



VIJAYANAGARA SRI KRISHNADEVARAYA UNIVERSITY
JNANASAGARA CAMPUS, BALLARI-583105

Department of Studies in
Garment Manufacturing Technology

V Semester Syllabus

Bachelor of Science

With effect from 2021-22 and onwards

Name of the Department: Garment Manufacturing Technology

V Semester

DSC13-FABRIC DYEING AND PRINTING TECHNOLOGY

Course Title: FABRIC DYEING AND PRINTING TECHNOLOGY	Course code:21BSC5C13GML
Total Contact Hours: 52	Course Credits: 4
Internal Assessment Marks: 40	Duration of SEE:3
Semester End Examination Marks: 60	

Course Outcomes (CO's):

1. Detailed information about colouring and printing process of a textile materials.
2. Knowledge about auxiliaries required for printing and dyeing of different fabrics and yarns under various machineries.
3. To introduce students to understand the classification of dyes and their fastness properties for all type of dyes and suitable fabrics.
4. To provide a knowledge of different printing methods and their merits and demerits along with latest technology used in printing.

At the end of the course, students will be able to:

1. To study the coloring process of fabric and an overview of the printing process.
2. To study the auxiliaries, pigments and dyes suitable for different fibers, yarns, and fabrics.
3. To study the classification of dyeing machines.
4. To study the classification of dyes and methods of dyeing.
5. To know the ingredients of printing paste and methods of printing.

DSC13-FABRIC DYEING AND PRINTING TECHNOLOGY

Unit	Description	Hours
1	Introduction to dyeing process. Introduction to textile printing-An overview of the printing process. Selection of dyes/pigments/auxiliaries to suit the end use and classification of dyes.	10hrs
2	Study of Dyeing machines: Jigger, padding mangle and winch dyeing machines, cheese dyeing, jet dyeing and garment dyeing machines.	11hrs
3	Dyeing of textile material by direct, acid, basic, metal complex, vat, disperse and reactive dyes, fastness, properties of their dyes.	10hrs
4	Introduction to printing process. Printing paste ingredients and preparation styles of printing, direct, discharge and resist printing block screen and roller.	11hrs
5	Printing garment printing machine, flat bed and rotary screen printing, Developments in printing machinery.	10hrs

References:

1. Trotman ER, Dyeing & chemical technology of textile fibres. Charles Griffin co., London,1993.
2. James Ronald, Printing & Dyeing of Fabrics & Plastics, Mahajan book distb, 1996.
3. Shenai V.A, "Introduction to the chemistry of dye stuffs, Sevak pub,Mumbai, 1991.

Date

Course Coordinator

Subject Committee Chairperson

DSC14-QUALITY CONTROL IN APPAREL INDUSTRY

Course Title: QUALITY CONTROL IN APPAREL INDUSTRY	Course code:21BSC5C14GML
Total Contact Hours: 52	Course Credits: 4
Internal Assessment Marks: 40	Duration of SEE:3
Semester End Examination Marks: 60	

Course Outcomes (CO's):

1. Understand the concept of quality control.
2. To realize the importance of raw materials, knitted and woven defects.
3. Identify the different tests of yarns, fabric and interlinings, fusing.
4. Understand the symbols of label and washing techniques and care label.
5. To know the process of seven tools of quality.

At the end of the course, students will be able to:

1. To understand the concept of quality and its definition.
2. To understand the knitted and woven fabric defects and to analysis raw material Inspections\.
3. To analysis different testing of yarn, fabric and interlinings, fusing materials.
4. To know the concept of textile labeling and symbols.
5. To know the concept of 7 quality tools.

DSC14-QUALITY CONTROL IN APPAREL INDUSTRY

Unit	Description	Hours
1	Definition of quality, quality control, quality assurance, grades & defects. Importance of Quality to meet international export level standards.	10hrs
2	Importance of fabric quality control. Knitted & woven fabric defects. Classification & Analysis. Fabric grading systems- 4 point & 10 point.raw material inspection-in Process inspection. Quality control in cutting room, sewing room, & finishing room, Charts and formats.	11hrs
3	Fabric tests- yarn count & construction, fabric stretch properties, dimensional changes due to laundering, dry cleaning, steaming & pressing. Bowing & skewness. Fabric thickness, Pilling & abrasion resistance. Testing sewing threads, buttons, snap fasteners, zippers & Fusible interlinings.	11hrs
4	Care labeling of apparels & textiles: care labeling of apparel ISO care symbols. Use of Static's in quality control. Introduction to AQL, ISO, TQM & Six sigma. Seven quality tools-process flow chart, cause & effect diagrams.	10hrs
5	Check sheets & histograms, Pareto analysis, scatter diagrams, stational process control chart, and use of these charts in quality management programs.	10hrs
References:		
<ol style="list-style-type: none"> 1. Carr and Latham, "Technology of clothing manufacture" 2. Pradeep. V. Mehta "Garment quality control" 3. Bone. M " Textile quality; physical methods of product and process control. 		

Date

Course Coordinator

Subject Committee Chairperson

DSC15-FABRIC SURFACE EMBELLISHMENT

Course Title FABRIC SURFACE EMBELLISHMENT	Course code:21BSC5C15GML
Total Contact Hours:52	Course Credits: 4
Internal Assessment Marks: 40	Duration of SEE:3
Semester End Examination Marks: 60	

Course Outcomes (CO's):

1. Basic knowledge of tools and equipments, methods of transferring the design and its care.
2. Classify the basic embroidery stitches.
3. Understanding of different Indian traditional embroideries.
4. Creating new idea on present trending embroidery with unique designs.

At the end of the course, students will be able to:

1. To impart knowledge on various traditional embroideries of India
2. To gain practical knowledge on different embroideries of India.
3. To know the basic knowledge of tools and equipment, methods of transferring the design and its care.
4. To develop and understanding of different Indian traditional embroideries and its variations.
5. To design present trend embroidery with unique designs.

DSC15-FABRIC SURFACE EMBELLISHMENT

Unit	Description	Hours
1	Introduction to fabric surface embellishment, tools and materials used in surface embellishment-hand and machine; basic tools and equipment; selection of needle, a thread, and fabric; methods of transferring the design; steps involved in embroidering; care and preservation of embroidery articles.	11hrs
2	Embroidery – Definition, Classification, Methods & Implementation of basic embroidery stitch – Running, back, stem, chain, Lazy daisy, couching, blanket, herringbone, and fish bone.	10hrs
3	Feather- single and double, seed, cross, fly, satin, long and short, french knot, bullion knot, double knot.	10hrs
4	Traditional Indian embroidery- Introduction, History; embroidery of different states of India – Chamba Rumal of Himachal Pradesh, Chikankari of U.P, Kashida of Kashmir, Kutch and kathiwar of Gujarat; Pulkari of Punjab; Tradition back ground cloth, motifs, stitches, threads, colours, technique and articles made.	11hrs
5	Implementation of Patch work, Appliqué, Quilting- tools, material & techniques. Present trend embroideries – Aari work, Zardhosi, cutwork etc.	10hrs

References:

1. Ethnic embroidery of India, Usha srikant, Samata enterprises Mumbai.
2. Indian embroidery- Kamaladevi chartophodhya, Wiley Einsterir Ltd, Delhi.
3. Traditional Needle Arts, Katrin Cargill, Great Britain publisher.
4. Traditional Embroideries of India, Shaylaja. D. Naik, APH Corp, New Delhi 1996.
Indian Embroidery, Savithri Pandit.

Date

Course Coordinator

Subject Committee Chairperson

DSC13P-FABRIC DYEING AND PRINTING TECHNOLOGY Lab

Course Title: FABRIC DYEING AND PRINTING TECHNOLOGY Lab	Course code:21BSC5C13GMP
Total Contact Hours: 56	Course Credits: 2
Internal Assessment Marks: 25	Duration of SEE: 3
Semester End Examination Marks: 25	

Course Outcomes (CO's):

1. Detailed practice of dyeing textile material with different classes of dyes.
2. An overview of complete printing process with suitable ingredients.
3. Preparation of screen for screen printing.
4. Understand the fastness properties of different dyes suitable for different yarns and fabrics.
5. Produce creative printing and dyeing methods by using tie and dye method & stencil printing etc.

At the end of the course, students will be able to:

1. To study and practice the dyeing of textile materials by using different class of dyes.
2. Practice the methods of printing textile material by using different printing ingredients.
3. Practice the preparation of screen used for screen printing.
4. Dyeing and printing notice the fastness properties of different fabrics.

List of Experiments

Practical -1
Dyeing of cotton yarn/fabric using direct dyes
Practical -2
Dyeing of cotton yarn/fabric using reactive dyes
Practical -3
Dyeing of cotton yarn/fabric using Vat/Soluble vat dyes
Practical -4
Dyeing of silk with acid and basic dyes
Practical -5
Dyeing of silk with metal complex dyes
Practical -6
Preparation of printing paste using pigment colours
Practical -7
Printing practice using hand blocks and screens with various classes of dyes.
Practical -8
Preparation of screens for screen printing
Practical -9
Resist style (Batik) of printing on fabrics
Practical -10
Tie and dye printing

Date:

Course Coordinator

Subject Committee Chairperson

DSC14P-CAD IN APPAREL INDUSTRY-I Lab

Course Title: CAD IN APPAREL INDUSTRY-I Lab	Course code:21BSC5C14GMP
Total Contact Hours:56	Course Credits: 2
Internal Assessment Marks: 25	Duration of SEE: 3
Semester End Examination Marks: 25	

Course Outcomes (CO's):

1. Express fashion/ textile ideas through CAD
2. Examine the diversified usage of CAD in fashion/textiles
3. Transform creativity into CAD reality
4. Outline the diversified applications CAD.

At the end of the course, students will be able to:

1. To understand the fundamentals and principles of CAD.
2. To provide the knowledge of CAD and their applications.
3. To improve the Practical knowledge in basic computers.
4. To provide the knowledge of basic tools handling in coreldraw.
5. To improve basic designing techniques in coreldraw.

List of Experiments

Practical -1
Working on Windows. Operating system- Desktop and their components, my computer, Accessing control panel using mouse & key board, Managing documents-working on files & folders.
Practical -2
Working on Point –Tolls & menu, drawing & coloring. Working on MS- Office, MS-word, Excel power point tools & menu, printing & saving a document.
Practical -3
Corel Draw-Basics, file handling, shapes, lines & curves, colors & fills, working with text, Symbols, clip art.
Practical – 4
Creation of motifs-Abstract, animated, geometric & floral design- its application on garment.

Date

Course Coordinator

Subject Committee Chairperson

DSE-E-1- A- APPAREL MARKETING AND MERCHANDISING

Course Title: APPAREL MARKETING AND MERCHANDISING	Course code: 21BSC5E1GMLA
Total Contact Hours:42	Course Credits: 3
Internal Assessment Marks: 40	Duration of SEE:3
Semester End Examination Marks: 60	

Course Outcomes (CO's):

1. Development of apparel marketing strategies
2. Creating new concepts of the visual merchandising.
3. Evaluate the current new trends in retail marketing.

At the end of the course, students will be able to:

1. To study the objectives of marketing
2. To know the roles and responsibilities of merchandiser
3. To gain the knowledge of new trends in retailing.

DSE-E-1- A- APPAREL MARKETING AND MERCHANDISING

Unit	Description	Hours
1	Marketing: Objectives and strategies. Types of markets- domestic international. Indian apparel marketing environment, consumer behaviour.	8hrs
2	Survey of marketing: Marketing concepts and terminology. Market segmentation. Visual merchandising: Definition and purpose. Brief introduction to colour and texture, line and composition and types of displays and setting.	9hrs
3	Role and Responsibilities of merchandiser, Merchandise buying: Buyers responsibilities and working with merchandising sources, merchandise planning: understanding consumer behavior, Planning and selection of merchandise assortment. Merchandising-Manufacturing interface.	9hrs
4	Apparel retailing: Types of retail operations. Single or multiple unit stores. Organization with in a store. The store image and positioning.	8hrs
5	New trends in retailing- Fashion advertising and publicity.	8hrs

References:

1. Mike Easey "Fashion marketing"
2. Tim Jackson and David Shaw "Fashion buying and merchandising management"
3. Martin.M. Pegler "Visual merchandising and display"
4. Philip Koller "Marketing Management" Analysis, planning, implementation and control.
5. Sharlekar. S.A Salvadore victor. S.J Nirmala Prasad.K "Principles of marketing"
7. Delhi.
8. Kulkarni, Padhan Patil "Modern Marketing Research" Himalayan publishing house.
9. house.

Date

Course Coordinator

Subject Committee Chairperson

DSE-E-1- B- BOUTIQUE MANAGEMENT

Course Title: BOUTIQUE MANAGEMENT	Course code: 21BSC5E1GMLB
Total Contact Hours: 42	Course Credits: 3
Internal Assessment Marks: 40	Duration of SEE:3
Semester End Examination Marks: 60	

Course Outcomes (CO's):

1. Acquire knowledge on creating a business plan
2. Analyze the factors affecting boutique design and development
3. Acquire knowledge on boutique operations management
4. Create new strategies for marketing and promotion
5. Understand the procedure for financial planning and startup formalities
6. Develop project proposal to start a Fashion Boutique

At the end of the course, students will be able to:

1. To know the roles and responsibilities of boutique management
2. To study the locations and space for the boutique
3. To study the boutique interior
4. To know the cost control and pricing of the boutique.

DSE-E-1- B-BOUTIQUE MANAGEMENT

Unit	Description	Hours
1	Introduction to Boutique management – Roles and responsibilities, Skill sets required to set up a Boutique. Identifying target market and customer.	8hrs
2	Role of private, government, nongovernment agencies and financial institutions in organizing a boutique. Setting up of a boutique- selection and planning for different store layout, cottage and franchise boutique. Customer relationship management, boutique marketing tools and promotion.	9hrs
3	Choice of location and space management – space required, type of building, infrastructure requirement, staffing –selection of generalists and specialists.. Book keeping for boutique and maintaining stock.	8hrs
4	Boutique interior- Visual merchandising and store layout. Setting up of boutique window display, lighting, wallpaper, wall painting, furniture, fixtures and safety measures. Logo making, visiting cards.	9hrs
5	Project finance, cash control and cash flow analysis. Cost accounting- preparation of simple cost sheet, accounting for over heads.	8hrs

References:

1. Stewart B., “Opening Boutique Guide”, Bull City Publishing, 2016.
2. <https://www.bizmove.com/starting-business/how-to-start-a-boutique-business.pdf>
3. Wright C, “Business Boutique”, Ramsey Press, Tennessee, 2017.
4. <https://www.thebalancesmb.com/department-store-mission-statements-4068552>
5. <https://www.entrepreneur.com/article/38290>
6. <https://www.smartsheet.com/retail-store-operations>
7. <https://www.shopkeep.com/blog/promotion-ideas-for-retail-stores>.

Date

Course Coordinator

Subject Committee Chairperson

V-1-CONSUMER BEHAVIOUR

Course Title: CONSUMER BEHAVIOUR	Course code:21BSC5V1GML
Total Contact Hours:42	Course Credits: 3
Internal Assessment Marks: 40	Duration of SEE:3
Semester End Examination Marks: 60	

Course Outcomes (CO's):

1. The students will be able to identify the dynamics of human behaviour and the basic factors that influence the consumer's decision process.
2. The students will be able to demonstrate how concepts may be applied to marketing strategy.
3. Students will be able to explore and compare the core theories of consumer behaviour in both consumer and organizational markets.
4. Students will be able to apply and demonstrate theories to real world marketing situations by profiling and identifying marketing segments.
5. Students will be able to appraise models of Consumer Behaviour and determine their relevance to particular marketing situations.

At the end of the course, students will be able to:

1. To introduce consumers, consumer behaviour in the market place and their impact on marketing strategy.
2. To understand the principal factors that influence consumers as individuals and decision makers with an application to the buying decision process.
3. The content will also address the importance of subculture and global consumer culture as marketing opportunities.
4. To understand the theoretical perspectives associated with consumer decision making, including recognizing cognitive biases and heuristics.
5. To assessing advanced literature in the field of consumer research.

V-1-CONSUMER BEHAVIOUR

Unit	Description	Hours
1	Introduction to Consumer Behavior; Consumer Behavior and marketing Strategy, Methods of consumer research, Applications of consumer behaviour knowledge in marketing. Contributing disciplines and area like psychology, social psychology, economics, anthropology etc.	9hrs
2	Consumer needs, theories of Motivation and their applications. Process theories and content theories. Personality and self concept. Theories of personality.	8hrs
3	Attitudes and Attitude Change; Concept and measurement of attitudes. Strategies of attitude change, Attribution theory and Cognitive dissonance. Persuasion and persuasibility.	8hrs
4	Self Concept. Concept of Multiple Selves. Development of the self. Image Congruence assumptions. Social Comparison theory . Self-esteem. Body image and body esteem. Fashion, Cosmetics and Conspicuous consumption.	9hrs
5	Family-family life cycle and decision-making. Social Class. The concept and measurement. Mobility among social classes. Prestige products and status. Diffusion of Innovation and Opinion Leadership .	8hrs

References:

1. Assael, H. Consumer Behaviour and marketing Action, Ohio, South Western, 1995
2. Engle, J F etc. Consumer Behaviour, Chicago, Dryden Press, 1993 Electives (Mktg)
3. Howard, John A etc. Consumer Behaviour in marketing Englewood Cliffs, New Jersey, Prentice Hall Inc.1989
4. Hawkins, D I etc. Consumer Behaviour Implications for Marketing Strategy. Texas, Business, 1995
5. Mowen, John C. Consumer Behaviour , New York, MacMillan, 1993
6. Schiffman, L G and Kanuk, L L Consumer Behaviour New Delhi, Prentice Hall of India, 1994

Date

Course Coordinator

Subject Committee Chairperson