



Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore
Shri Vaishnav Institute of Textile Technology
Choice Based Credit System (CBCS) in Light of NEP-2020
B. Sc. in Fashion Design (2023-26)

COURSE CODE	CATEGORY	COURSE NAME	TEACHING & EVALUATION SCHEME										
			THEORY			PRACTICAL			L	T	P	S	CREDITS
			END SEM University Exam	Two Term Exam	Teachers Assessment*	END SEM University Exam	Teachers Assessment*						
BSFD201N	DCC	TEXTILE SCIENCE - II	60	20	20	30	20	4	0	4	0	6	

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; P - Practical; C - Credit:

*Teacher Assessment shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

Course Educational Objectives (CEOs):

1. This course will provide a comprehensive knowledge of textile chemical processing.
2. This course will develop conceptual knowledge of different technical textile products.
3. This course will develop conceptual knowledge of garment manufacturing.

Course Outcomes (COs):

After completion of this course the students will be able

Students will be able to:

1. To understand the preparatory processes of chemical processing of textiles.
2. To explain the basic properties of dyeing of various textile fibers.
3. To understand the printing and finishing process on textiles.
4. To understand the garment manufacturing process.
5. To understand the various aspects of technical textiles.

Syllabus

Unit-I Dyeing Preparatory Processes

10 hours

Sequence of chemical processing of textiles. Aims of preparatory processes, Preparation of cotton materials: singeing, desizing, scouring, Bleaching, mercerization, Preparation of protein fiber based materials: Scouring and bleaching of wool, Degumming of silk. Preparation of synthetic materials: Heat setting of synthetic textiles.

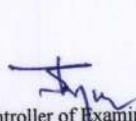
Unit-II Textile Dyeing

13 hours

Properties of dyes, Classification of dyes, adsorption, diffusion, and fixation of dye on fiber. Method of dyeing of cellulosic fibers with Direct dye, reactive dye, vat dye and sulfur dye.


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Dyeing of protein fibers with acid dye and reactive dye Dyeing of polyester, nylon, acrylic and other synthetics fibers using disperse dye.

Unit-III Textile Printing and Finishing

13 hours

Introduction and objectives of printing, Different methods and different styles of printing, Printing ingredients, after-treatment processes. Introduction and objectives of finishing, classification of finishing, principle of application of various finishing processes on textile materials: crease resistant finishing, softener, water repellent finishing, flame retardant finishing, antimicrobial finishing etc.

Unit-IV Garment manufacturing

12 Hours

Introduction and objectives of Garment manufacturing technology, overview of garment industry, process flow chat of garment manufacturing. Brief description of garment sampling, grading, marking, spreading, cutting, sewing, finishing and packing.

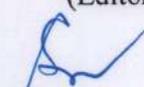
Unit-V Technical Textiles

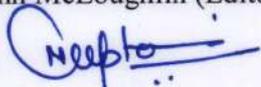
12 hours

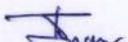
Introduction to technical textiles, High performance fibers: carbon, aramid, ceramic, HDPE, PTFE, Technical yarns, technical fabrics, Application of technical textiles: Agro textiles, Filtration, Composite, Geotextiles, Medical Textiles, Automobiles, Protection, Sports, Packaging, Home textiles.

Textbooks:

1. Textile Preparation and Dyeing, Asim Kumar Roy Choudhury, Society of Dyers and Colourists, India, 2011
2. Introduction to Clothing Manufacture, 2nd Edition, Gerry Cooklin, Steven George Hayes (Editor), John McLoughlin (Editor), Wiley – Blackwell Publishers, 2006


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3. Technical Textile Yarns, Edited by R. Alagurusamy and A. Das, Woodhead Publishing Limited, 2010.
4. Chemical finishing of Textiles, W.D. Schindler, P.J. Hauser, Woodhead Publishing, 2004
5. Textile Printing, Leslie W.C. Miles, Society of Dyers and Colourists, UK, 2003

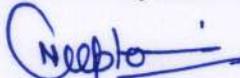
References:

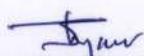
1. Technology of Dyeing, V A Shenai, N M Saraf, Sevak Publications, Bombay, 1996
2. Technology of Printing, V A Shenai, N M Saraf, Sevak Publications, Bombay, 1998
3. Technology of Finishing, V A Shenai, N M Saraf, Sevak Publications, Bombay, 1996
4. Garment Technology for Fashion Designers, Gerry Cooklin, Steven George Hayes, John McLoughlin, Dorothy Fairclough, John Wiley & Sons, 2011
5. Handbook of Technical Textiles, Edited by A. R. Horrocks and S. C. Anand, CRC Press, 2000.

List of Experiments (Expand it if needed):

1. To study the process flow of textile chemical processing.
2. Scouring of cotton fabric sample using Sodium hydroxide.
3. Bleaching of cotton fabric sample using Hydrogen peroxide.
4. Dyeing of cotton fabric sample using direct dye.
5. Dyeing of cotton fabric sample using vat dye.
6. Dyeing of cotton fabric sample using reactive dye.
7. Dyeing of silk or wool fabric sample using acid dye.
8. Dyeing of polyester fabric sample using disperse dye.
9. To study the process of printing paste preparation.
10. Printing of cotton or Polyester/cotton fabric using pigment by block printing method.


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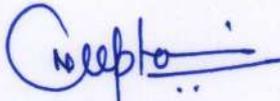
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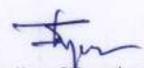
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11. Printing of cotton or Polyester/cotton fabric using pigment by screen printing method.
12. Printing of cotton fabric using resist style of printing (Tie and dye or Batik printing).
13. To Study of process flow of garment manufacturing process.
14. To study the different parts of basic sewing machine with their functions.
15. To study the marking process and cutting process and different tools.
16. To study the different stitching machines used in the stitching process.
17. To study the stitching process by making a garment.
18. Collection and identification of different types of technical textiles.


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BSFD203N	DCC	FASHION STUDY	60	20	20	30	20	4	0	4	6

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Course Educational Objectives (CEOs):

1. To practice the factors affecting fashion and trend.
2. To introduce about surface ornamentation.
3. To impart knowledge of design development.
4. To understand the different types of body defects.

Course Outcomes (COs):

After completion of this course the students will be able

1. To understand the types of factors affecting fashion.
2. To develop new different designs.
3. To apply and create the design of development and their placement.
4. To understand and apply proper technique in garments by surface ornamentation.
5. To understand the defects and irregularities of different types of body.

Syllabus

Unit I Factor affecting of Fashion

9h

Latest Fashion based on Age, Gender Balance, Nationality, Occupation, Socio-Economic Status, Climate conditions and Technological developments. Factors affecting fashion.

Unit II Design development

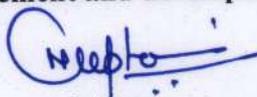
9h

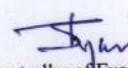
Structural designing-different types, Decorative designing=general considerations. Design types: Geometric design, Abstract design, Natural design, Stylized design, Symbolic design. Advantages and disadvantages.

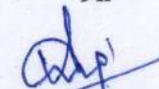
Unit-III Design Placement and development

9h


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Side/Spot/Tossed layout, Half –drop layout, Border layout, All-over layout, advantages of design placement and factors affecting. Modern developments in design layouts.

Unit-IV Surface Embellishment

9h

Introduction to Surface Ornamentation and Embroidery, General rules for Hand and Machine Embroidery, Special Attachments to Sewing Machines for Embroidery, Tools and Equipment, Needles – Threads. Developments in ornamentation.

Unit-V Types of Body Figures

9h

Figure Irregularities, types of body figures, Triangle or “pear” Spoon, Hourglass, Top hourglass, Bottom hourglass, Inverted triangle, or “apple”, Round or oval and Diamond shapes. Benefits of various types of body figures.

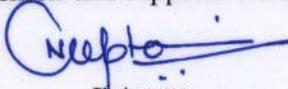
Textbooks:

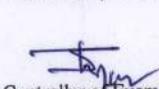
1. Basic Design: The Dynamics of visual form by Maurice de Soumare (2nd Editon), Herbert Press Ltd., 2007.
2. Principles of Color: A Review of Past Traditions and Modern Theories of Color Harmony by Faber Birren, 1999.
3. Fashion Source Book - Kathryn McKelvey, Second edition, Balckwell Publishing, New Delhi. 9 November 2009 Wiley India Pvt Ltd.

References:

1. Concept to consumer, Gini Stephens Fringes by Gini Stephens Frings | 10 August 1998.
2. Encyclopedia of Fashion Details, Patrick John Ireland | 1 August 2008.
3. Inside the fashion business- 4th edition Mac Millan Mirianr Guerreiro & Beatrice Judelle, Publishing Company, New York, 1994.
4. Elements of Fashion and Apparel Design - Sumathi, G.J., New Age International Publishers,


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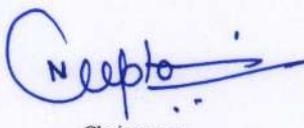
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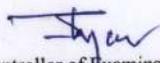
New Delhi, 2022.

List of Experiments (Expand it if needed):

1. Study the materials and tools used for machine embroidery.
2. Study computerized embroidery machine.
3. To study various design development process.
4. To do various patch work on damaged fabric.
5. Design placement techniques.
6. Draw design types and their development and prepare some creation on fabrics.
7. Draw some new and different texture with the help of nature and create on sheets and fabrics.
8. Prepare sample with the help of hand embroideries
9. Prepare sample with the help of machine embroideries.
10. Prepare one dress with the help of surface ornamentation.
11. Create one sample in 8x8" block with the help of abstract design.
12. Create one sample for kids' T-shirt, pocket with the help of colour scheme.
13. Illustrate one dress with the help of natural design.
14. Illustrate one man wear dress with the help of Geometric design
15. Create some Stylized design,
16. Draw 2 sheets for kids dress with Symbolic design,
17. Draw 2 sheets with any four Decorative design.
18. Draw five sheets in figure irregularities.
19. Prepare one dress for Hourglass body.
20. Prepare one sample 8x8 patch with basic embroidery.


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ML307 ENVIRONMENTAL MANAGEMENT AND SUSTAINABILITY

SUBJECT CODE	CATEGORY	SUBJECT NAME	TEACHING & EVALUATION SCHEME								
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ML-307	Compulsory	Environmental Management and Sustainability	60	20	20	0	0	4	0	0	4

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Course Objectives

1. To create awareness towards various environmental problems.
2. To create awareness among students towards issues of sustainable development.
3. To expose students towards environment friendly practices of organizations.
4. To sensitize students to act responsibly towards environment.

Examination Scheme

The internal assessment of the students' performance will be done out of 40 Marks. The semester Examination will be worth 60 Marks. The question paper and semester exam will consist of two sections A and B. Section A will carry 36 Marks and consist of five questions, out of which student will be required to attempt any three questions. Section B will comprise of one or more cases / problems worth 24 marks.

Course Outcomes

1. The course will give students an overview of various environmental concerns and practical challenges in environmental management and sustainability.
2. Emphasis is given to make students practice environment friendly behavior in day-to-day activities.



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COURSE CONTENT

Unit I: Introduction to Environment Pollution and Control

1. Pollution and its types (Air, Water, and Soil): Causes, Effects and Control measures
2. Municipal Solid Waste: Definition, Composition, Effects
3. Electronic Waste: Definition, Composition, Effects
4. Plastic Pollution: Causes, Effects and Control Measures

Unit II: Climate Change and Environmental Challenges

1. Global Warming and Green House Effect
2. Depletion of the Ozone Layer
3. Acid Rain
4. Nuclear Hazards

Unit III: Environmental Management and Sustainable Development

1. Environmental Management and Sustainable Development: An overview
2. Sustainable Development Goals (17 SDGs)
3. Significance of Sustainable Development
4. Environment Friendly Practices At Workplace and Home (Three Rs' of Waste Management, Water Conservation, Energy Conservation)

Unit IV: Environmental Acts

1. The Water (Prevention and Control of Pollution) Act, 1974: Objectives, Definition of Pollution under this act, Powers and Functions of Boards
2. The Air (Prevention and Control of Pollution) Act, 1981: Objectives, Definition of Pollution under this act, Powers and Functions of Boards
3. The Environment (Protection) Act, 1986: Objectives, Definition of important terms used in this Act, Details about the act.
4. Environmental Impact Assessment: Concept and Benefits

Unit V: Role of Individuals, Corporate and Society

1. Environmental Values
2. Positive and Adverse Impact of Technological Developments on Society and Environment
3. Role of an individual/ Corporate/ Society in environmental conservation
4. Case Studies: The Bhopal Gas Tragedy, New Delhi's Air Pollution, Arsenic Pollution in Ground Water (West Bengal), Narmada Valley Project, Cauvery Water Dispute, Fukushima Daiichi Disaster (Japan), Ozone Hole over Antarctica, Ganga Pollution, Deterioration of Taj Mahal, Uttarakhand flash floods



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Suggested Readings:

1. Rogers, P.P., Jalal, K.F. , Boyd, J.A.(Latest Edition) . **An Introduction to Sustainable Development.** Earthscan
2. Kalam, A.P.J. (Latest Edition) . **Target 3 Billion: Innovative Solutions Towards Sustainable Development.** Penguin Books
3. Kaushik , A. and Kaushik (Latest Edition). **Perspectives in Environmental Studies.** New Delhi: New Age International Publishers.
4. Dhameja, S.K. (Latest Edition). **Environmental Studies.** S.K. Kataria and Sons.New Delhi
5. Bharucha, E. (Latest Edition). **Environmental Studies for Undergraduate Courses.** New Delhi: University Grants Commission.
6. Wright, R. T. (Latest Edition). **Environmental Science: towards a sustainable future** .New Delhi: PHL Learning Private Ltd.
7. Rajagopalan, R. (Latest Edition). **Environmental Studies.** New York: Oxford University Press.