

THE GANDHIGRAM RURAL INSTITUTE - DEEMED TO BE UNIVERSITY

GANDHIGRAM - 624302, DINDIGUL DISTRICT, TAMIL NADU

(MINISTRY OF EDUCATION, GOVERNMENT OF INDIA)

DEPARTMENT OF HOME SCIENCE



B.Sc. / B.Sc (Hons) in TEXTILES AND FASHION DESIGN

SYLLABUS

(With effect from July 2024)

PROGRAMME EDUCATIONAL OBJECTIVES (PEO)

Students are able to

PEO 1: Understand the basic knowledge of fibers, textile processing, designing techniques in clothing and construction of different fabrics.

PEO 2: To provide knowledge, attitude, communication and skills to promote various fields of textile and fashion.

PEO 3: Give an overall comprehensive exposure and various aspects in designing, developing innovation design and for taking up entrepreneurship (Skill).

PEO 4: Provide a platform for creativity, vision with the advent of information technology to meet global needs.

PEO 5: Promote skills in developing different end products in apparel and home furnishings.

PEO 6: To make qualitative outputs through the traditional, cultural and environmental concepts.

PEO 7: Recognize and comply safe working practices and environmental regulation in the working area/ industries.

PEO 8: Entrepreneurial ventures self –employment promoted through life coping skills and to promote Individual empowerment.

PEO 9: Upgrade their knowledge for pursuing higher education.

Program Outcome (PO)

The POs are statements that describe what the students graduating from any of the educational programmes should be able to do.

PO 1: Become knowledgeable in the subject of Textiles and Fashion Design and apply the principles of the same to the needs of the Employer / Institution / Society.

PO 2: Gain Analytical skills in the area of Textiles and Fashion Design

PO 3: Understand and appreciate professional ethics, community living and NationBuilding initiatives

PO 4: Explored in the skills such as Illustrator, supervisors, quality controller and textile tester.

PO 5: Able to execute professional entrepreneurial ethics, attitudes and values.

PO 6: Professionally equipped as Computer Aided Textile and Garment Designer

PO 7: Skilled as pattern maker, cutter, embroiderer and stitcher.

PO 8: Become well trained and knowledgeable Merchandiser.

PO 9: Able to act as professional Portfolio Designer/ Developer.

PO10: Students will be employment provider than employment seeker

PROGRAMME SPECIFIC OUTCOME (PSO)

PSOs are Statements that describe what the graduates of a specific educational Programmes should be able to do.

- PSO1: Apply the knowledge of Textile and fashion design in the domain of Teaching/ Learning and Research.
- PSO2: Solve the complex problems in the field of Textiles and fashion design with an understanding of the societal, legal and cultural impacts of the solution.
- PSO3: Demonstrate knowledge and skills of designing and developing of garments and textile designing.
- PSO4: Apply various types of elements and principles of designs in garments.
- PSO 5: Analyze different types of fibers, yarns, fabrics and development of various weave structures.
- PSO 6: Examine and analyze various textiles testing process.
- PSO 7: Demonstrate traditional embroideries of India.
- PSO 8: Design and develop surface embellishments works.
- PSO 9: Create garments for children, women and men for different age groups.
- PSO 10: Ability in designing and formulating for textile and garments using Computer Aided Textile and Garment designing.
- PSO 11: Preparation of Portfolio design concepts.

Credit requirements for B.Sc in Textiles and Fashion Design (Honours)

S. No.	Broad Category of Course	3-year UG	4-Year UG
1	Major (Core)	60	83
2	Minor Stream	24	32
3	Multidisciplinary	09	09
4	Ability Enhancement Courses (AEC)	12	12
5	Skill Enhancement Courses (SEC)	09	09
6	Functional Tamil/Malayalam/Hindi	02	02
7	Value Added Courses common for all UG	08	08
8	Field study/VPP/Community Engagement	06	06
9	Research Project / Dissertation/Core Course	-	12
10	Internship	09	13
	Total	139	186

Note: Honours students' not undertaking research will do 3 courses for 12 credits in lieu of a Research project / Dissertation

Semester wise distribution of Credit Requirements for B.Sc/B.Sc Hons in Textiles and Fashion Design

S. No.	Broad Category of Course	Semester								Total
		I	II	III	IV	V	VI	VII	VIII	
1	Major (Core) (15X4) = 60	4	4	12	12	14	14	11	8	79
2	Minor Stream	4	4	4	4	4	4	8	-	32
3	Multidisciplinary	3	3	3	-	-	-	-	-	09
4	Ability Enhancement Courses (AEC)	3	3	3	3	-	-	-	-	12
5	Skill Enhancement Courses (SEC)	3	3	3	-	-	-	-	-	09
6	Functional Tamil/Malaya m/Hindi	-	2	-	-	-	-	-	-	02
7	Value Added Courses common for all UG	4	4	-	-	-	-	-	-	08
8	Internship	1	1	1	2	2	2	2	2	13
9	Field study/VPP/Community Engagement	-	-	VPP-2	CC-2	FS/CC- 2	-	-	-	6
10	Research Project / Dissertation/ Core course	-	-	-	-	-	4*	-	12	16
	Total	22	24	28	23	22	24	21	22	186

* Project or Major for 4 credits

B.Sc (HONS) TEXTILES AND FASHION DESIGN
SEMESTER-WISE CREDIT DISTRIBUTION ALONG WITH SCHEME
OF INSTRUCTION AND EVALUATION

Sem	Course Code	Nomenclature	No. of credits	No. of contact hours		Max Marks		
				T	P	CFA	ESE	Total
I	24TFUC1101	Major – 1 Fibre and Yarn Science	3	3	0	40	60	100
	24TFUC1102	Major – 1 Fibre and Yarn Science (P)	1	0	2	60	40	100
	24TFUB1101	Minor - 1 Elements and Principles of Design in Fashion	3	3	0	40	60	100
	24TFUB1102	Minor - 1 Fashion Illustration (P)	0+1	-	2	60	40	100
		Inter-departmental Elective- 1	3	3	0	40	60	100
	24ENUA1101	Essential English: Basic	3	3	0	40	60	100
	24TMUS1101/ 24MLUS1101/ 24HIUS1101	Indian Language – I (Tamil / Malayalam / Hindi/French)	3	3	0	40	60	100
	24FSUV1001	VAC - 1 Environmental Science	2	2	0	50	-	50
	24FAUV1001/ 24GTUV1002	VAC – 2 Heritage and cultural history of India/Shanthi Sena	2	2	0	50	-	50
	24TFUO1101	Industrial Training-I	1	-	-	0	50	50
		Total	22	19	4			
II	24TFUC1203	Major – 2 Fabric Structure	4	4	0	40	60	100
	24TFUB1203	Minor – 2 Basics of Sewing Techniques (P)	1+3	1	6	60	40	100
		Multidisciplinary – II Computation Skills	3	3	0	40	60	100
	24ENUA1202	Essential English: Intermediate	3	3	0	40	60	100
	24TMUS1202/ 24MLUS1202/ 24HIUS1202	Indian Language – II (Tamil / Malayalam / Hindi)	3	3	0	40	60	100
	24PEUV1001	VAC – III Yoga and Sports	2	2	0	50	-	50
	24GTUV1001	VAC – IV Let Us Know Gandhi	2	2	0	50	-	50
	24TMUF1201/ 24MLUF1201/ 24HIUF1201/ 24FRIS1201	Functional Tamil/Malayalam/Hindi/ French	2	2	0	40	60	100
	24TFUO1202	Industrial Training-II	1	-	-	0	50	50
		Total	24	20	6			

Sem	Course Code	Nomenclature	No. of credits	No. of contact hours		Max Marks		
				T	P	CFA	ESE	Total
III	24TFUC2104	Major – 3 Wet processing	4	4	0	40	60	100
	24TFUC2105	Major – 4 Pattern Making and Grading Techniques	4	4	0	40	60	100
	24TFUC2106	Major – 5 Recent Trends in Textiles and Fashion Industry	4	4	0	40	60	100
	24TFUB2104	Minor – 3 Pattern Making and Apparel Construction (P)	0+4	0	8	60	40	100
		MD III- Online course (Mooc/NPTEL)	3	3	0	40	60	100
	24ENUA2103	Essential English – Advanced	3	3	0	40	60	100
	24TMUS2103 24MLUS2103 24HIUS2103	Indian Language – III (Tamil / Malayalam / Hindi)	3	3	0	40	60	100
	24EXUE2101	Village Placement Programme -VPP	2	-	-	50	-	50
	24TFUO2103	Industrial Training-III	1	-	-	-	50	50
		Total	28	21	8			
IV	24TFUC2207	Major – 6 Textiles Finishing	4	4	0	40	60	100
	24TFUC2208	Major – 7 Historic Textiles and Costumes of India	4	4	0	40	60	100
	24TFUC2209	Major – 8 Home Furnishing (P)	0+4	0	8	60	40	100
	24TFUB2205	Minor – 4 Women's Apparel Construction (P)	1+3	1	6	60	40	100
		Discipline Centric Elective	3	3	0	40	60	100
		Community Engagement	2	-	-	50	-	50
	24TFUO2204	Industrial Training-IV	2	-	-	0	50	50
		Total	23	12	14			

Sem	Course Code	Nomenclature	No. of credits	No. of contact hours		Max Marks		
				T	P	CFA	ESE	Total
V	24TFUC3110	Major – 9 Principles of Textile Testing	4	4	0	40	60	100
	24TFUC3111	Major – 10 Apparel Quality Control	4	4	0	40	60	100
	24TFUC3112	Major -11 Computer Application Textiles and Fashion Industry	3+0	3	0	40	60	100
	24TFUC3113	Major -11 CAD in Textiles and Fashion Design (P)	0+3	0	6	60	40	100
	24TFUB3106	Minor -5 Men's Apparel Construction (P)	1+3	1	6	60	40	100
	24TFUO3105	Internship-I	2	-	-	-	50	50
		Field Study/Community Engagement	2	-	4	50	-	50
		Total	22	12	16			
VI	24TFUC3214	Major – 12 Entrepreneurship Development in Textiles and Fashion	4	4	0	40	60	100
	24TFUC3215	Major -13 Technical Textiles	4	4	0	40	60	100
	24TFUC3216	Major – 14 Draping Techniques (P)	0+3	0	6	60	40	100
	24TFUC3217	Major -15 Portfolio Presentation (P)	0+3	0	6	60	40	100
	24TFUB3207	Minor – 6 Fashion Forecasting and Merchandising	4	4	0	40	60	100
	24TFUC3218	*Optional (Project/ Major -16)	4	4	0	40	60	100
		Major -16 Textiles and Their Care Project		0	4	40	(40+20)	100
	24TFUO3206	Internship-II	2	-	-	0	50	50
		Total	24	16	12			
Exit option: Bachelor Degree in Textiles and Fashion Design with 136 credits								

Sem	Course Code	Nomenclature	Credits	Hours		Max Marks		
				T	P	CFA	ESE	Total
VII	24TFUC4119	Major 17 Fiber Science and technology	4	4	0	40	60	100
	24TFUC4120	Major 18 Yarn Science and technology	4	4	0	40	60	100
	24TFUC4121	Major 19 Advanced CAD in Textiles and Fashion Design (P)	0+3	0	6	60	40	100
		Minor 7 Research Methods and Statistics	4	4	0	40	60	100
	24TFUB4108	Minor 8 Enterprise Development	4	4	0	40	60	100
	24TFUO4107	Internship-III	2	-	-	0	50	50
	Total		21	16	6			
VIII	24TFUC4222	Major- 20 Boutique Planning	3+1	3	2	40	60	100
	24TFUC4223	Major- 21 Advanced Fabric Construction	4	4	0	40	60	100
	24TFUC4224	Major- 22 Advanced Wet Processing	4	4	0	40	60	100
	24TFUC4225	Major- 23 Professional portfolio (P)	1+3	1	6	60	40	100
	24TFUC4226	Major- 24 Dissertation	4	0	8	75	75+50	200
	24TFUO4208	Internship-IV	2	-	-	-	50	50
	Total		22	12	16			
B.Sc (Hons.) in Textiles and Fashion Design								

Credit requirements B.Sc in Textiles and Fashion Design (Honours)

Discipline Centric Courses

Course code	Name of the course	No of credits	No.of contact hours		Maximum marks		
			T	P	CFA	ESE	TOTAL
24TFUA2201	Concept of costing and export management	3	3	0	40	60	100
24TFUA2202	Fashion Branding and Promotion	3	3	0	40	60	100
24TFUA2203	Fashion Grooming	3	3	0	40	60	100
24TFUA2204	Basic Textile Economics	3	3	0	40	60	100

Multi Disciplinary Courses

Course code	Name of the course	No of credits	No.of contact hours		Maximum marks		
			T	P	CFA	ESE	TOTAL
24TFUI1101	Development of Design for Fashion	3	3	0	40	60	100
24TFUI1102	Fashion Psychology	3	3	0	40	60	100
24TFUI1103	World costume	3	3	0	40	60	100
24TFUI1104	Fashion Grooming	3	3	0	40	60	100

FIBER AND YARN SCIENCE

Course code: 24TFUC1101

Credit: 3+0

Max Mark: 100

Objectives:

- To impart the knowledge of fibers, sources, their identification and properties.
- To provide students with, the knowledge of yarn science and their properties.
- To impart the knowledge of manufacturing of natural and manmade fibers.

Specific Learning Outcome:

After learning this paper the students will gain knowledge in different types of textile fibers, origin, its classifications, manufacturing and its properties. They will be able to identify different fiber types based on its physical and chemical parameters. They will gain knowledge in different methods involved in spinning process of fibers as well as different types of yarn.

Unit I

Textile fibers- Definition, Classification of textile fibers, Natural fiber, Manmade fiber, Basic units of fibers – Monomers and Polymers, Polymerisation, Degree of polymerisation, Types of polymers, Inter polymer bonds in textile fiber, Fiber morphology, Properties of textile fibers- Primary and Secondary properties.

Unit II

Natural fibers- Definition, Classification, Natural cellulosic fibers- Cotton, Flax, Jute growth, processing, properties. Other cellulosic fiber – Coir, Bamboo, Ramie, Hemp, Kenaf, Pina, Abaca, Sisal, Kapok, Banana - its properties and end use. Natural protein fibers – Wool, Silk- processing, properties and types. Other natural fibers- Rubber, Asbestos.

Unit III

Manmade fibers- Definition, Classification - Production of manmade fiber - Wet spinning, Dry spinning, Melt spinning, Classification of manmade fibers- Fibers from natural polymers- Viscose Rayon, Acetate- production process, properties and end uses. Fibers from synthetic polymers - Acrylic, Nylon, Aramids, Polyester - production process, properties and end uses. Elastomeric fibers- Rubber, Spandex fiber. Inorganic fibers- Glass, Carbon.

Unit IV

Yarn – Definition- Classification- Process of yarn construction, Spun yarns, Conventional yarn spinning, Un conventional yarn spinning, Filament yarn- spun yarns from filament fibers, Yarn number or Yarn count – Direct system, Indirect system, measurement of yarn count. Yarn Twist – Direction of twist, Amount of twist, Balance of the yarn, Functional of twist.

Unit V

Yarn structure – Simple yarn, Complex yarn, Textured yarns – Air jet texturing, False twist texturing. Sewing threads- Essential qualities of good sewing thread, Classification of sewing threads. Difference between a thread and a yarn. Yarn defects.

Text Books

1. Text book- Textile Science- Deepali Rastogi, Sheetal Chopra.
2. E.P.G. Gohl, L.D. Velensky, "Textile Science" CBS Publishers and Distributors, 2003
3. Seema sekhri "Fabric science" 978-81-203-4183-8
4. Kanwar varinder "Fabric studies" 81-272-1904-58
5. Druid "Fabric textile and patterns" 9789057681127
6. Barker "Hand book of textiles"
7. Jaistree "Hand book of textiles" 978-81-7132-717-

References

1. AJ. Hall. "The standard hand book of Textiles", Wood head Publishing 8th edition 2004.
2. P.V. Vidyasagar, "Hand Book of Textiles", A. Mittal Publications, 2005
3. Sara J. Kadolph, "Textiles", Prentice Hall, 10th edition 2007
4. J. Gordon Cook, "Hand Book of Textile Fibres", Vol – IT Man Made Fibers, Wood Head Publishing
5. Murphy "Preparation of textile of fibres" 81-85733-75-9
6. Susiledantyayi "Fundamentals of textile and their care" 978-81-250-1027-2
7. Bernard P. Corbman, "Textiles Fiber. to Fabric" McGrawhill Publications, 6th Edition 1983

Course Outcome (CO)	Programme Specific Outcome(PSO)										
	1	2	3	4	5	6	7	8	9	10	11
FIBER AND YARN SCIENCE	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: understand the basics of fibre and yarn	3	3	1	1	3	3	2	2	3	3	2
CO2:Analyze various fibre structure	3	3	1	1	3	3	2	2	3	3	2
CO3:.Aquitant the students in yarn structure and its process	3	3	1	1	3	3	2	2	3	2	2
CO4:understand the physical and chemical properties of fibre	3	3	1	1	3	3	1	1	3	2	1
CO5:Explore various collections of natural and man-made fibre	3	3	1	1	3	3	1	1	3	2	2

Lecture Schedule

Unit	Topics to be covered	Hours
I	Textile fibers- Definition of textile fibers, Classification of textile fibers, Natural fiber, Man made fiber.	3
	Basic units of fibers – Monomers .and Polymers, Polymerisation, Degree of polymerisation	3
	Types of polymers, Inter polymer bonds in textile fiber, Fiber morphology	3
	Properties of textile fibers- Primary and Secondary.	2
II	Natural fibers- Definition, Classification, Natural cellulosic fibers, Cotton, Flax, Jute	3
	Other cellulosic fiber – Coir, Bamboo, Ramie, Hemp, Kenaf, Pina, Abaca, Sisal, Kapok, Banana	3
	Its properties, Natural protein fibers – Wool, Silk, other natural fibers- Rubber, Asbestos.	3
III	Man made fibers- Definition, Classification - Production of man made fiber - Wet spinning	2
	Dry spinning, Melt spinning, Classification of man made fibers	2
	Fibers from natural polymers- Viscose Rayon, Cuprammonium Rayon, Acetate	3
	Fibers from synthetic polymers - Acrylic, Polyamide fibers - Nylon, Aramids, Polyolefins	3
	Elastomeri fibers- Rubber, Elastane (Spandex fiber), Inorganic fibers- Glass, Carbon.	2
IV	Yarn – Definition- Classification- Process of yarn construction, Spun yarns, Conventional yarn spinning	3
	Un conventional yarn spinning, Filament yarn- spun yarns from filament fibers	2
	Yarn number or Yarn count – Direct system, Indirect system, measurement of yarn count	2
	Yarn Twist – Direct twist, Amount of twist, Balance of the yarn, Functional of twist.	2
V	Yarn structure – Simple yarn, Complex yarn, Textured yarns – Airjet text rising, False twist texturing	3
	Sewing threads, Essential qualities of good sewing thread,	2
	Classification of sewing threads, Difference between a thread and a yarn, Yarn defects.	3
	Total hours	49

FIBER AND YARN SCIENCE PRACTICAL

Course code: 24TFUC1102

Credit: 0+1

Max Mark: 100

Objectives:

- To impart the knowledge of fibers, sources, their identification and properties.
- To provide students with, the knowledge of yarn science and their properties.
- To impart the knowledge of manufacturing of natural and manmade fibers.

Specific Learning Outcome:

After learning this paper the students will gain knowledge in different types of textile fibers, origin, its classifications, manufacturing and its properties. They will be able to identify different fiber types based on its physical and chemical parameters. They will gain knowledge in different methods involved in spinning process of fibers as well as different types of yarn.

Identify, prepare and analysis the following samples.

- Identification of fiber
- Burning Test-Cellulosic fibre, protein fibre, manmade fibre
- Solubility test- Cellulosic fibre, protein fibre, man made fibre
- Microscopic structure- Cellulosic fibre, protein fibre, man made fibre
- Identification of Yarn
- Identify the direction of Yarn Twist
- Identification of yarn defects

Reference

1. P.V.Vidyasagar, "HandBookofTextiles", A.MittalPublications, 2005
SaraJ.Kadolph, "Textiles", PrenticeHall, 10thedition2007

Course Outcome (CO)	Programme Specific Outcome(PSO)										
	1	2	3	4	5	6	7	8	9	10	11
FIBER AND YARN SCIENCE PRACTICAL	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: understand the basics of fibre and yarn	3	3	1	1	3	3	2	2	3	3	2
CO2:Analyze various fibre structure	3	3	1	1	3	3	2	2	3	3	2
CO3:..Aquitant the students in yarn structure and its process	3	3	1	1	3	3	2	2	3	2	2
CO4:understand the physical and chemical properties of fibre	3	3	1	1	3	3	1	1	3	2	1
CO5:Explore various collections of natural and man-made fibre	3	3	1	1	3	3	1	1	3	2	2

ELEMENTS AND PRINCIPLES OF DESIGN INFASHION

Course code: 24TFUB1103

Credit: 3+0

Max Mark: 100

Objectives:

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

Specific Learning Outcome:

After learning this paper the students will gain knowledge in design concepts and elements used for design creations and clothing concepts related to the design development.

Unit I

Terms related to the fashion industry – fashion, style, fad, classic, and collection, trend, chic custom made, haute couture, knock-off avantgarde, pre – a – porter. Theories of fashion adoption- Trickle down or down ward flow theory, Trickle across of horizontal flow theory, Trickle up or upward flow theory. Fashion cycle and its importance. fashion leaders and fashion followers. Fashion designers-national and international designers.

Unit II

Design definition, classification - Structural and decorative design, symmetrical and asymmetrical design . Elements of design- Silhouette, Line, colour, Texture, Principles of design - Proportion, Balance, Rhythm, Emphasis, Harmony, Colour theory- Prang and Munsel colour system, Hue, Value and intensity. Factors affecting fashion - Economic factors, Consumer income, Sociological factors, Psychological factors.

Unit III

Figure theory and analysis, types, Female body type - Pear body type, Diamond body type, Round body type, Hourglass body type, Inverted triangle body type, Straight body type, Male body type - Short and heavy body type, Tall and heavy body type, Short and thin body type, Tall and thin body type, Athletic body type, Figure types - Heavy figure, Thin, Slender, Narrow and Broad shoulder, Small face, Prominent chin and Jaw, Thick arm and Prominent forehead.

Unit IV

Clothing definition, classification- Production theory, Modesty theory, Adornment theory, Clothing communicates- Age, Sex, Marital status, Cultural influences, Physical appearance, Life style, Occupation, Economic status, Social status, Value and Attitudes, Political beliefs, Religious beliefs, Industrialization, Emotions, Interests.

Unit V

Fashion figure proportion- Learning figure basics, Drawing constant proportion, Guidelines, Upper Torso definition, Lower Torso definition, Fashion Elongation and the figure, Figure map- 8. 10,1 2 head theory for men, women and children.

Text books

1. Comdex Fashion Design- Vol-1 Fashion Concepts
2. Elements of fashion and apparel design-G.J. Sumathi
3. Elements of fashion and apparel design Sumathi 81-224-1371-4
4. Encyclopedia of dress making Raul Jewel
5. Stanyer, Peter, “The Complete Book of Drawing Techniques” – Arcturus Publishing Limited for Book Mart Limited 2003

References

1. Edith Tomory, “A History of Fine Arts’ in India and the West” – Orient Longman Publishers 1982, reprinted 1999.
2. Hideaki Chijiwa, Colour harmony – “A Guide to creative colour Combination”.
3. HelIn Goworek, “Drawing Course a step by sep Guide” Blackwell Publications.

Course Outcome (CO)	Programme Specific Outcome(PSO)										
	1	2	3	4	5	6	7	8	9	10	11
ELEMENTS OF FASHION AND DESIGN	PS01	PS02	PS03	PS04	PS05	PS06	PS07	PS08	PS09	PS010	PS011
CO1: Understand the design concept through elements and principles of design.	3	3	3	3	1	1	1	3	3	2	3
CO2: Analyse various designs and fashion concepts in clothing for different age groups.	3	2	3	3	1	1	1	2	3	2	3
CO3: Acquaint the students in clothing communication for different body types.	3	3	3	3	1	1	2	1	3	2	3
CO4: Designing garments for children women and men.	3	2	2	3	2	3	2	2	2	2	1

Lecture Schedule

Unit	Topics to be covered	Hours
I	Terms related to the fashion industry – fashion, style, fad, classic, and collection, trend, chic custom made, haute coutu0re, knock-off avantgarde, pre – a – porter.	3
	Theories of fashion adoption- Trickle down or down ward flow theory, Trickle across of horizontal flow theory, Trickle up or upward flow theory	3
	Fashion cycle and its importance.	3
	Fashion leaders and fashion followers. Fashion designers- national and international designers.	2
II	Design definition, classification - Structural and decorative design, symmetrical and asymmetrical design	3
	Elements of design- Silhouette, Line, colour, Texture,	2
	Principles of design - Proportion, Balance, Rhythm, Emphasis, Harmony,	3
	Colour theory- Prang and Munsel colour system, Hue, Value and intensity.	2
	Factors affecting fashion - Economic factors, Consumer income, Sociological factors, Psychological factors.	2
III	Figure theory and analysis, types, Female body type - Pear body type, Diamond body type, Round body type, Hourglass body type	3
	Inverted triangle body type, Straight body type, Male body type - Short and heavy body type, Tall and heavy body type,	3
	Short and thin body type, Tall and thin body type, Athletic body type, Figure types - Heavy figure, Thin, Slender, Narrow	3
	Broad shoulder, Small face, Prominent chin and Jaw, Thick arm and Prominent forehead.	2
IV	Clothing definition, classification- Production theory, Modesty theory, Adornment theory,	4
	Clothing communicates- Age, Sex, Marital status, Cultural influences, Physical appearance, Life style, Occupation, Economic status, Social status	4
	Value and Attitudes, Political beliefs, Religious beliefs, Industrialization, Emotions, Interests.	3
V	Fashion figure proportion- Learning figure basics,	2
	Drawing constant proportion, Guidelines	2
	Upper Torso definition, Lower Torso definition, Fashion Elongation	3
	The figure, Figure map- 8. 10,1 2 head theory for men, women and children.	2
Total hours		55

FASHION ILLUSTRATION PRACTICAL

Course code: 24TFUB1102

Credit: 0+1

Max.Marks: 100

Objectives:

- To enable the students to familiarize with fashion designing and illustration techniques.
- Acquaint with the steps involved in drawing and to gain skill in illustration and design garments for personal / individual taste.

Specific Learning Outcome:

Sketching is an important skill that is required by a fashion designer, textile designer or a graphic designer. After completion of the course the students will have hands on skills in sketching, colouring, rendering and various other techniques involved in sketching. They will be able to illustrate human figures in different postures and garments.

Unit I

Basic human proportion, Anatomy and model drawing, 8, 10, 12 head theory, Straight, Flesh, Motion posture, Elongation figure, Body figures and features- Hair styling, Eye, Face, Arm, legs, Figure drawing, Body Movement – Kids, Female and Male, Hand movement, Face drawing and detailing, Full fledged fashion figure front view, back view and different angle.

Unit II

Garment details- Collars- varieties, Cuffs- varieties, Sleeves- varieties, Yokes- varieties, Neckline- varieties, Pockets- varieties, Style manipulation, Illustration of shirt- varieties, Trouser -varieties, Gown -varieties, Frocks- varieties , Skirt- varieties, Jacket- varieties, Sketching- folds and Curves of different fabric drapes.

Unit III

Rendering Techniques- Pencil, and Colour pencil, Charcoal, Water colour, Poster colour, Oil and Acrylic, Fabric rendering of different varieties of fabrics, Prints, Woven's, Knit, Wool, Fur, Lustrous, Dark, Sheer, lace, Embellishment etc.

Unit IV

Photo analysis- different garments of kids, Male and Female, Experimenting with collage as a method of illustration, Croquis and Flat sketches, Male, Female and Kids, development of costume on croquis using elements of fashion.

Unit V

Theme board and Mood board creation and definition- Portfolio presentation using rendering techniques, Product development through fashion illustration in apparel and accessories.

Text Books

1. Comdex Fashion Design- Vol-1 Fashion Concepts
2. Advanced Fashion Sketch Book, Bina Abing, OM Book Service, India (2007)
3. Basic fashion design Styling 978-2-940411-39-9
4. Sapna sarkas "Fashion and sketch book" 978-93-81031-39-1
5. Harold Carr "Fashion design and product development"
6. Fashion Design illustration Children Ireland
7. verekes "Fashion designers hand book for adobe illustration Centers" 978-1-4051-6055-1
8. Anmol Roy "Fashion designing and technologies" 978-81-8411-304-4
9. Figure Drawing for Fashion, Isao Yajima, Graphic-Sha; First Edition (1987)
10. Fashion Art for the Fashion Industry, Rita Gersten, Fairchild Books (1989)

References

1. Fashion Illustration Flat drawing
2. Eugeniakim "Saturday night ha" t0-307-33794-4
3. Tatham Seamas, "fashion design drawing course" 978-0-7641-2473-0
4. Fashion Drawing – The Basic Principles, Anne Allen and Julian Seaman, Anova Books.
5. Fashion illustration and Presentation, Manmeet Sodhia, Kalyani Publishers.
6. Fashion Source Book, Kathryn Mckelvey, Blackwell Science
7. Encyclopedia of fashion details, Patrick John Ireland, Batsford.
8. Fashion Illustration, Colin Barnes, Little Brown and Co. (UK) (April 1995).
9. Snap Fashion Sketch Book, Bill Glazer, Prentice Hall; 2 edition (2007).

Course Outcome (CO)	Programme Specific Outcome(PSO)										
	1	2	3	4	5	6	7	8	9	10	11
FASHION ILLUSTRATION PRACTICAL	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: Basic sketches and shadings using different mediums.	3	3	3	3	1	1	2	2	3	3	3
CO2: Analyze and illustrate various garments detailing for children, women and men wear.	3	2	3	3	1	1	2	2	3	2	3
CO3: Handle different mediums of rendering techniques and designing different types of fabrics.	3	3	3	3	1	1	2	2	3	3	3
CO4: Illustrate different poses and develop costumes on corquis for men, women and children.	3	3	3	3	1	1	2	2	3	3	3
CO5: Design and develop a Portfolio presentation with different theme basics on garments and accessories.	3	3	3	1	3	3	2	2	3	3	3

Lecture Schedule

Unit	Topics to be covered	Hours
I	Basic human proportion, Anatomy and model drawing, 8, 10, 12 head theory, Straight, Flesh, Motion posture, Elongation figure	5
	Body figures and features- Hair styling, Eye, Face, Arm, legs, Figure drawing,	5
	Body Movement – Kids, Female and Male, Hand movement, Face drawing and detailing	4
	Full fledged fashion figure front view, back view and different angle.	4
II	Garment details- Collars- varieties, Cuffs- varieties, Sleeves- varieties, Yokes- varieties, Neckline- varieties,	4
	Pockets- varieties, Style manipulation, Illustration of shirt- varieties, Trouser –varieties	4
	Frocks- varieties , Skirt- varieties, Jacket- varieties, Sketching- folds and Curves of different fabric drapes.	4
III	Rendering Techniques- Pencil, and Colour pencil, Charcoal, Water colour, Poster colour, Oil and Acrylic	5
	Fabric rendering of different varieties of fabrics, Prints, Woven's, Knit, Wool, Fur, Lustrous, Dark, Sheer, lace, Embellishment etc.	5
IV	Photo analysis- different garments of kids, Male and Female, Experimenting with collage as a method of illustration,	5
	Croquis and Flat sketches, Male, Female and Kids, development of costume on croquis using elements of fashion	5
V	Theme board and Mood board creation and definition- Portfolio presentation using rendering techniques	5
	Total	60

INDUSTRIAL TRAINING –I

Course code: 24TFUO1101

Credit: 1

Max.Marks:50

Specific Learning Outcome:

Based on the theory discussed in first semester, all students placed in field exposure during semester break. After successful completion of a field visit in textile manufacturing units and processing units the student will have a complete commercial knowledge on textiles, and also on the latest machineries and equipments.

Industrial Visit:

From a practical point of view, this approach also seems like it might be a very useful way to document the process of getting to grips with the literature on a subject – helping immensely when it comes to putting together. We have one week/ two week exposure visit at the beginning of first semester. During second semester, the students undertake needs assessment exercise at various textile/ fashion field sites. Documentation in the form of report should be submitted by the candidates for evaluation purpose. The field training component is spread over in all academic institutes to place the successful candidates.

Course Outcome (CO)	Programme Specific Outcome(PSO)										
	1	2	3	4	5	6	7	8	9	10	11
INDUSTRIAL TRAINING I	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: Identify technical concepts and ideas of merchandising.	3	3	3	3	3	3	3	3	3	3	3
CO2: Design and develop various types of process involved in textile and garment industry.	3	3	3	3	3	3	3	3	3	3	3
CO3: Supervise the quality in a textile and apparel manufacturing industries	3	3	3	3	3	3	3	3	3	3	3
CO4: Plan and execute ideas in textile and garment industries.	3	3	3	3	3	3	3	3	3	3	3
CO5: Organize and develop a Entrepreneurial small scale textile / garment units.	3	3	3	3	3	3	3	3	3	3	3

II SEMESTER FABRIC STRUCTURE

Course code: 24TFUC1203

Credit: 4+0

Max. Marks: 100

Objectives:

- To impart knowledge of fabric manufacture and fabric characteristics.
- To enable students to understand fabric structures and to analyze them.
- To impart knowledge of various looms and knitting machine.

Specific Learning Outcome:

After learning this paper the students will be able to design textile fabrics i.e. woven, knitted and non woven fabrics manually. They will acquired knowledge in different types of looms, loom parts and mechanisms of different looms, both handloom and power loom. The students will know the different types of knitting machines, knitting machine parts and functions, as well as they will be able to design knit fabrics.

Unit I

Weaving- Definition- Classification, introduction to fabric manufacturing technology- sequence of preparatory process for weaving and its objectives- sizing, weft winding, warping. Passage of material through weaving machine (loom)- study of looms- different types of loom- important motions of weaving- shedding, picking, beat-up and let-off, take up motions- hand loom, power loom, shuttle loom, shuttle less loom.

Unit II

Woven fabric and design- general characteristics of woven fabric, elements of woven design- design, draft plan, peg plan. Basic weave design- Plain weave and its derivatives. Twill weaves- types, Satin and Sateen weaves. Crepe weave, Honey comb weave, Huck a back weaves, Mock leno, Extra warp and Extra weft. Dobby and Jacquard weave structure and types.

Unit III

Knitting- definition, Classification, terms used in knitting, knitting elements- types and its mechanism – latch needle mechanism, knitting machine types- flat bed and circular knitting machine- mechanism. Warp and Weft knitting- principle, types- stitches, structure, properties and uses. Comparison of warp and weft knitting. Jacquard knitting-Concepts and methods.

Unit IV

Non woven- definition, Methods of manufacturing- web formation- types and mechanism. Fabric formation- bonding- mechanical, chemical and thermal bonding- types and mechanisms. Comparison between weaving, knitting and non woven. Comparison between woven, knitted and non woven fabrics, characteristics and end uses.

Unit V

Decorative fabric construction - Braiding and types- Two and three dimensional braiding, Circular braiding. Bonded fabrics - its characteristics and end use. Netting, Lace, Knotting, Crocheting, Embroidery, tatting – properties, types and end uses. Felting- construction, types, its characteristics and end use.

Text Books

1. Ormerod A, “Modern Preparation and Weaving machiner”, Woodhead Publication, 2004
2. Chitra, chowdhary “Textile design and structure” 978-81-8342-298-7
3. Charu samy “Textile design theory” 978-81-224-3053-0
4. Tanya jain “Textile designing theory and concept”
5. Frank Ames “Woven master recipes of Sikh heritage”
6. W.S. Murphy, “Textile Weaving & Design”, Abhishek Publication, 2003
7. J. Gordon Cook, Hand Book of textiles Fibers Vol I & II”, Woodhead Publication
8. Text book- Textile Science- Deepali Rastogi, Sheetal Chopra.

References

1. Amjden C.A “Navaho Weaving Its techniques and History”, Abhishek Publication.
2. Z.J. Grosicki, “Watson’s Textile Design & Colour, 7th Edition Woodhead Publication.
3. W.S. Murphy, “Handbook of weaving” Abhishek Publication.
4. Deborah Chnadler, “Learning to weave”, Interweave Press, 1995.
5. J.J. Pizzuto, “Fabric Science” 6th Edition, Fairchild Publications.

Course Outcome (CO)	Programme Specific Outcome(PSO)										
	1	2	3	4	5	6	7	8	9	10	11
FABRIC STRUCTURE	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO:1 Design different varieties of woven, non- woven and knitted fabrics.	3	3	3	1	3	3	1	1	3	3	1
CO2: Handle different parts and functions of handloom and power loom machineries	3	2	3	3	3	1	1	2	3	2	3
CO3: Acquaint the students in handling the parts and functions of knitting machineries.	3	3	3	1	3	3	1	1	1	3	1
CO4: Able to design various knitted fabrics.	3	3	3	1	3	3	1	1	1	3	1
CO5: Analyze and design decorative fabrics for different end uses.	3	3	3	1	3	3	2	2	3	3	3

Lecture Schedule

Unit	Topics to be covered	Hours
I	Weaving- Definition- Classification, introduction to fabric manufacturing technology- sequence of preparatory process for weaving.	3
	Sizing, weft winding, warping. Passage of material through weaving machine (loom)- study of looms- different types of loom	4
	important motions of weaving- shedding, picking, beat-up and let-off, take up motions- hand loom, power loom, shuttle loom, shuttle less loom.	4
II	Woven fabric and design- general characteristics of woven fabric, elements of woven design- design, draft plan, peg plan.	4
	Basic weave design- Plain weave and its derivatives. Twill weaves- types, Satin and Sateen weaves.	3
	Twill weaves- types, Satin and Sateen weaves. Crepe weave, Honey comb weave, Huck a back weaves, Mock leno, Extra warp and Extra weft.	4
III	Dobby and Jacquard weave structure and types.	3
	Knitting- definition, Classification, terms used in knitting, knitting elements- types and its mechanism,	3
	knitting machine types- flat bed and circular knitting machine-mechanism.	3
	Warp and Weft knitting- principle, types- structure, properties and uses	3
	Comparison of warp and weft knitting. Study on Jacquard knitting.	3
IV	Non woven- definition, Methods of manufacturing- web formation- types and mechanism.	3
	Fabric formation- bonding- mechanical, chemical and thermal bonding- types and mechanisms.	3
	Comparison between weaving, knitting and non woven. Comparison between woven, knitted and non woven fabrics, characteristics and end uses.	4
V	Decorative fabric construction, Bonding- Braiding and types- Two dimensional braiding, Circular braiding mechanism,	4
	3D braiding, Horn gear braiding, Cartesian, Bonded fabrics Netting, Lace, Knotting, Crocheting, Embroidery, Felting- its characteristics and end use.	4
	Total	55

BASICS OF SEWING TECHNIQUES PRACTICAL

Course code: 24TFUB1203

Credit: 1+3

Max. Marks: 100

Objectives:

- To impart skills in basic techniques of hand sewing.
- To provide the knowledge of various hand stitches.
- To impart skills in operating sewing machine.
- To provide the knowledge of stitching various garment parts.

Specific Learning Outcome:

By learning this paper the students will gain knowledge in taking measurements for preparing pattern. This paper will give way to understand parts and functions of a basic sewing machine and they will be able to know the mechanism and how to take care of a sewing machine. The students will also know to stitch starting from a simple seam to complex collars and yokes.

Unit I

Sewing Techniques: Definition-Sewing, Introduction to types of sewing machines, parts and functions of sewing machines of basic sewing machine. Special attachments in sewing machine. **Stitches:** Basic hand stitches – Basting, running, hand overcast, buttonhole, Hemming stitches – plain and blind hemming and slip stitch.

Unit II

Seams – plain, single top, double top, welt, flat fell, French seam, lapped, piped, slot and Mantua maker's seam. Seam finishes – (6). Fullness – darts (2), tucks (5), pleats (5), flares, godets, gathers (2) and ruffles (2). **Yokes(2)**, pocket(2), Neckline finishes- true bias, facing, shaped facing, binding and piping.

Unit III

Placket finishing – continuous one piece, two piece bound placket, Zipper placket and tailored placket. Fasteners – Press button, hook and eye, shirt button and button hole, button loop and decorative button and zips. **Sleeves (2)**, collars(2).

Unit IV

Preparation of Embroidery Samples- Basic and decorative stitches. Traditional embroideries-Kutch, Pulkari, Kantha, kasuthi, Chambarumal, Gold & silver embroidery, Zardosi, Chikankari, Kashida

Unit V

Patch work, Appliqué work, Quilting, Smocking, Mirror work, fabric painting.(each technique prepare two varieties)

Text Books

1. Helen J Armstrong, Pattern Making for Fashion Design, Prentice Hall
2. Pattern + palette – 2 Arrizabalaga
3. Pattern cutting and making up Martin .M,shoben 81-239-1373-7
4. Pattern cutting and making up Martin81-239-1373-7
5. Pattern Making of fashionAmstrong 978-81-317-2459-0, 978-317-2459
6. Mary Mathews. (1984). Practical clothing Construction Part-1. Madras Parrinpack. Prentice Hall Inc.

References

1. Harold Carr & Barbara Lathem, The Tachnology of Clothing Manufacture, Oxford Pub, USA, 1994
2. Gerry Cooklin, Introduction to Clothing Manufacture, Blackwell Science, UK, 1991
3. Metric Pattern cutting & Grading by Winfred Aldrich.
4. Bane Allyne, Flat pattern design. M.C. Graw – Hill Pub. USA
5. Winfred Aldrich, “Metric Pattern Cutting”. Black Well Science. UK
6. Helen J. Armstrong, “Pattern Making for fashion design” Prentice Hall.

Course Outcome (CO)	Programme Specific Outcome(PSO)										
	1	2	3	4	5	6	7	8	9	10	11
BASICS OF SEWING TECHNIQUES PRACTICAL	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: Knowledge about sewing machines types, uses and its care & maintenance.	3	3	3	1	1	1	2	2	2	3	3
CO2: Practice on different basic hand stitches and its application	3	3	3	2	2	1	3	3	3	2	3
CO3: Analyze and develop patterns for different types of yokes, collars, sleeves with style variations.	3	3	3	2	1	1	3	3	3	2	3
CO4: Application of various plackets, trimmings and accessories in the garments.	3	3	3	2	1	1	3	3	3	2	2
CO5: Understand the basic hand stitches and methods used in it	3	3	3	3	2	2	3	3	3	2	3
CO6: Practical knowledge on the traditional embroideries of India and techniques used in it.	3	3	3	3	2	2	3	3	3	2	3

Lecture Schedule

Unit	Topics to be covered	Hours
I	Sewing Techniques: Definition-Sewing, Introduction to types of sewing machines, parts.	3
	Functions of sewing machines, single needle, double needle	3
	Over lock machine, button hole machine, button fixing machine.	3
	Suitability and function, commonly used and special attachments in sewing machine.	3
II	Stitches: Basic hand stitches – Basting, running, hand overcast, buttonhole, Hemming stitches – plain and blind hemming and slip stitch.	5
	Seams – plain, edge, single top, double top, Flat fell, French seam, lapped, piped, slot.	4
	Seam finishes- pinked, overcast, edge, herring bone	3
III	Fullness and Yokes: Fullness – Darts, tucks pleats, gathers and style line.	4
	Yokes –and its types- Simple round Yoke, Full round yoke	4
	Square yoke, Pentagonal yoke , Side yoke , Yoke with and without Fullness.	4
IV	Sleeves and Collars: Sleeves – Plain, puffed, Raglan, Kimono, Bell sleeves, Butterfly, Cap.	4
	Angel, Bracelet, Cuff , Half, Long, Petal, and Slit Sleeves	4
	Collars – Peter pan, shawl, Shirt collar, Wing, Notched, Sailor, Ruff, Puritan and Mandarin.	5
V	Fasteners and Neckline Finishes: Fasteners – Press button, hook and eye, shirt button, button hole and zips.	4
	Finishes – Neckline finishes – Facing, shaped, piping / binding,	4
	Placket finishing – continuous one piece, two piece bound placket.	3
	Total hours	60

INDUSTRIAL TRAINING –II

Course code: 24TFUO1202

Credit: 1

Max.Marks:50

Specific Learning Outcome:

After successful completion of a field visit in a reputed textile manufacturing concern the student will have a complete commercial knowledge on textiles, they will gain knowledge about the latest machineries and equipments.

Industrial Visit:

From a practical point of view, this approach also seems like it might be a very useful way to document the process of getting to grips with the literature on a subject – helping immensely when it comes to putting together. We have one week/ two week exposure visit at the beginning of first semester. During second semester, the students undertake needs assessment exercise at various textile/ fashion field sites. Documentation in the form of report should be submitted by the candidates for evaluation purpose. The field training component is spread over in all academic institutes to place the successful candidates.

Course Outcome (CO)	Programme Specific Outcome(PSO)										
	1	2	3	4	5	6	7	8	9	10	11
INDUSTRIAL TRAINING– II	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: Identify technical concepts and ideas of merchandising.	3	3	3	3	3	3	3	3	3	3	3
CO2: Design and develop various types of process involved in textile and garment industry.	3	3	3	3	3	3	3	3	3	3	3
CO3: Supervise the quality in a textile and apparel manufacturing industries	3	3	3	3	3	3	3	3	3	3	3
CO4: Plan and execute ideas in textile and garment industries.	3	3	3	3	3	3	3	3	3	3	3
CO5: Organize and develop a Entrepreneurial small scale textile / garment units.	3	3	3	3	3	3	3	3	3	3	3

III SEMESTER
WET PROCESSING

Course code: 24TFUC2104

Credit: 4 +0

Max.Marks: 100

Objectives:

- To impart knowledge of textile and garments dyeing process.
- To introduce students to various chemicals, dyes and auxiliaries used for chemical processing.
- To impart the knowledge of textile coloring and various printing methods to the students.
- To bring an awareness on the industrial techniques of dyeing and printing

Specific Learning Outcome:

After learning this paper the students will gain thorough knowledge in Wet Processing of textile materials. They will be able to classify different finishing processes of textiles, preparatory process and different bleaching process. They will know different dyeing process, dyeing equipments, printing process and printing equipment.

Unit – I

Introduction to textile finishing – definition, importance, classification. Preparatory process for textiles for finishing. Eco-friendly processing – definition & importance. Study of conventional processing with eco-friendly processing. Enzymes – characteristics, types, application of enzymes in textile processing.

Unit – II

Converting gray goods-Introduction,-preparatory process, singeing, bleaching. Stabilizing process-mercerizing, slack mercerizing, ammoniating, shrinking-methods. Chemical treatments-resin treatment.

Unit –III

Textural process- Permanent stiffening, temporary stiffening, weighing, calendaring,sanforizing, glazing, schreinerizing, embossing, moirieving, cireing, beetling, raising, napping, electrifying and shearing.

Unit – IV

Dyeing- Introduction to dyeing, classification of dyes- natural and Synthetic. Natural- Origin of natural dyes, Raw material, selection, Extraction (understanding concepts) mordant and mordant techniques. Synthetic dyes– direct, basic, acid, vat, reactive and disperse dyes, sulphur. Methods of dyeing – Dope dyeing, fibre dyeing machine. Yarn dyeing machines – types, Package dyeing machines. Fabric dyeing machine – jigger, padding mangle, winch, beam, jet, soft flow dyeing machine. Garment dyeing machines

Unit – V

Printing -Definition, Difference between dyeing and printing. Preparation of printing paste – Essential ingredients used in printing paste – Basic styles of printing – Hand screen, Rotary, Transfer, Stencil, Block, Tie and Dye, Batik direct, discharge and Resist style. Introduction of Digital printing.

Text Books

1. Text book- Textile Science- Deepali Rastogi, Sheetal Chopra.
2. A.J.Hall “The Standard Hand Book of “Textiles”, Woodhead Publication, 2004
3. Natural dyeing Jackie crooks 978-1-85675-280-0
4. Needles: tufted couplet textile fiber dyes 978-93-80931-82-1
5. Textile chemical processing Jaitendrakumar 8190402558
6. Textiles and Laundry Poonam Sinha
7. Toxicity of Dyes and Intermediates Shenai
8. Dyeing printing and finishing Hust silk 81-8247-007-2
9. J.E. Smith “Textile Processing – Printing, Dyeing, Abhishek Publishing 2003.

References

1. Kate B Broughton, Textile Dyeing”, Rockport publishers, 1996.
2. W.S. Murphy, “Textile Finishing”, Abhishek Publication, 2000.
3. Rosi Robinson, “Creative Batik”, Search Press, 2004
4. Janice Gunner, “Shibori for textile Artists”, Batsford London
5. Textiles – Ninth edition, Sara J Radolph and Anna L Langford, Prentice hall, New Jersey (2002).
6. Textile processing – J L Smith, Abhishek publications, Chandigarh (2003).
7. Textile Chemistry – Peters R H, Vol I, & II, Textile Institute Manchester (1970)
8. Beginners Guide to fabric dyeing and printing – Stuart & Robinson, Technical books, London (1982).
9. Thickening agents and Emulsion thickenings in textile printing – Herbert Barthm, New Delhi (1994).

Course Outcome (CO)	Programme Specific Outcome (PSO)										
	1	2	3	4	5	6	7	8	9	10	11
WET PROCESSING	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: After learning this paper the students will gain thorough knowledge in Wet Processing of textile materials	3	3	3	1	3	3	1	3	3	3	3
CO2: Identify and understand different finishing processes of textiles, preparatory process.	3	3	3	1	3	1	1	1	3	3	3
CO3: Able to analyze, different dyeing and printing equipments.	3	3	3	1	3	3	1	1	3	3	3
CO4: Experiment with various laundering process, soap and detergent manufacturing process	3	3	3	1	3	3	1	1	3	3	3
CO5: Create various styles of dyeing and printing process.	3	3	3	1	3	3	1	1	3	3	3

Lecture Schedule

Unit	Topics to be covered	Hours
I	Wet processing- definition- classification- Basic preparatory process of finishing- Degumming, singeing, desizing, scouring	3
	Bleaching, stiffening, mercerization, carbonizing, Enzymatic process.	3
	Equipments and machineries used for various types of finish suitable for various fibers wet processing.	4
II	Dyeing- Introduction to dyeing, classification of dyes- natural.	6
	Origin of natural dyes, Raw material, selection, Extraction (understanding concepts) mordant and mordant techniques.	3
	Synthetic dyes– direct, basic, acid, vat, reactive and disperse dyes, sulphur	3
	Methods of dyeing- stock, top, yarn, piece, dope, garment dyeing	3
III	Printing methods- Definition-Classification-Styles-Direct Screen, Block, Roller, Rotary,	4
	Transfer, Discharge- white and coloured, Resist- stencil,	4
	Tie and dye, Batik. Identification of dyeing and printing defects	4
IV	Finishes – definition, classification of textile finishes, purpose of finishing	3
	Mechanical finishes- Calendaring, Durable press, Embossing, Napping, Shearing, Decating, Sanforizig,	3
	Sueding, Gigging, Beetting, Schrenrising, Stone wash, Tentering,	3
	Nano and microencapsulation process.	3
V	Chemical finishes- Definition, types, Antiseptic, Antistatic, Antislip, Flame Retardant,.	4
	Water Repellent, Stain Resistant, Water Proof. Moth proof, Anti Microbial, Plasma Finishes	4
	Total	57

PATTERN MAKING AND GRADING TECHNIQUES

Course code: 24TFUC2105

Credit: 4 +0

Max. Marks: 100

Objectives:

- To impart skills in basic techniques of pattern making.
- To impart pattern making and grading skills to the students.
- Lay a foundation for pattern development, pattern grading and pattern grading skills.

Specific Learning Outcome:

By learning this paper the students will gain knowledge in taking measurements for preparing metric patterns and commercial patterns. They will acquire knowledge in different pattern manipulation techniques and style development. This paper will give way to understand Fitting problems and fitting techniques. The students will also able to develop new designer patterns from basic patterns.

Unit I

Tools for clothing construction – Introduction, important tools & its types - their function. Brief study of Human growth. Different types of human body. **Body Measurements** – Importance, Principles of taking body measurements, Methods of taking body measurements for child, women & men, Standardisation methods-Definition, Standard measurement chart for children, men and women.

Unit II

Methods of pattern making: Pattern making – Introduction, glossary, Methods- Drafting, Draping and Flat Pattern. Drafting: Introduction, Preparation, Pattern drafting with personal measurement. Principles for pattern drafting. Preparing draft for basic bodice block for children. Draping: Definition, types of dress form, Draping techniques. Flat pattern Techniques: Definition, Pivot method, Slash & spread method, measurement method. Creating styles through dart manipulation and relocation of dart.

Unit III

Study of commercial pattern and body measurements - Pattern Grading: Introduction, Definition, Grading terminology, selecting a grading system, grading techniques, their advantages and disadvantages. Computer grading. Grading procedures. Grading of basic block using draft grading systems.

Unit IV

Fitting and Pattern alteration: Fitting – Definition – Principles for good fit. Causes for poor fit, checking the fit of a garment, solving fitting problems in various garments-basic principles. Fitting techniques. Pattern alteration - importance of altering patterns. Principles for pattern alteration. Common pattern alterations in a blouse. Alteration of pattern for irregular figures. Preparation of fabric for cutting – Importance of grain in fabric cutting. Checking and straightening the fabric grain and fabric ends.

Unit V

Pattern layout – Rules in pattern layout – Types of layout. Layout for asymmetrical designs, Bold designs, Checked and One-way design. Economy of fabrics in placing pattern – Adjusting the fabrics to patterns. Rules for placement of fabric if not sufficient. Fabric cutting – Transferring pattern markings. Stay stitching & Ease stitching. True Bias – Introduction, preparation and uses of true bias.

Text Books

1. Draping for Fashion Design, Hilde Jaffe, Nurie Relis.
2. Dress Design – Draping and Flat Pattern, Hill House MS, Houghton Mifflin Co, London, USA.
3. The theory of Fashion Design, Brockman, Magritha, John Wiley Sons, New York.

References

1. Design through Draping, Sheldon, Marhta, Burgers Publishing company, Minneapolis, USA.
2. Modern Pattern Design, Popin, Harriet, Funk and Wagnalls, New York and London.
3. Practical Clothing Construction – Part I and II, Mary Mathews, Cosmic Press, Chennai (1986)
4. The Complete Book of Sewing – Dorling Kindersley Limited, London (1986)
5. Sewing and Knitting – A Readers Digest, step- by – step guide, Readers Digest Pvt Ltd, Australia.

Course Outcome (CO)	Programme Specific Outcome (PSO)										
	1	2	3	4	5	6	7	8	9	10	11
PATTERN MAKING AND GRADING TECHNIQUES	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: Basics in taking measurements for preparing metric patterns and commercial patterns.	3	3	3	2	1	1	1	1	3	3	3
CO2: To analyse in different pattern manipulation techniques and style development.	3	3	3	3	2	1	1	1	3	3	3
CO3: To develop new designer patterns from basic patterns	3	3	3	3	2	1	1	1	3	3	3

Lecture Schedule

Unit	Topics to be covered	Hours
I	Study of body measurements, importance of body measurements, standard measurements chart for all age groups.	3
	Standard measuring techniques- commercial patterns for all age groups and its application in pattern making.	3
II	Methods of pattern making definition- drafting, principles of drafting. Steps in drafting children's, adults bodice and sleeve patterns.	4
	Flat pattern techniques- definition, pivot, slash and spread method. Dart manipulation- slash and spread, pivot transfer technique.	4
III	Layout definition, layout planning- types of layout, merits and demerits of layout, marking, assembling.	4
	Fitting- definition, principles of good fit, causes for poor fit, checking the fit of a garment, fitting techniques.	4
	Pattern alteration- importance of altering patterns, principles of pattern alteration.	4
IV	Grading- definition, types of manual and computerized. Manual- master grade basic back, basic front,	4
	Basic collar and basic facing and grading.	4
	Computerized grading technology- information flow, system description.	3
V	Draping- importance of draping- the dress form and its types. Draping steps for basic bodice, skirt, pants and intimates	5
	Various intimates for men, women, adolescence and kids, intimate garments- introduction, material used and types of fitting for men's innerwear briefs and truck. Women's inner wears.	5
	Total	47

RECENT TRENDS IN TEXTILES AND FASHION INDUSTRY

Course code: 24TFUC2106

Credit: 4 +0

Max. Marks: 100

Objectives:

- To gain knowledge about different types of sewing machines.
- To know about different spreading and cutting machines.
- To introduce students to aspects of fashion and recent advances in apparel industry.
- To impart knowledge about various product standards and product specifications and the process of product development towards market need.

Specific Learning Outcome:

After learning this paper the students will gain knowledge in process carried out in each department in apparel industrial. Apparel design is the backbone of all industrial activity, with the entire production, fitting and importance's of apparel and gain knowledge in fabric and trims sourcing and will be able to prepare a cost effective garments.

Unit I

Introduction to garment industry: Brief study of sequence of process – Planning, spreading & cutting. Marking – Definition, requirements of marker planning, methods of marker planning and computerized marker planning. Spreading – Definition, requirements of spreading process, methods of spreading, spreading machine. Nature of the fabric packages.

Unit II

Introduction to cutting technology – Definition, objective of cutting. Methods of cutting – Cutting equipment and tools - Hand shears, straight knife cutting machine, band Knife cutting machine, round knife cutting machine, notchers, drills & thread markers, computer controlled cutting machine, Laser cutting, Plasma cutting, die cutting, water jet cutting and ultrasonic cutting.

Unit III

Sewing machine – parts and function of basic sewing machine: Needle – parts & types of needle, needle size, presser foot and its types. Classification of Industrial sewing machines: Applications and Description of working of various sewing machine - Single Needle Lock Stitch machine (SNLS), Double Needle Lock Stitch machine (DNLS), Over Lock , Flat Lock , Bar tacking , Button hole machine, Button fixing machine, Blind stitch machine and smocking making machine. Machine bed types – flat bed, cylinder bed, post bed and feed-off-the-arm.

Unit IV

Definition and types of stitches and seams as per federal standards. Study on various garment finishing industrial machines for Fusing, stain removing, Pressing, foreign particle detecting and Packing. Colour matching- importance, computerized colour matching cabinet. Efficiency of planning fabric wastage and utilization of fabric waste.

Unit V

Introduction to Automatic sewing machine, Automatic embroidery machine and smocking making machine. Introduction to ultra sonic stone fixing machine. Introduction to computerized pattern development, Software's used for pattern development. Introduction to digitizer plotter scanner. Grading- computerized grading and software's used for grading. E-fitting, body scanner, 3D simulators.

Text Books

1. Fashion Design and Product Development, Harold Carr and John Pomeroy, Black well Science Inc, Cambridge (1992)
2. Fashion marketing, Mike Basey, Oxford University press, Wynford Drive, Don Mills, Ontario (1995) . .
3. Introduction to Fashion, Patrick John, B T Batsford Ltd, Ireland, Fullham road, London (1992).
4. Fashion From Concepts to Consumer, Stephens Frings, Prentice Hall, 7th Edition 2002.
5. Marketing Management, Philip Kotler, Prentice Hall, 7th Edition 1996

References

1. Shenai V.A, Technology of Textile processing, Chemistry of dyes and principles of dyeing, A Sevak Publication, Bombay, 1993.
2. Nalankili. G., Textile Finishing, SSM Publications, Komarapalayam.
3. Prayag. R.S., Technology of Textile Printing, L.R. Prayag.
4. Manivasagam. N. Treatment of textile processing effluents, Sakthi Publications, Coimbatore 1995.
5. Mary Mathews, Practical Clothing Construction – Part I Cosmic Press, Chennai.
6. Coles M Sew, “A complete guide for sewing”, Heinemann Professional Publishing, Singapore.
7. Latham & Carr, The Technology of Clothing Manufacture.
8. Gerry Cooklin, Introduction to clothing Manufacture, Blackwell Science Lts., England, (1991).
9. Ruth. E. Glock and Grace.I.Kunz, Apparel Manufacturing, Pearson Education, New Delhi.

Course Outcome (CO)	Programme Specific Outcome (PSO)										
	1	2	3	4	5	6	7	8	9	10	11
RECENT TRENDS IN TEXTILES AND FASHION INDUSTRY	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
Co 1: Introduction about the garment industry and its process and its various section in garment industry	3	1	3	1	1	3	1	3	3	3	2
Co2: Learnt about the various types of sewing machineries parts and its function	3	1	3	1	1	2	1	3	3	3	2
Co 3: Acquaint the students about various equipments used in apparel industry	3	1	3	1	1	1	1	2	2	3	3

Lecture Schedule

Unit	Topics to be covered	Hours
I	Foundation garment- introduction, materials used and types of fitting for Men's and Women's inner wear and swim wear.	4
	Fitting- principles of fitting, standards for a good fit, E-fitting, body scanner, 3D simulators. Interlining interfacing- materials, types, properties, application and machinery.	4
II	Introduction to manual/ computerized pattern development, mini- marker. Software's used for pattern development. Introduction to digitizer plotter scanner.	4
	Grading- computerized grading and software's used for grading. Spreading- definition, methods of spreading, spreading machine. Nature of the fabric packages.	4
III	Lay out- definition, importance and principles of layout, importance of fabric estimation, advantages, methods of estimation material requirement for garment- easy method and formula method of estimation.	4
	Handling special fabric - stretch fabric, knit, checks, braids, velvet, leather, fur and lace.	4
IV	Marking- definition, requirements of marker planning, methods of marker planning and computerized marker planning. Cutting- objective methods of cutting, cutting tools and equipments- hand shears, straight knife cutting machine, band knife,	4
	Round knife, notches, drills and thread markers, computerized cutting machine, laser cutting, plasma cutting, and ultrasonic cutting.	4
V	Garment finishing industrial Equipment for fusing, stain removal, pressing, Detecting foreign particle and packing..	4
	Colour matching- importance, computerized colour matching cabinet. Efficiency of planning fabric wastage,	4
	Total	40

PATTERN MAKING AND APPAREL CONSTRUCTION PRACTICAL

Course code: 24TFUB2104

Credit: 0+4

Max. Marks:100

Objectives:

- To impart the knowledge in drafting and garment construction for children's wear.
- To impart and develop creative skills in designing and constructing children's wear for different age groups.

Specific Learning Outcome:

This paper will enable the students to prepare patterns based on individual measurement and stitch garments for Children independently without any assistance. The students can develop complex patterns and designs based on the practical skill they acquire

. Unit I

Preparation of personal measurement chart, Standardization of body measurements, Drafting basic pattern – Bodice –Front &Back, sleeves, Skirts, Grading of Patterns.

Unit II

Design, Draft and Grade – Sleeve and Skirt using Slash and Spread Method (Any two Varieties). Draft a garment with any two style variation using your own measurement.

Unit III (Each one construct 2 varieties)

Designing, patternmaking, layout planning, marking, cutting and finishing the garments, Infant Jabla, Accessories - Infant bed, Infant Bib, panty for 2-3 years. Waist line frock for girl 2-4 years, Baby A-line frock with variation of sleeve, yoke, 3-5 years.

Unit IV (Each one construct 2 varieties)

Designing, patternmaking, layout planning, marking, cutting and finishing the garments, Flared frock, Nightwears, Knicker, Shorts, T – Shirt.

Unit V

Designing, drafting and construction of Saree petticoat – Six Panel, Seven panel, Eight Panel, Midi and Midi top with Waist Band, Plain Skirt, wrapron Skirt.

Text Books

1. Practical Clothing Constructing-Part I and II, Mary Mathews, Cosmic Press, Chennai (1986)
2. Zarpker System of Cutting- Zarpker. K. R, Navneet Publications ltd.
3. Practical cutting and tailoring part II EshwasriAnwahi, Lakhraj Hans R.B Publications, Delhi

References

1. Advanced drafting and draping Manmeet Sodhia
2. Metric pattern cutting for children's wear and babies wear Winifred Aloric
3. Singer sewing for children.

Course Outcome (CO)	Programme Specific Outcome (PSO)										
	1	2	3	4	5	6	7	8	9	10	11
PATTERN MAKING AND APPAREL CONSTRUCTION	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: To prepare basic patterns based on individual measurements for children.	3	3	3	2	1	1	1	1	3	3	3
CO2: Practice various complex patterns from infant to toddler's garments.	3	3	3	3	2	1	1	1	3	3	3
CO3: Analyze the suitability of fabrics and accessories used for children's wear	3	3	3	3	3	3	1	1	3	3	3
CO4: Create variations in necklines, sleeves and styles in garment construction	3	3	3	3	2	1	1	1	3	3	3
CO5: Construct comfortable garments for children's for different age groups.	3	3	3	3	2	1	1	1	3	3	3

Lecture Schedule

Unit	Topics to be covered	Hours
I	Designing, patternmaking, layout planning, marking, cutting and finishing the garments, Infant Jabla, napkin,	6
	Towels for 0-1 years, Accessories - Infant bed, feeding bottle cover, Infant Bib, panty for 2-3 years.	6
II	Designing, patternmaking, layout planning, marking, cutting and finishing the garments, Waist line frock for girl 2-4 years	6
	Stapled petticoat, Baby A-line frock with variation of sleeve, yoke, pockets etc. 3-5 years.	6
III	Designing, patternmaking, layout planning, marking, cutting and finishing the garments,	4
	Flared frock with Magyar sleeve 6-12 years with variation of tucks, gathering, pleates.	6
IV	Designing, patternmaking, layout planning, marking, cutting and finishing the garments, Nightwears for boys and girls 2-6 years with variation of neck design and pockets	6
V	Designing, patternmaking, layout planning, marking, cutting and finishing the garments, Knickers, shorts,	5
	Bush shirt, T-shirt, slack shirt 6-8 years preparatory models and construct os any two garments.	5
	Total	50

INDUSTRIAL TRAINING –III

Course code: 24TFUO2103

Credit: 1

Max.Marks:50

Objectives:

- To expose students to experience and knowledge which is required in industry, where these are not taught in the lecture rooms.
- To apply the knowledge taught in the lecture rooms in real industrial situations.
- To use the experience gained from the ‘Industrial Training’ in discussions held in the lecture rooms.
- To get a feel of the work environment.
- To gain experience in writing reports in works/projects.
- To expose students to the responsibilities and work ethics.
- With all the experience and knowledge acquired, it is hoped at the students will be able to choose appropriate work upon graduation.

Specific Learning Outcome:

After successful completion of a field visit in a reputed textile manufacturing concern the student will have a complete commercial knowledge on textiles, they will gain knowledge about the latest machineries and equipments.

Industrial Training

Industrial Training refers to work experience that is relevant to professional development prior to graduation. One of the requirements for the award of Bachelor of Science is that students must complete at least 2 weeks of Industrial Training. Industrial Training is normally accumulated during the semester breaks at the end of the second year. Students should note that Industrial Training is an essential component in the development of the practical and professional skills required of a candidate and an aid to prospective employment. Many employers regard this period as a chance to vet new employees for future employment.

All students should make considerable effort and give sufficient thought into obtaining the most relevant and effective Industrial Training. Whilst difficult, it is desirable to obtain experience in a range of activities, such as e.g. design office, laboratory and on-site situations. It should also be noted that developing an awareness of general workplace behavior and interpersonal skills are important objectives of the Industrial Training experience.

Course Outcome (CO)	Programme Specific Outcome (PSO)										
	1	2	3	4	5	6	7	8	9	10	11
INDUSTRIAL TRAINING–III	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: After learning this paper the students will gain thorough knowledge in Wet Processing of textile materials	3	3	3	1	3	3	1	3	3	3	3
CO2: Identify and understand different finishing processes of textiles, preparatory process.	3	3	3	1	3	1	1	1	3	3	3
CO3: Able to analyze, different dyeing and printing equipments.	3	3	3	1	3	3	1	1	3	3	3
CO4: Experiment with various laundering process, soap and detergent manufacturing process	3	3	3	1	3	3	1	1	3	3	3
CO5: Create various styles of dyeing and printing process.	3	3	3	1	3	3	1	1	3	3	3

+

SEMESTER – IV TEXTILE FINISHING

Course code: 24TFUC2207

Credit: 4 +0

Max.Marks: 100

Objectives:

- To impart knowledge about advance technology in textile.
- To obtain knowledge in effluent treatment in various textile industry.
- To impart the knowledge of eco-friendly treatments to the textiles.
- To bring awareness on the industrial techniques of textile finishes.

Specific Learning Outcome:

After learning this paper the students will gain thorough knowledge in various finishes of textile materials. They will be able to classify different finishing processes of textiles, effluent treatments. They will know different finishing equipments and eco-friendly treatments.

Unit – I

Functional finishes – Wrinkle resistant, Absorbency finishes, water proof finish – chemical and methods used. Difference between water proof and water repellant finish. Water repellant finish – chemical used, classification, mechanism and its application. Flame retardant finish – importance, application area, classification and method.

UNIT – II

Functional finishes -Soil release finish. Anti-microbial finish – rot and mildew proof finish, anti-bacterial finish. Anti-static finish and UV production finish.

Mechanical finishing – methods and application. Sanforising – types and method and its application. Brushing – method and its application. Decating - types and methods of decating. Milling – methods and application. Calendering - introduction, its purpose, universal calendering- moiré, schreiner, embossed.

Unit – III

Mechanical finishing -Drape -Crisp, transparent. Texture - pleated, flocked, sheared, plisse.

Special finishing – wash and wear finish. Anti-crease finish – methods and application. Durable press methods and application. Stiff finish – classification, different natural, modified natural and synthetic stiffening agents, different starching methods and its application.

Unit – IV

Special finishing -Denim finish – stone wash finish and Enzyme wash. Application of silicones in finishing processes, Fragrance finish and its application. Elastomeric finishes, Soil and oil repellent finishes and its application.

Unit – V

Environmental pollution during chemical processing of textiles. Effluent treatment – effluents from various plants – various process for treating waste water. Recent trends in finishing – micro encapsulation techniques, Nano finishes, bio - polishing.

Text Books

1. Text book- Textile Science- Deepali Rastogi, Sheetal Chopra.
2. A.J.Hall “The Standard Hand Book of “Textiles”, Woodhead Publication, 2004
3. 3. Natural dyeing Jackie crooks978-1-85675-280-0
4. Textile chemical processing Jaitendrakumar8190402558
5. Textiles and Laundry Poonam Sinha
6. Dyeing printing and finishing Hust silk81-8247-007-2
7. J.E. Smith “Textile Processing – Printing, Dyeing, Abhishek Publishing 2003

References

8. W.S. Murphy, “Textile Finishing”, Abhishek Publication, 2000.
9. Rosi Robinson, “Creative Batik”, Search Press, 2004
10. Janice Gunner, “Shibori for textile Artists”, Batsford London
11. Textiles – Ninth edition ,Sara J Radolph and Anna L Langford, Prentice hall, New Jersey (2002).
12. Textile processing – J L Smith, Abhishek publications, Chandigarh (2003).
13. Textile Chemistry – Peters R H , Vol I, & II, Textile Institute Manchester (1970)
14. Shenai, V.A, Technology of finishing, sevek publication, Mumbai (1996).
15. Manivasagam, N, Treatment of textile processing effluents, Sakthi publication (1995).
16. Understanding Textiles 6th edition, Billie j.Collier, Phyllis G.Tortora, Prentice Hall Inc., New Jersey, 2001.
17. Textiles by sara.J.Kadolph and Anna .L.Langford, 2000.
18. Textiles Finishing by R.S.Prayag.
19. Functional Finishes by Lewin and Sello.
20. Technology of Finishing by J.T.Marsh.

Course Outcome (CO)	Programme Specific Outcome (PSO)										
	1	2	3	4	5	6	7	8	9	10	11
TEXTILE FINISHING	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: To impart knowledge about advance technology in textile	3	3	3	1	1	1	1	1	3	3	3
CO2: Gain knowledge about the eco textiles	3	3	3	1	2	1	1	3	3	3	3
CO3:Attain the knowledge in effluent treatment in various textile industry	3	2	3	1	2	2	1	1	1	1	1
CO 4: Instruct the knowledge of eco-friendly treatments to the textiles	3	2	3	1	2	2	1	1	1	1	1

Lecture Schedule

Unit	Topics to be covered	Hours
I	Introduction to textile finishing – definition, importance, classification. Preparatory process for textiles for finishing.	3
	Eco-friendly processing – definition & importance. Study of conventional processing with eco-friendly processing.	3
II	Mechanical finishing – methods and application. Sanforising – types and method and its application. Milling – methods and application.	3
	Brushing – method and its application.	3
	Decating - types and methods of decating.	
	Calendering - introduction, its purpose, universal calendering. - moiré, schreiner, embossed. Drape – Crisp, transparent. Texture - pleated, flocked, sheared, plisse.	3
III	Special finishing – wash and wear finish. Anti-crease finish – methods and application. Durable press – methods and application. Stiff finish – classification, different natural, modified natural and synthetic stiffening agents, different starching methods and its application.	5
	Denim finish – stone wash finish and Enzyme wash. Application of silicones in finishing processes, Fragrance finish and its application.	4
IV	Functional finishes – water proof finish – chemical and methods used. Difference between water proof and water repellant finish.	4
	Water repellant finish – chemical used, classification, mechanism and its application. Flame retardant finish – importance, application area, classification and method. Soil release finish. Anti-microbial finish – rot and mildew proof finish, anti-bacterial finish. Anti-static finish and UV production finish.	4
V	Environmental pollution during chemical processing of textiles. Effluent treatment – effluents from various plants – various process for treating waste water.	4
	Recent trends in finishing – micro encapsulation techniques, Nano finishes, bio – polishing	3
	Total	42

HISTORIC TEXTILES AND COSTUMES OF INDIA

Course code: 24TFUC2208

Credit: 4 +0

Max. Marks: 100

Objectives:

- To understand the various century's costumes and historic textiles in India.
- To have concepts on colour, motif and specialization in different state costumes of India.
- To enhance the students knowledge regarding accessories and jewellery of different Eras.

Specific Learning Outcome:

After learning this paper the students will gain knowledge in Historical textiles and Designs starting from the evolution to human to till date. The students will gain knowledge on traditional woven textiles of India and the Traditional embroideries of different states of India. They will even learn about the Traditional costumes of different states of India spread on varied diversity.

Unit I

Indian- History, India valley civilization-Vedic perio, Mauryan period, Gupta period, Mughal period, Rajput period, British periods

Unit II

Traditional attires of north India- Jammu and Kashmir- Climate condition costume, Colourful pherans shawls, Intricate embroidery, Goucha, Himachal Pradesh and Uttaranchal – Short ghaghras, kurti and chunder or chunri, Riwaaz, pagri.

Unit III

Clothing in western India- Rajasthan and Gujarat- climate condition costume, radiant costume, ghagra choli and odhnis, gotanadzari work. Rajasthani- Bandhini, tie-n-dye, head wear to toe ornaments, Maang-teeka, Matha-patti, Rakhdi or ghundi, banda, Dhabla, pachewara and Bugatari. Maharashtrian- Pheta or patka or Rumal, mega sleeve choli or blouse, Marathi look typical nathni.

Unit IV

Costumes of east and north-east Inda- Bengali- Dhoti-kurtha, Assam- mekhla chador, Meghalaya-Jainsen, Mizoram, Manipur-Phanek,potlois, Tripura, Nagaland and Arunachal Pradesh – Buddhist monpas tribal costume.

Unit V

Clothing styles of south India- Kerala- Lungis, Mundu and Neriathu, saree zaribordaered, Karnataka-Angavastram, Andhra Pradesh- long sleeve choli, kurta, Tamil Nadu- Kanchipuram silk. Origin, History- brocades of Banaras, Baluchari, Chanderi, Pochampalli.

Text Books

1. John Gillow & Nicholas Barnad, "Traditional Indian Textiles". Thames & Hudson, 1993
2. Martand Singh, "Saris' of India – Bihar & West Bengal", Wiley Eastern Ltd. 1993
3. Rta Kapur chishti & Amba Sanyal, "Saris of India – Madhya Pradesh," Wiley Eastern Ltd. 1989
4. Ancient Indian Costume, Roshen Alkazi, Art Heritage (1983)
5. Costumes and textiles of Royal India – Ritu Kumar Published by Christie's Books.
6. The Guide to Historic Costumes, Karen Baclawski, Drama Publishers (1995).
7. Ikat textiles of India - G.K. Ghosh
8. Impressions – a classic collection of Indian textiles design (with cd) Prakasha. K

References

1. India by design Boroian
2. Indian fashion designing Prakash
3. Indian Ikat textiles -Rosemary crill 1-85177-242-1
4. Indian textiles ethnic and beyond (with cd) R.M. Lehri
5. Jute handlooms of india 1-890206-18-0
6. Shifting sands Kutch Textiles Traditions : Transformation Archana Shah
7. Textiles and crafts of India, Arunachal Pradesh, Assam, Manipur Vandana Bhanda
8. Traditional Embroideries of India Shailaja D. Naik
9. Traditional Indian Costumes and Textiles Bhatnagar
10. Warli paintings, Traditional folk arts from India K. Prakash
11. Suvasas the beautiful costumes Vishnu arora 978-81-8247-196-2
12. Textile and dress of Gujarat Eiluned Edwards
13. Textile art of India - Kokyo Hatanaka
14. Madhu Priya, "An innovative Collection of Indian Textile designs," Honesty Publishers & Distributors
15. "Traditional Indian costumes & textiles", by Dr. Parul Bharnager, Abhishek Publication.
16. "The Costumes and textiles of India", by – Jamila Brij Bhusan, Taraporevala – Bombay.

Course Outcome (CO)	Programme Specific Outcome (PSO)										
	1	2	3	4	5	6	7	8	9	10	11
HISTORIC TEXTILES AND COSTUMES OF INDIA	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: Understand historical textiles and Designs starting from the evolution to human to till date	3	3	3	3	3	3	3	3	3	3	3
CO2: Identify various woven textiles of India	3	3	3	3	3	3	3	3	3	3	3
CO3: Acquaint students with various traditional embroideries of India	3	3	3	3	3	3	3	3	3	3	3
CO4: Analyze on different culture and costumes worn in different states of India for any decades	3	3	3	3	3	3	3	3	3	3	3
CO5: Develop traditional and heritageous art form of India	3	3	3	3	3	3	3	3	3	3	3

Lecture Schedule

Unit	Topics to be covered	Hours
I	Indian- History, India valley civilization-Vedic perio, Mauryan perio	3
	Gupta perios, Mughal period, Rajput period, British periods	3
II	Traditional attires of north India- Jammu and Kashmir- Climate condition costume, Colourful pherans shawls,	3
III	Intricate embroidery, Goucha, Himachal Pradesh and Uttaranchal – Short ghaghras, kurti and chunder or chunri, Riwaaz, pagri.	4
	Clothing in western India- Rajasthan and Gujarat- climate condition costume, radiant costume, ghagra choli and odhnis, gotanadzari work..	3
IV	Rajasthani- Bandhini, tie-n-dye, head wear to toe ornaments, Maang-teeeka, Matha-patti, Rakhdi or ghundi, banda, Dhabla, pachewara and Bugatari	4
	Maharashtrian- Pheta or patka or Rumal, mega sleeve choli or blose, Marathi look typical nathni.	4
	Costumes of east and north-east Inda- Bengali- Dhoti-kurtha, Assam- mekhla chador, Meghalaya-Jainsen, Mizoram,	4
V	Manipur-Phanek,potlois, Tripura, Nagaland and Arunachal Pradesh – Buddhist monpas tribal costume.	3
	Clothing styles of south India- Kerala- Lungis, Mundu and Neriathu, saree zaribordaered,	4
	Karnataka-Angavastram, Andhra Pradesh- long sleeve choli, kurta, Tamil Nadu- Knachipuram silk.	3
	Origin, History- brocades of Banaras, Baluchari, Chanderi, Pochampalli.	3
Total		40

HOME FURNISHING PRACTICAL

Course code: 24TFUC2209

Credit: 0+4

Max Mark: 100

Objectives:

- To understand the Home Textiles and Furnishing concepts and production techniques.
- To enhance the knowledge on the types and uses of Home Furnishing to the textile students.
- To acquire knowledge and apply principles of design on interior decoration
- To identify and apply correct furniture
- To understand about the various fabrics used in the interiors.
- To gain information and understand the method of preparing basic soft furnishing.

Specific Learning Outcome:

This paper will enable the students to design Home Textiles based on different mapping, of home layout. They will be able to develop, design, and constructs different style of Home textiles. They will be able to coordinate the Home textiles to the Home Layout.

Unit I

Develop and prepare the model of Table linens - Table linen types- Square checks, Centre piece table cloth, Contrast table linen, polka dots, Straw covers, Runner, Placemats, Glass mates and napkins.

Unit II

Develop and prepare the model of Bed linens – Top sheet, Bottom sheet, Coverlet, Bedspread, Blanket, , Sleeping pillow, Decorative pillow, Bolster pillow, pillowcase.

Unit III

Develop and prepare the model of Kitchen linens – Apron - Bib apron, Server apron, Bistro apron, Dishwasher apron, Pinafore, Mittens , Bread Basket and Pot holder.

Unit IV

Develop and prepare the model of Window textiles - curtains - Flat panel curtain, panel pair curtain, Tab top curtain, ,Rod pocket curtain, Thermal curtain, Shutter, Solar shadeRoller shades, Pleated shades, draperies definition-any one variety.

Unit V

Develop and prepare the model of Upholstery - Traditional upholstery, office upholstery, and home furnishing upholstery– three seated and two seated sofa covers. Cushions with decorative effect.

Text book:

1. Carpets : Back to Front, Textile progress, Vol.19, No.3 by – L Cegielka MA, The Textile Inst. Publication
2. Textile Floor coverings by G.H. Crawshaw, Textile Progress, Vol.9, No.2, The Textile Inst. Publisher.
3. Interior Furnishings, Textile Progress, Vol.11, No.1, By Mortimer O. Shea, The Textile Inst. Publication
4. Interior Furnishing by Mortimer O.Shea, Textile Progress, Vol.11, No.1, The Textile Institute, Publication.

References

1. Harriet Goldstein, Vetta Goldstein Art in everyday life Oxford & publishing & co
2. Anne van wyke The craft of soft furnishing Stanley paul, London
3. Jerry KirschenGrosset and Dunlop How to make ties & table cloths A national general company, Newyork Pamela Wilson
4. Cullison New decorating book Meredith corporation, Iowa, USA
5. Alexander N G Designing Interior Environment
6. Mas court Brace covanorichDonserkery K G Interior Decoration in India Tarapoorwala& co

Course Outcome (CO)	Programme Specific Outcome (PSO)										
	1	2	3	4	5	6	7	8	9	10	11
HOME FURNISHING PRACTICAL	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: Illustrate different varieties of home furnishings	3	3	3	3	1	1	2	3	3	3	3
CO2: Analyze different fabrics suitable for house hold linens	3	3	3	3	3	3	2	2	3	3	3
CO3: Identify the design and colour suitability according to the interior works	3	3	3	3	3	3	2	2	3	3	3
CO4: Construct table linens, bed linens, kitchen linens, window textiles and all types of upholstery	3	3	3	3	2	1	3	3	3	3	3
CO5: Inspect the quality of home furnishings etc.,	3	3	3	3	2	1	3	3	3	3	3

Lecture Schedule

Unit	Topics to be covered	Hours
I	Introduction to Table linens - Table cloth- table linen types- Square checks, Centrepiece table cloth, White lace table linen, Crochet table covers,	5
	Contrast table linen, polka dots, Straw covers, Runner, Placemats, Glass mates and napkins. Developing, preparatory of models.	5
II	Introduction to Bed linens – Top sheet, Bottom sheet, Coverlet, Bedspread, Blanket, Comforter, Duvet, Duvet cover,	5
	Euro or continental pillow, Sleeping pillow, Decorative pillow, Bolster pillow, pillowcase, Pillow sham, Bed skirt, Throw blanket. Developing, preparatory of models.	5
III	Introduction to Kitchen linens – Apron definition- Bib apron, Server apron, Bistro apron, Cobbler apron, Tuxedo apron, Dishwasher apron.	5
	Diy retro apron, Pinafore, Tabard, Bungalow apron, Clerical apron, Mittens , Bread Basket and Pot holder. Developing, preparatory of models.	5
IV	Introduction to Window textiles - curtains definition- Flat panel curtain, panel pair curtain, Tab top curtain, Grommet curtain, Sah curtain, Rod pocket curtain, Thermal curtain, Curtain liners,	6
	Roman shades, Shutter, Solar shade, Wood blinds, Faux wood blinds, Panel track blinds, Roller shades, Pleated shades, draperies definition-any one variety. Developing, preparatory of models.	6
V	Introduction to Upholstery definition, traditional upholstery, office upholstery, home furnishing upholstery– three seated and two seated sofa covers.	6
	Cushions with decorative effect, Teapot Cover- printed and embroidered. Developing, preparatory of models.	6
	Total	54

WOMEN'S APPAREL CONSTRUCTION PRACTICAL

Course code: 24TFUB2205

Credit: 1+3

Max Mark:100

Objectives:

- To impart the practical knowledge in pattern drafting and construction of women's garments.
- To the style variation in women's wear.
- To develop creative skills in construction for different age group of women's wear.

Specific Learning Outcome:

This paper will enable the students to prepare patterns based on individual measurement and stitch garments for women independently without any assistance. The students can develop complex patterns and designs based on the practical skill they acquire.

Unit I

Each garment 2 varieties preparatory models

Measurements, designing, drafting and construction of Salwar, Kameez for teenage girls, Night wear/Night garment, Maxie for teenage girls, Kurtis for teenage girls.

Unit II

Each garment 2 varieties preparatory models

Measurements, designing, drafting and construction of Saree Blouse with Plain Sleeve, Kattori Blouse with varieties of sleeve, Choli blouse.

Unit III

Each garment 2 varieties preparatory model

Measurements, designing, drafting and construction of Ladies shirt half sleeve and full sleeve, House coat with shawl collar

Unit IV

Each garment 2 varieties preparatory models

Measurements, designing, drafting and construction of Ladies pant and its varieties with side zipper attached using fabrics (leather, corduroy)

Unit V

Design and develop the party wear garment for your own measurements (Two variation)

Text Books

1. Scientific garment quality –K M Illege and Sons , Plot No. 43 , Somuvar Peth pune 411011
Easy cutting –Juvekar commercial Tailors Corporation p vt 166 Dr. Ambedkar Road dadar.
2. A stitch in time-Frederick 0-19-512615-7
3. Aasha Blouse Design Vol 24, book no 209
4. Aasha Blouse Design Vol 28, book no 213
5. Aasha Blouse Design Vol 34, book no 220
6. Aasha Designer's Blouse , book no 215
7. Aasha Golden Collection Blouse , Vol 3, book no 222

References

1. Cutting and tailoring course illustrated Gayathri Verma
2. Cutting and tailoring theory Vol 1 Eshwari Anwani
3. Cutting and tailoring theory Gayathri Verm,
4. Garment construction skills Premalatha mullick 81-272-0267-3, 81-272-0267-3
5. Commercial system of cutting - Juvekar commercial Tailors Corporation p vt 166 Dr. Ambedkar Road dadar.
6. Zarapker system of cutting –K.RZarapker ,Navneet publication ltd.

Course Outcome (CO)	Programme Specific Outcome (PSO)										
	1	2	3	4	5	6	7	8	9	10	11
WOMEN'S APPAREL CONSTRUCTION- PRACTICAL	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: Understand the body measurements for an individual for women	3	3	3	3	2	3	1	1	3	3	3
CO2: Design and develop patterns with various styles for women.	3	3	3	3	3	3	1	1	3	3	3
CO3: Identify the suitability of fabrics for different age group of women.	3	3	3	3	3	3	1	1	3	3	3
CO4: Create complex patterns in drafting women's garments	3	3	3	3	3	3	1	1	3	3	3
CO5: As a skill construct different types of garments and create portfolio concepts	3	3	3	3	3	3	1	1	3	3	3

Lecture Schedule

Unit	Topics to be covered	Hours
I	Saree petticoat – Six Panel (or) Eight Panel (any one), Middi and Middi top With Waist Band.	6
	Plain Skirt, Rrapron Skirt.	6
II	Salvar, Kameez for Teenage girls, Night wear/Night garment	6
	Maxie for Teenage girls, Kurthis for Teenage girls.	6
III	Saree Blouse with Plain Sleeve,	6
	Kattori Blouse with varieties of sleeve, Choli blouse.	6
IV	Ladies shirt half sleeve and full sleeve	6
	House coat with shawl collar	6
V	Ladies pant and its varieties with side zipper attached	6
	Total	54

INDUSTRIAL TRAINING-IV

Course code: 24TFUO2204

Credit: 2

Max Marks:50

Objectives

- To expose students to experience and knowledge which is required in industry, where these are not taught in the lecture rooms.
- To apply the knowledge taught in the lecture rooms in real industrial situations.
- To use the experience gained from the 'Industrial Training' in discussions held in the lecture rooms.
- To get a feel of the work environment.
- To gain experience in writing reports in works/projects.
- To expose students to the responsibilities and work ethics.
- With all the experience and knowledge acquired, it is hoped at the students will be able to choose appropriate work upon graduation.

Specific Learning Outcome:

After successful completion of a field visit in a reputed textile manufacturing concern the student will have a complete commercial knowledge on textiles, they will gain knowledge about the latest machineries and equipments.

Industrial Training

Industrial Training refers to work experience that is relevant to professional development prior to graduation. One of the requirements for the award of Bachelor of Science is that students must complete at least 2 weeks of Industrial Training. Industrial Training is normally accumulated during the semester breaks at the end of the second year. Students should note that Industrial Training is an essential component in the development of the practical and professional skills required of a candidate and an aid to prospective employment. Many employers regard this period as a chance to vet new employees for future employment.

All students should make considerable effort and give sufficient thought into obtaining the most relevant and effective Industrial Training. Whilst difficult, it is desirable to obtain experience in a range of activities, such as e.g. design office, laboratory and on-site situations. It should also be noted that developing an awareness of general workplace behavior and interpersonal skills are important objectives of the Industrial Training experience.

Course Outcome (CO)	Programme Specific Outcome (PSO)										
	1	2	3	4	5	6	7	8	9	10	11
INDUSTRIAL TRAINING-IV	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: Identifying and standardizing the body measurements.	3	3	3	3	1	1	1	1	3	3	3
CO2: Supervise the fabrics, trimmings and accessories used in the garments.	3	3	3	3	3	1	1	1	3	3	3
CO3: Handle the buyers for the manufacturing of garments	3	3	3	3	3	1	1	1	3	3	3
CO4: After training in embroidery section they can create different motifs and designs according to the garment style.	3	3	3	3	3	1	3	3	3	3	3
CO5: Plan and propose the style variation according to the buyers needs	3	3	3	3	3	1	3	3	3	3	3

V SEMESTER

PRINCIPLES OF TEXTILE TESTING

Course code: 24TFUC3110

Credit: 4 +0

Max Mark:100

Objectives:

- To impart the knowledge of Testing of fiber, Yarn and Fabric to the students.
- Enables to know about different Textile Testing Instruments and Machines as well as their working principles.
- Helps in determining the Quality parameters and testing conditions required in a Textile testing Lab.

Specific Learning Outcome:

Textile Testing is an important paper dealing with different physical and functional parameters required for textiles. After learning the paper the students will be aware of testing principles and procedures for fiber, yarn and fabric. They can handle textile testing equipments without any external assistance and prepare testing data more effectively and accurately.

Unit I

Introduction to textile testing – Definition, Principles, objectives, important of textile testing. General aspects of textile testing. Routine test performed in industry. Benefits of testing. International standards for textile apparel testing. Terminology of testing – selection of samples for testing standard R H and temperature for testing - measurement of moisture regain conditioning oven – Shirley moisture meter.

Unit II

Identification of textile fiber – Burning, Solvent, Longitudinal and Cross section view of Different natural, semi-synthetic & mam-made fibres. Cotton fiber length – Definition, importance, Baer Sorter, Fibrograph. Fiber Fineness – Definition, importance, Methods of measuring fineness – air flow method. Fiber maturity - Definition, importance, Caustic Soda swelling method.

Unit III

Yarn testing-Yarn count – Yarn numbering system, Instruments – Knowless Balance, quadrant balance, Beesley balance. Yarn strength – important fiber property for good strength yarn, Single strength tester & Lea strength tester. Yarn twist – Definition, direction of twist, straightened fiber method, Take up twist tester Tension type twist tester.

Unit IV

Fabric testing- Woven, Knitted, Nonwoven, Dimensions, Length, Width, Thickness, Determination of fabric weight GSM, Cover factor. Fabric Strength - tensile strength. Fabric Abrasion - Martindale abrasion tester. Fabric Pilling – Introduction, I C I Pill box tester. Fabric drape - Drape meter (manual). Fabric Stiffness - Shirley stiffness tester

Unit V

• Evaluation of Colour fastness- Introduction, grey scale. Colour fastness to washing – Dry cleaning & bleaching – Launderometer. Colour fastness to light – sunlight, Fadeometer. Colour fastness to Crocking (manual), colour fastness to perspiration, colour fastness to pressing – wet and dry pressing. Colour fastness to abrasion, colour fastness to burnt gas Flame and Ozone. Whiteness index, matching cabinets, computer colour matching.

Text Books

1. J.E. Booth, “Principles of Textile Testing” CBS publishers and Distributors, 1996.
2. Textile testing Raul Jewel
3. B.P. Saville, “Physical testing of Textiles”, Woodhead publishing Ltd. 1999.
4. Pradeep V. Mehta. “Managing quality in apparel industry”, New Age international ltd.

References

1. J.N. Mandal, D.G. Divshikar, “A Guide to GEO Textiles Testing”, New Age International Ltd.,
2. Arindam Basu, Textile Testing, SITRA Publications.
3. Warner, B.S., (1995), “Fibre science”, New Jersey: Prentice Hall, Engle Wood Cliffs.

Course Outcome (CO)	Programme Specific Outcome (PSO)										
	1	2	3	4	5	6	7	8	9	10	11
PRINCIPLES OF TEXTILE TESTING	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: Aware of testing principles and procedures for fibre, yarn and fabric.	3	3	3	1	3	3	1	1	1	1	1
CO2: Experiment physical and chemical parameters of textiles	3	3	3	1	3	3	1	1	1	1	1
CO3: Demonstrate different methods of textile testing equipments and instruments.	3	3	3	1	3	3	1	1	1	1	1
CO4: Evaluate the quality parameters of fiber, yarn and fabrics	3	3	3	1	3	3	1	1	1	1	1
CO5: Propose the textile testing data and values more effectively and accurately	3	3	3	1	3	3	1	1	1	1	1

Lecture Schedule

Unit	Topics to be covered	Hours
I	Textile fiber test- Fiber identification by use of microscope,	3
	Burning test, Laboratory test- Length and Uniformity, Fineness and maturity.	3
	Chemical test for textile fibers, Objectives and selection of samples- Fiber, yarn, Fabric sampling.	3
II	Moisture relations- Regain, Moisture content, Humidity, Standard atmosphere,	3
	Dry hygrometer, Fiber testing- measurement of fiber length, Comb sorter, Fibrograph,	3
	Measurement of fiber fineness air flow instruments, measurement of maturity of cotton.	3
	Yarn evenness- Cause of irregularity, Effect of irregularity, Measurement of irregularity.	4
IV	Fiber testing- Woven, Knitted, Nonwoven, Dimensions, Length, Width, Thickness, Determination of fabric weight,	4
	Coverfactor, Air permeability, Stiffness, Crease recovery, Abrasion resistance, Pilling, Strength.	4
V	Evaluation of Colour fastness (Cotton, Silk, Wool) laundering, Rubbing fastness wet crocking and Dry crocking,	4
	Light fastness, Perspiration to acid, Perspiration to alkaline, Colour matching cabinet.	4
	Total	42

APPAREL QUALITY CONTROL

Course code: 24TFUC3111

Credit: 4 +0

Max Mark:100

Objectives:

- Enables to know about different Textile Testing Instruments and Machines as well as their working principles.
- To gain knowledge about quality control.
- To gain information about types of control forms.
- To know about garment inspection system.
- To gain information about testing results of garment.
- Helps in determining the Quality parameters required in a Textile materials and garment.

Specific Learning Outcome:

Quality control is an important paper dealing with different physical and functional parameters required for textiles and garment. After learning the paper the students will be aware of quality principles and procedures for fabric and garment. They will be aware of quality standards for garments and sampling techniques.

Unit – I

Introduction And Inspection Methods - Quality control - Definition - Importance of quality - Raw material Inspection – Fabric Inspection - Four point System - Ten point System - Inspection of Sewing Thread - Zippers - Button, Buckles, Snap Fasteners - In process Inspection - Spreading - Cutting - Sewing - Pressing/Finishing - Final Inspection - Sampling Plans - Acceptance Sampling.

Unit – II

Packing Quality & Quality Control Program - Classification of Packing - Stand up pack - Flat pack - Hanger pack – Hanger with sandwich pack - Dead man pack - its importance - packing materials required -Different types of packing materials - Quality Control Program - Seven tools of quality controls - ISO 9000 series standards - Procedure of obtaining ISO 9000 series standards - Total Quality management in Garment Industry.

Unit – III

Basic Testing for Garments - Seam strength Testing - Testing of Fabric Stretch properties - Dimensional changes due to Laundering, Dry cleaning, and Steaming & Pressing - Durable Press Evaluation of Fabrics and Apparel - Needle cutting / yarn severance - Sewability of fabrics - Bow and Skewness in Woven and Knitted fabrics - Distortion of yarn in Woven Fabrics – Fabric Streak Analysis.

Unit – IV

Advanced Testing for Garments - Soil/Stain release testing - Wrinkle Recovery - Water Resistance and Water Repellency - Testing of Fusible Interlinings - Testing of Zippers - Elastic Waist Band Testing – Testing of Sewing Threads - Pantyhose Testing - Wear Testing.

Unit – V

Care Labeling, Shade Sorting & Flammability -Introduction to Care labels - its importance - Different systems of Care labeling - American - British - Canadian - Japanese - and International labeling – Eco-labeling. Shade sorting - Introduction - importance - Fundamentals of colours - Colour measuring instruments - Instrumental shade sorting. Flammability - Introduction – Degree Flammability Test method - 45° and Vertical Flammability Tests - Process of Fabric Ignition - Factors affecting Fabric Flammability.

Text Books

1. J.E. Booth, “Principles of Textile Testing” CBS publishers and Distributors, 1996.
2. Textile testing Raul Jewel
3. B.P. Saville, “Physical testing of Textiles”, Woodhead publishing Ltd. 1999.
4. Pradeep V. Mehta. “Managing quality in apparel industry”, New Age international ltd.

References

1. Pradip V Mehta An Introduction to Quality control for The Apparel Industry ASQC Quality press New York.
2. Terry Brackenbary Knitted cloth Technology Black well science Ltd II 1996
3. Pradip V Mehta Managing Quality in Apparel Industry New Age International Publishers 1998
4. R.Senthilkumar Total Quality Management in Garment Industry Project Work, SSMITT &pc, Komarapalayam.
5. Solinger, Jacob, (1961), “Apparel manufacturing analysis”, New York, textile books,.
6. Solinger, Jacob, (1988) “Apparel Manufacturing Hand book,” Analysis, Principles and Practice, Columbia Media Corp.

Course Outcome (CO)	Programme Specific Outcome (PSO)										
	1	2	3	4	5	6	7	8	9	10	11
APPAREL QUALITY CONTROL	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: This paper deals with different physical and functional parameters required for textiles and garments	3	3	3	1	3	3	1	1	1	2	1
CO2: After learning the paper the students will be aware of quality principles and procedures for fabric and garment	3	3	3	1	3	3	1	1	1	2	1
CO3: they will be aware of quality standards for garment and sampling techniques	3	3	3	1	3	3	1	1	1	2	1

Lecture Schedule

Unit	Topics to be covered	Hours
I	Introduction And Inspection Methods - Quality control - Definition - Importance of quality - Raw material Inspection – Fabric Inspection - Four point System - Ten point System -	4
	Inspection of Sewing Thread - Zippers - Button, Buckles, Snap Fasteners - In process Inspection - Spreading - Cutting - Sewing - Pressing/Finishing - Final Inspection - Sampling Plans - Acceptance Sampling	4
II	Packing Quality & Quality Control Program - Classification of Packing - Stand up pack - Flat pack - Hanger pack – Hanger with sandwich pack - Dead man pack - its importance - packing materials required.	5
	Different types of packing materials - Quality Control Program - Seven tools of quality controls - ISO 9000 series standards - Procedure of obtaining ISO 9000 series standards - Total Quality management in Garment Industry.	5
III	Testing Of Garments – I - Seam strength Testing - Testing of Fabric Stretch properties - Dimensional changes due to Laundering, Dry cleaning, and Steaming & Pressing .	4
	Durable Press Evaluation of Fabrics and Apparel - Needle cutting / yarn severance - Sewability of fabrics - Bow and Skewness in Woven and Knitted fabrics - Distortion of yarn in Woven Fabrics – Fabric Streak Analysis	5
IV	Testing Of Garments – II - Soil/Stain release testing - Wrinkle Recovery - Water Resistance and Water Repellency -	4
	Testing of Fusible Interlinings - Testing of Zippers - Elastic Waist Band Testing – Testing of Sewing Threads - Pantyhose Testing - Wear Testing.	4
V	Care Labeling, Shade Sorting & Flammability - Introduction to Care labels - its importance - Different systems of Care labeling - American - British - Canadian - Japanese - and International labeling – Eco-labeling. Shade sorting - Introduction - importance - Fundamentals of colours - Colour measuring instruments - Instrumental shade sorting. Flammability - Introduction – Degree Flammability Test method - 45° and Vertical Flammability Tests - Process of Fabric Ignition - Factors affecting Fabric Flammability	6
	Total	40

COMPUTER APPLICATIONS IN TEXTILES AND FASHION INDUSTRY

Course code: 24TFUC3112

Credit: 3+0

Max Mark: 100

Objectives:

- To understand about computers its parts and functions and its role in textile & garment industry.
- To learn about the applications of computer in planning, designing and manufacturing in textile & fashion industry.

Specific Learning Outcome

After learning this course students will understand computer application in production planning scheduling and administration. Learn computer aided designing (CAD) for garment designing, textile designing, pattern making and grading and marker planning. Will enable to develop knowledge on computer aided manufacturing (CAM) for all production process right from spreading to sewing

Unit-I

Classification of computers, computer generations, computer specification, organization of computer .Types of storage devices (primary and secondary), input devices, output devices.

Unit-II

Role of computers in fashion industry – Information flow – CAD, CAM,CIM,CAA,PDC – Definition and functions. Computers in production planning and production scheduling ,computerized colour matching system.

Unit-III

CAD in designing Textile designing – Weaving, Knitting and printing. Creating embroidery designs. Garment designing – 2D and 3D forms.

Unit-IV

CAD in pattern making and grading – system description – information flow – process involved in pattern making, process involved in pattern grading.

Unit-V

Computer application in fabric defect checking, laying / spreading, cutting marker planning, labeling – Parts and functions. Computerized sewing machines.

Text Books

1. Clothing Technology – Hannelore Eberle et –al, Verlaag Europa – Lehrmittel, Vollmer Gmbh& Co 4287, Haan – Gruilen.
2. Computer Fundamentals – P K Sinha , BPB Publications, Delhi (1992)
3. The technology of clothing manufacture – Harold Carr and Barbara Latham, Blackwell Ltd (1994)
4. Pattern Grading for Women’s Cloths The Technology of sizing – Gerry Cooklin, Blackwell Science Ltd (1990)

Course Outcome (CO)	Programme Specific Outcome (PSO)										
	1	2	3	4	5	6	7	8	9	10	11
Computer Applications In Textiles And Fashion Industry	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: To understand about computer its part and functions and its role in textiles and garment industry	3	3	3	3	2	1	2	2	3	3	3
CO2: Learn CAD for garment designing, textile designing, pattern making and grading and marker planning	3	3	3	3	2	1	3	3	3	3	3

Lecture Schedule

Unit	Topics to be covered	Hours
I	Classification of computers, computer generations, computer specification, organization of computer.	3
	Types of storage devices (primary and secondary), input devices, output devices	3
II	Role of computers in fashion industry – Information flow – CAD, CAM,CIM,CAA,PDC – Definition and functions.	4
	Computers in production planning and production scheduling ,computerized colour matching system	4
III	CAD in designing Textile designing – Weaving, Knitting and printing. Creating embroidery designs.	3
	Garment designing – 2D and 3D forms.	3
IV	CAD in pattern making and grading – system description – information flow –.	3
	process involved in pattern making, process involved in pattern grading	3
V	Computer application in fabric defect checking, laying / spreading, cutting marker planning, labeling – Parts and functions. Computerized sewing machines.	4
	Total	30

CAD IN TEXTILES AND FASHION DESIGN PRACTICAL

Course code: 24TFUC3113

Credit:0+3

Max. Marks:100

Objectives:

- To acquaint students with CAD and CAM based applications in Textiles and Apparel industry.
- To impart knowledge of computer applications in design, draft, cut, production and management information systems.
- To bring the awareness of computer application to the field of fashion designing.
- To provide the knowledge about fashion software's and its application.

Specific Learning Outcome:

Computer aided designing is an important skill that is required by a fashion designer, textile designer or a graphic designer at the present Era. After completion of this course the students will have hands on skills in sketching, colouring, rendering and various other techniques involved in sketching using CAD software. They will be able to illustrate human figures in different postures and garments. They will be able to create design patterns; do texture mapping, 3d Visualization and simulation of fabrics on garments.

Unit I

Motifs development – Symmetrical / asymmetrical, Balanced / Unbalanced repeat (arrangements), Drop reverse and placement of design in borders, pallu, and all over, Developing Small Designs, Motifs for necklines, embroidery designs for hand kerchiefs.

Unit II

Texture Mapping- in fashion apparel, texture mapping in home furnishings, 2D Designing, slides with color changes in garment, design changes in garment

Unit III

Software applications in production department, Garment design using jindex software, Label Designing, Logo designing for branded apparel.

Unit IV

Developing- Patterns making- Grading and manual planning, Developing Women's and Men's Garments, Casual dressings 5 varieties), Party wears -5 varieties).

Unit V

Formal wear (Any One) using jindex and Corel draw, Kid's wear- frock (5 varieties), Design the slack shirt-Middi and Middi top (any two) (5 varieties).

Text Books

1. Mikell. P. Groover, Emory W. Zimmers; Jr, “ CAD /CAM computer aided design and maufacturing”, Printice Hall of India PVL. Ltd.
2. Veinsinet D D, “ Computer aided drafting and Design Concept & Applications, 1987
3. Digital fashion illustration Kesin Tallon978-0-7134-9058-9
4. Alison Beazley & Terry bond”, Computer Aided pattern Design and Product development” Blackwell Science, 2004.

References

1. Carr H & Barbara Latham B, “Technology of clothing manufacture.” 3rd edition, Black well sciences Publication 2000
2. winfred Aldrich, “ CAD In clothing ‘ and textiles, Blackwell science, 1994
3. Taylor P, “ Computers in Fashion industry”, Heineman publishers 1990.

Course Outcome (CO)	Programme Specific Outcome (PSO)										
	1	2	3	4	5	6	7	8	9	10	11
CAD IN TEXTILES AND FASHION DESIGN PRACTICAL	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: To understand about computer its part and functions and its role in textiles and garment industry	3	3	3	3	2	1	2	2	3	3	3
CO2: Learn CAD for garment designing, textile designing, pattern making and grading and marker planning	3	3	3	3	2	1	3	3	3	3	3

Lecture Schedule

Unit	Topics to be covered	Hours
I	Motifs development – Symmetrical / asymmetrical, Balanced / Unbalanced repeat (arrangements), Drop reverse and placement of design in borders.	6
	pallu, and all over, Developing Small Designs, Motifs for necklines, embroidery designs for hand kerchiefs	6
II	Texture Mapping- in fashion apparel, texture mapping in home furnishings,	6
	2D Designing, slides with color changes in garment, design changes in garment	6
III	Software applications in production department, Garment design using jindex software, Label Designing, Logo designing for branded apparel.	6
	Label Designing, Logo designing for branded apparel.	6
IV	Developing- Patterns making- Grading and manual planning, Developing Women's.	6
	Men's Garments, Casual dressings 5 varieties), Party wears -5 varieties)	6
V	Formal wear (Any One) using jindex and Corel draw, Kid's wear- frock (5 varieties), Design the slack shirt-Middi and Middi top (any two) (5 varieties).	6
	Total	54

MEN'S APPAREL CONSTRUCTION PRACTICAL

Course code: 24TFUB3106

Credit : 1+3

Max. Marks: 100

Objectives:

- To impart the practical knowledge in pattern drafting and garment construction skills in men's wear for the students.
- To develop creative skills in designing and constructing men's wear for different age groups.

Specific Learning Outcome:

This paper will enable the students to prepare patterns based on individual measurement and stitch garments for men independently without any assistance. The students can develop complex patterns and designs based on the practical skill they acquire.

Unit I

Each garment 2 varieties preparatory models

Measurement, Designing, Pattern making and constructing -T - Shirt with U neck (or) V Neck, Slack Shirt - With Shirt Collar and Patch Pocket.

Unit II

Each garment 2 varieties preparatory models

Measurement, Designing, Pattern making and constructing -Full sleeve shirt with yoke and cuff, Shorts and knickers.

Unit III

Each garment 5 varieties preparatory models

Measurement, Designing, Pattern making and constructing -Pyjama with Side pockets, Pleated trousers with zipper fly and bound pockets.

Unit IV

Each garment 2 varieties preparatory models

Measurement, Designing, Pattern making and constructing -kalidharkurtha with continuous bound placket (5 varieties), Nehru kurtha with pocket, Band collar and Tailored placket.

Unit V

Each garment 2 varieties preparatory models

Measurement, Designing, Pattern making and constructing -S.B. Vest coat with (or) without Bound Pocket (5 varieties), Men's S.B. Coat with shawl / collar and Ticket Pockets.

Text Books

1. Garment quality –K M Illege and Sons , Plot No. 43 , Somuvar Peth pune 411011
2. Easy cutting –Juvekar commercial Tailors Corporation p vt 166 Dr. Ambedkar Road dadar.
3. Commercial system of cutting - Juvekar commercial Tailors Corporation p vt 166 Dr. Ambedkar Road dadar.
4. Zarapker system of cutting –K.RZarapker ,Navneet publication ltd.

References

1. Dress making- Smt Thangam Subramaniam Bombay Tailoring and embroidery college ,32 North park street ,Ambattur, channi. Pratical clothing construction – Part I and II Mary Mathews, cosmic Press Chennai.
2. Garment construction skillsPremalatha mullick 81-272-0267-3, 81-272-0267-3

Course Outcome (CO)	Programme Specific Outcome (PSO)										
	1	2	3	4	5	6	7	8	9	10	11
MEN'S APPAREL CONSTRUCTION PRACTICAL	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: Prepare individual patterns for men without any assistance.	3	3	3	3	3	1	2	3	3	3	3
CO2: Develop patterns with various style variations in men's garments.	3	3	3	3	3	1	2	2	3	3	3
CO3: Analyze various types of fabrics suitable for men's wear	3	3	3	3	3	2	2	2	3	3	3
CO4: Create Traditional and Western style men's garments	3	3	3	3	2	1	3	3	3	3	3

Lecture Schedule

Unit	Topics to be covered	Hours
I	Measurement, Designing, Pattern making and constructing -T - Shirt with U neck	5
	V Neck, Slack Shirt - With Shirt Collar and Patch Pocket.	5
II	Measurement, Designing, Pattern making and constructing -Full sleeve shirt with yoke	5
	Cuff, Shorts and knickers.	5
III	Measurement, Designing, Pattern making and constructing - Pyjama with Side pockets.	5
	Pleated trousers with zipper fly and bound pockets.	5
IV	Measurement, Designing, Pattern making and constructing kalidharkurtha with continuous bound placket.	5
	Nehru kurtha with pocket, Band collar and Tailored placket	5
V	Measurement, Designing, Pattern making and constructing -S.B. Vest coat with (or) without Bound Pocket (5 varieties),	5
	Men's S.B. Coat with shawl / collar and Ticket Pockets	5
	Total	50

INTERNSHIP –I

Course code: 24TFUO3105

Credit:2

Max.Marks:50

Specific Learning Outcome:

After successful completion of an internship in a reputed textile manufacturing or garment manufacturing concern the student will have a complete commercial knowledge on textiles and garments, they will gain knowledge about the latest machineries and equipments.

Internship

Period of supervised training required for qualifying for a profession. It follows a specified number of academic credits or classroom years. To provide a valuable opportunity to gain work experience in a student's chosen field before graduation. A student or a recent graduate undergoing supervised practical training. Since relevant work experience is one of the key qualifications companies look for when comparing candidates for a job or internship, completing several internships during college greatly increases the chances of being selected for a job after graduation. Even though college students learn the knowledge required for succeeding in a specific career through their college courses and curriculum, internships are one of the best ways to develop the required skills necessary to gain the experience required to be successful in the field.

Completing an internship can help a student decide if a particular career is actually the right fit for them, and through an internship, students can establish contacts or even earn college credit while working in a part-time, temporary position. Additionally, in a competitive job market, internships for college students give recent graduates an edge over other potential candidates who do not have any relevant work experience.

Course Outcome (CO)	Programme Specific Outcome (PSO)										
	1	2	3	4	5	6	7	8	9	10	11
INTERNSHIP –I	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: Identifying and standardizing the body measurements.	3	3	3	3	1	1	1	1	3	3	3
CO2: Supervise the fabrics, trimmings and accessories used in the garments.	3	3	3	3	3	1	1	1	3	3	3
CO3: Handle the buyers for the manufacturing of garments	3	3	3	3	3	1	1	1	3	3	3
CO4: After training in embroidery section they can create different motifs and designs according to the garment style.	3	3	3	3	3	1	3	3	3	3	3
CO5: Plan and propose the style variation according to the buyers needs	3	3	3	3	3	1	3	3	3	3	3

VI SEMESTER
ENTREPRENEURSHIP DEVELOPMENT IN TEXTILES AND FASHION

Course Code: 24TFUC3214

Credit:4+0

Max Marks:100

Objectives:

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

Specific Learning Outcome:

After learning this course the students will have a basic understanding about entrepreneurship and the types and role of an entrepreneur. This paper will enable the students to know how to become an independent entrepreneur, various financial agencies available to acquire funds and asset benefits, they will have knowledge on world trade practices, and several other managerial aspects that are required by a successful entrepreneur.

Unit I

Scope of Entrepreneurship -Introduction to entrepreneurship, development of entrepreneurship, role of entrepreneurs in development of apparel and fashion industry, entrepreneurship with reference to fashion and apparel industry in India.

Unit II

Definition, role and expectation – entrepreneurial styles and types – characteristics of entrepreneur – functions of an entrepreneur – promotion of entrepreneurship – role of socio- culture, growth of entrepreneurial culture. Entrepreneurial motivation theories – entrepreneurship competencies – developing competencies

Unit III

Organizations - Entrepreneurial support by state, central financial institutions, organizations. Government policies with reference to textile and apparel industry.. Institution for entrepreneurial development –ITC, NPC, ITCOT, COMMERCIAL BANK and entrepreneurial development. Entrepreneurship and financial support

Unit IV

Entrepreneurship in apparel industry:Business planning – Starting a new venture related to apparel industry, essentials of a successful centre; Location & plant layout-factors, influencing plant location, building, structure, lighting, ventilation, material handling, availability of labour, material management and transportation. Industrial sickness and remedies,

Unit V

Identification of business opportunity in Textiles and Fashion Business - preparation of feasibility report – financial and evaluation – project formulation – common errors in project formulation – specimen project report.SWOT Analysis. Women entrepreneurship needs – growth of women entrepreneurship.

Text Books:

1. RajaGopal, Entrepreneurship & Rural markets
2. H.B.S. press, Harward Business Review on Entrepreneurship Harward business review, USA
3. Fashion Design and Product Development, Harold Carr and John Pomeroy, Black well Science Inc, Cambridge (1992)
4. Fashion marketing, Mike Basey, Oxford University press, Wynford Drve, Don Mills,Ontario (1995)

References:

1. Introduction to Fashion, Patrick John, B T Batsford Ltd, Ireland, Fullham road, London (1992).
2. Fashion From Concepts to Consumer, Stephens Frings, Prentice Hall, 7th Edition 2002.
3. Marketing Management, Philip Kotler, Prentice Hall, 7th Edition 1996

Course Outcome (CO)	Programme Specific Outcome (PSO)										
	1	2	3	4	5	6	7	8	9	10	11
ENTREPRENEURSHIP DEVELOPMENT IN TEXTILES AND FASHION	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: Understand the types and role of an entrepreneur	3	3	3	3	3	3	3	3	3	3	3
CO2: Know how to become an independent entrepreneur	3	3	3	3	3	3	3	3	3	3	3
CO3: Identify various financial agencies available to acquire funds and asset benefits.	3	3	3	3	3	3	3	3	3	3	3
CO4: Plan and executing in starting new boutiques.	3	3	3	3	3	3	3	3	3	3	3

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Lecture Schedule

Unit	Topics to be covered	Hours
I	Scope of Entrepreneurship -Introduction to entrepreneurship, development of entrepreneurship,	4
	role of entrepreneurs in development of apparel and fashion industry, entrepreneurship with reference to fashion and apparel industry in India.	4
II	Definition, role and expectation – entrepreneurial styles and types – characteristics of entrepreneur – functions of an entrepreneur – promotion of entrepreneurship –	4
	role of socio- culture, growth of entrepreneurial culture. Entrepreneurial motivation theories – entrepreneurship competencies – developing competencies	4
III	Organizations - Entrepreneurial support by state, central financial institutions, organizations. Government policies with reference to textile and apparel industry..	4
	Institution for entrepreneurial development –ITC, NPC, ITCOT, COMMERCIAL BANK and entrepreneurial development. Entrepreneurship and financial support	4
IV	Entrepreneurship in apparel industry:Business planning – Starting a new venture related to apparel industry, essentials of a successful centre;	3
	Location & plant layout-factors, influencing plant location, building, structure, lighting, ventilation, material handling, availability of labour, material management and transportation. Industrial sickness and remedies,	4
V	Identification of business opportunity in Textiles and Fashion Business - preparation of feasibility report – financial and evaluation –	4
	Project formulation – common errors in project formulation – specimen project report. SWOT Analysis. Women entrepreneurship needs – growth of women entrepreneurship	4
	Total	39

TECHNICAL TEXTILES

Course code: 24TFUC3215

Credit: 4+0

Max. Marks: 100

Objectives:

- To acquaint students with the application of Non woven & technical textiles in industry.
- To impart knowledge of technical textiles with their properties and applications.
- To understand the concepts of smart textiles, nano textiles and other technical textiles.

Specific Learning Outcome:

After learning the paper the students will understand the complexity of the textile industry. They will gain knowledge in Technical textiles its classifications, technical fibers and its applications. They will have a lot of options for their project during their final semester and also learn about different career options they have got in various different fields of textile application.

Unit I

Technical textiles definition and classification- Introduction, scope of technical textiles. Application of technical textiles- function and uses. High performance fibres- selection, property and its function.

Unit II

Medical textiles - Fibres selection, properties, functions and its applications, Eco tech- Fibres selection, properties, functions and its applications. Pack tech -Fibres selection, properties, functions and its applications.

Unit III

Agrotextile,- Fibres selection, properties, functions and its applications. Build tech - Fibres selection, properties, functions and its applications. Cloth tech- Fibres selection, properties, functions and its applications.

Unit IV

Geo textile- Fibres selection, properties, functions and its applications Home tech- Fibres selection, properties, functions and its applications,, Mobil tech- Fibres selection, properties, functions and its applications.

Unit V

Sport tech- Fibres selection, properties, functions and its applications, Indu tech Fibres selection, properties, functions and its applications, protective tech- Fibres selection, properties, functions and its applications

Text Books

1. Meachm Lewin & Jack Preston, and book of Fiber Science & Technology. Volume I, High technology fibers part A; Marcel Dekker. Inc 1993
2. Menachem Lewin & Jack Preston; Handbook of Fiber Science & Technology Volume II, High technology fibers, part B; Marcel Dekker Inc 1993
3. Menachem Lewin & Jack Preston, Hand book of Fiber Science & Technology Volume III, High technology fibers part C Marcel Dekker. Inc 1993.

References

1. Sarah. E Braddock and Marie O' Mahony" Techno textiles – Revolutionary fabrics for fashion & design", Thames & Hudson 2002.
2. Handbook of technical textiles – A R Morrocks and S C Anand, Wood head publishing ltd, England 2000.
3. P.W Harrison, The design of textiles for industrial application.
4. Bajaj.P&Sengupta.A.K, protective clothing.
5. Corbman. B.P, Textiles: Fibre to Fabric, Mc Graw Hill, 1983.
6. Johnson J.S &Man'sdorksc, Performance of Protective clothing.
7. Srinivasan, J, Raw kumar.S.S. High performance textiles & Apparels, Interline publications, 2004.

Course Outcome (CO)	Programme Specific Outcome (PSO)										
	1	2	3	4	5	6	7	8	9	10	11
TECHNICAL TEXTILES	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: Understand the complexity of technical textile industry.	3	3	3	1	3	3	1	1	1	1	1
CO2: Experiment on medical textiles and its requirements	3	3	3	1	3	3	1	1	1	1	1
CO3: Acquaint the students in the field of Technical textiles	3	3	3	1	3	3	1	1	1	1	1
CO4: Develop knowledge on smart and intelligent textiles and its related areas.	3	3	3	1	3	3	1	1	1	1	1
CO5: Analyze and application of smart textiles	3	3	3	1	1	3	1	1	1	1	1

Lecture Schedule

Unit	Topics to be covered	Hours
I	Technical textiles definition and classification- Introduction, scope of technical textiles.	4
	Application of technical textiles- function and uses. High performance fibres- selection, property and its function.	4
II	Medical textiles definition and classification- introduction, fibers selection for medical textile- types, requirements of fibres used in medical field.	4
	Specialized area for textile application in medical	3
	Non- implantable materials, extra corporal devices, implantable material and health care/ hygiene products- fibre selection, fabrics used, property, products and its function.	4
	Eco-textiles- definition, application of eco textiles.	3
III	Geo textiles definition and classification- introduction, geo synthetics- geo textile types and fibre forming polymers..	3
	Essential properties of geo textiles- mechanical, filtration and chemical resistance property	3
	Natural fibres used in geo textiles- application of natural geo textiles performance of natural fibres	3
	geo textiles for soil strengthening and frictional resistance of geo textiles.	3
IV	Protective textiles definition and classification- introduction, protective clothing- requirements of fibre selection, fabric construction, finishes for protection.	4
	Ballistic protective material. Water proof fabrics, flame retardant fabric and extreme weather condition fabric.	3
V	Textiles for automatic industry- introduction, textile fibres required for automatic industry.	3
	Textiles in cars, train, air crafts, marine- functional application.	3
	Nano technology- definition, application of nano technology in the field of textiles.	3
	Smart textiles- definitions, application of smart textiles	3
	Intelligent textiles- definition, area of application of intelligent textiles	3
Total		56

DRAPING TECHNIQUES PRACTICAL

Course code: 24TFUC3216

Credit: 0+3

Max.Marks: 100

Objectives:

- To learn the basic steps involved in draping of various garment parts.
- To understand the draping of variations.
- To developing knowledge in the field of draping yokes and collars.
- To learn the draping of knit garments.
- To teach the students the basics principles, and interpret and analyze complex drapes.
- To enable students to create their original designs on a three dimensional form using draping method.

Specific Learning Outcome:

After learning this paper the students will gain knowledge in basic bodice block and bodies parts, developing various parts of the garment using draping techniques. To gain information about draping techniques of ladies' apparel.

Unit – I

Prepare the following samples using the Draping Method

- Basic waist - Front and Back
- Sleeves & its types
- Collars & its types

Unit – II

Create and construct the following garments for a girl child

- Yoke frock
- Baba suit - with bib
- Middi and middi top

Unit – III

Create and construct the following garments for a boy child

- T-shirt and shorts
- Kurta and Pyjama
- ¾ pants and Tops

Unit – IV

Create and construct the following garments for an Adolescent girl

- Full Gown
- Salwar Kameez Churidhar
- Lachaas - Flowing skirt and short tops
- Middi and Tops
- Wrap around and Tops

Unit – V

Create and construct the following garments for an adolescent boy

- Night gown with shawl collar
- T-shirt and Bermudas
- Shirt and Pant

Text Books

1. Draping for Fashion Design, Hilde Jaffe, Nurie Relis.
2. Dress Design – Draping and Flat Pattern, Hill House MS, Houghton Mifflin Co, London, USA.
3. The theory of Fashion Design, Brockman, Magritha, John Wiley Sons, New York.

References

4. Design through Draping, Sheldon, Marhta, Burgers Publishing company, Minneapolis, USA.
5. Modern Pattern Design, Popin, Hariet, Funk and Wagnalls, New York and London.
6. Connie AmadenRawford “The Art of FashionDraping” Fair Child Publication.
7. Hilde Jaffe & Nurie Relis “Draping for Fashion Design” Prentice Hall career& Technology, Englewood Cliffs, USA

Course Outcome (CO)	Programme Specific Outcome (PSO)										
	1	2	3	4	5	6	7	8	9	10	11
DRAPING TECHNIQUES PRACTICAL	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: Design different varieties of bodies pattern with various measurements.	3	2	3	3	3	1	3	3	3	2	3
CO2: Handle various tools used for draping.	3	2	3	2	3	2	3	3	3	2	3
CO3: Acquaint the students in handling various styles of draping	3	2	3	3	2	3	3	3	3	2	3
CO4: Develop different children, women and men's wear.	3	2	3	2	3	3	3	3	3	2	3

Lecture Schedule

Unit	Topics to be covered	Hours
I	Prepare the following samples using the Draping Method <ul style="list-style-type: none"> • Basic waist - Front and Back • Sleeves & its types 	3
	<ul style="list-style-type: none"> • Collars & its types 	3
II	Create and construct the following garments for a girl child Yoke frock ,Baba suit - with bib ,Middi and middi top	4
III	Create and construct the following garments for a boy child T-shirt and shorts, Kurta and Pyjama, ¾ pants and Tops	4
IV	Create and construct the following garments for an Adolescent girl ,Full Gown ,Salwar Kameez ChuridharLachaas - Flowing skirt and short tops ,Middi and Tops Wrap around and Tops	5
V	Create and construct the following garments for an adolescent boy Night gown with shawl collar ,T-shirt and Bermudas ,Shirt and Pant	5
	Total	24

PORTFOLIO PRESENTATION PRACTICAL

Course code: 24TFUC3217

Credit:0+3

Max Mark: 100

Objectives:

- To make students understand the importance and concepts of Portfolio presentation.
- To impart practical skills for portfolio presentation

Specific Learning Outcome:

Portfolio is the collection of designs by a designer organized systematically. After gaining handful knowledge in the paper the student will be able to create portfolio on any theme that is provided to them. An effective and creative portfolio is required by each and every student to get into fashion designing career. Hence portfolio will act as mind of the student and will enable every recruiter to judge the students designing skill based on the portfolio they have prepared.

Unit I

Portfolio- meaning, Definition, Illustrate the portfolio flats, Mood board-definition, Story board, Fabric board- Rendering techniques for portfolio flats, Colour board-meaning, Types using combinations.

Unit II

Fabric development, Design development and presentation in portfolio sketching and rendering the fabric effects, Croquis mixed with flats. Figure composition for layout, Figures and Accessories, Space and Shapes in the layout, Grouping figures, Layout choice, Spontaneous layout.

Unit III

Design a portfolio garment Indian- Prints and Embroidery, Ethnic, Classic wear garments for Men, Women, Children (each 5 varieties).

Unit IV

Design a portfolio garment western- prints and Embroidery, Ethnic, Classic wear garments for Men, Women, Children (each 5 varieties).

Unit V

Display ideas- Visual, planning background, lighting, space planning, Display planning with and without mannequin and board items etc

Text Books

1. Comdex Fashion Design- Vol-1 Fashion Concepts
2. J Jarnow and KG Dickenson, “Inside the fashion Business” Prentice Hall
3. Be stylish with Bernia Quleshi Bernia Gureshi
4. Comdex Fashion Design Vol -1 Fashion Concepts Vikas Gupta
5. Cooklins garment tech note for fashion design Steven 978-81-265-3537-8

References

1. Costumes and textiles of Awadh Sushana Swarup
2. Fashion designing Ritu bal 817573776
3. Comdex Fashion Design Vol -2 Esembles for your body type Vikas Gupta
4. Gini Stephens Frings “Fashion – from concept to consumer” Pearson Education
5. Jerligan Easterling “Fashion Merchandising and Marketing” Person Education
6. Polly Guerin “Creative fashion Presentation” Fairchild Publications
7. Drake / Spooone/ Greenwald “Retail fashion promotion and Advertising”

Course Outcome (CO)	Programme Specific Outcome (PSO)										
	1	2	3	4	5	6	7	8	9	10	11
PORTFOLIO PRESENTATION PRACTICAL	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: Express the inspiration through garment designing	3	3	3	3	3	1	3	3	3	3	3
CO2: Create portfolio based on any theme and inspiration.	3	3	3	3	3	1	3	3	3	3	3
CO3: Practical knowledge on selection of fabrics and accessories.	3	3	3	3	3	3	3	3	3	3	3
CO4: Organize different types of visual display and exhibit their skills by portfolio.	3	3	3	3	2	1	3	3	3	3	3
CO 5: Display of garments through fashion show and photo shoots.	3	3	3	3	1	1	2	2	3	3	3

Lecture Schedule

Unit	Topics to be covered	Hours
I	Portfolio- meaning, Definition, Illustrate the portfolio flats, Mood board-definition, Story board,	5
	Fabric board- Rendering techniques for portfolio flats, Colour board-meaning, Types using combinations.	5
II	Fabric development, Design development and presentation in portfolio sketching and rendering the fabric effects, Croquis mixed with flats.	5
	Figure composition for layout, Figures and Accessories, Space and Shapes in the layout, Grouping figures, Layout choice, Spontaneous layout.	5
III	Measurement, Designing, Pattern making and constructing - Pyjama with Side pockets.	5
	Pleated trousers with zipper fly and bound pockets.	5
IV	Design a portfolio garment Indian- Prints and Embrodiery, Ethnic, Classic wear garments for Men, Women, Childern (each 5 varieties).	5
V	Display ideas- Visual, planning background, lighting, space planning, Display planning with and without mannequin and board items etc	5
	Total	40

FASHION FORECASTING AND MERCHANDISING

Course code:24TFUB3207

Credit: 4+0

Max.Marks: 100

Objectives:

- To acquire knowledge in forecasting a design.
- To be familiar with Retailing.
- To gain information about fashion marketing.
- To mould the students to become merchandising.
- To create interest in knowing various Brands.

Specific Learning Outcome:

After learning the paper the students will understand the forecasting system of new fashion. They will get the acquired knowledge about the fashion marketing and various brands.

Unit – I

Fashion forecasting – definition, types of forecasting – long term, short term, trend forecasting. Fad, classic, visualization, trend, fashion cycle, steps for forecasting. Tools for forecasting. Fashion forecasting- sources of fashion forecasting – Fashion forecasting agencies- role and importance - Fashion forecasting packages and magazines- fashion trade fairs- designers collection.

Unit – II

Fashion Retailing - Scope and importance of fashion retailing. Retail Strategy, Classifications of retail store, Retail Store Functions, Retail Marketing Channels – supply chain, and Retail Adaptation. Retailing Structures - Factors influence the retail structure. General Merchandise Chains - Shopping Malls and Boutiques. Fashion marketing - Structure and size of fashion marketing. Marketing management – definition and function.

UNIT – III

Brand – Definition, Trade mark, difference between Brand and trade mark. Functions of brands – Types of brands – Branding strategies. Famous apparel retail brands. Introduction - Copy right, patent and service mark. E-Commerce - Global Retailing, Retail Competition, E-Retailing, Online Marketing Communication – Strategies of Fashion Communication.

Unit – IV

Merchandiser – definition, types. Team of merchandiser. Principles of merchandiser. Merchandiser plan. Role of merchandiser in an apparel industry. Function of merchandiser. Merchandising-definition ,types, characteristics and its importance.Introduction about - Spec sheet, Route card, sampling - sampling techniques. Inspection –types of inspection. Buying house.

Unit – V

Visual Merchandising - Introduction – Visual Merchandising - store planning, store location, store design, renovation and store image & environment. Principles and techniques. Elements of visual merchandising. Promotion - Introduction. Promotion Mix: Advertising – kinds of advertising, advertising agencies and advertising through media. Publicity – publicity campaigns, Personal selling, Sales promotion.

Text book

1. Fashion Advertising and Promotion, *Jay and Ellen Diamond*, Fair Child Publishers, New York, 1999.
2. Retailing Principles, *Lynda Gamans Poloian*, Fair Child Publishers Inc., New York, 2003.
3. Jaico Books, “Retail Management – Functional Principles & Practices”, Gibson G.Vedamani.
4. Gini Stephens Frings “Fashion from concept to consumer”, Pearson Publications, 2005.

Reference book

1. Sharon Lee Tate Inside the Fashion Business Pearson education Pte . Ltd, Delhi. 2004
2. Leslie Davis /Nancy O. Bryant The Business of Fashion Fairchild Publications, New York.2002
3. Ellen Diamond Fashion Retailing Dorling Kindersley (India) Pvt.Ltd , Delhi. 2007
4. Helen Goworek Fashion Buying Om Book Service Delhi. 2001
5. Jeannette A. Jarnow Miriam Guerreiro Beatrice Judelle Inside the Fashion Business
6. Macmillan Publishing Company 1987
7. Philip . Kotler Marketing Management Prentice Hall. Stephens Frings Fashion from Concept to Consumer Prentice Hall.

Course Outcome (CO)	Programme Specific Outcome (PSO)										
	1	2	3	4	5	6	7	8	9	10	11
FASHION FORECASTING AND MERCHANDISING	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: Understand the role and responsibility of a merchandiser	3	3	3	3	3	3	3	3	3	3	3
CO2: Manage and handle buyers' needs and manufacture products	3	3	3	3	3	3	3	3	3	2	3
CO3: Analyze various quality aspects in garment manufacturing in the Industry	3	3	3	3	3	3	3	3	3	3	3
CO4: Prepare a cost effective plan in the production	3	3	3	3	3	3	3	3	3	3	3
CO5: Organize various promotional activities in garment industry	3	3	3	3	3	3	3	3	3	3	3

PROJECT

Course code: 24TFUC3218

Credit -4

Max.Marks : 100

Final year under graduate students at the end of final semester under goes a miner research work. Based on the curriculum/ area of interest by the individual has been focused with objectives, and detailed work on literature, methodology, result analysis and submitting as bound work with summary ,conclusion with evidence of tools used, appendix. This will be evaluated as per the scheme.

Course Outcome (CO)	Programme Specific Outcome (PSO)										
	1	2	3	4	5	6	7	8	9	10	11
PROJECT	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1:Identify new and innovative developments in the field of textile and garments	3	3	3	3	3	3	3	3	3	3	3
CO2: Impart traditional motifs, designs, and techniques and converting to the current trends.	3	3	3	3	3	3	3	3	3	3	3
CO3: Experimenting with various natural and man-made finishing techniques for both textile and garment designing.	3	3	3	3	3	3	3	3	3	3	3
CO4: Evaluating of the research through various testing, visual evaluation and survey methods.	3	3	3	3	3	3	3	3	3	3	3
CO5: As advance level creating and developing innovative products for commercial purpose in medical textiles, smart textiles and many more in textile and garment industry.	3	3	3	3	3	3	3	3	3	3	3

TEXTILES AND THEIR CARE

Course code: 24TFUC3218

Credit-4+0

Max. Marks: 100

Objectives:

- The subject focuses on the improvement on the aesthetic values of the textile material.
- To impart knowledge in laundry, laundering agents and their proper use.

Specific Learning Outcome:

After learning this paper the students will gain thorough knowledge in Care and maintenance of textile materials. They will be able to classify different finishing processes of textiles, preparatory process and different bleaching process. They will know different dyeing process, dyeing equipments, printing process, laundering process, soap and detergent manufacturing process, Fusing technology and fusing process.

Unit I

Laundry Equipment- Principles of laundering, methods of washing – Application of friction - hand friction, Rubbing and scrubbing - Application of light pressure, kneading and squeezing suction – washing – use of washing machine. Purchase and maintenance of equipment.

Unit II

Water – hard and soft water – Methods of softening water. Soaps and detergents – manufacture of soap, Quality of good soap, cleansing action of soap and uses of soap.

Unit III

Detergents-manufacturing process of detergents, soap less detergents, indigenous cleaning agents like Rita nuts. Shikkakai – green gram- bran solutions and their application.

Unit IV

Optical brighteners and starching – stiffening agents – Natural and commercial starches – Preparation of starch; use blueing agents – their application – optical blues, bleaches, types of bleaches and other laundry reagents.

Unit V

Dry cleaning and laundering - Methods of finishing damping – Ironing Methods of ironing different garments - Drying equipments. Dry cleaning and storage. Stain removal - definition, different types of stain removal, methods of stain removal and their applications.

Text Books

1. Textiles fabric & Their Selection, Wingate, I.B. Allied Publications Pvt. Ltd., Chennai.

2. Fundamentals of Textiels and Their care. Dantyagi.S. Orient Longman Ltd., New Delhi 1980.

References

1. Family clothing taste of Glession John wiley& Sons Inc., Illionois latest Edition.
2. Household textiles and laundry work durgaDeulkar, Alma Ram & Sons, Delhi.

Course Outcome (CO)	Programme Specific Outcome (PSO)										
	1	2	3	4	5	6	7	8	9	10	11
Textiles And Their Care	PS01	PS02	PS03	PS04	PS05	PS06	PS07	PS08	PS09	PS010	PS011
CO1: Students gain knowledge in care and maintenance of textile material	3	3	3	1	2	3	1	3	2	1	2
CO2: They able to classify different finishing process of textile preparatory process and different bleaching process	3	3	3	1	2	3	1	3	2	1	2
CO3: Know about different dyeing process, dyeing equipment, printing process, laundering process, soap and detergent, fusing technology and process	3	3	3	1	2	3	1	3	2	1	2

Lecture Schedule

Unit	Topics to be covered	Hours
I	Laundry Equipment- Principles of laundering, methods of washing – Application of friction - hand friction, Rubbing and scrubbing -.	4
	Application of light pressure, kneading and squeezing suction – washing – use of washing machine. Purchase and maintenance of equipment	4
II	Water – hard and soft water – Methods of softening water. Soaps and detergents – manufacture of soap, Quality of good soap, cleansing action of soap and uses of soap.	5
III	Detergents-manufacturing process of detergents, soap less detergents, indigenous cleaning agents like Rita nuts. Shikkakai – green gram- bran solutions and their application.	6
IV	Optical brighteners and starching – stiffening agents – Natural and commercial starches – Preparation of starch; use blueing agents – their application – optical blues, bleaches, types of bleaches and other laundry reagents	6
V	Dry cleaning and laundering - Methods of finishing damping – Ironing Methods of ironing different garments - Drying equipments. Dry cleaning and storage. Stain removal - definition, different types of stain removal, methods of stain removal and their applications	6
	Total	31

INTERNSHIP –II

Course code:24TFUO3206

Credit - 2

Max.Marks:50

Specific Learning Outcome:

After successful completion of an internship in a reputed textile manufacturing or garment manufacturing concern the student will have a complete commercial knowledge on textiles and garments, they will gain knowledge about the latest machineries and equipments.

Internship

Period of supervised training required for qualifying for a profession. It follows a specified number of academic credits or classroom years. To provide a valuable opportunity to gain work experience in a student's chosen field before graduation. A student or a recent graduate undergoing supervised practical training. Since relevant work experience is one of the key qualifications companies look for when comparing candidates for a job or internship, completing several internships during college greatly increases the chances of being selected for a job after graduation. Even though college students learn the knowledge required for succeeding in a specific career through their college courses and curriculum, internships are one of the best ways to develop the required skills necessary to gain the experience required to be successful in the field.

Completing an internship can help a student decide if a particular career is actually the right fit for them, and through an internship, students can establish contacts or even earn college credit while working in a part-time, temporary position. Additionally, in a competitive job market, internships for college students give recent graduates an edge over other potential candidates who do not have any relevant work experience.

Course Outcome (CO)	Programme Specific Outcome (PSO)										
	1	2	3	4	5	6	7	8	9	10	11
INTERNSHIP –II	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: Identifying and standardizing the body measurements.	3	3	3	3	1	1	1	1	3	3	3
CO2: Supervise the fabrics, trimmings and accessories used in the garments.	3	3	3	3	3	1	1	1	3	3	3
CO3: Handle the buyers for the manufacturing of garments	3	3	3	3	3	1	1	1	3	3	3
CO4: After training in embroidery section they can create different motifs and designs according to the garment style.	3	3	3	3	3	1	3	3	3	3	3
CO5: Plan and propose the style variation according to the buyers needs	3	3	3	3	3	1	3	3	3	3	3

VII SEMESTER
FIBER SCIENCE AND TECHNOLOGY

Course Code: 24TFUC4119

Credit: 4+0

Max Marks:100

Objectives:

- To impart the knowledge of fibres advanced in science, sources and their identification and properties
- To provide students with, the knowledge of natural, synthetic, regenerated fibers and their properties.

Specific Learning Outcome:

After learning this paper the students will gain knowledge in different types of textile fibers, origin, its classifications and properties. They will be able to identify different fiber types based on its physical and chemical parameters. They will gain knowledge in different fibers as well as different type fiber and its blends.

Unit I

Fiber- definition, Origin, basic units of fibers- monomers and polymers, polymerization- addition polymerization, condensation polymerization. Types of polymers- alternating copolymer, block copolymer, random copolymer, graft copolymer, inter- polymer bonds in textile fibers- Vander Waals force, hydrogen bonds (H- Bond), salt linkages, covalent bonds. Fibre formation-Melt spinning, dryspinning, wet spinning. Classification- Natural fiber- vegetable, animal, mineral fiber. manmade fiber- Regenerated fiber, regenerated modified fibers, Inorganic fibers, synthetic fibre.

Unit II

Natural fiber- vegetable fiber- linen, cotton, , jute, hemp, sisal, ramie, coir, pine, banana fiber and its physical, chemical, Morphological properties and molecular structure of cellulose. Natural fiber- animal fiber- silk, production and processing of silk, chemical composition of silk, properties of silk- microscopic, physical, chemical, biological. Wool – history of wool, production and type of wool, chemical composition and molecular structure of wool and its properties, specialty hair fiber, mineral fiber- asbestos, natural rubber and its properties.

Unit III

Regenerated fiber, regenerated modified fibers, Regenerated fiber- Viscose rayon, acetate, cupraammonium rayon, Bamboo, Modal, Soya, manufacturing process and microscopic, physical, chemical, biological properties and its uses and cares.

Synthetic and inorganic fibers, nylon, nylon 6,6, polyester, acrylic- modacrylic, olefins, spandex, Aramids, carbon fiber, glass fiber, metallic fibers, properties uses and cares. Blends, bio component and bio generic fibers.

Unit IV

High performance fibre- Novoloid fibres, Poly carbonate fibres, polyimide fibres. Elastomeric fibres- Polyurethane, spandex, lycra. Bio component and bio generic fibers- methods of extrusion- side by side method, sheath/core method, matrix/fibril process, advantages of bio component- and bio generic fibers- stretch or crimp, increased absorbency.

Unit V

Recent innovative fibres in textile - Lotus fibre, Sugarcane fibre, Coffee ground fibre, Milk fibre, Tencel fibre- properties and its end uses. Sustainable fibres in textile- Dupont Apexa fibre, Dupont Sorona fibre, Jutecell fibre, Avra fibre, Ecosure PET fibre, Coolmax Eco made fibre- properties and its end uses.

Text Books:

1. A textbook of fibre science and technology ,S.P. Mishra,2010-81-224-1250-5.
2. Fundamentals of textile and their care - SusilaDantyayi-978-81-250-1027-2
3. Preparation of textile of fibers- Murphy-81-85733-75-9
4. Hand book of silk technology-Tammanm
5. Jute handlooms of India-1-890206-18-0
6. Dictionary of textile- Jewel ralil-81-7488-677-x81-224-0495-2
7. E.P.G. Gohl, L.D. Velensky, "Textile Science" CBS Publishers and Distributors,2003
8. Seema sekhri "Fabric science"978-81-203-4183-8

References

1. Kanwar varinder "Fabric studies"81-272-1904-58
2. Druid "Fabric textile and patterns"9789057681127
3. Jaistree "Hand book of textiles"978-81-7132-717-
4. AJ. Hall. "The standard hand book of Textiles", Wood head Publishing
8thedition 2004.
5. P.V. Vidyasagar, "Hand Book of Textiles", A. Mittal Publications, 2005
6. Sara J. Kadolph, "Textiles", Prentice Hall, 10thedition2007
7. J. Gordon Cook, "Hand Book of Textile Fibres", Vol – IT Man Made Fibers,
Wood HeadPublishing
8. Murphy "Preparation of textile of fibres"81-85733-75-9
9. Susiledantyayi "Fundamentals of textile and their care"978-81-250-1027-2
10. Bernard P. Corbman, "Textiles Fiber. to Fabric" McGrawhill Publications, 6th
Edition 1983
11. A Novel Green Treatment for Textiles: Plasma Treatment as a Sustainable
Technology By Chi-wai Kan
12. Sustainable Fibres and Textiles Edited by Subramanian Senthilkannan Muthu

Course Outcome (CO)	Programme Specific Outcome (PSO)										
	1	2	3	4	5	6	7	8	9	10	11
FIBER SCIENCE AND TECHNOLOGY	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: Identification of various advanced natural and manmade fibers.	3	3	3	3	3	3	1	2	2	1	3
CO2: Analyze different types of fibers and its uses.	3	3	3	3	3	3	1	1	1	2	3
CO3: Evaluating the various physical and chemical properties of various fibers.	3	3	3	3	3	3	1	1	1	1	3
CO4: Explore on different types of organic , inorganic and bio component fibers	3	3	3	3	3	3	2	2	2	1	3

Lecture Schedule

Unit	Topics to be covered	Hours
I	Fiber-definition-Classification, Natural fiber- vegetable fiber- cotton, linen, jute, hemp, sisal, ramie, coir, pina, banana fiber and its physical, chemical. Morphological properties.	5
	Natural fiber- animal fiber- silk, production and processing of silk, chemical composition of silk, properties of silk- microscopic, physical, chemical, biological.	3
	Wool – history of wool, production and type of wool, chemical composition and molecular structure of wool and its properties	3
	specialty hair fiber, mineral fiber- asbestos, natural rubber and its properties.	3
II	Regenerated fiber, regenerated modified fibers, Regenerated fiber- Viscose rayon, acetate, cupraammonium rayon, Bamboo	3
	Modal, Soya, manufacturing process and microscopic, physical, chemical, biological properties and its uses and cares.	4
	Spinning polymers and synthetic membrane	3
III	Inorganic fibers, synthetic rubber, basic units of fibers- monomers and polymers, polymerization- addition polymerization, condensation polymerization	4
	Types of polymers- alternating copolymer, block copolymer, random copolymer	3
	graft copolymer, inter- polymer bonds in textile fibers- Vander Waals force, hydrogen bonds (H- Bond), salt linkages, covalent bonds	3
IV	Synthetic and inorganic fibers, nylon, nylon 6,6, polyester, acrylic- modacrylic,	3
	olefins, spandex, Aramids, carbon fiber, glass fiber, metallic fibers, properties uses and cares.	3
	Blends, bio component and bio generic fibers.	
V	Blending- blend, combination yarns, various stages of blending in the processing of fibers, bio component biogeneric fibers- methods of extrusion- side by side method, sheath/core method, matrix/fibril process, advantages of biocomponent	3
		5
	bio generic fibers- stretch or crimp, increased absorbency, formation of non woven.	3
	Total	51 hours

YARN SCIENCE AND TECHNOLOGY

Course Code: 24TFUC4120

Credit:4+0

Max Marks:100

Objectives:

- To impart the knowledge of yarn science in advanced, sources, their identification and properties
- To provide students with, the knowledge of yarn types and their properties.

Specific Learning Outcome:

After learning this paper the students will gain knowledge in different types of textile fibers, origin, its classifications and properties. They will be able to identify different yarn types based on its physical and chemical parameters. They will gain knowledge in different methods involved in spinning process of fibers as well as different types of yarn.

Unit I

Yarn-definition, Classification, methods of yarn construction – spun yarn – conventional spinning methods- cotton system, woolen system, worsted system, flax system, unconventional spinning methods- open end spinning, friction spinning, twist less spinning, self twist spinning, vortex spinning, filament fibers and process- two- to- top system, tow to yarn spinning split film or tape yarns,electrostatic spinning and air jet spinning.

Unit II

Filament yarns- wet spinning, dry spinning, melt spinning, bio component spinning, Bio constituent spinning, integrated multi component yarn , integrated composite spinning, cover spun yarn-selfil and aerodynamic spinning

Unit III

Yarn number or yarn count – Direct system- Tex, Denier, metric count, Indirect system, cotton count, worsted count, measurement of yarn count- quadrant balance, digital balance, yarn twist- direction of twist, amount of twist- length, fineness, stage of processing and end use. Balance of the yarn, functions of twist.

Unit IV

Classification based on yarn structure – simple yarn- single yarn, ply yarn, cord yarn , complex yarn and its types- slub yarn, thick and thin yarn, flock yarns, loop / curve yarn, Boulce yarn, nub / spot yarn, knot / knop yarn, seed / splash yarn, spiral yarn, chenille yarn, core- spun yarn,ratineyarn,cabled yarn and doubled yarn.

Unit V

Textured yarn- Air- jet texturising, false- twist texturising, gear- crimping process, knife edge, extruding or edge crimping, stuffer box method, knit deknit technique. Sewing threads- Essential qualities of good sewing thread, Classification of sewing threads. Difference between a thread and a yarn. Yarn defects.

Text Books:

1. Fundamentals of textile and their care - Susiladantyayi-978-81-250-1027-2
2. Preparation of textile of fibres- Murphy-81-85733-75-9
3. Textile Science-Gohl
4. Jute handlooms of India-1-890206-18-0
5. Dictionary of textile- Jewel rali-81-7488-677-x81-224-0495-2
6. Hand Book of silk technology-Tammanm
7. E.P.G. Gohl, L.D. Velensky, "Textile Science" CBS Publishers and Distributors,2003
8. Seema Sekhri "Fabric science"978-81-203-4183-8
9. J. Gordon Cook, "Hand Book of Textile Fibres", Vol – IT Man Made Fibers, Wood HeadPublishing.

References

1. Murphy "Preparation of textile of fibres"81-85733-75-9
2. Susiledantyayi "Fundamentals of textile and their care"978-81-250-1027-2
3. Bernard P. Corbman, "Textiles Fiber. to Fabric" McGrawhill Publications, 6thEdition 1983
4. Gilbert R. Merrill, "Cotton Opening and Picking"! Universal Publishing Corporation, 1999
5. Gilbert R. Merrill, "Cotton Combing" universal Publishing Corporation,1999
6. Gilbert R. Merrill, "Cotton Ring Spinning" Universal, Publishing Corporation,1999

Course Outcome (CO)	Programme Specific Outcome (PSO)										
	1	2	3	4	5	6	7	8	9	10	11
YARN SCIENCE AND TECHNOLOGY	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: Understand the advanced process of construction of yarn	3	3	3	3	3	3	1	2	2	1	3
CO2: Analyze various methods of yarn spinning process.	3	3	3	3	3	3	1	2	1	2	3
CO3: Acquaint the students in advanced yarn structure and its process	3	3	3	3	3	3	2	1	1	2	3
CO4: Understand the mechanical process of spinning	3	3	3	3	3	3	2	2	2	2	3
CO5: Analyze on physical and chemical process of yarn.	3	3	3	3	3	2	2	1	1	2	3

Lecture Schedule

Unit	Topics to be covered	Hours
I	Yarn-definition, Classification, process of yarn construction – spun yarn – conventional spinning methods- cotton system	4
	woolen system, worsted system, flax system, unconventional spinning methods- open end spinning, friction spinning,	3
	Twist less spinning, self twist spinning, vortex spinning, filament fibers and process- two- to- top system, tow to yarn spinning split film or tape yarns.	4
II	Yarn number or yarn count – Direct system- Tex, Denier, metric count, Indirect system, cotton count, worsted count	4
	Measurement of yarn count- quadrant balance,digital balance, yarn twist- direction of twist	4
	Aamount of twist- length, fineness, stage of processing and end use. Balance of the yarn, functions of twist.	4
III	Classification based on yarn structure – simple yarn- single yarn, ply yarn, cord yarn	3
	its types- slub yarn, thick and thin yarn, flock yarns, loop / curve yarn, Boulice yarn, nub	3
	spot yarn, knot / knop yarn, seed / splash yarn, spiral yarn, chenille yarn, core- spun yarn	4
IV	Textured yarn- Air- jet texturising, false- twist texturising.	3
	Gear- crimping process, knife edge, extruding	3
	Edge crimping, stuffer box method, knit deknit technique.	3
V	Filament yarns- wet spinning, dry spinning, melt spinning, bio component spinning	3
	Bio constituent spinning, integrated multi component yarn	3
	integrated composite spinning, cover spun selfil and aerodynamic spinning.	2
Total hours		50

ADVANCED CAD IN TEXTILE AND FASHION DESIGN PRACTICAL

Course Code: 24TFUC4121

Credit:0+3

MaxMarks:100

Objectives:

- To introduce students to various fashion designing concepts through CAD.
- To introduce the students with various advanced fashion designing software packages and develop the creativity among students in use of 3D software's.

Specific Learning Outcome:

After learning this paper the students will gain knowledge to make the students to creativity among students in use of 3D software's, kids garment, developing portfolio designing collection using software.

Unit I

Principle of colours dyeing– primary, secondary, tertiary, triads, complimentary, split, monochromatic, neutral colors and its application in kids garments and women's garments. Weaves and textures.

Unit II

Developing portfolio- design collection- Theme based - Developing theme board, mood board, color board, fabric swatch board, pattern board, story board, flat sketch and illustration boards.

Unit III

Designing and developing patterns-grading-marker planning – Infant to 15 old years, frock, skirt and night gown for age group of 5 years to 8 years.

Unit IV

Designing and developing patterns – grading patterns – marker planning – women's garments – kameez, salwar and maxi garments.

Unit V

Designing –pattern making-grading- markers planning- men's garments – trousers, kurta, pyjama, S.B.vest coat garment.

Text Books:

1. The Indian textile journal, Volume 117, Issues 7-12, Sorabji M. Rutnagur, Business Press.,2007
2. Journal of Fashion Marketing and Management by Ji-Young Ea Ruckman, (Obtained her PhD from the Department of Textile Industries, Leeds University, England), Jeong-Wha Kim, (Obtained her PhD from the Department of Clothing and Textiles, Sookmyung Women's University, Korea)

References:

1. Fashion Computing- Design Techniques and CAD by Sandra Burke by Burke Publishing.
2. Digital Fashion Illustration with Photoshop and Illustrator by Kevin Tallon

Course Outcome (CO)	Programme Specific Outcome (PSO)										
	1	2	3	4	5	6	7	8	9	10	11
ADVANCED CAD IN TEXTILE AND FASHION DESIGN	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: After learning this paper the students will gain design techniques in CAD	3	3	3	2	1	1	3	3	3	3	3
CO2: Identify different soft wares for designing and pattern making of garments	3	3	3	2	1	1	3	3	3	3	3
CO3: Compute different methods of tools and techniques used in CAD designing.	3	3	3	2	1	1	3	3	3	3	3
CO4: Experiment with various 2D, 3D designing of garments	3	3	3	2	1	1	3	3	3	3	3
CO5: Create various styles of children's, men's and women's garments.	3	3	3	2	1	1	3	3	3	3	3

ENTERPRISE DEVELOPMENT

Course Code: 24TFUB4108

Credit: 4+0

MaxMarks:100

Objectives:

- To enable the students to learn the Entrepreneurship Development.
- To make the students understand the Entrepreneurship opportunities.

Specific Learning Outcome:

After learning this paper the students will gain knowledge in Entrepreneurship, Entrepreneurial Development, Project Management, Finance and Marketing, small industry set up.

Unit I Introduction to Enterprise

Enterprise – Definition, Types of Enterprise – Sole proprietorship, Partnership, Co-operative society, Joint stock company-Definition Meaning, Functions, Objectives, roles. 6 M's of an Entrepreneurship.

Unit II Opportunities in Fashion Entrepreneurship

Identifying Opportunities - Prospects of Fashion entrepreneurship - Fashion and Textile Design, Manufacturing and Distribution, Fashion Sales and Marketing, Fashion Retail; Fashion Entrepreneur Traits; Factors affecting entrepreneurship growth

Unit III Online Fashion business

Innovative entrepreneurship – entrepreneurship in the digital revolution era; Online Fashion Business – Four levels of online activity – email, text, skype, website, social media, online sales; Advertisement – types, implementation, advantage and its disadvantages

Unit IV Start-up Management

Start-up – Concept, Spiral model of a Startup; Steps for new Start-up – Pros and Cons of new business, Business plan, Company registration, Budget, Buying Equipment, Design and production cycle

Unit V Government Start-up Schemes and Policies

Textile and Apparel– Evolution and their advantages in India; Government scheme and policies – Start-up India, Make in India, AIM, STEP, Stand-up India, TREAD and other textile start-ups

References

1. Hambrick , D(1982), environmental scsnning and organization strategy, strategic management journal. 3(2).pp.159-174
2. SWOT analysis: Discover new opportunities, Manage and eliminate threats. "www.mindtools.com.loop. Retrieved 24 February 2018.
3. Carme Moreno-Gavara, Ana Isabel Jiménez-Zarco, "Sustainable Fashion: Empowering African Women Entrepreneurs in the Fashion Industry", 2019, Palgrave Macmillan
4. Marta Peris-Ortiz, Jean-Michel Sahut (eds.), "New Challenges in Entrepreneurship and Finance: Examining the Prospects for Sustainable Business Development, Performance, Innovation, and Economic Growth", 2015, Springer International Publishing
5. Ronny Baierl, Judith Behrens, Alexander Brem, "Digital Entrepreneurship: Interfaces Between Digital Technologies And Entrepreneurship", 2019, Springer
6. Agnieszka Skala, "Digital Startups in Transition Economies: Challenges for Management, Entrepreneurship and Education", 2019, Springer International Publishing
7. Michele M. Granger, Tina M. Sterling, Ann Cantrell, "Fashion Entrepreneurship: Retail Business Planning", 2019, Edition-3, Fairchild Books

Text Books:

1. Dynamics of Entrepreneurial Development Management Vasant Desai, Himalaya Publishing House.
2. Entrepreneurial Development S.S. Khanna Entrepreneurship & Small Business Management CL Bansal, Haranand Publication
3. Entrepreneurial Development in India Sami Uddin, Mittal Publication

Course Outcome (CO)	Programme Specific Outcome (PSO)										
	1	2	3	4	5	6	7	8	9	10	11
ENTERPRISE DEVELOPMENT	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: Understand the types and role of an entrepreneur	3	3	3	3	3	3	3	3	3	3	3
CO2: Know how to become an independent entrepreneur	3	3	3	3	3	3	3	3	3	3	3
CO3: Identify various financial agencies available to acquire funds and asset benefits.	3	3	3	3	3	3	3	3	3	3	3
CO4: Plan and executing in starting new boutiques.	3	3	3	3	3	3	3	3	3	3	3

INTERNSHIP –III

Course code: 24TFUO4107

Credit - 2

Max.Marks:50

Specific Learning Outcome:

After successful completion of an internship in a reputed textile manufacturing or garment manufacturing concern the student will have a complete commercial knowledge on textiles and garments, they will gain knowledge about the latest machineries and equipments.

Internship

Period of supervised training required for qualifying for a profession. It follows a specified number of academic credits or classroom years. To provide a valuable opportunity to gain work experience in a student's chosen field before graduation. A student or a recent graduate undergoing supervised practical training. Since relevant work experience is one of the key qualifications companies look for when comparing candidates for a job or internship, completing several internships during college greatly increases the chances of being selected for a job after graduation. Even though college students learn the knowledge required for succeeding in a specific career through their college courses and curriculum, internships are one of the best ways to develop the required skills necessary to gain the experience required to be successful in the field.

Completing an internship can help a student decide if a particular career is actually the right fit for them, and through an internship, students can establish contacts or even earn college credit while working in a part-time, temporary position. Additionally, in a competitive job market, internships for college students give recent graduates an edge over other potential candidates who do not have any relevant work experience.

Course Outcome (CO)	Programme Specific Outcome (PSO)										
	1	2	3	4	5	6	7	8	9	10	11
INTERNSHIP –III	PS01	PS02	PS03	PS04	PS05	PS06	PS07	PS08	PS09	PS010	PS011
CO1: Identifying and standardizing the body measurements.	3	3	3	3	1	1	1	1	3	3	3
CO2: Supervise the fabrics, trimmings and accessories used in the garments.	3	3	3	3	3	1	1	1	3	3	3
CO3: Handle the buyers for the manufacturing of garments	3	3	3	3	3	1	1	1	3	3	3
CO4: After training in embroidery section they can create different motifs and designs according to the garment style.	3	3	3	3	3	1	3	3	3	3	3
CO5: Plan and propose the style variation according to the buyers needs	3	3	3	3	3	1	3	3	3	3	3

SEMESTER VIII BOUTIQUE PLANNING

CourseCode: 24TFUC4222

Credit:3+1

Max Marks: 100

Objectives:

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

Specific Learning Outcome:

After learning this paper the students will gain knowledge in boutique planning, costing, interior designing, developing own boutique and function of marketing in boutique planning.

Unit I

Boutique interior planning- Boutique interiors and display locations, fixture addressing, purchase display systems. Boutique management-types of boutique, planning, layout and storing. Inventory control-Definition, types, importance, remedies. Buying for boutique, Pricing merchandise and hiring.

Unit II

Business option and plans for boutique. Costing and funding agencies. Boutique display, Exterior of boutique, Illumination, masking and proscenia mannequins and 3d dressing. Props and promotion n floor .Role and importance of visual merchandising in today market place and colour pallets.

Unit III

Introduction to boutique management and terminologies. Fashion retailing-History, Scope, Importance. Types of retailing (Domestic and international), techniques. Retail marketing channels Boutique market place and its role. E- Commerce: Global retailing competition, E – retailing, online marketing, communication – Strategy of fashion communication.

Unit IV

Fashion marketing- Definition, Functions of marketing, concepts, product planning, product life cycle and product mix. Advertisement-Definition, importance and different methods ,media planning. Brands- Definition, trade mark, difference between brand and trade mark. Functions of brands, types of brands.

Unit V

Fashion studio, Silhouette consultation, Effective sales techniques, boutique operations, brand building, competitive strategies and survey, market research. Fundamentals of window display and its various types of display settings. Tradeshow, fashion shows and trade organizations.

Text Books:

1. Fashion Design and Product Development, Harold Carr and John Pomeroy, Black well Science Inc, Cambridge(1992)
2. Fashion marketing, Mike Basey, Oxford University press, Wynford Drive, Don Mills, Ontario (1995) ..
3. Introduction to Fashion, Patrick John, B T Batsford Ltd, Ireland, Fullham road, London(1992).
4. Fashion From Concepts to Consumer, Stephens Frings, Prentice Hall, 7th Edition 2002.
5. Marketing Management, Philip Kotler, Prentice Hall, 7th Edition 1996
6. Fashion marketing and merchandizing Manmeet sodhia 81-272-1184-2

References:

1. Gastelino. M. Fashion Kaleidoscope, Rupa & Co. 1994.
2. Gibson. G. Vedomani, Retail Management, jaico Publishing house, Bangalore
3. Elaine Stone, The Dynamics of Fashion, Fairchild Publication
4. Brenda Sternquist international Retailing, Fairchild Publication, New York
5. Martin. M. Pegler, Store Window No.14, No 12, Visual reference Publishers, New York.

Course Outcome (CO)	Programme Specific Outcome (PSO)										
	1	2	3	4	5	6	7	8	9	10	11
BOUTIQUE PLANNING	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: Manage and interpret various interior planning for boutiques	3	3	3	3	3	2	2	3	3	2	3
CO2: Apply various planning and costing in boutiques.	3	3	3	2	3	2	2	3	3	2	3
CO3: Organize different domestic and international way of retailing	3	3	3	2	2	3	2	3	3	3	3
CO4: Evaluate the visual merchandising process in various boutiques.	3	3	3	2	2	3	2	3	3	3	3
CO5: Analyse on various fashion marketing.	3	3	3	2	2	3	3	3	3	3	3

ADVANCED FABRIC CONSTRUCTION

Course Code: 24TFUC4223

Credit: 4+0

Max Marks: 100

Objectives:

- To impart the knowledge of fabric construction as weave, knit and nonwovens.
- To provide students with, the knowledge of fabric science and its types.

Specific Learning Outcome:

After learning this paper the students will gain knowledge in weaving and knitting, they know the looms and its parts, woven structures, knit and its types process, characteristic and mechanism.

UNIT- I

Weaving – Introduction, Sequence of preparatory process of weaving. Passage of material through weaving machine. Loom – Introduction, different types of loom – Traditional loom – material needed, construction-back strap, warp weighted loom, pit loom. Hand loom, Shuttle less loom, Modern loom –Computer controlled loom, triaxial loom, Multiphase weaving machine- warp wave, filling wave- Circular and flat. Woven fabric particulars. Various defect in woven fabric.

UNIT- II

Weaving- Definition, steps involved in weaving operation. Important motions of weaving process. Elements of woven design- Design, peg plan, draft plan, structure, characteristics, types for Woven structure: Plain weave, twill - satin, sateen, Honey comb, Huck – a- back, crepe weave, Bedford cords, welts and pique, Mock Lenox weave, pile fabric, Colour and weave effect of extra wrap and extra weft. Double cloth. Jacquard weave- history, types, characteristics, card cutting and lacing, point paper design. Dobby- Scope of dobby, types, difference between positive and negative, working, end uses and properties of dobby.

UNIT- III

Knitting element – Mechanism of operation, passage of material and knitting action. Knitting Machine and Mechanism: Types of knitting machine. Circular and Flat - bed knitting machine – Parts & function of the machine and passage of material. Warp and weft knit structure- single jersey, Rib, purl, Interlock, tricot, Rachel, Simplex – structure and representation properties, knitting Action and its mechanisms, uses and derivatives of knit structure. Jacquard knitting, Pile knitting and its varieties. Knitted fabric faults, causes and remedies.

UNIT- IV

Nonwoven fabrics- definition, classification, methods of manufacturing- web formation, fabric formation-Bonding types, Characteristics and mechanism. Polymer- extrusion based technologies- raw material and process sequence in spun bond technology and melt- blown technology. Composites- Definition, need for composites, properties of composites, classification of composite- based on the type of matrix material, based on the type of reinforcement, manufacturing process, advantages and limitation.

UNIT- V

Compound Fabric- Insertion knitting, Stitch bonding techniques, Metap knit weaving, Tufting, Felted fabric formation- process, types, properties and its uses. Decorative fabric construction- Braiding, Netting, Lacing, Knotting. Fabric varieties- Denim, Crepe georgette, Moroccan crepe, Pile fabrics, Velvet, Polar fleece.

Text Books:

1. Fabric structure and design- Dharshan chaturvedi- ISBN 978-93-51112-61-7
2. Fabric studies- Kanwar Varinder- ISBN 81-272-1904-58
3. Fabric textile and patterns- Druid- ISBN- 9789057681127
4. Textile Science- Gohl
5. Fabric science and technology- Mishra-ISBN-978-81-224-1250-5
6. Hand Book of textiles- Jaistree- ISBN-978-81-7132-717-1

References

1. Theory of textile structure- Clifton over Holser- ISBN-987-93-5111-100-9
2. Textile design and structure- Chitra, Chowdhary- ISBN-978-81-8342-298-7
3. Textile designing theory and concept- Tanya Jain
4. Fabric studies- Kanwar Varinder- ISBN-81-272-1904-58

Course Outcome (CO)	Programme Specific Outcome (PSO)										
	1	2	3	4	5	6	7	8	9	10	11
ADVANCED FABRIC CONSTRUCTION	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: Identify the weave structures of developed fabrics.	3	3	3	3	3	3	1	1	1	2	3
CO2: Practice on handling different machineries of weaving and knitting.	3	3	3	3	3	2	1	2	1	1	3
CO3: Analyze on various parts and functions of weaving and knitting machineries	3	3	3	3	2	1	2	1	1	1	3
CO4: Application of various methods followed for manufacturing of non woven's fabrics.	3	3	3	3	3	3	2	1	1	2	3

ADVANCED WET PROCESSING

Course Code: 24TFUC4224

Credit:4+0

MaxMarks:100

Objectives:

- To develop the holistic understanding of the finishing of fabric and garment used for the apparel industry
- To develop an understanding of the aesthetic and functional features of various types of finished fabrics and garments. To identify the effects of various types of finishes on the fabrics and the garments, changes occurring in their properties and their end uses in the apparel sector.

Specific Learning Outcome:

After learning this paper the students will gain knowledge to make the students understand the modern techniques of Garment and Fabric finishing in relation to productivity, cost quality and performance.

Unit I

Finishes- definition, Preparatory process- Singeing, Desizing, Scouring, Bleaching, Mercerizing. Classification- Basic finishes
Calendering, tentering, stiffening, weighting, carbonising, crabbing, decatizing, beetling, glazing, schreinerizing, embossing, moirering, ciering, napping.

Textile Bio-processing- Sequence of chemical processing of textile application of enzymes in textile processing- enzymatic desizing, methods of enzymatic desizing, enzymatic scouring process, Bio bleaching process and its application.

Unit II

Special finishing- Antimicrobial finish, antibacterial finish, antifungal finishes, Flame retardant- important, applications, classification and methods. UV protection, Crease resistant, Micro encapsulation finishing techniques, Hydrophilic finishes, Anti pilling finish, Anti static finish, non slip finish, Fire resistant- methods and its application.

Unit III

Textile dyeing- Introduction, definition, glossary, Stages of dyeing- Fiber, Yarn, Fabric and Garment. Classification of dyes- Natural and Synthetic dye. Natural dyeing – Origin, Definition, Classification, Types of natural dyes- Animal derived dyes, Plant derived dyes, Mineral derived dyes and Insect dyes. Extraction methods- Aqueous, ethanol, methanol, ether, chloroform, Ultrasonic, UV, Plasma and microwave. Merits and demerits of natural dyes.

Unit IV

Chemical dye, definition, Classification, Types of Dyes- Acid dyes, Basic dyes, Direct dyes, Mordant dyes, Vat dyes, Reactive dyes, Disperse dyes, Azoic dyes, sulfur dyes, Laser dyes, Leather dyes, Fluorescent brighteners, Solvent dyes, Chromophoric dyes and its types. Chemical processing equipment's –Principle and functions of different machines used preparatory processing including yarn rope, different mercerizing machines, jet and HTHP, beam dyeing machines, Foam applicator equipment for water removal – contact and non –contact type of dryer, hydrometer, schematic diagram.

Unit V

Printing, Definition, Classification Techniques of printing- Preparation of printing Colours, thickening agents, printing paste preparation, fixation. Methods of printing, Roller, Cylinder or machine printing, Digital printing, Calico printing, Conventional methods of printing, foam printing and ink jet printing.

Textile effluent treatment- Primary treatment- Screening, Sedimentation, Equalization, Neutralization, Coagulation. Secondary treatment- aerated lagoons, trickling filtration, activated sludge process, oxidation ponds, anaerobic digestion. Tertiary treatment- evaporation, reverse osmosis, dialysis, ion exchange, chemical precipitation, activated carbon treatment.

Text Books:

1. Shenai, V.A. Technology of Textile Processing, Chemistry for Dyes and Principles of Dyeing, A Sevak Publication, Bombay,1993
2. Manivsakam.N. Treatment of Textile processing Effluents, Sakthi Publications, Coimbatore,1995.9
3. Gulrajani, M.L. Deepti Gupta, Natural dyes and their application to Textiles, Indian Institute of Technology, New Delhi,1992
4. Prayag, R.S. „Technology of Textiles printing, L.R. Prayag, Dharwad,1995.

References:

1. Shenai, V.A. History of Textiles Design, Sevak Publications, Mumbai,1995.
 2. Sule, A.D. - ATIRA, Computer colour analysis- Textile applications, New Age International Private Limited, New Delhi,2002.
- Nalankilli.G., Textile Finishing, SSM Publication,Komarapalayam

Course Outcome (CO)	Programme Specific Outcome (PSO)										
	1	2	3	4	5	6	7	8	9	10	11
ADVANCED WET PROCESSING	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: Identify and understand the processing involved in fabric dyeing	3	3	3	3	3	2	3	3	3	3	3
CO2: Develop various styles of patterns for children's garments	3	3	3	3	3	2	3	3	3	3	3
CO3: Able to handle different tools and equipments and machineries for textile processing	3	3	3	3	3	3	3	3	3	3	3
CO4: Analyze the process involved in textile finishing	3	3	3	2	3	3	2	3	3	3	3

PROFESSIONAL PORTFOLIO PRACTICAL

Course Code: 24TFUC4225

Credit:1+3

Max Marks:100

Objectives:

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

Specific Learning Outcome:

After learning this paper the students will gain knowledge to make the students to develop the western ensemble for different type of body and create a design according to the body types.

Unit I

Fashion Styling-Introduction to styling – qualities of a fashion stylist, Areas of working: magazine and editorial, print advertising television/commercial, catwalk, digital video and film, music, celebrities and red carpets, digital and online media, personal styling/image consulting.

Unit II

Role of Fashion Stylist-Introduction, Team working, organizing a test-shoot, communication, style inspiration and development, casting the model - professional models, street casting, scouting online. Location – studio, outdoor, sourcing cloths, editing the cloths, cloths for body type, Fitting and corrections.

Unit III

Fashion Photography and Modelling- Introduction to photography, history, photographic careers, Black and White photography, colour photography. Lighting- Introduction, Methods and techniques of lighting. Indoor lighting, Outdoor lighting.

Model Portfolio Shoot- Effects images, Portraits photography - formal, fashion portrait gallery, location, capturing character, taking outdoors and indoor, black and white photos, theme and dramatic photos, photographing fashion sequences

Unit IV

Analysis Of Body Types-Portfolio development and presentation for ensembles for men – western ensembles, Indian ensembles and other ensembles, short and heavy body types, short and thin body types, tall, heavy body types, tall and thin body types, athletic body types – mood board, story board, colour board – presented separately or in a combined form, fabric development chart design development chart final presentation.

Unit V

Final Portfolio presentation- Portfolio development and presentation for Informal, Formal, Casuals, seasons or occasion, occupation, sports, for men, women, mood board, story board, colour board, presented separately or in a combined form, fabric development, design development and final presentation.

Text Books:

1. Jerligan Easterling “Fashion Merchandising and Portfolio presentation” Prentice Hall
2. J. John Dickenson, “Inside the Design world” Pearson Education
3. Gini Stephen Frings “ Fashion – from concept to consumer” Pearson Education
4. Polly Guerin “Creative fashion presentation” Fairchild publications
5. Jacqueline McAssey, Clare buckley, “Basics Fashion Design 08: Styling”, AVA publishing (UK) ltd, 2011
6. Danielle Griffiths, “Fashion stylist handbook”, Laurence King publishing Ltd, 2016.
7. Crystal Wright, “The Hair Makeup & Fashion Styling Career Guide: The Insider s Guide to a Successful Career in Print", Video, Film & TV", Motivational media production, LLC., 2011
8. Elizabeth Allen, Sophie Triantaphillidou, The Manual of Photography, Tenth Edition, Elsevier, 2011.
9. Bruce Smith, Fashion Photography: A Complete Guide to the Tools and Techniques of the Trade, Potter/Ten Speed/Harmony Publisher, 2018

References:

3. Fashion Computing- Design Techniques and CAD by Sandra Burke by Burke Publishing.
4. Digital Fashion Illustration with Photoshop and Illustrator by KevinTallon

Course Outcome (CO)	Programme Specific Outcome (PSO)										
	1	2	3	4	5	6	7	8	9	10	11
PROFESSIONAL PORTFOLIO PRACTICAL	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: Illustrate different types of body movements, and fashion figures.	3	2	3	3	2	1	3	3	3	3	3
CO2: Apply different mediums and creating various boards.	3	1	2	3	1	1	3	3	3	3	3
CO3: Presentation of different presentations boards according to the designs.	3	1	1	3	1	1	3	3	3	3	3
Co 4: Introduction to Fashion Styling, Fashion Photography and Modelling.	3	1	2	2	1	1	1	2	3	3	3

DISSERTATION

Course code : 24TFUC4226

Credit:4

Max. Marks: 200

Final year under graduate students at the end of final semester under goes a minor research work. Based on the curriculum/ area of interest by the individual has been focused with objectives, and detailed work on literature, methodology, result analysis and submitting as bound work with summary ,conclusion with evidence of tools used, appendix. This will be evaluated as per the scheme.

Course Outcome (CO)	Programme Specific Outcome (PSO)										
	1	2	3	4	5	6	7	8	9	10	11
DISSERTATION	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: Identify new and innovative developments in the field of textile and garments	3	3	3	3	3	3	3	3	3	3	3
CO2: Impart traditional motifs, designs, and techniques and converting to the current trends.	3	3	3	3	3	3	3	3	3	3	3
CO3: Experimenting with various natural and man-made finishing techniques for both textile and garment designing.	3	3	3	3	3	3	3	3	3	3	3
CO4: Evaluating of the research through various testing, visual evaluation and survey methods.	3	3	3	3	3	3	3	3	3	3	3
CO5: As advance level creating and developing innovative products for commercial purpose in medical textiles, smart textiles and many more in textile and garment industry.	3	3	3	3	3	3	3	3	3	3	3

Internship- IV

Coursecode: 24TFUO4208

Credit0+2

Maxmarks=50

Period of supervised training required for qualifying for a profession. It follows a specified number of academic credits or classroom years. To provide a valuable opportunity to gain work experience in a student's chosen field before graduation. A student or a recent graduate undergoing supervised practical training. Since relevant work experience is one of the key qualifications companies look for when comparing candidates for a job or internship, completing several internships during college greatly increases the chances of being selected for a job after graduation. Even though college students learn the knowledge required for succeeding in a specific career through their college courses and curriculum, internships are one of the best ways to develop the required skills necessary to gain the experience required to be successful in the field.

Completing an internship can help a student decide if a particular career is actually the right fit for them, and through an internship, students can establish contacts or even earn college credit while working in a part-time, temporary position. Additionally, in a competitive job market, internships for college students give recent graduates an edge over other potential candidates who do not have any relevant work experience.

Course Outcome (CO)	Programme Specific Outcome (PSO)										
	1	2	3	4	5	6	7	8	9	10	11
INTERNSHIP –IV	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: Identifying and standardizing the body measurements.	3	3	3	3	1	1	1	1	3	3	3
CO2: Supervise the fabrics, trimmings and accessories used in the garments.	3	3	3	3	3	1	1	1	3	3	3
CO3: Handle the buyers for the manufacturing of garments	3	3	3	3	3	1	1	1	3	3	3
CO4: After training in embroidery section they can create different motifs and designs according to the garment style.	3	3	3	3	3	1	3	3	3	3	3
CO5: Plan and propose the style variation according to the buyers needs	3	3	3	3	3	1	3	3	3	3	3

DISCIPLINE CENTRIC

CONCEPT OF COSTING AND EXPORT MANAGEMENT

Course Code: 24TFUA2201

Credit: 3 +0

Max Marks: 100

Objectives:

- To study the apparel industry costing methods, types and calculation of fabric costing.
- To get insight knowledge about marketing, export procedure & documentation and policies of exports.

Specific Learning Outcome:

After learning this course the students will have an understanding about the garment cost and sampling cost and accessories used in the garments. Also learn about trade and export procedure and promotion

UNIT I

Principles of costing - Requirements of good costing system - Cost unit - Types of costs -Elements of cost - Overheads - Prime cost - Work cost - Cost of production - Total cost -Apparel manufacturing cost categories - Manufacturing budget – Cash flow control – Standard cost sheet - Break–Even charts.

UNIT II

Costing: Definition – Cost estimation: Meaning - Fabric costing: fabric types, fabric consumption, weaving/ knitting price – cost estimation of dyeing, printing and finishing - Costing of apparel: woven/knits - Estimation of factory cost for woven & knitted fabric

UNIT III

Trade: Domestic trade vs International trade – WTO - Globalization - Regional trade blocks - Counter trade: Factors responsible for counter trade growth - Business Environment: social & logical - Business ethics: definition, importance and need. Export marketing of apparel - International Care labelling - International codes for products & services - Role of terms of payment in international trading.

UNIT IV

Export Procedure - Major documents for exports and its purpose - INCO Terms – Documents for claiming export assistance - Export Finance - Export credit: short term, medium & long term - Logistics and Shipping - Standard policies: Indian trade policies - India's foreign trade policy: Export & import policy.

UNIT V

Export promotion council: Apparel Export Promotion Council - Registration Formalities -Registration Cum Membership Certificate – Import Export Code – RBI Code - Foreign exchange regulation - Nature of foreign exchange market and main functions - Special economic zones.

REFERENCES

1. Maurice Johnson & Evelyn C. Moore. (2001). Apparel Product Development. New Delhi: Om Book Service.
2. Prashant P. Deshande. (2009). Garment – Export industry of India. New Delhi: APH Publishing.
3. Nasim Yousaf, (2001). Import & Export of Apparel and Textiles. USA, Indiana: Xlibris.
4. Thomas E. Johnson. & Donna L. Bade. (2010). Export Import Procedures & Documentation. New York: Amacom.
5. DGFT, (2015-2020). Hand Book of Import and Export Procedures. New Delhi: Govt. of India.
6. Francis Cherunilam, (2001). International trade and Export management. Mumbai: Himalaya Publishing House.
7. Mahajan, (2007). Export Policy, Procedures and Documentations. Mumbai: Snow-white Publishers.
8. Darlie O. Koshy, (1995). Effective export marketing of Apparel. New Delhi: Global Business Press. Jain,
9. S.P. & Narang, K.L. (2005). Cost Accounting. New Delhi: Kalyani Publishers.

Course Outcome (CO)	Programme Specific Outcome (PSO)										
	1	2	3	4	5	6	7	8	9	10	11
CONCEPT OF COSTING AND EXPORT MANAGEMENT	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: Forecasting the basic costing application in textile and apparel industry.	3	3	3	3	1	1	3	2	3	3	2
CO2:Cost calculation in buying of machineries, raw materials, accessories etc.,	3	3	3	3	1	1	2	1	3	3	2
CO3:Preparing estimation for various production cost involved in the industry	3	3	3	3	1	1	3	3	3	3	2
CO4: Evaluate the overall cost calculation take place in the industry	3	3	3	3	3	1	3	3	3	3	1

FASHION BRANDING AND PROMOTION

Course Code: 24TFUA2202

Credit: 3+0

Max Marks: 100

Objectives:

- To study the fundamentals of fashion branding and brand promotion
- To get insight knowledge about marketing, advertising and brand dynamics

Specific Learning Outcome:

After learning this course the students will have an understanding about the fashion brands, brand development and marketing and promotion through advertisement.

UNIT- I Fundamentals of Fashion Branding

Brand – definition, characteristics, value and importance in marketing; Branding Concept- Building brand awareness, brand communication, brand personality, brand image and brand identity, brand equity, brand positioning, brand gap

UNIT- II Development of Brand

Fashion branding Elements and its types– Brand name decision, Logo, Symbol, Abstract marks, Emblems, Dynamic marks, Characters; Co-branding, Corporate branding; Trends and Challenges in Fashion Branding; National Fashion Brands vs International Fashion Brands.

UNIT- III Promotion and Brand dynamics

Promotion – types, segmentation and value proposition; Advertising message: message objectives, recall, attitude, emotions and feelings; Fashion Brand Personality and Advertising Responses – Building Fashion Brand Personality via Advertisement

UNIT- IV Communication in Advertising and Marketing

Role of communication in Advertising and Marketing - Target Customers - Media Communication Strategy and Tactics; Preparing a Communication Plan – Types: Video, Audio, Print Media, Out-of Home Media, Search Engine Marketing, Sales Promotion, Media and Campaign Measurement.

UNIT V Merchandising

Retailing merchandiser, concepts, Quick response, just in Time, Merchandising Calendar, trend analysis, forecast analysis, concepts of apparel product lines, planning, directing, coordinating and controlling

References

1. Apparel merchandising management Vasugi raja 978-81-907757-3-1
2. Encyclopaedia of Textiles set of 4 vols S. Naik
3. Encyclopaedia of textiles vol (4) 1 Naik978-93-313-1847-3
4. Statistics for textile apparel managementJ. Hayavadan
5. Apparel Marketing and merchandizing M.S. Sheshadri
6. Grace I. Kunz, Merchandising: Theory, principles and practices, Fairchild publication.
7. Elaine Stone, Dynamics of Fashion, Fair Child Publication
8. Phillip Kotler, Marketing management, Pearson Prentice Hall,
9. Tim Jackson & David Shaw, Fashion Buying & Merchandising Management.
10. M.S. Shesahdri, Apparel marketing & Merchandising, MS Publication, Bangalore.
11. Fashion Merchandising –Strong Elian
12. Managing Quality In Apparel Industry – Pradeep Metha
13. Human Behaviour At Work – Keith Davis.
14. Marketing Management – Philip Kotler
15. Marketing Management – Sharlekar
16. Fashion Marketing – Mike Easey(Ed), Blackwell Science
17. Marketing Management – Rajan Nair
18. Fashion from concept to consumer Gini Stephi 0-13-177478-6

Course Outcome (CO)	Programme Specific Outcome (PSO)										
	1	2	3	4	5	6	7	8	9	10	11
FASHION BRANDING AND PROMOTION	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1:Understand the role and responsibility of a merchandiser	3	3	3	3	3	3	3	3	3	3	3
CO2: Manage and handle buyers' needs and manufacture products	3	3	3	3	3	3	3	3	3	3	3
CO3:Analyze various quality aspects in garment manufacturing in the Industry	3	3	3	3	3	3	3	3	3	3	3
CO4: Prepare a Communication Plan for marketing.	3	3	3	1	1	1	1	1	1	1	1

FASHION GROOMING

Course Code : 24TFUA2203

Credit : 3 +0

Max: marks : 100

Objectives

- To develop knowledge and skills on grooming
- To acquire knowledge on basic personal care.
- To apply various techniques on self grooming and styling

Specific learning outcome

After learning this course students will be able to do self grooming on their own . Develop different appearance related to fashion and then styling . Developing portfolio on styling.

Unit - I

Self Rolling of thread. Different types of waxes,- tools and equipments needed their work and process.

Unit -II

Self bleach, clean ups and product knowledge and skin care - Materials required , uses and process followed.

Unit - III

Different types of hair cutting - tools and equipments needed and procedures to be followed.

Unit - IV

Self manicure and pedicure - - tools and equipments needed and procedures to be followed. Different types of Facials procedures to be followed.

Unit - V

Self Make Up For Different Occasions - Different types of Saree draping, Make up tools and equipments used.

Text Books

1. Style & Grooming- Felix oberman.
2. Hand book of Attire and grooming by Cyrus .M.Gonda
3. Careers in Beauty and Grooming by Lerner and mark.

Course Outcome (CO)	Programme Specific Outcome (PSO)										
	1	2	3	4	5	6	7	8	9	10	11
FASHION GROOMING	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: Be able to do self grooming on their own	1	1	1	1	1	1	1	1	1	1	3
CO2: Developdifferent appearance related to fashion and then styling	1	1	1	1	1	1	1	1	1	1	3

BASIC TEXTILE ECONOMICS

Course code: 24TFUA2204

Credit: 3+0

Max.Marks: 100

Objectives:

- To create awareness on Export and Import policies among the students.
- To impart knowledge on shipment policies and procedures
- To understand world trade policies and mutual trade agreements among exporting nations
- To impart knowledge on how to become a successful exporter.

Specific Learning Outcome:

After learning this course the students will have an understanding about the economics and knowledge about shipment policies and procedures. This paper will enable the students to know how to become an independent successful exporter.

Unit I

Introduction Concepts of Textile Economics, Textile Economics of demand and supply, elasticity of demand, working of textile market mechanism, Theory of Production in textiles short run & long run. Textile environment of business: Introduction to concept of textile business environment and other factor.

Unit II

Concepts of different types of textile costs and Cost Functions, determination of price and output in perfect and imperfect market conditions, price discrimination. Demand forecasting with reference to different textiles and fashion industries.

Unit III

Textile industries component of environment: economic, political, legal, social, technological & international Economic systems, economic planning in India, objectives, strategies and evaluation of year plan for domestic and international marketing.

Unit IV

Textile industrial policy and industrial licensing. New textile economic policies, textile Company regulatory legislations in India, MRTP, FEMA, EXIM in light of liberalization policies. Public sector in India: concepts, philosophy and objectives, performance, problems and constraints, Industrial Sickness, Privatization.

Unit V

Textile Management: Textile industries planning, Organizing, Staffing, Leading, Communicating, Controlling. Marketing Management, Trade practices, promotion, Theory of textile business cycles, Concept causes and Measures to control business cycles. Theories of inflation: causes and control of inflation, monetary and fiscal policy. Balance of Payments: concept, causes of disequilibrium and remedial methods

Text Books

1. International trade and export management (2008) Francis Cherunilam, Himalaya publishing house – New Delhi.
2. Foreign Trade (2005) Jeevanandam. C, Sultan Chand & Sons – New Delhi.
3. Principles of management- Dinakarpagare, sultan chand and sons, delhi.

References

1. Entrepreneurship Development in India – Dr. C.B Gupta , Dr N.P . Srinivasan, sultan Chand and sons delhi 1997.

Course Outcome (CO)	Programme Specific Outcome (PSO)										
	1	2	3	4	5	6	7	8	9	10	11
BASIC TEXTILE ECONOMICS	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: Understanding about the economics and knowledge about shipment policies and procedures.	3	3	3	1	1	1	1	1	1	1	1
CO2: Enable to become an independent successful exporter.	3	3	3	1	1	1	1	1	1	1	1

MULTIDISCIPLINARY COURSES

DEVELOPMENT OF DESIGN FOR FASHION

Course Code: 24TFUI1101

Credits: 3+0

Max Marks:100

Objectives:

- To teach the students the concepts in design and fashion related to terms, principles.
- To enable students to create a variety of dress designs body's in the concepts.

Specific Learning Outcome:

After Learning this subject students will gain knowledge about garment designing, suitability of designs and colour analysis in designing.

Unit- I

Design Concepts - Structural and Applied design , Garment Silhouettes ,Elements of design and their effects- Line, shape , color and texture. Principles of design and their effects- Proportion, Balance, Emphasis, Rhythm, Harmony.

Unit - II

Terms and Concepts Related to Fashion - Fashion terms: Fashion, Fad, Classic, Trend, Haute-Couture, Prêt-a-porter, Knockoff Accessories, toile, boutique, bespoke Inspiration and sources of fashion- printed sources, historic /traditional costumes, media, travel, fabrics, awareness. Factors influencing fashion.

Unit III

Fashion Cycle- Consumer identification with fashion life cycle its three stages – fashion leaders / followers /innovators/ motivators/victims. Theories of Fashion Adoption – Trickle down, trickle up bottom up, trickle across.

Unit -IV

Application of colour and Principles of design in dress - Harmony through colour, Emphasis through colour, Proportion through colour, Rhythm through colour and Balance through colour. Illustrate the Colour Harmony in Dress Design.

Unit- V

Design Development - Design development and sourcing of fabric .Development of a sample garment and line. Specification sheet and cost sheet .Fashion forecasting, sources of fashion forecasting information.

Text Books:

1. Elements of Fashion and Apparel Design By, G. J. Sumathi, New Age International, 2007
2. Art in everyday life by-Harriet Goldstein,2007, Macmillan,
3. Fashion design, the art of style by Jen Jones, Capstone, 2007

Course Outcome (CO)	Programme Specific Outcome (PSO)										
	1	2	3	4	5	6	7	8	9	10	11
DEVELOPMENT OF DESIGN FOR FASHION	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: Understand the design concept through elements and principles of design.	3	3	3	3	1	1	1	3	3	2	3
CO2: Analyze various designs and fashion concepts in clothing for different age groups.	3	2	3	3	1	1	1	2	3	2	3
CO3: Acquaint the students in clothing communication for different body types.	3	2	3	3	1	1	2	1	3	2	3
CO4: Analyse the development of fashion through fashion forecasting.	3	2	2	3	2	3	2	2	2	2	3

FASHION PSYCHOLOGY

Course code: 24TFUI1102

Credit: 3+0

Max. Marks: 100

Objectives:

- To learn and understand the scenario in the fashion psychology.
- To upgrade the clothing trends and fashion according to the age groups.

Specific Learning Outcome:

By learning this subject the students will acquire handful knowledge in the latest developments and trends in fashion. Development is subjected to all the clothing, selection of cloth, factors affecting in fashion.

Unit I

Clothing Definition, Classification, Introduction to Clothing understanding clothing, Purpose of clothing:- Protection, Modesty, Attraction etc. Clothing Values, Clothing Culture, men and women clothing and ornamentation, groups, Role and status of clothing. Clothing according to climatic conditions,- Arctic region- African, Asia and Arabs etc.

Unit II

Selection of clothes:Clothes for children, middle age, adults, Types of clothes according to human figure, Different materials for different clothes. Colors suitable for different garments. Kids to teenage clothing.

Unit III

Modern Clothing-Youth style and fashion, Teddy boy, skins modes, hippies, punks, taste of youth and their life style. Ancient to modern clothing, minis maxis, unisex, fit women, glamorous woman. Casual and formal clothing. Fashion for all, ready to wear fashion, mass marketing of fashion.

Unit IV

Planning for clothing for children- school, parties, sports, casual, Wardrobe Planning, Factors for clothing selection- Social Factors- Place, cultural, gender, occupation, occasion and social status. Economic Factors- Social economic condition, economic status, Availability of technology, Availability of technology.

Unit V

Environmental factors- Climate condition, protection from extreme condition and unusual places. Physiological factors- Age, Health condition, Physical structure of body or personality, Thermo physiological and Activity level.

Text Books

1. Black A.J. (1985) , ‘ A History of Fashion’ ,USA Orbits Publishing Ltd.
2. Rouse E. (1989), ‘Understanding Fashion’,UK, Blackwell Science.

Course Outcome (CO)	Programme Specific Outcome (PSO)										
	1	2	3	4	5	6	7	8	9	10	11
FASHION PSYCHOLOGY	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: Understand the needs of clothing.	3	3	3	3	2	1	3	3	3	3	3
CO2: Identify varieties of fabric for different age groups.	3	3	3	3	2	1	3	3	3	3	3
CO3: Analyze in selection of clothing for different age groups.	3	3	3	3	2	1	2	2	3	3	3
CO4:Express psychology of fashion through clothing	3	3	3	3	2	1	3	3	3	3	3
CO5: Plan and execute different types of wardrobe for children, women and men	3	3	3	3	2	1	3	3	3	3	3

WORLD COSTUMES

Course code: 24TFUI1103

Credit: 3+0

Max. Marks: 100

Objectives:

- To impart the knowledge on the costumes of different countries of the world
- To provide a theoretical understanding on different cultural and customary costumes of world nations.

Specific Objective Learning:

In this paper important costumes and textiles from different selective nations from different Continents will be discussed. After learning this subject the students will gain access to the costumes, designs, stitching principles, embroidery, dyeing and printing works that has been done on the costume. The students will gain knowledge on traditional woven textiles of India and the Traditional embroideries of different states of India. They will even learn about the Traditional costumes of different states of India spread on varied diversity.

UNIT - I

Costumes of European countries – Egypt, Greece, Roman, Sweden, Germany, Poland.

UNIT - II

Costumes of Far Eastern Countries – Japan, Hong Kong, Korea, Srilanka, Pakistan, Malaysia, China, Burma, Thailand & Philippines.

UNIT-III

Costumes of Africa- Men's, Women's and Children Costumes.

UNIT-IV

Costumes of Asia- India, Bangladesh and Nepal.

UNIT-V

America costumes- Men's, Women's, and Children costumes of different states of America.

References & Text Books :

1. Costumes of India and Pakistan, Das S.N, DB Taraporevala sons & Co, Mumbai 1958.
2. Costumes through the ages lever, Jameasion and Schuster, Newyork, 1968.
3. Traditional Indian textiles, Gillow or Barnard, Thames and Hudson, London, 1994.
4. History of Fashion, Anderson Black J, orbis publishing Ltd, USA 1985.
5. Costumes & textiles of Royal India, Ritukumar, Christies Book Ltd, London 1999.

Course Outcome (CO)	Programme Specific Outcome (PSO)										
	1	2	3	4	5	6	7	8	9	10	11
WORLD COSTUMES	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: To understand the costumes, designs, stitching principles, embroidery, dyeing and printing works that has been done on the costume.	3	3	3	1	1	1	1	1	1	1	1
CO2: To gain knowledge on traditional woven textiles of India and the Traditional embroideries of different states of India.	3	3	3	1	1	1	1	1	1	1	1

FASHION GROOMING

Course Code : 24TFUI1104

Credit : 3+0

Max: marks : 100

Objectives

- To develop knowledge and skills on grooming
- To acquire knowledge on basic personal care.
- To apply various techniques on self grooming and styling

Specific learning outcome

After learning this course students will be able to do self grooming on their own . Develop different appearance related to fashion and then styling . Developing portfolio on styling.

Unit - I

Self Rolling of thread. Different types of waxes,- tools and equipments needed their work and process.

Unit -II

Self bleach, clean ups and product knowledge and skin care - Materials required , uses and process followed.

Unit - III

Different types of hair cutting - tools and equipments needed and procedures to be followed.

Unit - IV

Self manicure and pedicure - - tools and equipments needed and procedures to be followed. Different types of Facials procedures to be followed.

Unit - V

Self Make Up For Different Occasions - Different types of Saree draping, Make up tools and equipments used.

Text Books

4. Style & Grooming- Felix oberman.
5. Hand book of Attire and grooming by Cyrus .M.Gonda
6. Careers in Beauty and Grooming by Lerner and mark.

Course Outcome (CO)	Programme Specific Outcome (PSO)										
	1	2	3	4	5	6	7	8	9	10	11
FASHION GROOMING	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1: Be able to do self grooming on their own	1	1	1	1	1	1	1	1	1	1	3
CO2: Develop different appearance related to fashion and then styling	1	1	1	1	1	1	1	1	1	1	3

