# PERIYAR UNIVERSITY PERIYAR PALKALAI NAGAR 

SALEM-636011

# DEGREE OF BACHELOR OF SCIENCE 

CHOICE BASED CREDIT SYSTEM

B.Sc. TEXTILE AND FASHION DESIGNING
(SEMESTER PATTERN)
(For Candidates admitted in the College Affiliated to Periyar
University From 2022-2023 onwards)
REGULATIONS

## I. ELIGIBILITY

Candidate seeking admission to the first year Degree of Bachelor of Science in Textile and Fashion Designing 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.

## II. DURATION

The course for the degree of Bachelor of Science Textile \& Fashion Designing shall extend over a period of three academic years - 6 Semesters and each semester normally consisting of 90 working days or 450 Hours.

## III. ELIGIBILITY FOR THE DEGREE

A candidate shall be eligible for the degree of Bachelor of Science Textile \& Fashion Designing, if he/she has satisfactorily undergone the prescribed courses of the study for a period not less than 6 semesters in an institution approved by the university has passed the prescribed examinations in all the 6 Semesters.

## IV. SUBJECT OF STUDY

The subjects of the study for the B.Sc., Textile \& Fashion Designing and the syllabus for the subjects are given in the annexure.

## V. REQUIREMENT OF EXAMINATION

The theory examinations will be conducted for 3 hours by the university in the subjects prescribed for all the semesters in every semester.

The practical examinations will be conducted by the university for 3 hours with respective to allied and core practical in all the subjects prescribed in every semester.

## VI. SCHEME OF THE EXAMINATION

The scheme of examinations for the course is given in Annexure. All the practical examinations /Internship work shall be conducted \& evaluated internally by the institution themselves with internal and external examiners appointed by the university.

## VII. PASSING RULES

## Theory

- $75 \%$ of the marks for external evaluation and $25 \%$ marks are allotted for internal evaluation.
- Candidate is demand to have passed to a subject, if he/she get a minimum of $40 \%$ of total marks in theory subjects with internal mark of 10 marks and external marks of 30 marks.


## Practical

- $60 \%$ of the marks for external evaluation and $40 \%$ marks are allotted for internal evaluation.
- For practical subjects, the candidate should get minimum marks of 24 marks in external evaluation out of 60 and 16 marks in internal evaluation out of 40 .
- For project viva voce, $80 \%$ of the marks for internal evaluation and $20 \%$ marks are allotted for external evaluation.
- For project, the candidate should get minimum marks of 32 marks in internal evaluation out of 80 and 8 marks in external evaluation out of 20.

1. The graduates will be able to utilize their knowledge and skills in higher studies and research.
2. The graduates will able to execute innovative and professional skills in the field of Apparel Industry.
3. The graduates can start-up their business, freelance and enterprise without difficulty and can also enter into the world of work easily.
4. The graduates can exit with employability in various fields of textiles and apparel.

| Program Educational Outcomes (PEOs) |  |
| :--- | :--- |
| The B.Sc. ( Textile \& Fashion Designing) program describe accomplishments that graduates are expected to <br> attain within five to seven years after Graduation |  |
| PEO1 | The student can excel in the field of Textile \& Fashion Designing after the completion of the 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. |


| $\sum_{i=\Omega}$ | $\stackrel{\stackrel{e}{2}}{2}$ | PAPER CODE | $\begin{gathered} \text { COURSE } \\ \text { CODE } \end{gathered}$ | COURSE | HRS |  | $\begin{aligned} & \text { \#̈ } \\ & \text { Ü } \end{aligned}$ | MARKS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | L | T/P |  | CIA | EA | TOTAL |
| I | I |  | Language | Tamil-I | 2 | 4 | 3 | 25 | 75 | 100 |
|  | II |  | Language | English-I | 2 | 4 | 3 | 25 | 75 | 100 |
|  | III |  | Core-I | Fiber \& Yarn Science | 5 | - | 5 | 25 | 75 | 100 |
|  |  |  | Core Practical-I | Fiber \& Yarn Science - Practical | - | 3 | 2 | 40 | 60 | 100 |
|  |  |  | Allied-I | Pattern Making \& Grading | 4 | - | 4 | 25 | 75 | 100 |
|  | IV |  | Value <br> Education | Yoga | 1 | 1 | 2 | 25 | 75 | 100 |
|  |  |  | Language | Professional English | 4 | - | 4 | 25 | 75 | 100 |
|  |  |  |  |  |  | 30 | 23 |  |  | 700 |
| II | I |  | Language | Tamil-II | 2 | 4 | 3 | 25 | 75 | 100 |
|  | II |  | Language | English-II | 2 | 2 | 3 | 25 | 75 | 100 |
|  | III |  | Allied-II | Apparel Manufacturing Machineries \& Equipment | 5 | - | 5 | 25 | 75 | 100 |
|  |  |  | Core Practical-II | Basic Apparel Designing- Practical | - | 3 | 2 | 40 | 60 | 100 |
|  |  |  | Allied <br> Practical-I | Basic Illustration \& Sketching Practical | 1 | 3 | 3 | 40 | 60 | 100 |
|  | II |  | Naan Mudhalvan Skill Course | Language Proficiency forEmployability | 2 | - | 2 | 25 | 75 | 100 |
|  | IV |  | EVS | Environmental Studies | 2 | - | 2 | 25 | 75 | 100 |
|  |  |  | Language | Professional English | 4 | - | 4 | 25 | 75 | 100 |
|  |  |  |  |  |  | 30 | 24 |  |  | 800 |
| III | III |  | Language | Tamil-III | 2 | 4 | 3 | 25 | 75 | 100 |
|  |  |  | Core-II | Woven Fabric Science | 3 | - | 3 | 25 | 75 | 100 |
|  |  |  | Core <br> Practical-III | Woven Fabric Science Practical | - | 3 | 2 | 40 | 60 | 100 |
|  |  |  | Core-III | Knitting \& Non-Woven | 3 | - | 3 | 25 | 75 | 100 |
|  |  |  | Core <br> Practical-V | Children's Apparel Practical | - | 4 | 2 | 40 | 60 | 100 |
|  |  |  | Allied-III | Fashion Designing | 4 | - | 4 | 25 | 75 | 100 |
|  |  |  | Allied Practical-III | Fashion Designing Practical | - | 3 | 2 | 40 | 60 | 100 |
|  | IV |  | NMEC-I | Fundamentals of Textiles | 1 | 1 | 2 | 25 | 75 | 100 |
|  | IV |  | NMSDC | Digital Skills for Employability - <br> Microsoft Office Essentials | 2 |  | 2 | 25 | 75 | 100 |
|  |  |  |  |  |  | 30 | 23 |  |  | 900 |


| $\sum_{\sqrt[y y]{*}}$ | $\stackrel{E}{\alpha}$ | PAPER CODE | COURSE CODE | COURSE | HRS |  |  | MARKS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | L | T/P |  | CIA | EA | TOTAL |
| IV | III |  | Language | Tamil-IV | 2 | 4 | 3 | 25 | 75 | 100 |
|  |  |  | Core -V | Textile Testing \& Quality Control | 3 | - | 3 | 25 | 75 | 100 |
|  |  |  | Core-VI | Textile Wet Processing | 3 | - | 3 | 25 | 75 | 100 |
|  |  |  | Core <br> Practical- VI | Women's Apparel Practical | - | 4 | 2 | 40 | 60 | 100 |
|  |  |  | Core <br> Practical- VII | Textile Wet Processing Practical | - | 4 | 2 | 40 | 60 | 100 |
|  | IV |  | Naan Mudhalvan Skill Course | Employability Skills-Microsoft | 2 | - | 2 | 25 | 75 | 100 |
|  |  |  | Allied-IV | Home Textiles | 3 | - | 3 | 25 | 75 | 100 |
|  | IV |  | SBEC-I | Embroindery \& Accessories Making Practical | - | 3 | 2 | 40 | 60 | 100 |
|  |  |  | NMEC-II | Fundamentals Of Designing | 1 | 1 | 2 | 25 | 75 | 100 |
|  |  |  |  |  |  | 30 | 22 |  |  | 900 |
| V | 15 Days Internship to any Textile Processing / Garment Industry (viva voce for the internship training in V semester) |  |  |  |  |  |  |  |  |  |
|  | III |  | Core VII | Apparel Costing \& Merchandising | 5 | - | 5 | 25 | 75 | 100 |
|  |  |  | Core VIII | Textile Finishing | 5 | - | 5 | 25 | 75 | 100 |
|  |  |  | Core IX | Fashion Business Communication | 5 | - | 5 | 25 | 75 | 100 |
|  |  |  | Core Practical- VIII | Computer Application in Garment Designing Practical | - | 4 | 2 | 40 | 60 | 100 |
|  |  |  | Internship | Internship Project Viva-Voce | - | - | - | - | - | - |
|  |  |  | Core <br> Practical- IX | Men's Apparel Practical | - | 4 | 2 | 40 | 60 | 100 |
|  | IV |  | MBEC-I | Entrepreneurship Development | 5 | - | 5 | 25 | 75 | 100 |
|  | IV |  | NMSDC | Marketing and Design Tools | 2 |  | 2 | 25 | 75 | 100 |
|  |  |  |  |  |  | 30 | 26 |  |  | 600 |
| VI | III |  | Core-X | Clothing Care | 5 | - | 5 | 25 | 75 | 100 |
|  |  |  | Core XI | Apparel Production Management | 5 | - | 5 | 25 | 75 | 100 |
|  |  |  | Core Practical- X | Fashion Draping Practical | - | 5 | 3 | 40 | 60 | 100 |
|  |  | Add on course | Naan <br> Mudhalvan Skill Course | Employability Readiness (Naandi/Unnati/Quest/Izapy/IBM Skillbuild) | Add-on Course |  |  |  |  |  |
|  |  |  | MBEC-II | International Trade And Documentation | 5 | - | 5 | 25 | 75 | 100 |
|  | IV |  | SBEC II | Portfolio Presentation-Viva Voce | - | 5 | 3 | 40 | 60 | 100 |
|  |  |  | SBEC-III | Beauty Care Practical | - | 5 | 3 | 40 | 60 | 100 |
|  |  |  |  | Extension Activity | - | - | 1 | - | - | - |
|  |  |  |  |  |  | 30 | 25 |  |  | 600 |
|  |  |  |  |  |  | 180 | 143 |  |  | 4500 |

## QUESTION PAPER PATTERN

## THEORY

Time: 3 Hours
Total Marks : 75 Marks

## QUESTION PAPER PATTERN

| Unit | Section-A | Section-B | Section-C |
| :---: | :--- | :--- | :--- |
| I | Q. $1,2,3$ | Q. 16 | Q. 21a, 21b |
| II | Q. $4,5,6$ | Q. 17 | Q. 22a, 22b |
| III | Q. $7,8,9$ | Q. 18 | Q. 23a, 23b |
| IV | Q. $10,11,12$ | Q. 19 | Q. 24a, 24b |
| V | Q. 13,14,15 | Q. 20 | Q. 25a, 25b |

# SECTION A (15 X1 = 15) ANSWER ALL THE QUESTIONS <br> SECTION B ( 5 X2 = 10) ANSWER ANY TWO QUESTIONS <br> SECTION C (5X10 = 50) <br> EITHER OR CHOICE ANSWER ALL THE QUESTIONS 

INTERNALASSESSMENT
TEST $\left.\quad \begin{array}{l}\text { ASSIGNMENT : } \\ \text { ATTENDANCE: } \\ \text { PASSING MINIMUM(IA)40\% } \\ \text { PASSING MINIMUM(UE)40\% }\end{array}\right]=30$ MARKS
PASSING MINIMUM TOTAL

## PRACTICAL:

Time: 3 Hours Total Marks : 60Marks
SECTION A (1X20=20)
SECTION B (1 X40=40)

## INTERNALMARKS:




| Course Code | FIBER \& YARN SCIENCE | L | T | P | C |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Core-I |  | 5 | - | - | 5 |
| Basic Knowledge in Textiles and Science |  | Syllabus |  | $\begin{gathered} 2022 \\ \text { Onwards } \end{gathered}$ |  |

## Course Objectives:

The main objectives of this course are to:

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.

## Expected Course Outcomes:

On the successful completion of the course, student will be able to:

| 1 | Recognize the molecular conformations of various textile fibers. | K1 |
| :--- | :--- | :--- |
| 2 | Explain the production process of various textile fibers and yarns. | K2 |
| 3 | Utilize the Fibers and Yarns in different fields of Textile Industry. | K3 |
| 4 | Analyze the structural investigations techniques of Fibers and Yarn. | K4 |
| 5 | Outline the Properties and behavior of textile fibers and Yarns. | K2 |

K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create
Unit:1 Introduction of Textile Fibers
Introduction of textile fibers: Classification - Physical and chemical properties. Cotton: Botanical and commercial classification - Properties - End uses. Brief study about Organic cotton Flax: Properties End uses. Brief study about organic cotton. Wool: Producing countries - Grading - Properties - End uses - Felting -Woolen and Worsted Yarns. Silk: Producing countries - Degumming - WeightingProperties - End uses. Brief study on wild silk varieties.

\section*{| Unit:2 | Filament Spinning System |
| :--- | :--- |}

Methods of filament spinning. Semi synthetic fibers: Regenerated and modified cellulose -Viscose rayon process flow - HWM fibers - End uses -Brief study of Bamboo, Lyocell, Soya bean fibers.

## Unit:3

## Polymer Science

Polymer - Terminologies - Types of polymers \& Polymerization. Synthetic fibers: Brief study about Polyamide, Polyester, Poly Acrylic and Spandex. Individual fiber properties and trade names-End uses. Drawing and effects. Texturization: definition, types, properties of textured yarnits uses. Micro fibers.

## Unit:4 Yarn Production Process

Classification of yarn types-Staple spinning system - Types. Yarn manufacturing Process:
Ginning- objectives, Objectives and process sequence -Blow room, carding, Drawing, combing, simplex, ring frame, Comparison of carded and combed yarn. Principles and process sequence Rotor spinning, Compact Spinning.

## Unit:5 Post Yarn Process

Post spinning process: cone winding, Doubling, reeling- Ply yarn and single yarn Characteristics. Properties required for export quality hosiery yarns. Study of yarn twist and its importance Various yarn \& package defects. Yarn numbering systems. Blended textiles: Types of blending Benefits Double yarn Properties Uses. Classification of Sewing threads \& applications core spun sewing thread - Advantages.

| Text Book(s) |  |
| :--- | :--- |
| 1 | A Text Book of Fiber Science and Technology, Mishra, S.P, New Age International (P) Ltd <br> 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., <br> London, 1997. |
| 4 | Hand Book of Textile Fibers - Vol. I \& Vol. II. Gordon Cook, J, Wood Head Publishing Ltd., <br> 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 <br> Limited,1984. |
| Related Online Contents [MOOC,SWAYAM, NPTEL, Websites etc.] |  |
| 1 | $\underline{\text { https://textilelearner.blogspot.com/ }}$ |
| 2 | $\underline{\text { https://www.textiletoday.com.bd/category/innovations/fiber-yarn-fabric/ }}$ |
| 3 | $\underline{\text { https://study.com/academy/lesson/textile-yarns-definition-types-classification.html }}$ |



| Course Code | T | $\mathbf{L}$ T | $\mathbf{P}$ | C |
| :---: | :---: | :---: | :---: | :---: |
|  | Allied-I | 4 - |  | 4 |
|  | wledge in Textiles and Scienc | Syllabus |  |  |
| Course Objectives: |  |  |  |  |
| 1. To enable the students to develop the ability to create design through flat pattern technique <br> 2. To impart skills in dart manipulation. <br> 3. To enable the students to learn the skills of standardizing body measurements |  |  |  |  |
| Expected Course Outcomes: |  |  |  |  |
| On the successful completion of the course, student will be able to: |  |  |  |  |
| 1 Infer about pattern making terminology and steps in taking body measurement. |  |  | K2 |  |
| Summarize the pattern drafting techniques and fitting standards for different garments. |  |  | K2 |  |
| 3 Generalize the Pattern Draping techniques and its facts. |  |  |  |  |
| 4 Predict different pattern grades and fabric grains for cutting. |  |  | 3 |  |
| 5 Explain pattern alteration techniques and predict the various kinds of pattern layout. |  |  |  |  |
| K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create |  |  |  |  |
| Unit:1 1 BODY MEASUREMENTS |  |  |  |  |
| Importance, Preparation for measuring, Girls and Ladies measurements, Boy's and Men' measurements. Standardizing body measurements, Importance, Techniques used. Relative lengt and girth measurements. Preparation of standardized measurement chart. |  |  |  |  |
|  |  |  |  |  |
| Pattern making terminology, Methods of pattern making, Types of paper patterns, Patte making tools, Steps in drafting Bodice front, Bodice back, Sleeve, Skirt front and back, Colla one piece peter pan and shirt collar. Dart Manipulation, Technique-Slash and Spread method and Pivotal method. Study of commercial pattern, Merits \& Demerits. Preparation of commercia pattern for kids. Fitting - Standards of a good fit, Steps in preparing a blouse for fitting, checkin the fit of a blouse. |  |  |  |  |
| Unit:3 DRAPING |  |  |  |  |
| Draping -Definition and Meaning, Need for draping, Importance of Draping Techniqu Advantages and Disadvantages, Tools and Equipments used for Draping, Preparation of dress form Importance of grain, preparation of Muslin Material, straightening, tearing and pressing. |  |  |  |  |
| Unit:4 GRADING AND PREPARATION OF FABRIC FOR CUTTING |  |  |  |  |
| Grading, Introduction and importance of grading, Manual Grading of basic bodice - front anc back, Sleeve, skirt and Collar, Computerized Grading. Basic terms: Grain, Selvedge, On grain, Of Grain, Off Grain Print, With the Grain, Against the Grain, Importance of Grain in Fabric. Cutting Preparing the Fabric for Cutting, Methods of straightening fabric ends, Methods of straightening fabric grain, shrinking fabrics. |  |  |  |  |
| Unit:5 | LTERATION AND LAYOUT |  |  |  |

Importance of altering patterns, Principles for pattern alteration, common pattern alteration in blouse. Pattern layout - Definition, Purpose, Rules in layout, Types of layout and Special layouts. Piecing, transferring pattern markings.

## Text Book(s)

1 Mary Mathews, Practical Clothing Construction- Part I and II, - Cosmic Press, Madras, 1990
2 Helen Joseph Armstrong, (2014).Pattern Making for FashionDesign. $5^{\text {th }}$ editions. India:Dorling Kindersley
3 GayatriVerma, (2006).Cutting and Tailoring Course. New Delhi:Asian publishers.
4 Connie Amaden Crawford,(2005).The Art of Fashion Draping IIIEdition. OM Books International.
33 LoriA.Knowles,(2005).ThePracticalGuidetoPatternMakingforFashion Designers.NewYork:FairChild,Publications,Inc.
Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]
1 https://textilelearner.blogspot.com/2014/03/methods-off-garment-parttern-grading.html
2 https://www.threadsmagazine.com/2008/11/01/making-sense-of-pattern-grading
3 https://www.clothingpatterns101.com/pattern-grading.html



Introduction to various machines for garment finishing - Fusing - Sucking - Ironing - Packing. Pressing-Purpose of pressing -Categories of pressing-The means of pressing-pressing equipment and methods-Iron and steam presses. Packaging-Types of package forms-Types of packaging materials-Quality specification of packaging materials-Merchandising PackagingShipment packaging-Selection of package design.

## Text Book(s)

1 The Technology of Clothing Manufacture, Harold Carr and Barbara Latham, Publication by Blackwell Science Ltd, England 1994.
2 Introduction to Clothing Manufacture, Gerry Cooklin, Publication by Blackwell Science Ltd, England 1991.
$3 \quad$ Terry Bracken bury, Knitted Clothing Technology, Publication by Blackwell Science Ltd, England, 1992.
4 Clothing Construction and Wardrobe Planning, Dora.S.Lewis, Mabel Goode Bowers and Marietta Kettunen, Publication by The Macmillan Company, New York, 1955.

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

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

| Course Code | BASIC APPAREL DESIGNINGPRACTICAL | L | T | P | C |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Core Practical-II | - | - | 3 | 2 |
| Basic Knowledge in Garment Machineries |  | $\begin{array}{\|l\|l\|} \hline \text { Syllabus } & \begin{array}{l} 1 \\ \\ \text { Onwards } \end{array} \\ \hline \end{array}$ |  |  |  |
| Course Objectives: |  |  |  |  |  |
| 1. To impart practical exposure in sewing operation. <br> 2. To acquaint students with the knowledge on basic sewing techniques. <br> 3. To impart the knowledge and skills required for garment designing. |  |  |  |  |  |
| Expected Course Outcomes: |  |  |  |  |  |
| On the successful completion of the course, student will be able to: |  |  |  |  |  |
| Manipu | seams, seam finish and bias finishing te |  |  | P2 |  |
| Customize the fullness methods, placket and fasteners attachments in garment. |  |  |  | P4 |  |
| Construct the various body parts of a garment. |  |  |  | P4 |  |
| P1 - Imitation; P2 - Manipulation; P3 - Precision; P4 - Articulation; P5 - Naturalization. |  |  |  |  |  |
| 1. Preparation of Samples for Seams and Seam Finishes. <br> 2. Preparation of Samples for Hems. <br> 3. Preparation of Samples for Facing and binding.(Any2) <br> 4. Preparation of Samples for Fullness. (Darts, Tucks, Pleats, Gathers, Flares, Ruffles, Godets and Gathers) <br> 5. Preparation of Samples for Plackets and fasteners.(Any2) <br> 6. Preparation of Samples for different Sleeves.(Any2) <br> 7. Preparation of Samples for different Collars.(Any2) <br> 8. Preparation of Samples for different Yokes.(Any2) <br> 9. Preparation of Samples for different pockets(Any2) |  |  |  |  |  |
| Text Book(s) |  |  |  |  |  |
| 1. $\begin{aligned} & \text { Gayatri Vermaand Kapil Dev,(2006).Cutting and Tailoring Course. New Delhi: Asian } \\ & \text { Publishers }\end{aligned}$ |  |  |  |  |  |
| 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.clothingpatterns101.com/style-lines.html |  |  |  |  |  |




| Course Code | WOVEN FABRIC SCIENCE | L | T | P | C |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Core-II | 3 | - | - | 3 |
| Basic Knowledge in Garment Machineries |  | $\begin{array}{\|c\|l} \hline \text { Syllabus } & \begin{array}{l} 2022 \\ \text { Onwards } \end{array} \end{array}$ |  |  |  |

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.

## Expected Course Outcomes:

On the successful completion of the course, student will be able to:

| 1 | Clarify the preparatory processes involved in the woven fabric production. | K2 |
| :--- | :--- | :--- |
| 2 | Explain the principles of sizing process and its methods. | K2 |
| 3 | Infer about the basic mechanism of loom and its structure. | K2 |
| 4 | Categorize the woven fabrics and its structure | K4 |
| 5 | Differentiate the types of looms and jacquard mechanisms involved in woven fabric <br> production. | K4 |

K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create

## Unit:1 Preparatory Process

Classification of fabric forming methods - Weaving preparatory processes - Objects of winding process - Winding types - Passage of material through high-speed automatic cone winding machine Passage of material through precision winding machine - Winding terminologies, open wind and close wind - Winding defects, causes \& remedies. Pirn winding - Objects - Passage of material through an automatic high speed pirn winder.

## Unit:2 $\quad$ Sizing Process

Objects of warping - Types of warping - Passage of material through high-speed modern beam warping machine \& sectional warping machine - Warping defects, Causes \& remedies. Objects of sizing - comparison of two cylinder, multi cylinder \& hot air sizing machines - Sizing ingredients \& their functions - Size paste preparation - Sizing defects, causes \& remedies

## Unit:3 $\quad$ Basic Mechanisms of Looms

Passage of material through a plain power loom - Basic mechanisms of a loom - Primary, secondary \& auxiliary motions - Tappet shedding - Cone over pick \& under pick mechanisms - Beat up mechanism - Types of let off \& take up mechanisms - Fabric defects, causes \& remedies

## Unit:4 $\quad$ Weaving and its types

Introduction to weaves - Weave diagram - Plain weave \& derivatives - Twill weave \& derivatives Satin \& sateen weaves - Ordinary and Brighten Honey Comb; Huck-a-Back; Mock Leno; extra warp and extra weft figuring - single and double colour.

## Unit:5 Loom types

Objects of dobby \& jacquard mechanisms - Types of dobby \& jacquard - Study of negative \& positive dobbies - Study of single cylinder \& double cylinder jacquard mechanisms. Shuttle less looms: Introduction - Advantages - Types of shuttle less looms: projectile, rapier, air jet, water jet and multi phase weaving.

| Text Book(s) |  |
| :--- | :--- |
| 1 | R.Marks, A.T.C. Robinson, Principles of Weaving, The Textile Institute, Manchester(1976) |
| 2 | B.Hasmukhrai, Fabric Forming, SSM ITT Co operative stores Ltd, Komarapalayam(1996). |
| 3 | K.T.Aswani, Fancy Weaving Mechanism, Mahajan Book Distributors, Ahmadabad(1990). |
| 4 | N.Gokarneshan, Fabric Structure and Design, New Age International Publishers,New <br> Delhi(2004). |
| Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.] |  |
| 1 | https://www.cottonworks.com/topics/sourcing-manufacturing/weaving/basic-woven-designs- <br> introduction-to-woven-fabric/ |
| 2 | https://www.textileschool.com-453-wovendesign- |
| 3 | https://www.intechopen.com/books/advances-in-modern-woven-fabric-technology/color-and- |



1 https://www.cottonworks.com/topics/sourcing-manufacturing/weaving/basic-woven-designs-introduction-to-woven-fabric/
2 https://www.textileschool.com-453-wovendesign-
3 https://www.intechopen.com/books/advances-in-modern-woven-fabric-technology/color-and-weave-relationship-in-woven-fabric


| Course code | KNITTING \& NON-WOVEN | L | T | P | C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Core-III | $\mathbf{3}$ | - | - | $\mathbf{3}$ |
|  | Basic knowledge about fabric structure | Syllabus | 2022 |  |  |

## Course Objectives:

The main objectives of this course are to:

1. Familiarize with the basics of knitting process
2. Impart knowledge on the warp and weft knitting techniques
3. To know the recent trends and technologies adopted in the industry

## Expected Course Outcomes:

On the successful completion of the course, student will be able to:

| 1 | Outline basics of knitting process and knitting machine process functions. | K2 |
| :--- | :--- | :--- |


| 2 | Summarize the warp and weft knitting process and its production techniques. | K3 |
| :--- | :--- | :--- |


| 3 | Explain seamless knitting and care of knitted fabric maintenance. | K2 |
| :--- | :--- | :--- |


| 4 | Generalize non woven fabric production process and its uses | K2 |
| :--- | :--- | :--- |


| 5 | Infer about technical textiles applications and its types. | K2 |
| :--- | :--- | :--- |

K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create

| Unit:1 | Knitting Overview |
| :--- | :--- |

Knitting - Definition, classification and history, characteristics of knitted goods. General terms and principles of knitting technology, machine knitting, parts of machine, knitted loop structure, stitch density

## Unit:2 $\quad$ Principles of Weft \& Warp Knitting Technology

Weft knitting - classification - circular rib knitting machine, purl, interlock, jacquard - single jersey machine - basic knitting elements - types and functions - knitting cycle, CAM - system - 3way technique to develop design - knit, tuck, miss - effect of stitches on fabric properties.

Warp knitting - lapping variations-tricot, raschel, simplex and Milanese - kitten raschel - single bar, 2 bar, multi bar machines. types of threading, production of nets, curtains, heavy fabrics, elasticized fabrics.

## Unit:3 Seamless Knitting \& Knitting Care

Seamless Knitting - Applications, advantages, and limitations. Care and maintenance of knitted material - washing, drying, ironing, storing. Common defects that occur in knitted fabric production.

## Unit:4 Non-woven

Non-woven- Introduction, Definition, Classification, scope \& applications of Non-woven- Fibers used- web preparation, opening, cleaning machine, production of parallel laid web, cross laid, and random laid web. Bonding methods- mechanical, thermal, chemical.

\section*{| Unit:5 | Technical Textiles |
| :--- | :--- |}

Introduction, Definition, scope and importance \& uses. Applications of agro-tech, build-tech, clothtech, home-tech, indu-tech, mechanical-tech, sports-tech, pack-tech, mobile-tech, protect-tech, geotech, medical-tech.

## Text Book(s)

1 Knitting Manufacture Technology - Anbumani, New Age International, Chennai ,2006
2 Knitting and Apparel Technology, S.S.M.I.T Co-operative Society. 2005
3 Knitting Technology, David J. Spencer, Woodhead Publishing Ltd., Cambridge England, 2002
$4 \quad$ Knitting Technology, D B Ajgaonker, Universal Publishing Corporation, 1998
5 Geotextiles- N.W.M. John, Blackir, London.
6 Non-woven, Arul Dhakiya, M.G. Kamath, Raghavendra, R. Hedge \& Monica Kannadnguli

| Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.] |  |  |
| :--- | :--- | :---: |
| 1 | https://fashion2apparel.blogspot.com/2017/02/seamless-garments-advantages.html |  |
| 2 | https://www.indiaretailing.com/2018/06/12/fashion/indian-knitwear-market-present-and-the- <br> future-trends/ |  |
| 3 | https://www.fibre2fashion.com/industry-article/64/overview-of-tirupur-knitwear-industry |  |
| 4 | https://www.fibre2fashion.com/industry-article/7047/seamless-garment-technology |  |
| 5 | https://textilelearner.blogspot.com/2013/01/faultsdefects-in-knitted-fabrics.html |  |



| Course code |  | CHILDREN'S APPAREL PRACTICAL | L | T | P | C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Core Practical-V |  |  | 3 | 2 |
| Basic knowledge about knit fabric |  |  |  | Sylla |  |  |
| Course Objectives: |  |  |  |  |  |  |
| 1. Designing, drafting and constructing the following garments for the features Prescribed <br> 2. List the measurements required and materials suitable Calculate the cost of the garment <br> 3.Calculate the material required-Layout method and direct measurement Method |  |  |  |  |  |  |
| Expected Course Outcomes: |  |  |  |  |  |  |
| On the successful completion of the course, student will be able to: |  |  |  |  |  |  |
| 1 Design and generalize the measurements for the various kids' garments. |  |  |  |  |  |  |
| 2 Pre |  | Prepare patterns and calculate material requirement for the designed kid's wear |  |  |  |  |
| 3 Construct the designed kid's garment and calibrate the cost of the garment. |  |  |  |  |  |  |
| P1 - Imitation; P2-Manipulation; P3 - Precision; P4 - Articulation; P5-Naturalization. |  |  |  |  |  |  |
| 1. Bib- Variation in outline shape <br> 2. Panty-plain or plastic lined panty <br> 3. Jabla- without sleeve, front open (or) Magyar sleeve, back opens <br> 4. Baba suit- knicker with chest piece attached (or)Romper <br> 5. A-Line Frock- double pointed dart, neck line and arm hole finished with facing <br> 6. Summer frock- with suspenders at shoulder line, without sleeve/collars(or) Angel top with raglan sleeve, fullness at neck line <br> 7. Yoke frock- yoke at chest line, with open, puff sleeve, gathered skirt9OR0 frock-with collar, without sleeve, gathered/ circular skirt at waist line(or) Princess line frock <br> 8. Knicker- elastic waist, side pockets. <br> 9. Shirt- open collar, with pocket |  |  |  |  |  |  |
| 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 |  |  |  |  |  |  |
| $2 \mathrm{https://www.youtube.com/watch?} \mathrm{v=LuazkYL0j3a}$ |  |  |  |  |  |  |
| 3 https://www.youtube.com/watch?v=nI-shbmnuVg |  |  |  |  |  |  |


| Course code | FASHION DESIGNING | L | T | P | C |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Allied-III |  |  |  | $\mathbf{4}$ | - | - |

## Course Objectives:

The main objectives of this course are to:

1. Impart knowledge on design concepts in the field of fashion
2. Familiarize with the fashion cycles, consumers and theories
3. Design suitable garments for unusual figure types

## Expected Course Outcomes:

On the successful completion of the course, student will be able to:

| 1 | Distinguish fashion and differentiate elements and principles of design | K2 |
| :--- | :--- | :--- |
| 2 | Generalize the colour combinations with standard colour harmonies | K3 |
| 3 | Interpret the fashion evolution, consumer groups in fashion theories and forecasting. | K4 |
| 4 | Justify the different dress designs for unusual figure types | K4 |
| 5 | Describe fashion terminologies and fashion profiles | K2 |

K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create
Unit:1 $\quad$ Design Elements and Principles
Design- definition and types - structural and decorative design, requirements of a good structural and decorative design in dress
Elements of design and its application in dress - line, shape or form, colour and texture. Principles of design and its application in dress - balance, rhythm, emphasis, harmony and proportion.

## Unit:2 <br> Standard Colour Harmonies

Colour theories; Prang colour chart Dimensions of colour- hue, value, and intensity.
Standard colour harmonies - Related, Contrasting and Neutral colour harmony; Application of Colour in principles of design- application of the same in dress design.

## Unit:3 Fashion Evolution and Fashion Forecasting

Fashion evolution - Fashion cycles, Length of cycles, consumer groups in fashion cycles - fashion leaders, fashion innovators, fashion motivation, fashion victim, Fashion followers. Adoption of Fashion theories - Trickle down, trickle up and trickle across. Fashion forecasting - Need for forecasting

\section*{| Unit:4 | Designing Dresses for Unusual Figures |
| :--- | :--- |}

Deigning 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:5 Fashion Terminologies and Fashion Profiles

Definition and meaning of the fashion terms - fashion, style, line and collection, Mannequin and dress forms; fashion show; high fashion; Haute couture, couture and couturier; knock-off; Avant Garde; Pret - a -porter. Role/qualities of a Fashion Designer, Fashion Stylist, Fashion Journalist, Fashion Merchandiser, Fashion Director.

| Text Book(s) |  |
| :--- | :--- |
| 1 | Fashion Sketch Book - Bina Abling, Fair Child Publications, New York Wardrobe,1988. |
| 2 | Art and Fashion in Clothing Selection - Mc Jimsey and Harriet, Iowa State University <br> Press,Jowa,1973. |
| 3 | Fashion from Concept To Consumer - Frings Gini Stephens, Pearson Education, US, 1998. |
| 4 | Inside the Fashion Business - Kitty G. Dickerson, Pearson Education,US, 2007. |
|  |  |
| 1 | Related Online Contents [MOOC,SWAYAM, NPTEL, Websites etc.] |
| 2 | https://www.apparelsearch.com/terms/index.html |
| 3 | https://www.instyle.com/fashion |



- Double complementary
- Split complementary
- Triad
- Neutral

6. Create Garments for the Following Seasons

- Summer
- Winter
- Autumn
- Spring

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.
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/

| Course code | FUNDAMENTALS OF TEXTILES | L | T | P | C |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | NMEC_I | $\mathbf{1}$ | $\mathbf{1}$ | - | $\mathbf{2}$ |
| Have basic knowledge in designing |  |  |  | Syllabus | $\mathbf{2 0 2 2}$ |

## Course Objectives:

1. The subject aims to make the students different types of fabrics, yarn \& its use.
2. To facilitate the students to understand the structural features of Fibers and Yarn.
3. To investigate techniques of textile fibers and yarn with its manufacturing Process.

## Expected Course Outcomes:

On the successful completion of the course, student will be able to:

| 1 | Categorize textile fibres and its characteristics. | K2 |
| :--- | :--- | :--- |
| 2 | Interpret the manufacturing process, properties and uses of different textile fibres | K2 |
| 3 | Explain fibre spinning methods and categorize different kind of yarns. | K2 |
| 4 | Infer about woven fabric production and the constructional parameters of fabric. | K2 |
| 5 | Generalize the non woven fabric production process and its application. | K2 |

## K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create

 Unit:1Fiber Classification
Introduction to the field of Textiles-classification of fibers-natural and chemical-primary and secondary characteristics of textile fibers.

## Unit:2 $\quad$ Fiber properties and uses

Manufacturing process, properties and uses of natural fibers-cotton, linen, jute, pineapple, hemp, silk, wool, hair fibres, Man-made-fibres - viscose rayon, acetate rayon-nylon, polyester, and acrylic.

## Unit:3 Spinning \& Yarn Classification

Spinning - definition, classification - chemical and mechanical spinning - blending, opening cleaning, doubling, carding, combing, drawing, roving, spinning-Yarn classification - definition classification - simple fancy yarns, sewing threads and its properties .

## Unit:4

Woven
Woven-basic weaves - plain twill, satin, fancy weaves - pile, double cloth, leno, swivel, tappet, dobby and jacquard, weaving technology-process Sequence-machinery details.

## Unit:5

Non-Woven
Non- woven- felting, fusing, bonding, lamination, netting, braiding and calico, tatting and crocheting

Role/qualities of a Fashion Designer, Fashion Stylist, Fashion Journalist, Fashion Merchandiser, Fashion Director.

## Text Book(s)

1 Fashion Sketch Book - Bina Abling, Fair Child Publications, New York Wardrobe,1988.
$2 \quad$ Fashion from Concept To Consumer - Frings Gini Stephens, Pearson Education, US, 1998.

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

| 1 | https://nptl.ac.in/courses/116/102/116102026/ |
| :--- | :--- |
| 2 | https://www.intechopen.com/books/advances-in-modern-woven-fabric-technology/color-and- |
| 3 | Weave-relationship-in-woven-fabric |



| Course Code | TEXTILE TESTING \& QUALITY <br> CONTROL | L | T | P | C |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Core-V |  |  |  |  |  |  |  | $\mathbf{3}$ | - | - | $\mathbf{3}$ |
| Basic knowledge in textile fibers, yarns \& fabrics |  | Syllabus | $\mathbf{2 0 2 2}$ <br> Onwards |  |  |  |  |  |  |  |  |

## Course Objectives:

The main objectives of this course are to:

1. Instruct about various test for yarns, fabrics \&garments
2. Describe about various levels of inspection \& its procedure in apparel production
3. Describe about various norms \& standards followed in testing and inspection

## Expected Course Outcomes:

On the successful completion of the course, student will be able to:

| 1 | Explain the testing procedure for various yarn parameters | K 2 |
| :--- | :--- | :--- |
| 2 | List out the specifications for various woven \& knitted fabrics | K 2 |
| 3 | Differentiate the various systems used for fabric inspection | K 4 |
| 4 | List out the possible defects and its causes in apparel production | K 2 |
| 5 | Differentiate the categories of defects in garment and the various standards <br> followed in apparel testing | K 4 |

K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create

| Unit:1 | Yarn Testing |
| :--- | :--- |

Importance of Quality. Quality terminologies. Testing: Objectives of Testing - atmospheric conditions for testing lab. Identification of textile fibers. Yarn numbering systems - Determination of yarn count. Yarn strength testing \& CSP. Testing of yarn evenness, yarn twist \& Hairiness Measurement

\section*{|  | Unit:2 |
| :--- | :--- |}

Knitted fabric specifications - Testing of Dimensional stability, Spirality \& Bowing. Testing of colour fastness to washing, rubbing, perspiration \& light - Grey scales and ratings. Brief study about testing of woven fabric.

| Unit:3 | Raw material Inspection |
| :--- | :--- |

Inspection: Definition - Types of Inspection. Raw materials inspection: fabric inspection systems \& Testing of Sewing thread, zippers, Buttons.

## Unit:4 In process inspection

In process inspection and its significance in apparel quality. Defects in Sewing, Ironing \& Packing. Testing of Seam strength \& seam slippage

| Unit:5 | Final Inspection \& Standards |
| :--- | :--- |

Final inspection procedures. Categories of defects. Package quality testing - care labels. Brief study about Testing Standards. Brief study about Oeko-Tex Standards.

## Text Book(s)

1 Physical Testing of Textiles,1st Edition, B P Saville, Woodhead Publishing, 1999
2 Managing Quality in Apparel Industries, Pradeep V Metha \& Satish K. Bhardwaj, NIFT, 1998
3 Stamper, Evaluating apparel quality, Sue Humphries Sharp, Linda Donnell \& Anitha A Fairchild Books, 1991
4 Textile Testing, Arindam Basu, South India Textile Research Association, 2006

## Related websites

| 1 | http://textilemerchandising.com/quality-assurance-and-quality-control// |
| :--- | :--- |
| 2 | https://insight-quality.com/garment-quality-control-procedures/ |
| 3 | https://garmentsmerchandising.com/acceptable-quality-level-apparel-industry/ |
| 4 | http://texhour.com/aql-and-type-of-defects |


| Course code | TEXTILE WET PROCESSING | L | T | P | C |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | as | Core-VI | $\mathbf{3}$ | - | - | $\mathbf{3}$ |
|  | Basic knowledge in textile finishing | Syllabus | $\mathbf{2 0 2 2}$ |  |  |  |
|  |  |  |  | Onwards |  |  |

## Course Objectives:

The main objectives of this course are to:

1. Dye and Print the fabrics the using suitable dyes and prints
2. Prepare on Effluent and its impact
3. Prepare the fabric for finishing

## Expected Course Outcomes:

On the successful completion of the course, student will be able to:

| 1 | Generalize the pre-preparatory process sequence in a textile industry | K2 |
| :--- | :--- | :--- |
| 2 | Explain the types of finishes used in textile materials | K2 |
| 3 | Discover the textile dyes and dyeing methods | K3 |
| 4 | Infer about direct printing methods | K2 |
| 5 | Outline about discharge printing and the need for effluent treatment | K2 |

K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create

| Unit:1 | Wet Processing Process and Basic Finishes |
| :--- | :--- |

Process sequence of textile wet processing; Finishes types - Basic finishes, Aesthetic finishes, Functional finishes and Special purpose finishes. Basic Finishes - Singeing, desizing, scouring, bleaching and mercerizing - Process sequence and methods.

| Unit:2 | Aesthetic, Functional and Special Finishes |
| :--- | :--- |

Aesthetic finish- glazed, Moire, embossed, napped finish Functional finish - Water repellant, flame retardant, antistatic finish Special purpose finish - fragrance, antibacterial, stone wash and enzyme wash in denim Recent trends - Microencapsulation and nano finishes.

\section*{| Unit:3 | Dyes and Dyeing Machines |
| :--- | :--- |}

Dyes - classification and suitability of dyes to the fabric, stages of dyeing - fiber, yarn, fabric and garment dyeing, Natural dyes and its significance, Dyeing machines - loose stock fiber bale - hank package - jigger - winch - HT\& HP Beam, jet - padding mangles. Garment dyeing machines

## Unit:4 $\quad$ Direct Printing

Printing - Difference between dyeing and Printing. Preparation of Printing Paste, Properties and types of Thickeners, Direct Printing - Block Printing - History and techniques used. Screen Printing - Flat screer and Rotary screen, techniques used.

\section*{| Unit:5 | Resist, Discharge Printing and Effluent Treatment |
| :--- | :--- |}

Discharge Printing, other methods - Digital Printing, Heat transfer printing Effluent Treatment Pollution created by the processing unit, Process sequence in Effluent treatment Plant.

## Text Book(s)

| 1 | Textile Chemistry, Paters R.H, Elsevier Publishing, 1967. |
| :--- | :--- |

2 Technology of Textile Processing, Shenai V.A., Sevak publications, Bombay, 1981.
3 Textile Finishing, Shenai.V.A. Sevak Publications, Mumbai, 1999.
$4 \quad$ Functional Finishes, Menachem Lewin and Stephen B. Sello, Marcel Dekker, Inc., 1984.
5 Textile Finishing, R.S.Prayag, Shree J Printers, India, 1994.
Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]
$1 \quad$ https://textilecourse.blogspot.com/2018/08/working-process-printing-

| 2 | http://www.neoakruthi.com/blog/etp-for-textile-industry.html |
| :--- | :--- |

$3 \quad$ https://textilelearner.blogspot.com/2011/08/flow-chart-of-wet-processing-process.html
$4 \quad$ https://www.textileschool.com/343/fabric-wet-processing-techniques/
5 https://www.fibre2fashion.com/industry-article/1699/special--finishes-to-garment-anoverview

| Course code | WOMEN'S APPAREL PRACTICAL | L | T | P | C |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Core Practical-VI |  | - | - | 4 | 2 |
| Basic knowledge about knit fabric |  |  | Syllabus$\mathbf{2 0 2 2}$ <br> Onwards |  |  |
| Course Objectives: |  |  |  |  |  |
| The main objectives of this course are to: <br> 1. Design Garments for women <br> 2. Impart Skills in pattern drafting <br> 3. Construct garments by sewing |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Expected Course Outcomes: |  |  |  |  |  |
| On the successful completion of the course, student will be able to: |  |  |  |  |  |
| Des | Design and generalize the measurements for the various women's' garments. |  |  |  | P3 |
| 2 Pre <br> wea | Prepare patterns and calculate material requirement for the designed women's wear. |  |  | P3 |  |
| Con | Construct the designed women's garment and calibrate the cost of the garment. |  |  |  | P5 |
| P1 - Imitation; P2 - Manipulation; P3 - Precision; P4 - Articulation; P5 - Naturalization. |  |  |  |  |  |
| Calculate the material required -Layout method and Direct measurements method 1. Saree Petticoat- Six Panel, Decorated bottom. |  |  |  |  |  |
|  |  |  |  |  |  |
| 2. Skirts - Circular/umbrella/panel with style variations. |  |  |  |  |  |
| 3. Blouse- front open, Fashioned neck, Waist band at front, with sleeve. <br> 4.Salwar (or) Churidhar (or) Parallels (or) Bell Bottom |  |  |  |  |  |
|  |  |  |  |  |  |
| 5. Kameez - with /without slit, with or without flare ,with /without opening , with or without panels, with /without yoke. |  |  |  |  |  |
| 6. Nightie -With yoke, front open, with sleeve, full length. <br> 7. Ladies pant- waist band, zip attached ,tight fitting / parallel pants. |  |  |  |  |  |
|  |  |  |  |  |  |
| 8. Short kurta / top - Decorative / surface design in tailored placket, with or without collar. |  |  |  |  |  |
| Text Book(s) |  |  |  |  |  |
| 1 Scientific garment quality -K M Illege and Sons, Plot No. 43, Somuvar Peth pune411011 |  |  |  |  |  |
| 22 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 |  |  |  |  |  |
| 2 https://shoeguide.com/ |  |  |  |  |  |



| Course code | HOME TEXTILES | L | T | P |  | C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 3 | - |  | 3 |
| Knowledge about choice of fabrics for Home Textiles |  |  | Syllabus |  | 2022 <br> Onwards |  |

## Course Objectives:

The main objectives of this course are to:

1. Impart knowledge on the various home textile products
2. Gain insights on the bed linens, kitchen linens, bathroom linens
3. Acquire better understanding on the choice of fabrics for the home textile products

## Expected Course Outcomes:

On the successful completion of the course, student will be able to:

| 1 | Classify the home textile products and list out the fabric selection factors. | K2 |
| :--- | :--- | :--- |
| 2 | Categorize the types of floor and wall coverings in home textiles. | K4 |
| 3 | Distinguish doors and window treatments in home furnishing | K4 |
| 4 | Generalize the furnishing used in living room. | K2 |
| 5 | Discover the furnishing types of kitchen and dining. | K4 |

K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create

| Unit:1 | Introduction to Home textiles |
| :--- | :--- |

Introduction to home textiles, definition, types of home textiles, factors influencing selection of home textiles, recent trends in home textiles.

| Unit:2 | Floor and wall coverings |
| :--- | :--- |

Floor and wall coverings - definition, types of floor covering -hard, soft and resilient floor coverings and uses and care and maintenance of floor coverings. Wall covering- definition, uses, care and maintenance of wall coverings.

\section*{| Unit:3 | Door and Window treatments |
| :--- | :--- |}

Door and window treatments - definition and parts of door and windows, curtains and draperies definition and materials used for curtains and draperies. Types of Curtains -draw, tailored, pleated, cafe, three tier curtains. Types of Draperies - swags. Accessories- rods hook, rails, racks, curtain tape pins.

\section*{| Unit:4 | Soft furnishings for living rooms |
| :--- | :--- |}

Soft furnishings for living and bed linen. Introduction to living and bedroom linens, types-sofa, sofa covers, wall hangings, cushion, cushion covers, upholsteries, bolster and bolster covers, bed sheets, covers, blankets, blanket covers, comfort and comfort covers, bed spreads, mattress and mattress covers, pillow and pillow covers, pads, uses and care.

\section*{| Unit:5 | Soft furnishing for kitchen and dining |
| :--- | :--- |}

Soft furnishings for kitchen and dining, types of kitchen linens - kitchen towel, aprons, dish cloth, fridge, grinder and mixie covers, mittens, fridge holders -their uses and care. Types of dining- table mat, dish/pot holders, cutlery holder, fruit baskets, hand towels-uses and care. Bathroom linens types, uses and care.

## Text Book(s)

| 1 | Home Comforts-The Arts and Science of Keeping Home, Cheryl Mendelson, Scriber, New <br> York, 2005 |
| :--- | :--- |
| 2 | Cushions and Pillows- Professional Skills - Made Easy, Hamlyn Octopus, Octopus <br> Publishing Group, New York, 2001 |
| 3 | The Ultimate Sewing Book 200 Sewing Ideas For You and Your Home, Magi Mc <br> McCormick Gordon, Collins and Brown, London, 2002 |
| 4 | Design and make curtains, Heather Luke, New Holland publishers, London,1999 |


| Course code | EMBROIDERY \& ACCESSORIES MAKING PRACTICAL | L | T | P | C |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | SBEC-I | - |  | 3 | 2 |
| Basic knowledge about knit fabric |  |  | Syllabus |  |  |
| Course Objectives: |  |  |  |  |  |
| 1. To impart knowledge to the students about the hand and machine embroidery. <br> 2. To learn the various types of stitches. <br> 3. To provide opportunity for skill development in designing accessories. <br> 4. To impart knowledge on fashion accessories \& creativity. |  |  |  |  |  |
| Expected Course Outcomes: |  |  |  |  |  |
| On the successful completion of the course, student will be able to: |  |  |  |  |  |
| 1 Produce the hand and machine embroidery samples |  |  |  |  | P4 |
| 2 Prepare decorative samples using beads or mirrors or sequins or etc., |  |  |  |  | P5 |
| 3 Develop complex fashion accessories by learning to design different accessories manually |  |  |  |  | P5 |
| P1-Imitation; P2 - Manipulation; P3 - Precision; P4 - Articulation; P5 - Naturalization. |  |  |  |  |  |
| A. Prepare samples for the following |  |  |  |  |  |
| 1. Hand embroidery -20 stitches -10 samples |  |  |  |  |  |
|  |  |  |  |  |  |
| 3. Applique ( machine / hand )-3 types 7/d. |  |  |  |  |  |
| 4. Smocking - 4 types |  |  |  |  |  |
| 5. Bead Work -1 sample |  |  |  |  |  |
| 6. Sequins work -1 sample |  |  |  |  |  |
| 7. Zardosi work -1 sample |  |  |  |  |  |
| 8. Tassels and fringes -2-3samples. |  |  |  |  |  |
| 9. Mirror work -Shapes (Round, square, diamond) - 3 sample |  |  |  |  |  |
| 10. Fixing the stones-1 sample. |  |  |  |  |  |
| B. Traditional surface ornamentation practices with two to four variations in the following, |  |  |  |  |  |
| 2. Chikan |  |  |  |  |  |
| 3. Kasuti |  |  |  |  |  |
| 4. Zardosi |  |  |  |  |  |
| 5. Kutch work |  |  |  |  |  |
| 6. Mirror work |  |  |  |  |  |
| 7. Aari work |  |  |  |  |  |
| 8. Phulkari |  |  |  |  |  |
| C. Crocht |  |  |  |  |  |
| D. In embroidery practical add |  |  |  |  |  |
| E. Hand bag - Any 3 types |  |  |  |  |  |
| F. Hat - Any 2 types |  |  |  |  |  |
| G. Bow - Decorative bow \& formal bow |  |  |  |  |  |
| H. Purse \& pouches - any 2 types |  |  |  |  |  |
| 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) |  |  |  |  |  |
| Dress making- Smt Thangam Subramaniam Bombay Tailoring and embroidery college 32 |  |  |  |  |  |
| 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 https://sueguide.csom/smocking/ |  |  |  |  |  |
| 2 https://www.youtube.com/watch? v=nJz9c8gEvFg |  |  |  |  |  |



5 Cornucopia of Cushions, Susie Johns, Apple Press, London, 1997
$6 \quad$ Art in Everyday Life, Harriet Goldstein and Vetta Goldstien, The Macmillian Company, 2004
$7 \quad$ Performance of Home Textiles, Subrata Das, Woodhead Publishing India Pvt. Limited, 2010
8 Home Furnishing, V. Ramesh Babu and S. Sundaresan, Woodhead Publishing India Pvt. Limited, 2018

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

1 https://www.homestratosphere.com/types-curtains/
2 https://bettersleep.org/mattress-education/mattress-accessories/pillow-types/
$3 \quad$ https://textilecourse.blogspot.com/2018/06/types-classification-home-textiles.html
$4 \quad$ https://www.fibre2fashion.com/industry-article/1769/home-textiles-a-review
5 http://www.india-crafts.com/textile/home-textile.html

| Course code | FUNDAMENTALS OF DESIGNING | L | T | P | C |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | NMEC-II | $\mathbf{1}$ | $\mathbf{1}$ | - | $\mathbf{2}$ |
|  | Have basic knowledge in designing | Syllabus | $\mathbf{2 0 2 2}$ |  |  |

## Course Objectives:

The main objectives of this course are to:

1. Impart knowledge on design concepts in the field of fashion
2. Familiarize with the fashion cycles, consumers and theories
3. Design suitable garments for unusual figure types

## Expected Course Outcomes:

On the successful completion of the course, student will be able to:

| 1 | Infer about design and its types | K2 |
| :--- | :--- | :--- |
| 2 | Interpret the principles of design and its applications | K3 |
| 3 | Explain color theory and color schemes. | K2 |
| 4 | Generalize the designing concepts for unusual figures. | K2 |
| 5 | Justify wardrobe planning and list out the factors for fabric selection | K2 |

K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create

| Unit:1 | Design and its types |
| :--- | :--- |

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

\section*{| Unit:2 | Principles of design |
| :--- | :--- |}

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

## Unit:3 <br> Color theory

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

\section*{| Unit:4 | Designing dresses for unusual figures |
| :--- | :--- |}

Figure Irregularities - Stout figure, Thin figure, Broad shoulders, Narrow Shoulders, Faces-Round, Large, and Small face.
Unit:5 Wardrobe Planning
Wardrobe Planning - Factors to be considered while selecting clothes for different age group - Men, Women and Children.

## Text Book(s)

1 Fashion Sketch Book - Bina Abling, Fair Child Publications, New York Wardrobe,1988.
2 Fashion from Concept to Consumer - Frings Gini Stephens, Pearson Education, US, 1998.
3 Inside the Fashion Business - Kitty G. Dickerson, Pearson Education, US, 2007.
Related Online Contents
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/



## Text Book(s)

1 Apparel Costing, M. Krishnakumar, Abhishek Publications 2015
2 Apparel Costing, Andrea Kennedy, Andrea Reyes, Francesco Venezia, Bloomsbury Visual Arts, 2020
3 Apparel Costing, A functional Approach, Krishnakumar, M, Abishek Publications, Chandigargh, 2012

## Related websites

1 https://www.toppr.com/guides/fundamentals-of-accounting/fundamentals-of-cost-accounting/elements-of-cost/
2 https://corporatefinanceinstitute.com/resources/knowledge/finance/budgeting/
3 https://efinancemanagement.com/budgeting
4 https://theinvestorsbook.com/pricing-methods.html
5 https://www.yourarticlelibrary.com/marketing/pricing/pricing-objectives-top-5-objectives-of-pricing-explained/48639

| Course code | TEXTILE FINISHING | L | T | P | C |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Core VIII |  |  |  |  |  |  | $\mathbf{5}$ | - | - | $\mathbf{5}$ |
| Basic knowledge in garment production processes |  |  |  |  |  |  | Syllabus | 2022 <br> Onwards |  |  |
| Course Objectives: |  |  |  |  |  |  |  |  |  |  |

## Course Objectives:

1. To impart knowledge \& understanding of chemistry, mechanism \& application process of various textile finishes.
2. It aims to enhance the awareness of future trends in textile finishing.
3. To impart the knowledge about finishing methods of fabric based on their function.

## Expected Course Outcomes:

On the successful completion of the course, student will be able to:

| 1 | Distinguish the method \& application of finishes on different textile substrates. | K2 |
| :--- | :--- | :--- |
| 2 | Generalize the process sequence of mechanical finishes on textile materials. | K2 |
| 3 | Interpret the functional finishes on textile materials | K3 |
| 4 | Infer about the advanced finishes carried out on textiles | K3 |
| 5 | Discover the special finishes on textile materials. | K4 |

K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create

## Unit:1 Finishing

Finishing - Introduction - Objects of finishing, Importance of finishing, Classification of finishes, Advantages of finishing.

\section*{| Unit:2 | Mechanical Finishing |
| :--- | :--- |}

Mechanical Finishes- Beetling, Shearing, Calendaring, Tentering, Moiering, Embossing, Glazing, Napping, Chemical Weighting of Silk, Sizing, Sanforizing, Schreinering, Wrinkle free finish.

| Unit:3 | Functional Finishing |
| :--- | :--- |

Functional Finish - Resin finish, Water Proof finish, Water Repellent finish, Antimicrobial finish, Flame Retardant finish, Soil Release finish - Process and Recipe, Types and Method of Fusing, Welding and Adhesives, Molding.

\section*{| Unit:4 | Advanced Finishes |
| :--- | :--- |}

Advanced Functional Finish - Stiff finish - Process and Recipe, Softening - Silicone finish, Denim finish, Stone Wash finish, Anti - Pilling finish, Anti Mildew finish.

## Unit:5 Special finishes

SpecialFinishesOnGarments-FinishingofWoven/Knittedgarments-Stoneless,StoneWashef fects-Mud wash, Ion wash, Chalk wash, Water resistant Breathable finish, Bio polishing, Leathery Finish, Protective Finishes-Deodorizing, Cool Finish and Thermo stat finishes.

## Text Book(s)

$1 \quad$ ShenaiandSaraf. 1995.TechnologyofTextileFinishing.Sevakpublications.
2 NallangilliandJayaprakasam.2005.TextileFinishing.S.S.MInstituteofTextile Technology.
3 Prayag.1996.Technologyoffinishing.ShreeJ.Printers,Pune

## Related websites

| 1 | https://nptl.ac.in/courses/116/102/116102054/ |
| :--- | :--- |
| 2 | https://ugcmoocs.inflibnet.ac.in/ugcmoocs/view_ug.php/130 |


| Course code | FASHION BUSINESS <br> COMMUNICATION | $\mathbf{L}$ | $\mathbf{T}$ | $\mathbf{P}$ | C |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Core-IX | 5 | - | - | $\mathbf{5}$ |
|  | Knowledge about fashion | Syllabus | 2022 <br> Onwards |  |  |

## Course Objectives:

The main objectives of this course are to:

1. Gain a better understanding of a fashion designer at the national and international level
2. Impart knowledge on new product development, sales promotion, retailing and pricing
3. Move towards a sustainable fashion

## Expected Course Outcomes:

On the successful completion of the course, student will be able to:

| 1 | Describe the factors influencing fashion changes and World fashion centers. | K2 |
| :--- | :--- | :--- |
| 2 | Analyze the contributions of the fashion designers nationally and internationally | K 4 |
| 3 | Generalize the steps involved in new product development and sales promotion | K2 |
| 4 | Analyze the scope and functions of retailing and pricing | K4 |
| 5 | Evaluate the environmental pollution created by fashion products and move towards <br> sustainable fashion | K4 |

K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create
Unit:1 World of Fashion- An Overview
Factors influencing fashion changes - Accelerating and Decelerating factors
Understanding Fashion designer - types - classicist, idealist, influenced, realist, thinking poet. Minimalists, Village India, Studio line.
World Fashion Centers - Milan, Paris, London and New York

## Unit:2 Legendary Fashion Designers

Study of International Fashion Designers of the World - Yves Saint Laurent, Valentino, Pierre Cardin, Ralph Lauren, Karl Lager field, Donna Karen, Georgio Armani, Coco Chanel, Calvin Klien, Christian Dior.
An overview of Indian Fashion Designers - Manish Malhotra, Manish Arora, Ritu Beri, Tarun Tahiliani, Rohit Bal, Wendell Rodricks, JJ Valaya.

## Unit:3 Fashion Products and Promotion

The fashion industry and new product development; product mix and range planning. Fashion and Seasons. Fashion Promotion - Fashion Communication; Fashion Advertising and Publicity; Personal Selling importance and steps involved; Fashion Shows - types and steps involved in organizing a show; Sales promotion methods /strategies.

## Unit:4 Fashion Retailing

Fashion Retailing - Scope and functions, Types of Stores, Challenges for fashion retail in India, E- retailing growth and development, Major players of fashion goods online. Pricing policies and strategies for appare products, Functions and factors Influencing pricing, pricing strategies for new products, methods of setting prices

## Unit:5 Sustainable Fashion

Sustainable Fashion - meaning and significance; Environmental concerns related to fashion; Linear fashion and circular fashion; 4R's in sustainability - Repair, recycle, reuse and reduce. Moving towards sustainable fashion - Eco fashion, Slow fashion; Environmental impact of fast fashion.

Text Book(s)
1 Drake et-al, Retail Fashion: Promotion and Advertising, Macmillan Publication Company. New York, 1992.
2 Gini Stephens Frings, Fashion - From Concept to Consumer, 6th edition, Prentice Hall, 1999.
3 Leslie Davis Burns et-al, The Business of Fashion: Designing, Manufacturing and Marketing, 4th Edition, Bloomsbury Academic publisher, 2011
Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]

| 1 | https://247wallst.com/special-report/2018/10/01/the-30-most-influential-fashion-designers-of-all- <br> time/8/ |
| :--- | :--- |
| 2 | https://www.reviewsxp.com/blog/top-fashion-designers/ |
| 3 | https://en.wikipedia.org/wiki/Fashion_capital |
| 4 | https://www.fibre2fashion.com/ |
| 5 | http://www.technopak.com/Files/fashion-retail-scenario-in-india.pdf |
| 6 | https://en.wikipedia.org/wiki/Sustainable_fashion |
| 7 | https://fashionunited.uk/news/fashion/re-defining-sustainability-repair-recycle-reuse-and- <br> reduce/2016052520528 |
| 8 | https://get-green-now.com/environmental-impact-fast-fashion/ |


| Course code | COMPUTER APPLICATION IN <br> GARMENT DESIGNING PRACTICAL | $\mathbf{L}$ | T | P | C |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Core- Practical VIII | - | - | $\mathbf{5}$ | $\mathbf{3}$ |  |
| Knowledge and skills in manual pattern |  | Syllabus | $\mathbf{2 0 2 2}$ |  |  |
| Onwards |  |  |  |  |  |

## Course Objectives:

The main objectives of this course are to:

1. Acquire skills in developing patterns through computer software.
2. To understand the basics of CAD software
3. Drafting, Grading and Marker planning of garment patterns using new advance software.

## Expected Course Outcomes:

On the successful completion of the course, student will be able to:

| 1 | Draft the pattern for various kid's, women's and men's wear | P3 |
| :--- | :--- | :--- |
| 2 | Grade the pattern blocks into various sizes. | P4 |
| 3 | Create marker planning for the pattern for cutting with higher efficiency | P5 |

P1 - Imitation; P2 - Manipulation; P3 - Precision; P4 - Articulation; P5 - Naturalization.
Unit: 1
Children's wear
Draft and grade patterns for the following garments. Create marker plans and conduct fit analysis for the following garments

1. Yoke frock
2. Baba suit
3. Summer frock
4. Skirt and tops

## Unit: $2 \quad$ Women's wear

Draft and grade patterns for the following garments. Create marker plans and conduct fit analysis for the following garments
5. Salwar
6. Kameez
7. Tops
8. Nighty

\section*{| Unit: 3 | Men's wear |
| :--- | :--- |}

Draft and grade patterns for the following garments. Create marker plans and conduct fit analysis for the following garments
9. Full sleeve shirt
10. T-Shirt
11. BermudasPleated trouser

| Contemporary Issues |  |
| :--- | :--- |
| Expert lectures, online seminars - webinars |  |
| Text Books |  |
| 1 | Pattern Cutting For Clothing Using Cad: How To Use Lectra Modaris Pattern Cutting <br> Software - Stott M, Woodhead Publishing Ltd, 2012 |
| 2 | Pattern Cutting And Making Up Revised Edition - Shoben M M, CBS Publishers and <br> Distributors, 2000 |
| 3 | Computer Aided Design \& Manufacturing (Test CAD Programs Inside), Sadhu Singh, <br> Khanna Publications, 1998. |
| Related Online Content [MOOC, SWAYAM, NPTEL, Websites etc.] |  |
| 1 | https://medcraveonline.com/JTEFT/various-approaches-in-pattern-making-for-garment- <br> sector.html |
| 2 | https://www.youtube.comwatch?v=jTWtQNTJt_A |
| 3 | https://www.youtube.comwatch?v=iX7O4X7O4fNQijA |



The main objectives of this course are to:

1. Expose the students to the work environment
2. Familiarize and adapt to the workplace
3. Understand the methods, techniques and practices followed in the place of training

## Expected Course Outcomes:

On the successful completion of the course, student will be able to:

| Generalize working structure of the industry/ company | P3 |
| :--- | :--- |
| Analyze the methods adopted in the training place | P4 |
| Recognize the challenges in the training place | P2 |
| Discover the nuances of the workplace and appreciate it | P5 |

P1 - Imitation; P2 - Manipulation; P3 - Precision; P4 - Articulation; P5 - Naturalization.
No CIA, Report: 80 marks and Viva: 20 marks
Details of the Training
The student should undergo 15 Days Internship training in a Textile Processing Unit/ Designer House / Buying House/ Garment Unit / Retail house after IV semester theory exam / before the start of Fifth Semester (Total Marks - 50, No CIA, Report: 80 marks and Viva: 20 marks)

## Purpose of the Internship Training

The training bridges the gap between the theoretical knowledge gained in the college and the practical application of the same in the industry / company / stores
The student will have a better exposure about the workplace and its nuances

## Process to be Followed

Students can identify their area of interest. Industry / companies have to be identified and a profile of the company has to be analysed at least a month earlier. Contacts can be established by the guidesallottedtothestudent.Priorpermissionhastobeobtainedfromtheplaceoftraining.
After confirmation, the student will undergo training for a period of 15 working days.

## Instructions to the Students

The students should abide by the rules and regulations of the concern and get the maximum benefit from the training. The students should maintain a daily logbook where the student should record his details of the training.
A copy of the record has to be sent to the supervisor allotted to the student. The logbook must be signed (with seal) by the staff of the company. Based on the study done, the student will submit a report to the guide within a weeks' time along with the logbook. Incase of any problems, the student should reach out to the supervisor immediately

## Instructions to the Supervisor

The supervisor should establish contacts with the place of training. A routine follow up has to be done with the student once in two or three days. Problems, if any faced by the student should be sorted out immediately.

| Training Report and Presentation |  |
| :--- | :--- |
| Training Report (30 - 50 pages) should be prepared by the student and submitted in a month’s <br> time. At the end of the semester student should present the report with a power point presentation |  |
| Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.] |  |
| 1 | https://www.wikihow.com/Write-a-Report-After-an-Internship |
| 2 | http://mfe-iseah-kef.blogspot.com/2013/11/internship-daily-journal.html |
| 3 | https://www.academia.edu/25257761/Student_Internship_Logbook |
| 4 | https://www.indeed.com/career-advice/career-development/how-to-write-an-internship-report |
| 5 | https://valenciacollege.edu/students/internship/documents/ActivityLog.pdf |
| 6 | https://www.template.net/business/log/internship-time-log/ |



| Course Code | Entrepreneurship Development | L | T | P | C |
| :---: | :---: | :---: | :---: | :---: | :---: |
| MBEC-I |  | 5 | - | - | 5 |
| Basic knowledge about apparel business Opportunities |  | $\begin{array}{\|l\|l} \hline \text { Syllabus } & \begin{array}{l} \mathbf{2 0 2 2} \\ \\ \text { Onwards } \end{array} \\ \hline \end{array}$ |  |  |  |

The main objectives of this course are to:

1. Familiar the students with challenges of starting new ventures
2. Enable them to investigate, understand and internalize the process of setting up a new business.

## Expected Course Outcomes:

On the successful completion of the course, student will be able to:

| Outline the concept of entrepreneurship and traits of entrepreneur | K2 |
| :--- | :--- |
| Identify a project and formulate a project report. | K4 |
| Appraise the formalities of SSI's Registration for an enterprise | K4 |
| Identify the Sources of Finance and Institutional Assistance for small scale industries. | K4 |
| Infer about entrepreneur, Incubation centers and start up in India | K4 |

K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create

| Unit:1 | Introduction to Entrepreneurship |
| :--- | :--- |

Entrepreneurship: Concept and Definitions; Entrepreneurship and Economic Development; Classification and Types of Entrepreneurs; Entrepreneurial Competencies; Factor Affecting Entrepreneurial Growth - Economic, Non-Economic Factors; EDP Programmes; Entrepreneurial Training; Entrepreneur; Manager Vs. Entrepreneur.

## Unit:2 $\quad$ Starting the venture

Project Identification - Project formulation - Project design - preparing project report - Project Planning and Scheduling using Networking Techniques of PERT / CPM; Methods of Project Appraisal.

| Unit:3 | SSI and Registration |
| :--- | :--- |
| Sn |  |

Small Enterprises and Enterprise Launching procedures and Formalities Role of SSI in Economic Development of India; SSI; Registration; NOC from Pollution Board; project report presentation guidelines

## Unit:4 $\quad$ Sources of Finance and Institutional Assistance

Role of Support Institutions and Management of Small Business: Director of Industries; DIC; SIDO; SIDBI; Small Industries Development Corporation (SIDC); SISI; NSIC; NISIET, NIESBUD; TANSIDCO; TIIC; State Financial Corporation; KVIC

| Unit:5 | Financial incentives for SSI |
| :--- | :--- |
| Financial incentives and subsidies for SSI's, and Tax concessions; - seed capital assistance -Role |  |
| of entrepreneur in export promotion and import substitution - Social Entrepreneur, Incubation |  |
| centre, Startup India |  |


| Text Book(s) |  |
| :--- | :--- |
| 1 | Entrepreneurial Development, Dr. C.B. Gupta, Sultan Chand \& Sons, New Delhi, 2009 |
| 2 | Entrepreneurial Development, Dr.S. S Khanka, Sultan Chand \& Sons, New Delhi, 2009. |
| 3 | Entrepreneurship Development and Small Business Enterprises, Charantimath, Poornima, <br> Pearson Education, New Delhi, 2006 |
| 4 | Entrepreneurship New Venture Creation, David H. Holt, Prentice Hall of India Private <br> Limited, New Delhi, 2005 |
| Related Websites |  |
| 1 | https://www.researchgate.net/publication/259843889 |
| 2 | https://ncert.nic.in/textbook/pdf/kebs109.pdf |



| Course Code |  | CLOTHING CARE | L | T | P | C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Core-X |  |  | 5 | - | - | 5 |
| Basic Knowledge about garment and fabric care |  |  | Syllabus |  | 2022 <br> Onwards |  |

## Course Objectives:

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.

## Expected Course Outcomes:

On the successful completion of the course, student will be able to:

| 1 | Identify the suitable methods of washing, drying, ironing and storing | K4 |
| :--- | :--- | :--- |
| 2 | Evaluate the methods and equipment to be used for the better life of clothes | K4 |
| 3 | Appraise the stiffening agents used in fabric washing. | K4 |
| 4 | Recognize the principles of washing and its facts. | K4 |
| 5 | Analyze the special types of laundry for special fabrics and care label symbols. | K4 |

K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create

| Unit:1 | Clothing Care Essentials |
| :--- | :--- |

Water- hard and soft water, Determination of water hardness methods of softening water. Zeolite or Base exchange method. Laundry Cl 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:2 $\quad$ Laundry and Drying Equipment
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:3
Finishes and stiffening agents
Stiffening Agents: Study of stiffening agents -purpose of stiffening-classification of stiffening Agents preparation and uses of stiffeners - natural and commercial starches - reparation of starch for use - bleaching agents - bluing and tinting agents and their application-optical whiteners.

\section*{| Unit:4 | Principles of Washing |
| :--- | :--- |}

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.

\section*{| Unit:5 | Special Types of Laundry \& Care Labels |
| :--- | :--- |}

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.

## Text Book(s)

| 1 | Dantyagis, -FundamentalsofTextileandTheirCarell, OrientalLongmansLtd,NewDelhi,1996 |
| :--- | :--- |
| 2 | Denlkar, -HouseholdTextilesandLaundryWorkll,AtmaRamandSons,Delhi,1993 |
| 3 | NeomiD'Souza, -FabricCarell,New AgeInternationalPublisher,1998 |
| 4 | Davis, -LaundryandClothingCarell, DramaBookPublishers,1995 |
| Related Websites |  |
| 1 | https://www.bhg.com/homekeeping/laundry-linens-cloths-how-to-wash-clothes-by-hand/ |
| 2 | https://textilelearner.blogspot.com/2013/07/textile-finishing-processing.html |



| Course code |  | L | T | P | C |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Core XI |  | 5 |  |  | 5 |
| Basic Knowledge in Garment Production Processes |  | Syllabus |  | 2022-2023 Onwards |  |
| Course Objectives: |  |  |  |  |  |
| The main objectives of this course are to: <br> 1. The Students will be able to familiarize with the function of the garment industry, its various process and technical parameters in garment production. <br> 2. It will enhance awareness of seen product, machinery \& equipment and prepare the students for work around the garment industry. |  |  |  |  |  |
| Expected Course Outcomes: |  |  |  |  |  |
| On the successful completion of the course, student will be able to: |  |  |  |  |  |
| $1 \quad$ Understand the concept of plant location and layout |  |  |  |  |  |
| Analyze the work study techniques |  |  |  |  | K4 |
| Apply the best techniques to improve productivity with quality production |  |  |  |  | 3 |
| 4 Understand the functions of line balancing techniques |  |  |  |  |  |
| 5 Evaluate production planning and control techniques |  |  |  |  | K5 |
| K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create |  |  |  |  |  |
| Unit:1 Plant Location and Layout |  |  |  |  |  |
| Plant Location and Layout. Production - Definitions - Terminology - Organizing for Production Function of Production Department - Introduction to Garment Industry Plant Location - Location Economics -Plant Layout - Process Layout -- Product Layout - Combination Layout -Introduction to Balancing Theory - Balance Control. |  |  |  |  |  |
| Unit:2 Work Study |  |  |  |  |  |
| Work Study- Concept And Need - Method Study and Work Measurement -Techniques - Process Chart Symbol - Process Flow Chart -Flow Diagrams - String Diagrams - Multiple Activity Chart - Principles of Motion Economy - Simo Chart - Time Study Methods - Standard Time Data - Ergonomics With Special Reference To Garment Industry. |  |  |  |  |  |
| Unit:3 Production and Productivity |  |  |  |  |  |
| Production and Productivity- Methods of Production Systems - Job, Mass \& Batch - Section Systems, Progressive Bundle System \& 'Synchro' System- Conveyor Systems - Unit Production System Advantages of UPS - Quick Response- Measurement of Productivity -"Men, Machine, Material" - Total Factor Productivity-Criteria for Increasing Productivity in Garment Industry. |  |  |  |  |  |
| Unit:4 Line Balancing |  |  |  |  |  |
| Line Balancing - Duties and Responsibilities of Production manager / Supervisor - Effective Line Supervision - Factors of Production -Production Function - Process Flow and Charts for Garment Scheduling Calculations. |  |  |  |  |  |
| Unit:5 Production Planning and Control |  |  |  |  |  |
| Production Planning and Control - Capacity Requirement Planning [CRP] - Material Requirement Planning -Steps in Production Planning - Factors to be consider in Production Planning -Function, Qualitative and Quantitative Analysis of Production - Coordinating Departmental Activities - Practical Difficulties in implantation. |  |  |  |  |  |

## Text Book(s)

1 Carr\& Latham's Technology of Clothing Manufacture, fourth edition, revised by David.J.Tyler, Blackwell Publishing UK, 2008.
2 Jacob Solinger, Apparel Manufacturers Handbook, New Age International (P) Ltd, 2005.
3 Gerry Cooklin, Introduction to Clothing Manufacture. Wiley Blackwell, 2006.
4 A. J. Chuter, Introduction to Clothing Production Management, Blackwell Scientific Publications. 1988.
5 Tripathi, Personal Management and Industrial Relations, Sultan \& Chand Sons, 2013
6 O.P. Khanna, Industrial Engineering and Management, Dhanpat Rai Publications, 2018
7 Rama Moorthi, Production and Operations Management, New Age International (P) Ltd, 2005.

| Course code | FASHION DRAPING PRACTICAL | T | P | C |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: |
| Core Practical-X |  |  |  |  |  |  |  |
| Basic knowledge in pattern making, body silhouettes and various <br> fabrics |  |  |  |  |  | Syllabus | 2022 |


| Course code | INTERNATIONAL TRADE AND <br> DOCUMENTATION | $\mathbf{L}$ | $\mathbf{T}$ | $\mathbf{P}$ | $\mathbf{C}$ |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| MBEC II |  |  |  |  |  |  |

## Course Objectives:

To study the Trade procedures and documentation formalities are a critical part of International Business Management. This subject aims at imparting knowledge of trade procedures and documentation formalities.
Expected Course Outcomes:
On the successful completion of the course, student will be able to:

| 1 | Outline export promotion council procedures for firm establishment. | K2 |
| :--- | :--- | :--- |
| 2 | Infer about the implications of foreign trade policy and its documentations. | K2 |
| 3 | Generalize the import trade procedures and documentation. | K2 |
| 4 | Summarize the procedure and formalities of shipment and customs. | K2 |
| 5 | Interpret the payment procedures and delivery formalities. | K2 |

K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create Unit: $1 \quad$ Firm Establishment
Firm establishment: introduction - export promotion councils and their role - registration Formalities - RCMC -IE code - RBI code - garment classification and categories for various countries - quota - quota distribution methods - quota transfer.

\section*{| Unit: 2 | Foreign Trade Documents |
| :--- | :--- |}

Foreign trade documents: need, rationale and types of documents relating to goods - invoice packing note and list - certificate of origin - certificate relating to shipments - mate receipt shipping bill - cart ticket - certificate of measurement - bill of lading - air way bill - documents relating to payment - letter of credit - types of L/C - bill of exchange - letter of hypothecation bank certificate for payment - document relating to inspection - certificate of inspection - GP and other forms.

| Unit: 3 | Import Procedure |
| :--- | :--- |

Import procedure : import license - procedure for import license - import trade control regulation procedure - special schemes - replenishment license - advance license - split up license - spares for after sales service license - code number - bill of entry

| Unit: 4 | Shipment \& Customs |
| :--- | :--- |

Shipment and customs: Pre-shipment inspection and quality control - foreign exchange formalities -Pre-shipment documents - documentation terms - excise and customs clearance of export cargo shipment of goods and port procedures - customs clearance of import cargo. Post - Shipment formalities and procedures - claiming duty drawback and other benefits.

| Unit: 5 | Payment and Deliveries |
| :--- | :--- |

Payment and deliveries: terms of delivery- INCO terms - EXW - FCA - FOB - CFR - CIF - CPT DAF - DDP - DDU. Terms of payment - open account - cheque - cash payment against documents - bank payment against documents (LC) - security and Cost of various payment terms - Assessing the risk in payment - role of ECGC and standard policy.

## Text Books

1 International Trade and Documentation, Edward G Hinkelman, Publisher: World Trade Press

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2001 .
$$

2 Streamline Your Export Paper Work, Bose. A., Published by International Trade Form,Oct Dec 1965.
3 Export and Import Management, Aseem Kumar, Excel Publications, 2007.
Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]
1 https://www.marketresearchreports.com/apparel-retailing
2 https://smallbusiness.chron.com/analysis-retail-apparel-industry-70514.htm
3 https://www.marketresearch.com/Consumer-Goods-c1596/Consumer-Goods-Retailing-c80/Apparel-Retailing-c 1093/


| Course code | PORTFOLIO PRESENTATION-VIVA VOCE | L | T | P | C |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | SBEC II | - | - | 5 | 3 |
|  | edge in creating various garments | Syll | bus |  |  |
| Course Objectives: |  |  |  |  |  |
| The main objectives of this course are to: |  |  |  |  |  |
| 1. To design and execute an organized collection of creative works <br> 2. To make original works of art that demonstrates effective use of design principles, appropriate crafts man ship and technique. <br> 3. Design collections by fulfilling the objectives of the client and user requirements. |  |  |  |  |  |
|  | 20, |  |  |  |  |
| Expected Course Outcomes: |  |  |  |  |  |
| On the successful completion of the course, student will be able to: |  |  |  |  |  |
| Select a theme for different garment categories. |  |  |  | P |  |
| Create different portfolio boards for selected theme. |  |  |  | P |  |
| Construct the garments for all deigned categories. |  |  |  | P |  |
| P1 - Imitation; P2 - Manipulation; P3 - Precision; P4 - Articulation; P5 - Naturalization. |  |  |  |  |  |
|  |  |  |  |  |  |
| Part A <br> Portfolio Presentation - with Customer profile, Inspiration board, Mood Board, Colour board, Flat Sketch board, Illustration board, Swatch board, Trim board, Accessory board- for the following collection <br> - Fashion Show- with a theme - one ramp set <br> - Winter collection - 3garments <br> - Summer Collection -3 garments |  |  |  |  |  |
| 1. Customer profile: capture photograph of your customer. <br> 2. Inspiration board: Image collection from books and magazines by scanning, Photography and drawing, use of objects for mood creation <br> 3. Mood board: develop a theme based on group discussion, mind mapping, brain storming. <br> 4. Colour board: spotting theme board, mood board and inspiration board arrive the color board. <br> 5. Flat sketch board: Develop front, side and back views |  |  |  |  |  |
| Part B <br> Construct the garments for all the above categories |  |  |  |  |  |
|  |  |  |  |  |  |
| Contemporary Issues |  |  |  |  |  |
| Expert lectures, online seminars - webinars |  |  |  |  |  |


| Text Books |  |
| :--- | :--- |
| 1 | Portfolio Presentation for Fashion Designers, Linda Tain, Fairchild Publishers (1998) |
| 2 | Fashion Design Drawing and Presentation, Patrick John Ireland, B T Batsford Ltd, 2006 |
| 3 | Creative Fashion Presentation, Polly Guerin, Fairchild Publishers, 1987 |
| 3 | New Encyclopedia of Fashion Details, Patrick John Ireland, Publisher: Pavilion Books, 2008 |
| 4 | Check and Stripe: A Design-Source Book 2, Kyoto Shoin Company Ltd. 1992 |
| Related Online Contents [MOOC,SWAYAM, NPTEL, Websites etc.] |  |
| 1 | https://issuu.com/theodoracucu/docs/portfolio_internship_ba |
| 2 | https://successfulfashiondesigner.com/fashion-portfolio/fashion-portfolio-checklist// |



