

MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WESTBENGAL
(Formerly West Bengal University of Technology)
Syllabus of BSc. Sustainable Fashion Design & Management
(Effective from 2023-24 Academic Sessions)
Semester-IV

Course Name: Computer Graphics - Photoshop

Mode: Offline

Credits: 4

SUB CODE: BSFD402

Aim of the Course: With the fundamental skills and knowledge required to effectively utilize Adobe Photoshop as a powerful tool for graphic design, image editing, and digital art creation. Through a series of structured lessons and hands-on projects, students will learn how to navigate the Photoshop interface, manipulate images, and apply various tools and techniques to achieve desired visual effects.

Course Objectives: Students will familiarize with the Adobe Photoshop interface and its tools, enabling them to proficiently edit and manipulate images, create original digital artwork, and apply graphic design principles effectively. Through hands-on projects and guided instruction, students will develop skills in photo editing, digital painting, and graphic composition, while also learning best practices for workflow optimization and project management. By the end of the course, students will have acquired a versatile skill set that prepares them for careers in graphic design, digital media, and related fields where proficiency in Adobe Photoshop is essential.

Sl.	Graduate attributes	Mapped modules
CO1	Students become acquainted with the Photoshop interface, tools, and basic functionalities. They learn how to manipulate images, adjust colors, retouch photos, and create simple compositions.	M1
CO2	Students will learn fundamental skills essential for manipulating and enhancing digital images. Through hands-on instruction, they will master techniques such as cropping, resizing, and rotating images to achieve desired compositions.	M2
CO3	Students will gain proficiency in retouching and repairing images, using tools like the healing brush and clone stamp to remove imperfections and blemishes, ensuring their images achieve a polished and professional quality.	M2
CO4	Students will explore techniques for selecting appropriate fonts, formatting text effectively, and creating harmonious color palettes. Additionally, they will develop skills in designing shapes, paths, and vector graphics, understanding how these elements contribute to the overall visual hierarchy and impact of their designs.	M3
CO5	The students will explore a variety of special effects such as shadows, glows, and reflections, mastering the art of creating realistic lighting and shading effects. Additionally, students will learn how to apply selective adjustments and color grading to enhance the mood and atmosphere of their images.	M4
CO6	Students will learn how to effectively showcase their fashion designs and concepts in a professional and visually compelling manner. Through practical instruction and hands-on projects, they will explore techniques for designing fashion portfolios and look books that highlight their creative vision and aesthetic sensibilities.	M4

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Learning Outcome/Skills: This course provides an in-depth exploration of Adobe Photoshop, a powerful software tool used for graphic design, image editing, and digital art creation. Through a series of lectures, demonstrations, and hands-on projects, students will learn essential techniques for navigating the Photoshop interface, manipulating images, and creating visually compelling graphics.

Module Number	Content	Total Hours	%of questions	Bloom Level (applicable)	Remarks ,if any
THEORY					
M1	Introduction to Adobe Photoshop	10	25	1,2	NA
M2	Basic Image Editing Techniques	5	25	25	NA
M3	Graphic Design Fundamentals	10	20	1,2,3	NA
M4	Special Effects and Enhancements	10	20	1,2	NA
M5	Fashion Portfolio Presentation	10	10	1,2	NA
Total Theory		45	100		
TUTORIAL		15			
TOTAL		60			

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Detailed Syllabus

Module1: Introduction to Adobe Photoshop

- Overview of Adobe Photoshop interface and workspace
- Understanding tools, panels, and menus
- Introduction to layers, masks, and adjustment layers

Total Hours:10

Module2: Basic Image Editing Techniques

- Cropping, resizing, and rotating images
- Adjusting brightness, contrast, and color balance
- Retouching and repairing photos using healing tools and clone stamp

Total Hours:5

Module3: Graphic Design Fundamentals

- Introduction to graphic design principles and elements
- Typography basics: choosing fonts, formatting text, and creating text effects
- Designing shapes, paths, and vector graphics

Total Hours:10

Module4: Special Effects and Enhancements

- Adding special effects such as shadows, glows, and reflections
- Creating realistic lighting and shading effects
- Enhancing images with selective adjustments and color grading

Total Hours:10

Module 5 : Fashion Portfolio Presentation

- Designing professional fashion portfolios and lookbooks
- Creating mockups and visualizations of fashion collections
- Techniques for presenting fashion designs in digital and print formats

Total Hours:10

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Suggested Readings:

Books

Mastering Photoshop – Khanna Publications

Absolute beginners guide to mastering photoshop and creating world class photos

Adobe light room cc and Photoshop cc for photographers classroom in a book

Photoshop cc: visual quick start guide

Photoshop cc bible-wiley

Adobe Photoshop cs6 classroom in a book

The Photoshop workbook: glyn dewis- Tricks, and techniques

Photoshop for photographers: complete photoshop training for photographers - serge ramelli Adobe

photoshop: a beginners guide to adobe photoshop-lisa lambert

Adobe photoshop cc for photographers, 2015 release Adobe

Photoshop cc classroom in a book (2015 releas

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Course Name: Textile & Surface Design Studies

Mode: Offline

Credits: 4

SUB CODE: BSFD 401

Aim of the Course: The aim is to equip with the knowledge and skills needed to create innovative and trend-setting designs for garments, accessories, and other fashion-related products. The focus is on understanding the intricate relationship between textiles, surfaces, and fashion aesthetics, while also embracing the latest advancements in technology and sustainability practices. Students learn to conceptualize and develop original prints, patterns, and textures that enhance the visual appeal and functionality of clothing and accessories

Course Objectives: The course is designed to cultivate a broad skill set and knowledge base among students by helping them acquire multidimensional skills. Fostering creativity and innovation in textile and surface design; mastering traditional and digital design techniques; comprehending the characteristics and behaviors of various textiles and surfaces; investigating trends, cultural influences, and sustainable practices in fashion design are some examples of these goals.

Sl.	Graduate attributes	Mapped modules
CO1	Studying the history of textiles and accessories offers a captivating journey through the tapestry of human civilization, revealing the intricate threads that have woven together cultures, economies, and identities across millennia.	M1
CO2	Studying the distinctions between natural and synthetic yarns provides a nuanced understanding of the materials that form the foundation of textile production.	M2
CO4	The syllabus for a course comparing natural and synthetic yarns is structured to provide students with a comprehensive understanding of the characteristics, production methods, and applications of these materials.	M3
CO5	Students delve into fundamental weaving structures like plain weave, twill, and satin. Through a combination of theoretical instruction and practical demonstrations, students develop proficiency in setting up and operating various types of looms, understanding the intricacies of warp and weft interactions, and troubleshooting common weaving challenges.	M4
CO7	Students emerge with a comprehensive understanding of weaving techniques and their practical applications in textile design and production.	M4

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Learning Outcome/Skills:

The learning outcomes and skills developed through Textile & Surface Design Studies in fashion encompass a wide array of creative and technical abilities. Students gain proficiency in conceptualizing and executing original textile designs, including prints, patterns, and textures, utilizing both traditional and digital techniques. They acquire a deep understanding of textile properties, fabrication processes, and surface manipulation methods, enabling them to innovate and experiment with materials effectively.

Module Number	Content	Total Hours	% of questions	Bloom Level (applicable)	Remarks, if any
THEORY					
M1	Textile and Accessories History	10	25	1,2	NA
M2	Natural and Synthetic yarn	10	30	1,2,3	NA
M3	Identify each fabric and its character and Dyed and Printed Textiles	15	20	1,2	NA
M4	Weaving Techniques	10	25	1,2	NA
Total Theory		45	100		
TUTORIAL		15			
TOTAL		60			

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Detailed Syllabus

Module 1: Textile and Accessories History

From the earliest civilizations to modern global markets, textiles and accessories have played integral roles in shaping societies, reflecting technological advancements, cultural values, and individual expressions of identity and status. Through exploration of ancient textile production techniques, examination of medieval guilds, and analysis of Renaissance luxury trade, students uncover the rich tapestry of craftsmanship, innovation, and artistry that has characterized the evolution of fashion and adornment.

TotalHours:10

Module 2: Natural and Synthetic yarn

The course begins with an introduction to the origins and properties of natural yarns, including cotton, wool, silk, and linen, exploring their historical significance and cultural contexts. Students then delve into the chemical compositions and manufacturing processes of synthetic yarns such as polyester, nylon, acrylic, and spandex, examining their development, properties, and environmental impacts.

TotalHours:10

Module 3: Identify each fabric and its character and Dyed and Printed Textiles

Cotton, Hemp, Jute, Linen (Flax), Rayon, Silk, Wool, Cashmere fabrics, Cambrics, Damask fabrics ,Taffeta fabric , Casement fabric ,Duck fabric, Voile fabrics ,Organza (Nylon .Silk Polyester),Matte fabric, Twill fabrics, Satin & Sateen fabric ,basket weave fabric ,Poplin fabric ,Acetate, Triacetate Nylon, Polyamide, Polyester, Acrylic, Modacrylic, Polyacrylic. Dyed textiles - (Ikat, patola, tie and dye)Indian traditional Painted textiles – Kalamkari, Phad Painting, Pichhwai, Madhubani Painting, Mata Ni Pachedi, Warli. Colours, motifs, stitches used in these Indian textiles.

TotalHours:15

Module 4: Weaving Techniques

Examination of basic to advanced weaving techniques, including plain weave, twill, satin, and complex structures, and their effects on fabric appearance and performance.

TotalHours:10

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Suggested Readings:

Reference Books

1. Essentials of Textiles, M.L. Joseph, Wadsworth Publishing ; 4th edition, 1988.
2. Quality Management In Garment Industry, B. Purushothama, Khanna Publishing.
3. Weaving, machines, mechanisms and management, Talukdar M K, Sriramulu P K and Ajgaonkar D B, Mahajan Publishers Pvt. Ltd., Ahmedabad, 1998
4. Hand Book of Weaving, W.S. Murphy, Abhishek Publications, 2001.
5. Weaving: Conversion of Yarn to Fabric, Lord P R and Mohamed M H , Merrow Publishing Co. Ltd, UK, 1998
6. Textiles: Fibre to Fabric, Corbmann B P, McGraw Inc 6th Edn, New York, 1983
7. Fabric Studies 2009 by Kanwar Varinder Pal Singh
8. Form and Fabric: Studies in Rome's material past in honour of B R Hartley (Oxbow Monographs) by J. Bird (Editor)

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Course Name: Grading & Indian Apparel Pattern Making & Garment Construction III

Mode: Offline

Credits:3

SUB CODE: BSFD403

Aim of the Course: This syllabus aims to cultivate students' awareness, understanding, and expertise in garment design, pattern making, and apparel production. It provides comprehensive knowledge of garment pattern grading and sizing techniques, enabling students to manually and systematically create industry-standard graded patterns.

Course Objectives: This course aims to equip students with a thorough understanding of pattern grading based on standard measurement systems, with a specialized focus on Indian ethnic garment styles. They will develop the ability to analyze existing garments, create precise patterns, and refine those using correct fitting techniques. By integrating industry-standard apparel production techniques, the course prepares students for professional opportunities, fostering both technical proficiency and creative innovation to excel in garment design and construction.

Sl.	Graduate Attributes	Mapped Modules
CO1	The student will demonstrate the ability to draft basic Anarkali patterns and innovate with design variations, blending tradition with creativity.	M1
CO2	The student will understand the foundational techniques for designing and constructing blouses, a staple in Indian ethnic wear.	M2
CO3	The students will acquire knowledge of advanced couture tailoring techniques and high-quality finishing methods, enabling them to produce refined and professional Indian wear.	M2
CO4	The students will have the skills to draft accurate and industry-standard patterns for traditional Indian attire.	M3
CO5	The students will gain an introduction to contouring techniques in pattern development, which enable precise fit and shaping for complex garment structures.	M4
CO6	The students will develop the ability to create innovative and experimental women's silhouettes through advanced pattern and drape development techniques, fostering creativity and originality in their designs.	M4
CO7	The students will demonstrate proficiency in creating basic shirt blocks (front and back) along with variations, showcasing adaptability in shirt design.	M4

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Learning Outcome/Skills:

The course enables students to master pattern-making and garment construction by designing and creating original garments using flat pattern techniques. It covers pattern drafting, manipulation, grading, and sizing, along with innovative methods like contouring, corsetry, and experimental draping. Students will develop skills in creating well-fitted personal patterns and advanced couture tailoring for both contemporary and traditional women's wear, including jackets, shirts, kurtas, Anarkalis, and Indian Choli Blouses. The focus on industry-standard techniques ensures readiness for apparel production and professional excellence.

Module Number	Content	Total Hours	% of questions	Bloom Level (applicable)	Remarks, if any
THEORY					
M1	Fundamentals of Pattern Making	10	25	1,2	NA
M2	Creative Silhouette Development	10	30	1,2,3	NA
M3	Advanced Couture Tailoring	10	20	1,2	NA
M4	Traditional and Ethnic Wear Pattern Drafting	15	25	1,2,3	NA
Total Theory		45	100		
Practical		30			
TOTAL		75			

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Detailed Syllabus

Module 1: Fundamentals of Pattern Making

- Drafting basic jacket patterns and their variations
- Drafting basic shirt blocks (front and back) and shirt variations
- Introduction to grading and sizing: Adjusting size 8 blocks to sizes 6, 10, and 12

Total Hours:10

Module 2: Creative Silhouette Development

- Developing innovative and experimental women's silhouettes
- Contouring techniques in pattern development
- Introduction to corset in pattern creation
- Applying corset construction techniques to both contemporary and couture garment designs.

Total Hours:10

Module 3: Advanced Couture Tailoring

- Advanced tailoring and finishing techniques for womenswear
- Application of couture principles to Indian wear such as Anarkalis and Choli Blouses
- Techniques for draping and refining garment construction

Total Hours:10

Module 4: Traditional and Ethnic Wear Pattern Drafting

- Drafting patterns for women's kurtas and pyjamas
- Designing and constructing basic Anarkali patterns and their variations
- Introduction to Indian Choli Blouse pattern development and advanced tailoring techniques

Total Hours:15

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PRACTICAL

Credit:2

Total Hours:30

Subject Code: BSFD493

1. Drafting a Basic Jacket Pattern

- Create a standard jacket pattern and explore its variations for different styles.

2. Drafting Basic Shirt Blocks

- Develop front and back shirt blocks and experiment with variations such as different collars and sleeve styles.

3. Grading Patterns for Sizing

- Practice grading a basic size 8 block to sizes 6, 10, and 12 using industry-standard methods.

4. Experimental Draping and Silhouette Development

- Create innovative women's silhouettes using draping techniques and experimental pattern manipulation.

5. Contouring Techniques in Pattern Development

- Learn contouring methods to achieve a well-fitted and body-hugging garment design.

6. Introduction to Corsetry

- Draft and construct a basic corset pattern with emphasis on boning, lacing, and panel shaping.

7. Drafting Patterns for Traditional Wear

- Develop patterns for women's kurtas and pyjamas, focusing on achieving accuracy and fit.

8. Designing and Constructing Anarkali Patterns

- Draft a basic Anarkali pattern and explore its variations for traditional and contemporary designs.

9. Introduction to Indian Choli Blouse Patterns

- Draft and construct patterns for Indian Choli Blouses, incorporating advanced tailoring and finishing techniques.

10. Advanced Couture Tailoring and Finishing

- Apply couture tailoring techniques to refine garments, including hemming, seam finishing, and lining insertion for both Western and Indian wear.

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Suggested Readings:

Books

1. **"Patternmaking for Fashion Design" by Helen Joseph-Armstrong**
 - A comprehensive guide to pattern drafting, manipulation, and grading techniques.
2. **"Metric Pattern Cutting for Women's Wear" by Winifred Aldrich**
 - Covers basic and advanced pattern-cutting techniques for a wide range of women's garments.
3. **"The Art of Couture Sewing" by Zoya Nudelman**
 - Explores advanced couture sewing and finishing techniques.
4. **"Draping for Fashion Design" by Hilde Jaffe and Nurie Relis**
 - Focuses on draping methods to create innovative designs and silhouettes.
5. **"The Practical Guide to Patternmaking for Fashion Designers: Juniors, Misses, and Women" by Lori A. Knowles**
 - Offers practical insights into drafting patterns for different body types and garment styles.
6. **"Corsets and Crinolines" by Norah Waugh**
 - A historical exploration of corsetry with detailed instructions for recreating classic designs.
7. **"Patternmaking with Stretch Knit Fabrics" by Julie Cole**
 - Provides techniques for designing and drafting patterns specifically for knitwear.
8. **"Sewing for the Apparel Industry" by Claire Shaeffer**
 - Focuses on industrial sewing techniques, including tailoring and finishing methods.
9. **"Pattern Cutting for Lingerie, Beachwear, and Leisurewear" by Ann Haggart**
 - Includes techniques for drafting patterns for specialized garments like corsets and intimate wear.
10. **"The Complete Photo Guide to Perfect Fitting" by Sarah Veblen**
 - A detailed resource on achieving perfect garment fit through muslin fitting and pattern adjustment.
