INDEX

Department of Home Science

B.A (Prog.) with Apparel Design & Construction (ADC)

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Semester VII

B.A (Prog.) with Apparel Design and Construction (ADC) as Major

Category-II

DISCIPLINE SPECIFIC CORE COURSE DSC-13-ADC: FASHION PRODUCT DEVELOPMENT

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title &	Credits	Credi	t distributio course	on of the	Eligibility Ovitavia	Prerequisite	
Code		Lecture	Tutorial	Practical/ Practice	Eligibility Criteria	of the course	
Fashion Product Development	4	3	1	0	Class XII	Nil	

LEARNING OBJECTIVES

- Develop an understanding of the profile of Indian Apparel industry and role of product development.
- Impart knowledge of market research techniques used in Fashion product development.
- Acquire knowledge and skills related to Fashion product development processes.
- Create an awareness of the significance of sustainability and ethical considerations in fashion product development.
- Introduce the learners to the role of PLM application, in streamlining product development, supply chain management, and lifecycle assessment.

LEARNING OUTCOMES

After completing this course, the learner will be able to:

- Analyse and interpret the structure and segments of the Indian fashion industry.
- Conduct effective market research, including trend analysis and consumer segmentation, necessary for product development.
- Integrate sustainability and ethical practices into design thinking and product development processes.
- Describe the importance and functions of Product Lifecycle Management applications.
- Contribute effectively to various roles within the fashion industry, including product development, and supply chain management.

SYLLABUS OF DSC-13

THEORY (Credits 3; Hours 45)

UNIT 1: Apparel Industry and Fashion Product

This unit provides an understanding of the profile of Indian apparel industry, market segmentation, and the role of fashion product development.

• Profile of Indian Apparel Industry – Domestic and Export

- Apparel Market Segmentation
- Role of Product Development in the Fashion Industry
- Types of Fashion Product Development Customer specification based, Trend-Based, Product enhancement, Innovative product

UNIT 2 – Market Research for Product development

The Unit focuses on market research for product development, covering consumer research to identify needs and market segments, trend analysis for fashion forecasting, and tools like Opportunity Identification, past-sale and sell-through analysis.

- Consumer Research: Identifying Customer Needs and Consumer Markets
- Trend Analysis: Fashion Season and Trend forecasting
- Opportunity Identification for Product development
- Retail research Past-Sale Analysis, Sell through Analysis

UNIT 3 - New Product Development

15 Hours

This unit provides an overview of new product development processes, covering design thinking, sustainability and ethical considerations, and the steps in translating concept to product and marketing.

- Design Thinking for New Products
- Sustainability and Ethical Considerations in Fashion Product Development
- New product development process and challenges
- Taking Concept to Market Concept and design development, technical design, Costing, sourcing and supply chain management, sample making and testing, Production planning and quality assurance, Distribution Channels and Marketing, Reducing 'time to market'.

UNIT 4: Introduction to Product lifecycle management (PLM) 1

This Unit introduces the learners to the use of Product Lifecycle Management (PLM) in fashion. It also discusses the importance of Product Lifecycle Assessment (LCA) and its essential steps.

- Role and Importance of Fashion Product Lifecycle Management (PLM)
- Application and challenges of PLM software in Fashion Business
- Importance and steps of Product Lifecycle Assessment (LCA)

TUTORIALS (Credits 1; Hours 15)

Tutorial classes will involve:

- Q&A sessions/ Group discussions/ Problem Solving exercises with the Students
- Presentation of project/ research activity by students
- Any other scholastic work related to application of conceptual understanding of the subject.
- Evaluation and feedback by the teacher

Essential Readings

10 Hours

- Carr, H., & Pomeroy, J. (2009). Fashion Design and Product Development. Wiley India Pvt Ltd.
- Keiser, S., Vandermar, D., & Garner, M. B. (2022). Beyond Design: The Synergy of Apparel Product Development. Fairchild.
- P. Shamayita, K. Gupta Pavan, Sampath V.R. (2024). Fashion, Product Design and Technology— Challenges and Opportunities. Allied Publishers Private Limited (India).
- Stark, J. (Ed.). (2019). Product Lifecycle Management (Volume 4): The Case Studies. Springer Cham.

Suggested Readings

- Evans, N., Jeffrey, M., & Craig, S. (2020). Costing for the Fashion Industry (2nd ed.). Bloomsbury Publishing.
- Grose, V. (2021). A Practical Guide to the Fashion Industry: Concept to Customer. Bloomsbury Publishing.
- Kunz, G., & Glock, R. (2004). Apparel Manufacturing: Sewn Product Analysis (Fashion Series) (4th ed.). Pearson.
- Mbeledogu, E. (2022). Fashion Design Research (2nd Ed.). Laurence King Publishing.

Semester VIII

B.A (Prog.) with Apparel Design and Construction (ADC) as Major

Category-II

DISCIPLINE SPECIFIC CORE COURSE DSC-14-ADC: SUSTAINABILITY IN TEXTILE AND FASHION INDUSTRY

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title &		Credit dis	tribution o	f the course	Flicibility	Prerequisite
Course The & Code	Credits	Lecture	Tutorial	Practical/ Practice	Criteria	of the course
Sustainability in						
Textile and Fashion	4	3	1	0	Class XII	NIL
Industry						

LEARNING OBJECTIVES

- To understand sustainability in the context of textile and fashion industry.
- To evaluate the environmental and social impact of materials.
- To explore sustainable production practices.
- To examine ethical considerations in textile and fashion.
- To assess consumer behavior and promote sustainable fashion choices.

LEARNING OUTCOMES

After completing this course, the learner will be able to:

- Define and articulate the principles of sustainability within the textile and fashion industry.
- Evaluate and compare the environmental and social impact of different textile materials.
- Apply principles of sustainable production, incorporating circular economy concepts and zerowaste design into textile and fashion manufacturing processes.
- Critically analyse and assess ethical considerations in the fashion supply chain, including fair labour practices, social responsibility, and human rights issues.
- Analyse the consumer behaviour related to sustainability and develop effective strategies for promoting sustainable fashion choices.
- Apply acquired knowledge and skills to propose and develop sustainable practices within a realworld context.

SYLLABUS OF DSC-14

THEORY (Credits 3; Hours 45)

UNIT 1: Introduction to Sustainability in Textile and Fashion

15 Hours

The unit covers the definition and importance of sustainability, and key standards and organizations influencing sustainable practices in textiles and fashion.

- Sustainability definition and importance, Sustainable Development Goals, pillars of sustainability
- Key terms related to sustainability Circular economy, Life cycle assessment, Life cycle costing, water footprint, carbon footprint, Higg's Index.
- Environmental laws and regulations in India, Important International agreements on environment
- Organizations and campaigns promoting sustainability Greenpeace, Earth Day Network, Ethical Fashion Forum, United Nations, Fair Trade, World Wildlife Fund (WWF), Zero Discharge of Hazardous Chemicals (ZDHC), Sustainable Apparel Coalition (SAC), Detox Campaign, Revolution Blue Sign etc.

UNIT 2: Sustainability Challenges in Textile and Fashion Industry 15 Hours

The unit examines environmental challenges in the textile industry, including energy use, water, pollution, waste, fast fashion, overconsumption, and ethical labour practices.

- Environmental impacts in textile and apparel supply chain: Greenhouse gas emissions, water consumption and pollution, effect on ocean ecosystem, micro-fibres in water bodies, waste accumulation (overconsumption, fast fashion), deforestation and soil degradation
- Unethical labour practices in the fashion supply chain Sweatshops, Lack of fair labour practices (child labour, low wages, discrimination, workers' exploitation, health & safety risk).

UNIT 3: Circular Economy and Sustainability Strategies 15 Hours

The unit provides insights into adopting environmentally conscious practices within the textile and fashion industry.

- Sustainable fibres, fabrics, dyes and auxiliaries in textile supply chain.
- Sustainable design solutions Zero waste production, multifunctional garments, designing sustainable clothing that enables: low-impact care and extended use.
- Consumer responsibility Adoption of slow fashion and fashion brands promoting sustainability, Adoption of green laundry practices, upcycling and recycling of textiles, 7 R's of waste management: reduce, reuse, recycle, refuse, repurpose, recover, rethink
- Government sponsored Eco-labelling schemes Blue Angel, Eco Mark (JPN), Environmental Choice (CND), White Swan (Nordic Countries), EU, Eco-Mark (India), Green Label (Singapore), ISO 14000 Certification and standards.
- Private labelling schemes eco-tex, Oeko-Tex (textiles and clothing), Global Organic Textile Standards, Green Seal, Bra Miljval, Britta Steilmann Collection, Fair trade labelling etc.
- Fair trade and corporate social responsibility in textile and clothing manufacturing.

TUTORIALS (Credits 1; Hours 15)

Tutorial classes will involve:

- Q&A sessions/ Group discussions/ Problem Solving exercises with the Students
- Presentation of project/ research activity by students
- Any other scholastic work related to application of conceptual understanding of the subject.
- Evaluation and feedback by the teacher

Essential Readings

- Fletcher, K. (2013). Sustainable fashion and textiles: Design journeys. Routledge.
- Gupta, N. & Sekhri, S. (2022). *Sustainable Laundry: Challenges and Solutions*. First Edition, Eliva Press. ISBN : 978-1636484808
- Gwilt, A., & Rissanen, T. (2012). *Shaping sustainable fashion: Changing the way we make and use clothes*. Routledge.
- Pratibhan, M. Ed. (2017). Sustainability in Fashion & Apparels (Challenges & Solutions). Woodhead Publishing
- Muthu, S. S., & Gardetti, M. A. (Eds.). (2020). Sustainability in the Textile and Apparel Industries: Consumerism and Fashion Sustainability. Springer Nature Switzerland AG. ISBN 978-3030385316

Suggested Readings

- Asadi, J. (2021). *International Environmental Labelling Vol.3 Fashion: For All People who wish to take care of Climate Change*. Top Ten Award International Network, ISBN 978-1777335656
- Debnath, S. (2016). Sustainable Fibres for Fashion Industry: Volume 1 (pp. 89-108). Singapore: Springer.
- Muthu, S. S. (Ed.). (2014). Roadmap to sustainable textiles and clothing: Eco-friendly raw materials, technologies, and processing methods. Springer.
- Jacques, P. (2020). *Sustainability: The basics*. Routledge.
- Mahapatra N. N. (2015); Textiles & Environment. Woodhead Publishing

Pool of Discipline Specific Elective Courses (DSE) for Odd Semester

B.A (Prog.) with Apparel Design and Construction (ADC)

Category-V

DISCIPLINE SPECIFIC ELECTIVE COURSE DSE-7-ADC: RESEARCH METHODS IN HOME SCIENCE

Credit Distribution, Eligibility and Pre-requisites of the Course

Course Title &		Credit distribution of the course		Fligibility	Dronoquisito	
Code	Credits	Lecture	Lecture Tutorial Practical/ Practice		Criteria	of the course
Research Methods in Home Science	4	3	0	1	Class XII	NIL

LEARNING OBJECTIVES:

- To provide students understandings about the basic concepts, approaches and methods in conducting Home Science research.
- To enable learners to appreciate and critique the nuances of designing a research study well.
- To sensitize students towards ethical concerns while conducting Home Science research.

LEARNING OUTCOMES:

After completing this course, the learner will be able to:

- Demonstrate knowledge of the scientific method, purpose and approaches to research in Home Science
- Compare and contrast quantitative and qualitative research approaches
- Explain different types of research design and their applicability in Home Science research
- Understand the key elements of a research process
- Explain ethical principles, issues and procedures

SYLLABUS OF DSE-7-ADC

THEORY (Credits 3; Hours 45)

UNIT I: Research Purpose and Design

This unit will deal with meaning and importance of research in various areas of Home Science. Exposure to different types of research designs and measurement in Home Science research would also be given.

- Meaning, purpose and significance of research
- Research as a scientific method
- Types of research
- Quantitative, Qualitative and mixed method approaches

- Research Designs –Experimental and Non-Experimental; Descriptive and Observational; Participatory research
- Internal and external validity of research design
- Variables, concepts and measurement in research
- Levels of measurement
- Units of analysis

UNIT II: Sampling and Research tools & techniques

This unit will introduce the student to the concept of sampling and methods used to draw sample from population using examples from Home Science discipline. Students would also learn about types of data, its collection and reliability and validity concerns.

- Role of sampling in research
- Sampling techniques and their applicability, Sample size and sampling error
- Types of data: Primary and Secondary
- Tools of data collection; types, construction and administration- Interview, Questionnaire, Observation, Focus group discussion and other methods
- Validity and reliability of data collection tools

UNIT III: The Research Process

This unit will elaborate upon the various steps involved in conducting and reporting researches in Home Science.

- Defining the problem, research questions, objectives, hypotheses
- Review of related literature and originality in writing
- Systematic research: concept and methodology
- Planning the research
- Identifying variables and constructing hypothesis
- Selecting appropriate research methodology and tools
- Data analysis: coding and tabulation
- Writing a research report: styles and formats
- Citation formats: in medical sciences, social sciences

UNIT IV: Values, Social Responsibility and Ethics in Research

This unit will apprise the students about ethical concerns while conducting and reporting research.

- Ethical principles guiding research: from inception to completion and publication of research
- Plagiarism and Academic integrity in research: plagiarism tools and software
- Ethical issues relating to research participants and the researcher
 - Rights, dignity, privacy and safety of participants
 - Informed consent, confidentiality, anonymity of respondents, voluntary participation, harm avoidance

PRACTICAL (Credits 1; Hours 30)

- 1. Data visualization
- 2. Levels of Measurement
- 3. Types of research designs

15 Hours

15 Hours

- a. Experimental and non-experimental; Descriptive and observational
- b. Qualitative, Quantitative and mixed method
- 4. Sampling techniques and sample size calculation
 - a. Probability sampling method
 - b. Non-Probability sampling methods
- 5. Tools of data collection- Interview schedule, questionnaire and FGD
 - Designing/ Construction
 - Preparation of tools for ethical review
 - Pilot testing/ validity and reliability of the tool
- 6. Data collection and analysis process: conducting interviews, administering questionnaire
- 7. Coding and tabulation of data for analysis
- 8. Citation formats and Plagiarism
- 9. Reviewing a research paper from a specific area of specialization in Home Science

ESSENTIAL READINGS

- Kerlinger F. N. and Lee, H.B. (2017). *Foundations of Behavioral Research* 4th Ed. Harcourt College Publishers.
- Kothari, C. R. (2019). *Research Methodology: Methods and Techniques*. New Age International Pvt Ltd, New Delhi.
- Kothari, C. R. (2022). Shodh Padhati 1st Ed. New Age International Pvt Ltd, New Delhi.
- Kumar, R. (2019) Research Methodology: A Step-by-Step Guide for Beginners. 5th Ed. Sage Publications, New Delhi.

SUGGESTED READINGS

- Bernard, H. R. (2000). *Social research methods: Qualitative and quantitative approaches.* Thousand Oaks, CA: Sage.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches.* Thousand Oaks, CA: Sage Publications.
- Davis, A. M., Treadwell, D. (2019). Introducing Communication Research: Paths of Inquiry. United Kingdom: SAGE Publications.
- Flynn, J.Z., Foster, I.M. (2009). *Research Methods for the Fashion industry*. Fairchild books, Bloomsbury publishing.
- Indian National Science Academy (INSA) (2019). *Ethics in Science Education, Research and Governance*. ISBN:978-81-939482-1-7. <u>http://www.insaindia.res.in/pdf/EthicsBook.pdf</u>
- Jacobsen, K. H. (2020). *Introduction to health research methods: A practical guide*. Jones & Bartlett Publishers.
- UGC (2021) Academic Integrity and Research Quality. New Delhi: UGC, Retrieved from https://www.ugc.ac.in/e-book/Academic%20and%20Research%20Book WEB.pdf

B.A (Prog.) with Apparel Design and Construction (ADC)

Category-V

DISCIPLINE SPECIFIC ELECTIVE COURSE DSE-9-ADC: SURFACE ORNAMENTATION FOR APPAREL DESIGN

Credit Distribution, Eligibility and Pre-requisites of the Course

Course Title &	Credit		stribution of	the course	Fligibility	Proroquisito
Code	Credits	Credits Lecture Tutorial Practical/ Practice		Criteria	of the course	
Surface						
Ornamentation for	4	2	0	2	Class XII	NIL
Apparel Design						

LEARNING OBJECTIVES

- To provide an understanding of various techniques of decorating the fabric surface.
- To impart knowledge and skills for incorporating surface ornamentation ideas into design collections.

LEARNING OUTCOMES

After completing this course, the learner will be able to:

- Describe the various methods of fabric surface ornamentation
- Apply surface ornamentation techniques such as embroidery, dyeing and printing, fabric manipulation and embellishments in garment design projects

SYLLABUS OF DSE-9-ADC

THEORY (Credits 2; Hours 30)

UNIT I: Surface Ornamentation and Motif Development

This unit provides an understanding of the concepts relating to motif development for surface ornamentation

- Value addition through surface ornamentation
- Structure development for apparel: Weaves, knits, Lace
- Methods of applied surface ornamentation –embroidery, dyeing, printing, fabric manipulation, embellishments
- Textile motifs Classification, motif development, Symmetry, Design repeat, motif enlargement and reduction

Unit II: Surface Design through embroidery

This unit provides basic understanding of the various tools, terms and techniques of embroidery for surface ornamentation.

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10 Hours

- Embroidery Terminology Aari, Adda, Applique, Backing, Couching, Filling stitch, Frame, Fusing, Monogram, Tacking, Tilla, Wrapped stitches
- Tracing Methods
- Tools and Materials Fabrics, Needles, Threads, Scissors, Other materials
- Hand Embroidery Stitches Flat and raised
- Machine and Computerised embroidery
- Traditional embroidery: Metal thread embroidery with decorative material Aari, Mukaish, Gota-Patti, Zardozi; Applique work Pipli, Phool Patti ka Kaam, Ralli

Unit III: Surface Design through Colouration

8 Hours

This unit introduces the learners to traditional painting techniques. It also imparts knowledge regarding creative application of dyeing and printing.

- Traditional and Crossover Fabric Hand painting Patta-Chitra, Pichhwai, Madhubani, Mandana, Mandala, Warli, Rogan art, Gond
- Design development through innovative dyeing and printing techniques

Unit IV: Surface Design through Fabric manipulation and embellishments 8 Hours

This unit provides understanding of the various techniques of using fabric manipulation and embellishments.

- Creative Fabric manipulation Pleats, Gathers, Ruffles, 3D textures, Shirring, Ruching
- Creative embellishments Trims, buttons, Quilting, Lace, Fraying, waste fabric, innovative techniques

PRACTICAL (Credits 2; Hours 60)

- Development of samples using the techniques learnt in the theory component.
- Product development using one or more surface ornamentation techniques.

ESSENTIAL READINGS

- Kimberly Irwin, (2015), Surface Design for Fabric, Fairchild Books
- Josephine Steed, Frances Stevenson, (2020), Sourcing Ideas for Textile Design: Researching Colour, Surface, Structure, Texture and Pattern (Basics Textile Design), Bloomsbury Visual Arts
- Juracek, A. Judy, (2000), Soft Surface, Themes & Hudson Ltd.
- Naik, Shailaja D., (2006), *Surface Designing of Textile Fabric*, New Age International (P) Ltd., Publishers
- Singer Margo, (2007), Textile Surface Decoration-Silk & Velvet, A & B Black Ltd

SUGGESTED READINGS

- Campbell, J. & Bakewell, A., (2006), *The Complete Guide to Embroidery Stitches*, Reader's Digest Association.
- Colette Wolff, (1996), The Art of Manipulating Fabric, Interweave
- Milne D'Arcy Jean, (2006), Fabric Left Overs, Octopus Publishing Group Ltd.
- Singer, R., (2013), *Fabric Manipulation*, David & Charles Publishers.

B.A (Prog.) with Apparel Design and Construction (ADC)

Category-V

DISCIPLINE SPECIFIC ELECTIVE COURSE DSE-11-ADC: DATA ANALYSIS AND STATISTICAL TOOLS

Credit Distribution, Eligibility and Pre-requisites of the Course

Course Title &		Credit di	stribution of	the course	Flightlitz	Duonoquigito	
Course The & Code	Credits	Lecture	Tutorial	Practical/ Practice		of the course	
Data Analysis and Statistical Tools	4	3	0	1	Class XII	NIL	

LEARNING OBJECTIVES

- To provide an understanding of the fundamental concepts of statistics.
- To enable learners to collect, organize, and summarize data using appropriate tables, graphs, and statistical methods.
- To gain the ability to compute, analyse and interpret results of datasets using basic statistical tools.

LEARNING OUTCOMES

After completing this course, the learner will be able to:

- Explain fundamental statistical concepts and their relevance to research.
- Summarize and visualize data effectively using descriptive statistics.
- Apply inferential statistical techniques to draw meaningful conclusions from sample data.
- Interpret and communicate statistical findings in the context of research.

SYLLABUS OF DSE-11-ADC

THEORY (Credits 3; Hours 45)

UNIT 1: Fundamentals of Statistics

This unit establishes the foundational principles of statistics, focusing on its application in social sciences.

- Definition and scope of statistics in social science and market research
- Types of Statistics: Descriptive and Inferential
- Types of Data: Qualitative and Quantitative
- Measurement Scales: Nominal, Ordinal, Interval, Ratio
- Importance of Reliability and Validity

UNIT II: Data Organization and Summarization

This unit focuses on summarizing and visualizing data for analysis and interpretation.

- Organising data: frequency distributions tables
- Types of statistical graphs and their interpretation: Histogram, Pie Chart, Bar Graph, Line Graph, Frequency Polygon, Ogive

15 Hours

- Measures of Central Tendency: Mean, Median, Mode for ungrouped and grouped data
- Measures of Dispersion for ungrouped and grouped data: Absolute dispersion (Range, Quartile deviation, Mean deviation, Standard Deviation, Variance) and Relative dispersion (Coefficient of Range, Coefficient of Quartile deviation, Coefficient of Mean deviation, Coefficient of Variance)
- Measures of Shape: Skewness and Kurtosis
- Measures of partition values Quartile, Decile, Percentile, Percentile Rank for ungrouped and grouped data

UNIT III: Inferential Statistics

15 Hours

This unit equips students with techniques for making inferences about population from sample data.

- Introduction to Probability: Basic concepts, Law of addition and multiplication
- Properties of Normal Distribution
- Correlation and Regression
- Sampling and Hypothesis testing:
 - Null and Alternative Hypotheses.
 - Errors in Sampling: Type I and Type II Errors.
 - Level of Significance (α) and Confidence (c)
 - One-tailed vs Two-tailed tests.
- Statistical Tests:
 - Parametric Tests: Z-test, t-tests for means (One-sample, Two-sample), F test for variance, ANOVA (One way), Karl Pearson's Coefficient of Co-relation
 - Non-Parametric Tests: Chi-square test, Spearman's Rank (repeated and Non-repeated) Correlation Coefficient
- Introduction to Computer-Aided Statistical Analysis:
 - Software: Excel, SPSS, Atlas.ti, JASP, Jamovi, NVIVO
 - Real life Application, Analysis, and Interpretation

PRACTICAL

(Credit 1; Hours 30)

- 1. **Introduction to Statistical Software**: Using spreadsheet application such as Excel for statistical analysis by inputting basic data and performing essential Excel functions.
- 2. Construction of Frequency Distributions: Organize raw data into grouped and ungrouped frequency tables using a given dataset.
- 3. **Diagrammatic Representation of Data**: Visualize data using bar charts, pie charts, line graphs, histograms, and frequency polygons, and interpret the results for a given dataset.
- 4. **Measures of Central Tendency**: Calculate mean, median, and mode for grouped and ungrouped data in Excel, and compare central tendencies between two datasets.
- 5. **Measures of Dispersion**: Compute range, variance, and standard deviation in Excel to analyse the spread of two different datasets.
- 6. Area under the Curve: Calculate the area under the curve using standard scores.

- 7. **Correlation Analysis**: Measure the strength of relationships between two variables by calculating Pearson's and Spearman's correlation coefficients.
- 8. **Hypothesis Testing (One-sample and Two-sample t-test)**: Test the significance of means for single, independent, and dependent datasets using t-tests.
- 9. Chi-Square Test for Independence: Test the independence between categorical variables by analysing and interpreting a contingency table.

Essential Readings

- Minium, E. W., King, B. M., & Bear, G. (2017). *Statistical Reasoning for Psychology and Education*. New York: Wiley and Sons.
- Gupta, S.P. (2022) *Statistical Methods*, 46th Edn. S. Chand and Sons.
- Agresti, A., Christine Franklin, C. and Klingenberg, B. (2017). *Statistics: The Art and Science of Learning from data*, Pearson, Boston

Suggested Readings

- Schmuller, J. (2016). Statistical Analysis with Excel for Dummies, 5th Edition,
- New York, USA.
- Gupta, S. C. and Kapoor, V. K. (2020). *Fundamentals of Mathematical Statistics*, 12th Edn., S. Chand and Sons.
- Ross, Sheldon M. (2010): Introductory Statistics, 3rd Edition, Academic Press.
- Derek Rowntree, (2018). Statistics Without Tears, An Introduction for Non-Mathematicians, Penguin Books

Credit Distribution, Eligibility and Pre-requisites of the Course

DISCIPLINE SPECIFIC ELECTIVE COURSE DSE-13-ADC: FASHION VISUAL MERCHANDISING

Course Title 8-		Credit di	stribution of	the course	Flightlitz	Duonoguigito	
Course Thie & Code	Credits	Lecture	Tutorial	Practical/ Practice	Criteria	of the course	
Fashion Visual Merchandising	4	3	1	0	Class XII	NIL	

LEARNING OBJECTIVES

- To introduce the concept of visual merchandising in apparel stores.
- To create an understanding of basic elements of visual merchandising and display across fashion retail stores.

LEARNING OUTCOMES

After completing this course, the learner will be able to:

- Describe the role and objectives of visual merchandising
- List and explain the various elements of visual merchandising
- Identify the different types of store display used in apparel stores.
- Explain the concept and use of Planogram in store display
- Classify the different types of store layouts
- Compare the apparel merchandise display across various retail formats.

SYLLABUS OF DSE-13-ADC

THEORY (Credits 3; Hours 45)

UNIT I: Introduction to Visual merchandising

This unit provides an overview of the role and essential features of visual merchandising.

- Importance and objectives of visual merchandising, Role of a visual merchandiser
- Essential features of visual merchandising
- Schedules Seasons, Promotions, Special sales, Themes

Unit II: Elements of Visual Merchandising

This unit provides basic understanding of the elements of visual merchandising

- Brand imagery
- Store front Front signage, Entrance, Window display, surrounding space
- Store interior and ambiance
- Store layout Grid, diagonal, free-flow, Race track /loop layout, Spine layout, Mixed Floor Plan Unit III: Store Display 15 Hours

This unit aims to provide an overview of elements and techniques of store display.

15 Hours

- Types of Display- Window display, Interior display
- Elements of Display Merchandise, Mannequins, Forms, Props, Fixtures, Background, Signage, Lighting, Colour
- Concept of Planogram Macro Space, Micro space
- Merchandise Presentation Techniques: Colour Blocking, Product blocking, vertical/ horizontal blocking, symmetric, price blocking
- Display settings, Essentials of good display, Common problems in display

Unit IV: Visual Merchandising for Apparel Store

This unit explains the use of visual merchandising techniques in apparel stores across various retail formats.

- In-Store Merchandise Presentation for Fashion Apparel Men's wear, Women's wear, Kids' wear
- Display approach for apparels
- In-store apparel Merchandise presentation in different retail formats Departmental stores, Speciality stores, Exclusive Brand stores, Hyper-markets

TUTORIALS (Credits 1; Hours 15)

Tutorial classes will involve:

- Q&A sessions/ Group discussions/ Problem Solving exercises with the Students
- Presentation of project/ research activity by students
- Any other scholastic work related to application of conceptual understanding of the subject.
- Evaluation and feedback by the teacher

ESSENTIAL READINGS

- Bawa Ramandeep, Sinha A.K., Kant Rita (Dr.), (2022), Visual Merchandising and Consumer Behaviour in Shopping Malls, Sultan Chand & Sons
- Bhalla Swati, Anuraag S., (2010), Visual Merchandising, Tata McGraw-Hill
- Jonathan Baker, Sarah Bailey, (2021), Visual Merchandising for Fashion, Bloomsbury Visual Arts
- Martin M. Pegler, Anne Kong, (2018), Visual Merchandising and Display 7th Edition, Bloomsbury

SUGGESTED READINGS

- Claus Ebster, Marion Garaus, (2012), *Store Design and Visual Merchandising Creating Store Space That Encourages Buying*, Business Expert Press
- Tony Morgan, (2016), *Visual Merchandising (3rd Edition)*, Laurence King
- Portas, Mary, (1999), The Art of Retail Display, Thames and Hudson Limited

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time

Pool of Discipline Specific Elective Courses (DSE) for Even Semester

B.A (Prog.) with Apparel Design and Construction (ADC)

Category-V

DISCIPLINE SPECIFIC ELECTIVE COURSE DSE-8-ADC: FASHION ACCESSORIES: DESIGN AND DEVELOPMENT

Credit Distribution, Eligibility and Pre-requisites of the Course

		Credit dis	stribution of		Duonoquisito	
Course Title & Code	Credits	Lecture	Tutorial	Practical/ Practice	Criteria	of the course
Fashion Accessories: Design & Development	4	3	0	1	Class XII	NIL

LEARNING OBJECTIVES

- To give the learners an overview of the accessory design and development process
- To develop the skills required for creating and restyling fashion accessories.
- To impart the basic knowledge about styles and production techniques of select fashion accessories.

LEARNING OUTCOMES

After completing this course, the learner will be able to:

- State the importance of fashion accessories.
- Describe the role of an accessory designer
- Describe the Common styles, materials used and production of handbags, footwear, Jewellery, Belts, Hats
- Provide a brief description of the sources of design inspiration and research.
- Describe the various steps in the accessory design development process.
- Explain how to design development is used for creating an accessory range.
- Use illustration and rendering techniques for designing fashion accessories.
- Adopt restyling techniques creatively for making accessories through recycling
- Create a theme/inspiration based accessory collection.

SYLLABUS OF DSE-8-ADC

THEORY (Credits 3; Hours 45)

UNIT I: Importance of Fashion Accessories

This unit introduces the students to role and importance of accessories and accessory designer.

- Meaning, Importance and types of accessories in the fashion industry
- Role of an accessory designer
- Leading accessory designers and brands

Unit II: Understanding Fashion Accessories

25 Hours

This unit creates an understanding of the common styles, production methods of common fashion accessories.

- Common styles, materials used and production methods of common accessories: Handbags, Footwear, Jewellery, Belt, Hats
- Coordinating Accessories with Clothes

Unit III: From Concept to Creation: Key Steps in Accessories Design 10 Hours

This unit provides an overview of steps in the designing of an accessories collection/ range.

- Theme based design conceptualization Inspiration and Research, Trend forecasting, Design development, Developing a theme-based range, Presentation techniques
- Developing accessories through recycling and restyling

PRACTICAL (Credit 1; 30 Hours)

- 1. Fashion Illustration of accessories Handbag, Footwear, Jewellery
- 2. Restyling project- Restyling of plain accessories using creative techniques
- 3. Theme based design development of accessory collection
- 4. Designing and construction of any one fashion accessory

Essential Readings

- Darla-Jane Gilroy, (2023), *Fashion Bags and Accessories: Creative Design and Production*, Laurence King Publishing
- Diamond E. (2007). *Fashion Apparel, Accessories, and Home Furnishings*. New Jersey: Pearson.
- Fringes S. (2007). *Fashion: From Concept to Consumer* (9th Edition). New Jersey: Prentice Hall
- Jarnow J. (1987). *Inside the Fashion Business*. New Jersey: Pearson.
- Romano C. (2002). Plan your Wardrobe. UK: New Holland Publication

Suggested Readings

- Gerval O. (2010), Fashion Accessories. USA: Firefly Books publisher
- Lau J. (2012). Basics Fashion Design 09: Designing Accessories: Exploring the design and construction of bags, shoes, hats and jewellery. New York: A Publishing
- Peacock J. (2000). *Fashion Accessories: The Complete 20th Century Sourcebook.*, London: Thames & Hudson Publisher
- Marshall S., Jackson H., Stanley S. (2011). *Individuality in Clothing Selection and Personal Appearance* (7th Edition). New Jersey: Pearson.
- Vilaseca E. (2008). Essential Fashion Illustration: Color and Medium. USA: Rockport Publishers

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time

B.A (Prog.) with Apparel Design and Construction (ADC)

Category-V

DISCIPLINE SPECIFIC ELECTIVE COURSE DSE-10-ADC: TEXTILES FOR HOME

Credit Distribution, Eligibility and Pre-requisites of the Course

Course Title P.		Credit di	stribution of	the course	Flightlitz	Duonoguigito	
Course The & Code	Credits	Lecture	Tutorial	Practical/ Practice	Criteria	of the course	
Textiles for Home	4	3	0	1	Class XII	NIL	

LEARNING OBJECTIVES

- To provide an overview of home textiles sector in India.
- To create an understanding of specification and selection criteria applicable to common home Textiles

LEARNING OUTCOMES

After completing this course, the learner will be able to:

- Define and classify Home textiles
- List the popular production centres and brands of Home textiles
- Explain the standard size, fabric characteristics, application and care of common home linen
- Select suitable home linen based on end use and evaluation standards
- Describe the performance requirements of various home linen.

SYLLABUS OF DSE-10-ADC

THEORY (Credits 3; Hours 45)

UNIT I: Introduction to Home Textiles

This unit provides an overview of the Home textiles sector in India.

- Definition, Classification of Home Textiles and made-ups
- Market overview, evolution and emerging trends in Indian Home textile sector, Production centres
- Leading Home textile brands and labels

Unit II: Common Household linen

This unit provides basic understanding of the quality parameters of select household linen

- Fabric characteristics, standard size, application, evaluation standards, care and maintenance of Bedlinen, Table-linen, Bath linen, Kitchen linen
- Upholstery and Drapery Fabric types and characteristics, trims and accessories, styles, selection criteria, care and maintenance

5 Hours

Unit III: Floor Coverings – Carpets and rugs

This unit aims to provide an understanding of the production methods and categories of floor coverings.

- Categories of floor covering rugs, durries, carpets
- Production methods tufting, knotting, weaving, knitting, braiding, needle-punching, Flocking
- Fibres use, standard sizes, selection criteria, care and maintenance

Unit IV: Performance Requirements of Home Textiles

This unit provides an understanding of performance requirements, finishes, quality standards, labelling, and safety regulations in home textiles.

- Performance Requirements
- Finishes used in Home textiles
- Quality Standards and Specifications
- Labelling and Safety regulations for Home textiles

PRACTICAL (Credits 1; 30 Hours)

- 1. Case study of a Home textile brand
- 2. Comparative study of various Home Textile brands with respect to labelling and packaging
- 3. Collection of swatches of different fabrics and materials used for home textiles
- 4. Designing and construction of any one household linen

ESSENTIAL READINGS

- Gopalakrishnan, D & T Karthik, (2020), Home Textiles, Daya Publishing House
- Kapoor Hemant & Aashima Arora (2012), Home Textiles, Bio-Green
- V. Ramesh Babu, S. Sundaresan, (2018), Home Furnishing, WPI Publishing

SUGGESTED READINGS

- Anon, (2010), How To Make Draperies, Slip Covers, Cushions And Other Home Furnishings -The Modern Singer Way, Read Books
- Cheryl Mendelson, (2010), Laundry: The Home Comforts Book of Caring for Clothes and Linens, Scribner
- Subrata Das, (2015), *Performance of Home Textiles*, Woodhead Publishing

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time

B.A (Prog.) with Apparel Design and Construction (ADC)

Category-V

15 Hours

Credit Distribution, Eligibility and Pre-requisites of the Course

DISCIPLINE SPECIFIC ELECTIVE COURSE DSE-12-ADC: DESIGN THINKING

Course Title &		Credit distribution of the		the course	Fligibility	Dronoquisito	
Code Code	Credits	Lecture	Tutorial	Practical/ Practice	Criteria	of the course	
Design Thinking	4	2	0	2	Class XII	NIL	

LEARNING OBJECTIVES

- To understand the basics of design thinking, including its key concepts, and core elements.
- To understand the five stages of the design thinking process: Empathize, Define, Ideate, Prototype, and Test.
- To understand techniques for conducting user research, including empathy mapping, stakeholder interviews, and usability testing.
- To understand strategies for generating and evaluating creative ideas, including brainstorming, mind mapping, and prototyping.
- To understand methods for testing and refining prototypes, including user testing and iteration.

LEARNING OUTCOMES

After completing this course, the learner will be able to:

- Explain the concept and use of the design-thinking process.
- Apply empathy and user centricity to problem identification and solution development.
- Ideation techniques are utilized to generate innovative ideas.
- Develop prototypes and iterate based on user feedback.
- Apply Design Thinking concepts to the creation of products.

SYLLABUS OF DSE-12-ADC

THEORY (Credits 2; Hours 30)

UNIT I: Basics of Design, Creativity and Innovation

This unit will help students to understand the meaning and scope of design, creativity and innovation.

- Design Definition, concept and scope
- Importance and requirement of good design
- Creative thinking process, developing a creative mind-set, overcoming creative blocks
- Innovation: Concept, significance, types and process

UNIT II: Introduction to Design Thinking

This unit introduces the students to the concepts related to design thinking.

5 Hours

- Introduction to Design Thinking
- Importance of Design Thinking
- Design Thinking Framework
- Application of Design Thinking Case studies

UNIT III: Design Thinking Process

15 Hours

This unit creates an understanding of the design thinking process.

- Empathise Observation Plan, Observation Techniques, Interview Plan, Interview Techniques, Creating User Personas, Problem Definition and User-Centricity
- Define Problem statement with criteria and constraints
- Ideate Conceptualizing using tools for idea generation brain
- Prototype types of prototype, development of a sample / prototype/ service/ application
- Test Feedbacks and Critiques
- Examples and Case Studies in Design Thinking from different domains.

PRACTICAL (Credits 2; 60 Hours)

- 1. Case study of any successful design project in fashion and textiles.
- 2. Project from research to development Creating empathy maps, defining problem statement, Ideation and sketching potential solutions, developing prototypes, user testing and feedback.

Essential Readings

- John. R. Karsnitz, Stephen O'Brien, John P. Hutchinson, (2013), *Engineering Design*, Cengage learning
- Karl Aspelund, (2015), The Design Process, Fairchild Books
- Lawson Bryan, (2005), *How Designers Think: The Design Process Demystified*, Architectural Press
- Pavan Soni (2020), Design Your Thinking: The Mindsets, Toolsets, and Skill Sets for Creative Problem-solving, Penguin Random House India Private Limited

Suggested Readings

- Charles Lambdin, Frishberg, Leo, (2016), *Presumptive Design: Design Provocations for Innovation*, Morgan Kaufmann Publishers
- Michael Lewrick, Patrick Link, Larry Leifer, (2018), *The design thinking playbook: Mindful digital transformation of teams, products, services, businesses and ecosystems*