begin his career in the area of Apparel Production. |
| PEO6 | The student can work as Quality Mangers in Garment Industry |
| PEO7 | The student can work as Fabric Mangers in woven \& Knitted Fabric sector. |
| PEO8 | The student can also work as an industrial engineer. |
| PEO9 | The student can work as Merchandiser and Costing Mangers in Garment Industries. |
| PEO10 | The student can act as Consultant in Apparel Sectors. |

## PROGRAMME SPECIFIC OUTCOME (PSO)

## B.Sc., COSTUME DESIGN \& FASHION

- To impact theoretical \& practical knowledge so as to provide a strong foundation for studies for career.
- To prepare the students for a wide variety of jobs in garment industry and to apply their creative
mind in the designing of apparel and home textile.
- Wide variety of employability options such as Design Director, Fashion Director, Style advisor, Fashion Buyer, Design Manager, Design Consultant, Fashion Blogger, Couturier, Fashion critic, Fashion Illustrator and Fashion Merchandiser.


## PROGRAMME OUTCOME (PO)

## B.Sc., COSTUME DESIGN \& FASHION

* Analyze and identify required parameters vital to design and manufacture apparel products suiting the needs of the market
* Acquire creative and innovative skills in designing apparels with due considerations to public health, safety, cultural, societal and environmental factors.
* Understand the impact of sustainable development in apparel manufacturing processes.
* Understand the commitment towards professional ethics and responsibilities in the entire textile Business process.
* Apply the knowledge, skill and attitude as a team player in initiating, executing and managing projects
in the areas of design, manufacture, marketing and entrepreneurship in multi-disciplinary environments.
* Students would be equipped with Skills for Life Long Learning.
* Students would have set up strong foundation to their career in the field of Costume design and fashion.
* Students would have acquired essential workplace skills.
* Apply the technical skills to analyze and execute various of designs.
* Understand how the Indian and Global fashion markets work and be able to work in it.
* Students would develop professional practices in tune with the changing Dynamics of the Fashion industry landscape.
* To be Equipped with Skills for Life Long Learning.
* To set up strong foundation to their career in the field of Costume design and fashion.
* To acquire essential workplace skills.
* To apply the technical skills to analyze and execute various of designs.
* To understand how the Indian and Global fashion markets work and be able to work in it.
* To develop professional practices in tune with the changing Dynamics of the Fashion industry landscape.


## SCHEME OF CURRICULUM - B.Sc., COSTUME DESIGN \& FASHION

(For the candidates admitted during the academic year 2020-2022 onwards)

| $\stackrel{\rightharpoonup}{\pi}$ | Paper <br> Code | Subject Title | $\begin{aligned} & \text { n } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  | University Examination |  |  |  |
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| SEMESTER I |  |  |  |  |  |  |  |  |
| I | 17U1LT01 | Tamil - I | 6 | 5 | 25 | 75 | 100 | 3 |
| II | 17U1LE01 | English - I | 6 | 5 | 25 | 75 | 100 | 3 |
| III | 17U1CDCP01 | Principles of Pattern Making - Core Practical - I | 5 | 3 | 40 | 60 | 100 | 3 |
| III | 17U1CDCP02 | Basic Garment Designing - Core Practical - II | 5 | 3 | 40 | 60 | 100 | 3 |
| III | 17U1CDA01 | Sewing Technology - Allied - I | 6 | 5 | 25 | 75 | 100 | 3 |
| IV | 17U1CDAP01 | Yoga | 2 | 2 | 25 | 75 | 100 | 3 |
| SEMESTER II |  |  |  |  |  |  |  |  |
| I | 17U2LT01 | Tamil - II | 6 | 5 | 25 | 75 | 100 | 3 |
| II | 17U2LE01 | English - II | 6 | 5 | 25 | 75 | 100 | 3 |
| III | 17U2CD01 | Fibre To Yarn - Core - I | 5 | 5 | 25 | 75 | 100 | 3 |
| III | 17U2CDCP03 | Fibre To Yarn - Core Practical - III | 3 | 2 | 25 | 75 | 100 | 3 |
| III | 17U2CDAP01 | Fashion Draping - Allied Practical - I | 3 | 2 | 40 | 60 | 100 | 3 |
| III | 17U2CDAP02 | Basic Illustration - Allied Practical - II | 6 | 3 | 40 | 60 | 100 | 3 |
| IV | 17U2ES01 | Environmental Studies | 1 | 1 | 25 | 75 | 100 | 3 |


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| SEMESTER III |  |  |  |  |  |  |  |  |
| III | 17U3CD02 | Fabric Manufacturing－Core－II | 5 | 5 | 25 | 75 | 100 | 3 |
| III | 17U3CD03 | Care and Maintenance of Textiles－Core－III | 5 | 5 | 25 | 75 | 100 | 3 |
| III | 17U3CDP04 | Fabric Design Analysis－Core Practical－IV | 3 | 2 | 40 | 60 | 100 | 3 |
| III | 17U3CDP05 | Children＇s Apparel－Core Practical－V | 6 | 3 | 40 | 60 | 100 | 3 |
| III | 17U3CDA02 | Fashion Designing－Allied－II | 5 | 5 | 25 | 75 | 100 | 3 |
| III | 17U3CDAP03 | Fashion Designing－Allied Practical－III | 3 | 2 | 40 | 60 | 100 | 3 |
| IV | 17U3CDN01 | Basic Textiles－NMEC－I | 2 | 2 | 25 | 75 | 100 | 3 |
| SEMESTER IV |  |  |  |  |  |  |  |  |
| III | 17U4CD04 | Historic Costume \＆Textiles－Core－IV | 6 | 3 | 25 | 75 | 100 | 3 |
| III | 17U4CD05 | Wet Processing－Core－v | 6 | 3 | 25 | 75 | 100 | 3 |
| III | 17U4CDP06 | Women＇s Apparel－Core Practical－VI | 5 | 5 | 25 | 75 | 100 | 3 |
| III | 17U4CDP07 | Wet Processing－Core Practical－VII | 2 | 3 | 40 | 60 | 100 | 3 |
| III | 17U3CDA03 | Dynamic of Fashion－Allied－III | 4 | 4 | 25 | 75 | 100 | 3 |
| III | 17U4CDSP01 | Surface Embellishments－SBEC－I | 3 | 2 | 40 | 60 | 100 | 3 |
| IV | 17U4CDN02 | Basic Designing－NMEC－II | 2 | 2 | 25 | 75 | 100 | 3 |


| $\underset{\sim}{\underset{E}{E}}$ | Paper <br> Code | Subject Title | $\begin{aligned} & \text { n } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ | Uِ: | University Examination |  |  |  |
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| SEMESTER V |  |  |  |  |  |  |  |  |
| III | 17U5CD06 | Core VI | 5 | 5 | 25 | 75 | 100 | 3 |
| III | 17U5CD07 | Core VII | 6 | 5 | 25 | 75 | 100 | 3 |
| III | 17U5CD08 | Core VIII | 6 | 5 | 25 | 75 | 100 | 3 |
| III | 17U5CDP08 | Core Practical VIII | 3 | 5 | 40 | 60 | 100 | 3 |
| III | 17U5CDP09 | Core Practical IX | 3 | 5 | 40 | 60 | 100 | 3 |
| III | 17U5CDP10 | Core Practical X | 5 | 5 | 25 | 75 | 100 | 3 |
| IV | 17U5CDME01 | MBEC I | 2 | 2 | 25 | 75 | 100 | 3 |
| SEMESTER VI |  |  |  |  |  |  |  |  |
| III | 17U6CD09 | Core IX | 5 | 5 | 25 | 75 | 100 | 3 |
| III | 17U6CD10 | Core Practical XI | 5 | 5 | 25 | 75 | 100 | 3 |
| IV | 17U6CDP11 | MBEC - II | 4 | 2 | 40 | 60 | 100 | 3 |
| IV | 17U6CDME02 | MBEC - III | 5 | 5 | 25 | 75 | 100 | 3 |
| IV | 17U6CDSP02 | SBEC II | 3 | 2 | 40 | 60 | 100 | 3 |
| IV | 17U6CDSP03 | SBEC III | 4 | 2 | 40 | 60 | 100 | 3 |
| V |  | Extension Activity | - | 1 | - | - | - | 3 |
|  |  | Total | 180 | 140 | 1160 | 2940 | 4200 |  |

## LIST OF CORE PAPERS

I. Fiber to Yarn - Core
II. Fabric Manufacturing - Core
III. Care and Maintenance of Textiles - Core
IV. Historic Costumes \& Textiles - Core
V. Wet Processing - Core

## LIST OF CORE PRACTICALS

I. Principles of Pattern Making - Core Practical
II. Basic Garment Designing - Core Practical
III. Fiber to Yarn - Core Practical
IV. Fabric Design Analysis - Core Practical
V. Children's Apparel - Core Practical
VI. Women's Apparel - Core Practical
VII. Wet Processing - Core Practical

## LIST OF ALLIED PAPERS

I. Sewing Technology - Allied
II. Fashion Designing - Allied
III. Dynamic of Fashion - Allied

## LIST OF ALLIED PRACTICALS

IV. Fashion Draping - Allied Practical
V. Basic Illustration - Allied Practical
VI. Fashion Designing - Allied Practical

## LIST OF SBEC PAPERS

I. Surface Embellishment Practical

## LIST OF NMEC PAPERS

I. Basic Textiles
II. Basic Designing

SEMESTER -I

## PRINCIPLES OF PATTERN MAKING - CORE PRACTICAL - I 17U1CDP01

## COURSE OBJECTIVES:

1. To acquaint students of the basic production machinery and equipment used in apparel construction.
2. To learn about the garment industry.
3. To learn the working process of the various departments in garment industry.

## COURSE OUTCOMES:

CO 1. Describe the various machineries and process involved in fabric spreading andcutting.
CO 2. Generalize the types of garment production machineries and its application methods.
CO 3. Summarize the sewing machines and its special attachments for higher production. CO 4. Explain the special machines and its functions in Garment Industry. CO 5. Identify garment finishing machineries and its working principles.

## I. Draft and grade the Patterns for the following

## a) Sleeve

1. Plain sleeve
2. Puff sleeve at top and bottom
3. Bell sleeve

## b) Collar

1. Shirt Collar
2. Peter Pan Collar
3. Stand Collar
c) Yoke
4. Simple Yoke
5. Partial Yoke
I. Designing and Drafting and Grading basic apparel for
a) Children
6. Bib, Panty, Jabla
7. Summer Frock
8. Angle Top
9. A-line Frock
10. Sun Suit

## b) Women

1. Saree Petticoat
2. Middi and Middi top
3. Blouse
4. Nighty
5. Salwar Kameez

## c) Men

1. Full Sleeve Shirt
2. Pleated Trouser
3. S.B. Vest
4. Nehru Kurtha
5. Night Dress

## Text Book(s)

1. A Text Book of Fiber Science and Technology, Mishra, S.P, New Age International (P) Ltd Publishers, New Delhi 2000.
2. Spun Yarn Technology, Eric Oxtoby, Butterworth-Heinemann, Published in 1987.
3. The Motivate Series - Textiles, Wynne, A, Publisher : Macmillan Education Ltd., London, 1997.
4. Hand Book of Textile Fibers - Vol. I \& Vol. II. Gordon Cook, J, Wood Head Publishing Ltd., Cambridge, England, 1984.
5. Man-made Fibers, Moncrieff, W, Butterworth Scientific Publication, 1975.
6. Handbook of Textile Fibers: Natural Fibers,J Gordon Cook, Woodhead publication Limited,1984.

## Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]

1. https://textilelearner.blogspot.com/
2. https://www.textiletoday.com.bd/category/innovations/fiber-yarn-fabric/
3. https://study.com/academy/lesson/textile-yarns-definition-types-classification.html

## BASIC GARMENT DESIGNING - CORE PRACTICAL - II <br> 17U1CDP02

## COURSE OBJECTIVES:

1. To impart practical exposure in sewing operation.
2. To acquaint students with the knowledge on basic sewing techniques.
3. To impart the knowledge and skills required for garment designing.

## COURSE OUTCOMES:

CO 1. Manipulate the various seams, seam finish and bias finishing techniques.
CO 2. Customize the fullness methods, placket and fasteners attachments in garment.
CO 3. Construct the various body parts of a garment.

## 1. Preparation Samples for the Following

1. Preparation of Samples for Seams and Seam Finishes.
2. Preparation of Samples for Hems.
3. Preparation of Samples for Fullness. (Darts, Tucks, Pleats, Gathers, Flares, Ruffles, Godets and Gathers)
4. Preparation of Samples for Facing and binding. (Any 3)
5. Preparation of Samples for Plackets and fasteners. (Any 4)
6. Preparation of Samples for different Sleeves. (Any 3)
7. Preparation of Samples for different Collars. (Any 3)
8. Preparation of Samples for different Yokes. (Any 3)
9. Preparation of Samples for different pockets (Any 3)

## Text Book(s)

1. Gayatri Vermaand Kapil Dev,(2006).Cutting and Tailoring Course. New Delhi: Asian Publishers
2. KR Zarapker, (2005).Zarapker System of Cutting.New Delhi: Navneet Publications Ltd.
3. Thangam Subramaniam,(2006). Dress Making- Bombay Tailoring and Embroidery College
4. Ruth Sleigh Johnson,(2011).Practical sewing techniques. London :A\&C Black publishers

## Related Websites

1. https://ecourseonline.iasri.res.in/mod/page/view.phb?id=114171
2. https://www.fibertofashion.com/industry-article/5658/basic-of-pattern-making
3. https://www.clothingpatterns $101 . c o m / s t y l e-l i n e s . h t m l ~$

## SEWING TECHNOLOGY - ALLIED - I <br> 17U1CDA01

## COURSE OBJECTIVES:

1. To acquaint students of the basic production machinery and equipment used in apparel construction.
2. To learn about the garment industry.
3. To learn the working process of the various departments in garment industry.

## COURSE OUTCOME:

CO 1. Describe the various machineries and process involved in fabric spreading andcutting.
CO 2. Generalize the types of garment production machineries and its application methods.
CO 3. Summarize the sewing machines and its special attachments for higher production. CO 4. Explain the special machines and its functions in Garment Industry. CO 5. Identify garment finishing machineries and its working principles.

## Unit: 1 Introduction to Sewing Process

Introduction to sewing, History of sewing machines, Sewing Machine - parts and functions of single needle machine, Tools for measuring, marking, cutting \& pressing. Selection of thread and needle for various types of fabric..

## Unit: 2 Classification of Sewing Machines

Classification of sewing machines -Single Needle Lock stitch Industrial model, Over Lock Machine, Zig Zag Multi Purpose Machine, Double Needle Machine, Bar Tack Machine, button hole making machine, button fixing machine, blind stitching machine, fabric examining machine. Machine attachments - care and maintenance of sewing machines.

## Unit: 3 Basic Sewing Machine and its Details

Basic sewing machines and associated work aids, simple automobiles. The use of components \& trims - Labels and motifs, lining, Interlining, wadding, lace, braids \& elastics, Hooks and loop fastening, Seam binding and tape, Shoulder pad, Eyelets \& laces, Zip fastener, Buttons, Tack buttons, Snap fasteners and Rivets, Performance properties of components and trims. Sewing machines attachments - (Hemmers, Ruffler, Binder, Tucker, cloth guide, zipper foot, gathering foot, feed cover plate, circular attachment). Common problem $\&$ remedies

## Unit:4 Fusing

Fusing - Definition, advantages of using fusible interlinings, requirement of fusing, Fusing process. The means of fusing, Fusing equipments, Methods of fusing quality control in fusing. Alternative of fusible interlining. Pressing: the purpose of pressing, categories of pressing, means of pressing, pressing equipments and methods, pleating, permanent press. State of pressing.

## Unit:5 Stitching mechanism

In Stitching mechanism - needles, bobbin and bobbin case, bobbin winding, upper and cover threading, auxiliary hooks, throat plates, take -ups tension disc. Feeding mechanism -
drop feed, different fed, needle feed, compound feed, puller feed Introduction to various machines for garment finishing - Fusing - Sucking - Ironing - Packing.

## Text Book(s):

1. The Technology of Clothing manufacture, Harold Carr abd Barbara Catham, Blackwell Science (1994)
2. Goswami, B.C. "Textile Yarns", Technology, Structure and applications", Mc graw Hill.
3. Chris Jefferys (2004), 101 Essential Tip- Basic Sewing, D.K. Publishing
4. Besty Hosegood (2006), The complete book of sewing, Dorling Kindersley Ltd., London.
5. Thomas Anna Jacob, "The art of sewing:, USB publishers New Delhi, 1994.
6. Readers Digest sewing book.

## Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]

1. https://www.onlineclothingstudy.com/2018/05/machinery-needed-forgarment.html
2. https://garmentsmerchandising.com/garment-machine-function/
3. https://dir.indiamart.com/indianexporters/m_texmch.html

## SEMESTER -II

## FIBRE TO YARN - CORE - I <br> 17U2CD01

## OBJECTIVES

1. To facilitate the students to understand the structural features of Fibers and Yarn.
2. To investigate techniques of textile fibers and yarn with its manufacturing Process.
3. To Learn the Properties and behavior of Fibers and Yarn.
4. To Gain knowledge in Advanced Spinning System.

## COURSE OUTCOME:

CO 1. Recognize the molecular conformations of various textile fibers.
CO 2. Explain the production process of various textile fibers and yarns.
CO 3. Utilize the Fibers and Yarns in different fields of Textile Industry.
CO 4. Analyze the structural investigations techniques of Fibers and Yarn.
CO 5. Outline the Properties and behavior of textile fibers and Yarns.

## Unit - I

Introduction to textile fibres - definition, classification of fibres, manufacturing process, physical and chemical properties and end uses of natural fibres - cotton, linen, wool, silk and jute. Polyester, nylon.

## Unit - II

Man made fibres - polyester, nylon, acrylic, spandex, viscose, rayon and tencel.

## Unit -III

Introduction to Ginning -objectives - types, working principle of knife roller gin, blow room process - objects of mixing, objects of blow room, working principles of axi-flow cleaner, kirschner beater, lap forming unit ( scutcher )- cleaning efficiency.

## Unit -IV

Sequence of spinning process - objects and working principles of blow room, carding, draw frame and comber - objects and working principles of simplex and spinning (Ring Frame )

## Unit - V

Yarn - definition, classification, simple, fancy yarn and sewing threads, manufacturing process, yarn twist - classification of twist, yarn count. Identification of yarn count.

## Reference:

1. Corbman B.P Fibre to Fabric, International Students Edition Mc Graw Hill Book
2. Spun Yarn Technology, Eric Oxtoloy, Butter work Pub UK 1987
3. Technology of spinning WD Klcin, Textile Institute

## FIBRE TO YARN - CORE PRACTICAL - III <br> 17U2CDP03

## OBJECTIVES:

1. To train the students on identification of different kinds of fibers based on different tests and measurement of properties of fibers.
2. To facilitate the students to understand the structural features of Fibers and Yarn.
3. To Learn the Properties and behavior of Fibers and Yarn.

## COURSE OUTCOME:

CO 1. Discover the natural and man-made fibres using various identification test methods.
CO 2. Determine the blend proportion of different fibers from the blended material.
CO 3. Calibrate the count and twist of the textile yarn.

## Fibre Testing :

Identification of textile fibres by
a. Microscopical Test
b. Solubility Test
c. Burning Test

## Yarn Testing:

a. Analysis of blend ratio of yarn
b. Determination of

1. Yarn count
2. Yarn Twist
3. Lea Strength
4. CSP calculation
5. Fabric Count

## Text Books:

1. Raoul Jewel, (2000), Encyclopedia of dress making, Delhi, APH Publishing Cooperation.
2. Claire B. Schaeffer (1994), Fabric Sewing Guide, Lola, Wisconsin, Krause Publishers.
3. Handbook of Textile fibers, Woodhead Publications, (1984).

Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]:

1. https://nptl.ac.in/courses/116/102/116102026/
2. https://onlinecourses.swayam2.ac.in/cec19_te01/preview
3. https://textilelearner.blogspot.com/

## FASHION DRAPING - ALLIED PRACTICAL - I <br> 17U2CDAP01

## COURSE OBJECTIVES:

1. To train the students on identification of different kinds of fibers based on different tests and measurement of properties of fibers.
2. To facilitate the students to understand the structural features of Fibers and Yarn.
3.To Learn the Properties and behavior of Fibers and Yarn

## COURSE OUTCOME:

CO 1: Prepare muslin and formulate the measurements for various garment's draping
CO 2. Produce the pattern blocks in dress form for various garments
CO 3: Create dart or pleat variations in appropriate garment patterns
I. Prepare the following samples using the Draping Method Basic bodice Front and Back Dart Manipulation Pleats, Darts, Tucks and Gathers
II. Neckline variations

- Boat neck
- Drawstring
- Cowl
- Key hole
- Halter


## III. Armhole variations

- Square
- Round
- V Shape
IV. Waistline variations
V. Skirts-
- Flared skirt
- Gore skirt
- Pleated skirt
- Hip yoke skirt
- Umbrella skirt


## VI. Collars -

- Shirt Collar
- Stand Collar
- Peter Pan collar
- Shawl collar cut in one piece with front waist
- Tie tying techniques -5 methods


## VII. Sleeves -

- Basic sleeve
- Puff sleeve
- Bell Sleeve
- Leg - o - Mutton
- Petal sleeve
- Raglan sleeve
- Kimono sleeve


## VIII. Design the following garment by draping Techniques

- Create any one of garment for a girl child - street wear
- Create any one of garment for a boy child - casual wear
- Create any one of garment for a teenage girl - party wear
- Create any one of garment for a teenage boy - formal wear


## Text Book(s):

1. Draping for Fashion Design, 5th Edition, Nuriesrelis, Hilde Jaffe and Rose Mary Torre, Pearson Prentice Hall Publications, United States, 2012.
2. The Art of Fashion Draping, Connie Amadan Crawford, Fair Child Publications, New York, 2005.
3. Draping for Apparel Design - 3rd Edition, Helen Joseph and Armstrong, India, Bloomsbury Publications India Ltd, 2013.
4. Cutting and Draping Special Occasion Cloths: Designs for Party wear and Evening wear, Dawn Cloak, London, Batsford, 1998.

## Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]

1. https://style2designer.com/apparel/draping-mannequin/what-is-draping-technique-and-its- process/
2. https://www.aicp.fr/portfolio-items/moulage-technique-dumoulage/?lang=en\#:~:text=Draping\%2C\ the\ most\ ancient\ of,to\ create\% 20 a\%20fabric\%20prototype

## BASIC ILLUSTRATION - ALLIED PRACTICAL - II 17U2CDAP02

## COURSE OBJECTIVES:

1. Students will learn the basic objects drawing and shades.
2. They will learn basic head theories and draw human figures at different angles
3. They will create garment design for various seasons on fashion figures.

## COURSE OUTCOME:

CO 1. Compose various types of garment and its parts
CO 2. Design different kinds of accessories and ornaments
CO 3. Deconstruct the various head theories of human figures, features and different positions of body parts.

## Prepare sketches for the following

1. Different types of collar, Sleeve, Neck line, skirts.
2. Different types of ladies tops, Shirt, Pant(Full and half), Chudidhar
3. Different types of Accessories - Bags ,footwear , hats etc
4. Different types of Ornaments
5. Facial features - Eyes ,nose , lips, Ears
6. Face ,hands legs - Different positions
7. Lay figure -7 $1 / 2$ head
8. Fashion figure $-8,10,12$ head.

## Text Book(s)

1. Patric John Ireland, Fashion Design Illustration -Women, B.T.Batsfort Ltd, London(1993).
2. Patric John Ireland, Fashion Design Drawing and Presentation, B.T.Batsfort Ltd, London(1982).
3. Patric John Ireland, Fashion Design Illustration -Men, B.T. Batsfort Ltd, London(1996).
4. Wolfgang. H. Hageney, Checks And Stripes -Classic Variations in Colour Vol.I, Belveden(1997).

SEMESTER-III

## FABRIC MANUFACTURING - CORE - II <br> 17U3CD02

## COURSE OBJECTIVES

To enable the students to

1. To impart knowledge on woven fabrics
2. To help students understand fabric formation process.
3. To impart knowledge on woven fabric Designs and Structures.

## COURSE OUTCOME:

CO 1. Clarify the preparatory processes involved in the woven fabric production.
CO 2. Explain the principles of sizing process and its methods.
CO 3. Infer about the basic mechanism of loom and its structure.
CO 4. Categorize the woven fabrics and its structure
CO 5. Differentiate the types of looms and jacquard mechanisms involved in woven fabric production.

## Unit - I

Weaving - Definition - process sequence of weaving preparatory process. Warp winding - objectives - warping, sizing, weft winding- objectives - pirn winding machine

## Unit - II

Looms - classification of loom, basic loom, mechanism , basic elements of woven design - design, draft and peg plan. Types of drafting plan.

## Unit - III

Plain weave - modification of plain weave - characteristic features and end uses. Twill weave modification of twill weave - characteristic features and end uses. Satin weave, sateen weave characteristic features and end uses .

## Unit - IV

Honey comb, huck - a - back, mock leno- characteristic features and end uses
Complex weave structure - double cloth, extra warp, extra weft, pile fabric - characteristic features and end uses.

Unit - V
Shuttle less looms - airjet, water jet, Repier, projectile loom. Difference between shuttle \& shuttle less loom

## Reference:

1. Gokerneshan. N (2009 weaving Repaartion Technology, Abisheck Publication, Chandigarh
2. Murphy.W.S (2001) Handbook of weaving . Abhishek Publications, Chandigarh
3. Fabric Science 5 ${ }^{\text {th }}$ Edition, Joseph J Pretal, Fairchild Publication. New York 1990.
4. Mechanism of weaving , N.N. Banner. J.I Vol- I \& II Textile Institute
5. Principles of weaving, Mark and Robinson, Textile Institute Manchester

## CARE \& MAINTENANCE OF TEXTILES - CORE - III <br> 17U3CD03

## COURSE OBJECTIVES:

To enable the students to

1. This course facilitates an understanding, care and maintenance of textiles and orients the learners in the field of clothing industry.
2. The learners are expected to know the laundry soaps, Laundry equipment and dry cleaning in textile industry.
3. Impart the knowledge of machines and equipment used in washing, storing, and ironing process.

## COURSE OUTCOME:

CO 1. Identify the suitable methods of washing, drying, ironing and storing
CO 2. Evaluate the methods and equipment to be used for the better life of clothes
CO 3. Appraise the stiffening agents used in fabric washing.
CO 4. Recognize the principles of washing and its facts.
CO 5. Analyze the special types of laundry for special fabrics and care label symbols.

## UNIT-I

Water- hard and soft water, Determination of water hardness methods of softening water. Zeolite or Base exchange method. Laundry soaps - Manufacture of soap and methods, composition of soap, types of soap, soap less detergents, chemical action, detergent manufacture, advantages of detergents. Difference between soap and detergents.

## UNIT-II

Laundry equipment and reagents: Study of laundry equipment and laundry reagents - soaps detergents - cleaning action of soaps, indigenous cleaning agents - rita nut - shikakai - green gram bran solution - study of modern and industrial cleaning agents

## UNIT - III

Stiffening Agents: Study of stiffening agents -purpose of stiffening-classification of stiffening Agents preparation and uses of stiffeners- natural and commercial starches - preparation of starch for use bleaching agents - blueing and tinting agents and their application - optical whiteners .

## UNIT-IV

Washing Machine And Care Labels: Study of different types of house hold/industrial washing machine- rotary - swirling - pressure - tumble wash etc; the various systems of care labeling-washing instruction. bleaching instruction-drying instruction-ironing instruction-dry cleaning instruction. placement of labels on garments.

## UNIT -V

Stain Removal: Principles of laundering - stain removal - various solvents for stain removing blood, tea, rust; oil/grease etc. - different methods of washing - application of friction by hand rubbing scribing - tumble wash. General rules and ways of stain removal.

## References

1. Dantyagi S., "Fundamentals of Textile and Their Care", Oriental Longmans Ltd, New Delhi, 1996
2. Denlkar, "Household Textiles and Laundry Work", Atma Ram and Sons, Delhi, 1993
3. Neomi D'Souza, "Fabric Care", New Age International Publisher, 1998
4. Davis, "Laundry and Clothing Care", Drama Book Publishers, 1995

## FABRIC DESIGN ANALYSIS - CORE PRACTICAL - IV 17U3CDP04

## COURSE OBJECTIVES:

To enable the students to

1. To impart the knowledge about the physical property of textile \& their testing procedures and to develop an understanding of the principles involved in testing.
2. To identify the different types of weaves
3. To understand the woven fabrics designs.

## COURSE OUTCOME:

CO 1. Calibrate design, draft and peg-plan for simple woven fabrics.
CO 2. Determine the designs for decorative woven fabrics.
CO 3. Formulate the draft and peg-plan for decorative woven fabrics

Analysis of following fabrics for Design, Draft, Peg Plan, and Ends per inch and Picks per inch, Yarn count, Yarn crimp, Cover factor $\&$ Weight per square yard of fabrics.

1. Plain weave and its derivatives
2. Twill weaves $-2 / 1,3 / 1$.
3. Satin / Sateen
4. Honey comb
5. Huck - a - back
6. Crepe weaves
7. Extra Warp
8. Extra Weft
9. Mock leno
10. Pile weave
11. Fancy weave
12. Single Jersey knit
13. Interlock knit
14. Rib

## Text Book(s)

1. Principles of weaving, R. Marks, A.T.C. Robinson, Publication by the textile institute Manchester (1976)
2. Fabric forming, B. Hasmukhroi, Publication by SSM ITT Cooperative stores Ltd, Komarapalayam (1996)
3. Weaving mechanism Vol $1 \&$ Vol 2, Prof. N.N. Banerjee, Published by Srimati. Tandra Banerjee,
4. West Bengal (1999)
5. Mechanism of Weaving machines, Prof. J.L. Chakravorty, Srimati B. Chakravorty, Serapur,
6. Publication by West Bengal, 1984
7. Handbook of Weaving, Sabit Adanur, Technomic publishing Company, Inc, USA (2001)

## CHILDREN'S APPAREL - CORE PRACTICAL - V <br> 17U3CDP05

## COURSE OBJECTIVES:

To enable the students to

1. Designing, drafting and constructing the following garments for the features Prescribed
2. List the measurements required and materials suitable Calculate the cost of the garment
3. Calculate the material required-Layout method and direct measurement Method

## COURSE OUTCOME:

CO 1. Design and generalize the measurements for the various kids' garments.
CO 2. Prepare patterns and calculate material requirement for the designed kid's wear.
CO 3. Construct the designed kid's garment and calibrate the cost of the garment.

## Designing and Drafting the following children's garments.

Bib - Give some variation in outline shape or surface design
Panty - Plain and variation in shapes.
Jabla - With sleeve and opening
Knickers - with elastic opening
Baba suit / Romper - knickers with chest piece attached
A line frock- double pointed dart, facings at neckline and armhole and strap attach in hip.
Summer frock - without sleeve and collars, suspenders tied at shoulder
Yoke frock - with yoke, with sleeve, Gathered, flared, with collars
Boy's shirt - shirt collar, pocket
Boy's short - fly open with buttons, side pocket, pleats and dart.

## Text Book(s)

1. Practical Clothing Constructing-Part I and II, Mary Mathews, Cosmic Press, Chennai(1986)
2. Zarapker System of Cutting- Zarapker. K. R, Navneet Publicationsltd.
3. Cutting \& Tailoring course, Gayathri Verma \& Kapil Dev, Computech Publications

## Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]

1. https://epgp.inflibnet.ac.in/home/viewsubject?catid=827
2. https://www.youtube.com/watch?v=LuazkYLOj3a
3. https://www.youtube.com/watch?v=nI-shbmnuVg

## FASHION DESIGNING - ALLIED - II <br> 17U3CDA02

## COURSE OBJECTIVES:

To enable the students to

1. The main objectives of this course are to:
2. Impart knowledge on design concepts in the field of fashion
3. Familiarize with the fashion cycles, consumers and theories
4. Design suitable garments for unusual figure types

## COURSE OUTCOME:

CO 1. Distinguish fashion and differentiate elements and principles of design
CO 2. Generalize the colour combinations with standard colour harmonies
CO 3. Interpret the fashion evolution, consumer groups in fashion theories and forecasting.
CO 4. Justify the different dress designs for unusual figure types
CO 5. Describe fashion terminologies and fashion profiles

## UNIT I

Terms related to the fashion industry - fashion, style, fad, classic, and collection, chic, Custom made , mannequin , fashion show, trend, forecasting, high fashion, fashion cycle, haute couture,fashion director, fashion editor, line, knock-off, avantgarde, bridge, buying house, apparel, fashion merchandising, pret -a

- porter.


## UNIT II

Design- definition and types - structural and decorative design, requirements of a good structural and decorative design. Elements of design - line, shape or form, colour, size and texture. Application of structural and decorative design in a dress, selection and application of trimmings and decorations. Principles of design- balance - formal and informal, rhythm- through repetition, radiation and gradation, emphasis, harmony and proportion. Application of principles of design in a dress.

## UNIT III

Colour- definition, colour theories- prang colour chart and munsellcolour system, Dimensions of colour- hue, value, and intensity. Standard colour harmonies- application in dress design. Colour in principles of design- application of the same in dress design.

## UNIT IV

Designing dresses for unusual figures becoming and unbecoming for the following figure types-Stout figure, thin figure, slender figure, narrow shoulders, broad shoulders, round shoulders, large bust, flat chest, large hip, large abdomen, round face, large face, small face, prominent chin and jaw, prominent forehead.

## UNIT V

Wardrobe planning for different age groups, factors influencing wardrobe selection, Fashion and season, Designing dresses for different occasions - business meetings, parties/ dinners, evenings/leisure hours, marriage functions, sports, uniforms for civil service, airhostess, hoteliers, schools - girls and boys.

## Reference:

1. Fashion - From Concept to Consumer - Gini Stephens Frings, 6 th edition, Prentice Hall (1999).
2. Inside the Fashion Business - Bennett, Coleman \& Co, Mumbai (1998)
3. Art and Fashion in Clothing Selection - Harriet T, Mc Jimsey, The Iowa state University Press, Ames, Iowa (1973).
4. Inside the Fashion Business - Kitty G. Dickerson, Pearson Education,US, 2007.

## Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]

1. https://www.apparelsearch.com/terms/index.html
2. https://www.instyle.com/fashion
3. https://prezi.com/1tlwgnhviqs-/fashion-elements-and-principles-of-design/

## FASHION DESIGNING - ALLIED PRACTICAL - III 17U3CDAP03

## COURSE OBJECTIVES:

The main objectives of this course are to:

1. Familiarize with the elements and principles of design
2. Play with colours following the standard colour harmonies
3. Create garment design for various seasons on fashion figures

## COURSE OUTCOME:

CO 1. Demonstrate Prang colour chart, value and intensity chart
CO 2. Calibrate various head theories and figures for a child, women and men
CO 3. Sketch garment designs by using elements of design and also the applications of principles of design.
CO 4. Develop colour harmonies in garment design and design garments for various seasons.

## 1. Prepare the following Charts

- Prang colour chart
- Value Chart
- Intensity Chart

2. Illustrate garment designs for the Elements of Design

- Line
- Colour
- Texture
- $\quad$ Shape or form
- Size

3. Illustrate garment designs for the Principles of Design

- Balance in dress
- Harmony in dress
- Emphasis in dress
- Proportion in dress
- Rhythm in dress


## 4. Illustrate the colour harmony in dress design

- Monochromatic colour harmony
- Analogous colour harmony
- Complimentary colour harmony
- Double complementary colour harmony
- Split complementary colour harmony
- Triad colour harmony


## 5. Application of colour and principles of design in dress

- Harmony through colour
- Emphasis through colour
- Proportion through colour
- Rhythm through colour
- Balance through colour

6. Designing dresses for figure irregularities- becoming and unbecoming Stout figure, thin figure, slender figure, narrow shoulders, broad shoulders, round shoulders, large bust, flat chest, large hip, large abdomen, round face, large face, small face, prominent chin and jaw, prominent forehead.

Text Book(s)

1. Fashion Sketch Book, Bina Abling, Fair Child Publications, New York Wardrobe, 1988.
2. Illustrating Fashion, Kathryn McKelvey and Janine Munslow, Blackwell Science, 1997.
3. Art and Fashion in Clothing Selection, Mc Jimsey and Harriet, Iowa State University Press, Jowa,1973.
4. 

Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]

1. https://www.idrawfashion.com/
2. https://www.fashionistasketch.com/drawing-faces-fashion-illustration/
3. https://in.pinterest.com/pin/458804280762797371/

## BASIC TEXTILES - NMEC - I <br> 17U3CDN01

## COURSE OBECTIVES:

1. To enable Students knowledge of the essential and desirable properties and structure of textile fibers.
2. To enable students knowledge of various yarn formation process.
3. To make student familiar with basic fabric construction techniques.
4. The course will help in predicting performance of textile in practical use.

## COURSE OUTCOMES:

CO 1: Learn about various techniques and process of designing textiles
CO 2: Study about various dimensions of yarns like types of yarns, yarn size and twist and yarn calculations for weaving.

CO 3: Get acquainted with the basic weaves-plain, twill and satin and creating variety in weaves with different color and weave effects

## UNIT - I

Types of Design - Structural and Decorative design, Requirements Of Structural And Decorative
Design, Elements of Design - Line, Size, Shape, Color and Texture.
UNIT - II
Principles of Design - Balance, Emphasis, Proportion, Rhythm, Harmony and its types. Application of principles of design in dress design.

UNIT - III
Color- Definition, Color theory - Prang color system, Dimension of color- Hue, Value and Intensity. Color schemes in Prang color System.

UNIT - IV
Figure Irregularities - Stout figure, Thin figure, Broad shoulders, Narrow Shoulders, Faces - Round, Large, and Small face.

UNIT - V
Wardrobe Planning - Factors to be considered while selecting clothes for different age group - Men, Women and Children.

## Text BOOK:

1. Sumathi, G.J. 2002, Elements of Fahion Apparel Design. Newage International (P) Ltd publishers.

## Reference:

1. Harriet Mc jimsey. 1973. Art and Fashion in Clothing Selection. [Second Edition]. Iowa State University Press, Ames.

# SEMESTER - IV 

## HISTORIC COSTUMES \& TEXTILES - CORE - IV <br> 17U4CD04

## COURSE OBJECTIVES:

To enable the students to,

- Understand the nutritional demands in various stages of life cycle.
- Acquires skills in planning adequate meals in different stages of life cycle.
- To determine physiological changes at different stage of life span.


## COURSE OUTCOME:

CO 1. Infer about design and its types
CO 2. Interpret the principles of design and its applications
CO 3. Explain color theory and color schemes.
CO 4. Generalize the designing concepts for unusual figures.
CO 5. Justify wardrobe planning and list out the factors for fabric selection

## Unit - I

Non - woven - Introduction - definition, classification and scope and application of non woven - fibres used-web preparartion, opening, cleaning machine, production of parallel laid web, cross laid and random laid web.

## Unit - II

Bonding methods - mechanical, thermal, chemical/ adhesive, melt blown and spun lace techniques. Finishing of bonded fabrics. Fusing -methods of fusing. Braiding methods of braiding. Netting - methods, lacing.

## Unit - III

Technical Textiles - Introduction, definition, scopes \& importance and uses. Application of Agro Tech,Build Tech,Cloth Tech, Home Tech, Indu Tech, Medical Tech, Sports Tech, Pack Tech, Mobile Tech, Protect Tech, Geo Tech.

## Unit - IV

Medical Tech, Sports Tech, Protective - introduction, general properties and end uses.

## Unit - V

Smart \& intelligent textiles, Smart - Active smart, passive smart \& ultra smart, Intelligent - PCM, SMP, Chromic \& conductive materials

## Reference:

- Non woven bonded fabrics - Lunenscholss J and W Albrocht, Ellis Horwood, London 1985
- Non - Wovens - Arul Dahiya, MG Kamath, Raghavendra R Hedge and Monika Kannadnguli
- Geo Textiles - NWM John, Blackir London
- Family Clothing - Tate and Glisson, John Wiky and Sons., Illinas, 1963

Technical Textiles - Anand and A.R. Horracks, Textile Institute

## WET PROCESSING - CORE - V <br> 17U4CD05

## COURSE OBJECTIVES:

- Dye and Print the fabrics the using suitable dyes and prints
- Prepare on Effluent and its impact
- Prepare the fabric for finishing


## COURSE OUTCOMES:

CO 1. Generalize the pre-preparatory process sequence in a textile industry
CO 2. Explain the types of finishes used in textile materials
CO 3. Discover the textile dyes and dyeing methods
CO 4. Infer about direct printing methods
CO 5. Outline about discharge printing and the need for effluent treatment

## UNIT-I

Wet processing-meaning-process sequence. Object and methods in singeing, Desizing, Scouring, Wool carbonizing, Weighting of silk. Wet processing equipment - kier $-\mathbf{J}$ box - pad roll - U box - Roller bed

- Conveyor steamer - stenter.


## UNIT-II

Bleaching -objects-types- Hypo chlorites - Hydrogen peroxide - sodium chlorite. Equipments and chemicals for bleaching of cotton, viscose, cotton/ viscose, polyester/ cotton. Mercerization - objects - Methods - types of mercerization-chain and chainless methods.

## UNIT III

Dyeing - properties of dyes, Characteristics of dyes, classification of dyes, Direct, Vat, Sulphur, reactive, naphthol, acid, Basic, disperse dyes and natural dyes.dyeing of fiber blends.Dyeing machines - fiber, yarn
-cheese dyeing.

## UNIT IV

Fabric dyeing machines-working principles - hank package - jigger- HT Beam, jet padding mangles. Colour fastness to washing - light, rubbing \& perspiration, computer colour matching-colour matching cabinet.

## UNIT - V

Wet processing of Knitted fabric - scouring - Bleaching- dyeing - printing-calendaring-Shrink controlling - steaming. Wet processing of fiber blends. Briefly study of eco friendly dyeing and Effluents treatments-BOD,COD-primary and
secondary treatment process.

## References:

1. Paters R.H.Textile Chemistry" Vol. I,II Textile institute, Manchester 1970.
2. Shenai V.A." Technology of textile processing" Vol. III, V, VII Sevale publications, Bombay 1981.
3. Lewis D.M."Wool Dyeing" SDC publications England 1990.
4. Nalankilli.G., Chemical Preparatory Process, NCUTE Publication, New Delhi.
5. Manivasakam.N. Treatment of Textiles Processing, Effluents, Sakthi Publications, Coimbatore, 1995.

## WOMEN'S APPAREL - CORE PRACTICAL - VI 17U4CDP06

## COURSE OBJECTIVES

1. Design Garments for women
2. Impart Skills in pattern drafting
3. Construct garments by sewing

## COURSE OUTCOME:

CO 1. Design and generalize the measurements for the various women's' garments.

CO 2. Prepare patterns and calculate material requirement for the designed women's wear.

CO 3. Construct the designed women's garment and calibrate the cost of the garment.

CO 4. Calculate the material required -Layout method and Direct measurements method

## Design, Draft and construct the following garments.

1. Middy - Variation in panel, bottom round
2. Middy Top - Front open, single dart, with or without collar and variation in sleeves.
3. Night dress - With or without yoke, variation in Sleeves, attaching trimmings.
4. Maxi - Variation in neck with or without sleeve and attaching trimmings.
5. Salwar - Gathered waist with tape or elastic, bottom design variation.
6. Kameez - Fashioned neck, variation in sleeve.
7. Ladies pant - Variations in bottom zip attached, patch pocket.
8. Ladies shirt - Half open collar attached, half or full sleeve.

## Text Book(s)

1. Scientific garment quality -K M Illege and Sons , Plot No. 43, Somuvar Peth pune411011
2. Practical Clothing Constructing-Part I and II, Mary Mathews, Cosmic Press, Chennai(1986)
3. Dress making- Smt Thangam Subramaniam Bombay Tailoring and embroidery college32

## Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]

1 https://www.patternsonline.com-default.aspex

## WET PROCESSING - CORE PRACTICAL - VII 17U4CDP07

## COURSE OBJECTIVES:

The students will be able to

1. To gain a practical on-hand training on preparatory process.
2. To understand the technical importance of wet processing.
3. To plan various process requirements for dying.

## COURSE OUTCOME:

CO 1. Prepare the samples by pre-treatment process and calculate weight loss percentage.

CO 2. Formulate the recipe for the fabric sample dyeing
CO 3. Produce the sample by formulated recipe and calibrate shade percentage.

## Preparation of samples for Processing

1. Desizing(acid \&enzyme)
2. Scouring
3. Bleaching
4. Mercerizing

## Dye the given fabric using suitable dye

1. Direct Dye
2. Reactive Dyes(Hot \&Cold brand)
3. Sulphur Dyes
4. Vat Dyes
5. Disperse Dyes
6. Acid Dyes
7. Basic Dyes
8. Vegetable Dyes (any one)

## Text Book(s)

1. AATCC Garment wet processing Technical manual (1994)
2. Textile processing and properties, Preparation, Dying, Finishing \& Performance, Tyrone L.
3. Vigo, elsewhere publishing, Netherland
4. Textile Wet processing, Manoj Dole, Manoj Dole Publications Co. India (2018)

## Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]

$1 \mathrm{https}: / /$ britanicca.com/topic/textile/dying-and-printing
2 https://www.sciencedirect.com-topics/engineering/dying-process

## DYNAMIC OF FASHION - ALLIED - III <br> 17U4CDA03

## COURSE OBJECTIVES:

1. Introduce the students to the various terminologies and aspects of fashion.
2. Give awareness about how fashion operates and how to help them to understand the changes occurring in the fashion industry.
3. Instruct the knowledge about role of fashion designer and fashion centres in the world.

## COURSE OUTCOME:

CO 1: Impart the knowledge of fashion
CO 2: Analyze various movement and evaluation of fashion.
CO 3: Characterize the fundamental aspects of design and product development.

CO 4: Apply knowledge of fashion
CO 5: Develop the ability of learners to know the details of fashion design and centers.

## UNIT - I

Origin of Fashion - Importance of fashion - Development of fashion, Components of fashion -, Design Details, Texture ,Color and Silhouette . Types of silhouette - Natural Body, Slim line, Wedge, Hour Glass, Extreme Volume Silhouette.

## UNIT - II

Fashion Focus - The designers Role, The Manufacturers Role, The Retailers Role . Scope of Fashion Business - Primary Level, The Secondary Level, The retail level and the Auxiliary level. Study about International Designers - Fashion related cycle and theories.

## UNIT - III

The Movement of Fashion - Factors influencing fashion movement -Accelerating factors, Retarding factors, and Recurring fashions. Predicting the movement of fashion.

## UNIT - IV

Types of designers - High fashion Designer, Stylist, and Freelance Designer. Sources of design inspiration.Indian fashion Designers- Manish Malhothra, Ritu kumar, Ritu berri, Tarun Tahilani, Wendell Rodricks, Abu Jani and Sandeep Khosla, JJ Valaya, Rina Dhaka, Manish Arora, and Rohit Bal.

## UNIT - V

Study of International Fashion centers - France, Italy, England, Germany, Canada, New York. Study of International Fashion Brands - Women's Wear, Men's Wear, Kids Wear,Sports Wear, Cosmetics and Accessories.

## TEXT BOOKS:

1. Elaine stone. 2001. The Dynamics of Fashion. Fair child publications, New York.
2. Gini Stephan Friengs . 1999. Fashion from concept to consumer. [Sixth Edition].

## SURFACE EMBELISHMENTS - SBEC - I 17U4CDSP01

## OBJECTIVES:

1. To impart knowledge to the students about the hand and machine embroidery.
2. To learn the various types of stitches.
3. To provide opportunity for skill development in designing accessories.
4. To impart knowledge on fashion accessories \& creativity.

## COURSE OUTCOME:

CO 1. Produce the hand and machine embroidery samples
CO 2. Prepare decorative samples using beads or mirrors or sequins or etc.,
CO 3. Develop complex fashion accessories by learning to design different accessories manually.

## Prepare samples for the following

1. Hand embroidery - 20 stitches $\mathbf{- 1 0}$ samples
2. Machine embroidery -7stitches -3 samples.
3. Applique ( machine / hand )- 3 types
4. Smocking - 4 types
5. Bead Work -1 sample
6. Sequins work -1 sample
7. Zardosi work -1 sample
8. Tassels and fringes -2-3 samples.
9. Mirror work -Shapes (Round, square, diamond) - 3 samples
10. Fixing the stones-1 sample.
B. Traditional surface ornamentation practices with two to four variations in the following,
11. Kantha
12. Chikankari
13. Kasuti
14. Zardosi
15. Kutch work
16. Mirror work
17. Aari work
18. Phulkari work .

## C. Crochet

## Text Book(s)

1. Scientific garment quality -K M Illege and Sons, Plot No. 43, Somuvar Peth pune411011
2. Shailaja D. Naik, Traditional embroideries of India, APH Publishing (1996)
3. Dress making- Smt Thangam Subramaniam Bombay Tailoring and embroidery college32
4. Libby Moore Thread folk, a Modern Maker's book of Embroidery, Project \& Artist Collaboration, Paige Tata \& Co.

## Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]1

1. https://sueguide.csom/smocking/

## BASIC DESIGNING - NMEC - II

## 17U4CDN02

## COURSE OBJECTIVES:

1. To impart knowledge to the students about the hand and machine embroidery.
2. To learn the various types of stitches.
3. To provide opportunity for skill development in designing accessories.
4. To impart knowledge on fashion accessories \& creativity.

## COURSE OUTCOME:

CO 1: Distinguish fashion and differentiate elements and principles of design
CO 2: Generalize the colour combinations with standard colour harmonies
CO 3: Interpret the fashion evolution, consumer groups in fashion theories andforecasting.
CO 4: Justify the different dress designs for unusual figure types CO 5: Describe fashion terminologies and fashion profiles

## UNIT - I

Types of Design - Structural and Decorative design, Requirements Of Structural And Decorative Design, Elements of Design - Line, Size, Shape, Color andTexture.

## UNIT - II

Principles of Design - Balance, Emphasis, Proportion, Rhythm, Harmony and its types.
Application of principles of design in dress design.

## UNIT - III

Color- Definition, Color theory - Prang color system, Dimension of color- Hue,
Value and Intensity. Color schemes in Prang color System.

## UNIT - IV

Figure Irregularities - Stout figure, Thin figure, Broad shoulders, Narrow
Shoulders, Faces - Round, Large, and Small face.

## UNIT - V

Wardrobe Planning - Factors to be considered while selecting clothes for different age group - Men, Women and Children.

## TEXT BOOK:

1. Sumathi, G.J .2002. Elements of Fashion and Apparel Design. Newage Publishers.

## REFERENCE BOOK:

1. Harriet Mc jimsey. 1973. Art and Fashion in Clothing Selection. [Second Edition]. Iowa State University Press, Ames.
