Scheme & Syllabus of UNDER GRADUATE DEGREE COURSE

II Semester(Textile Design)



Rajasthan Technical University, Kota Effective from session: 2023-24



Scheme & Syllabus

I Year-II Semester: Textile Design

Teaching and Examination Scheme: B. Des

I Year - II Semester

			THEOR	Y							
Sr. No.	Category	ory		Contact hrs./week				Marks			Credits
1100		Code	Title	L	T	P	Total Hrs.	IA	E T E	Total	
1	Design	2BOD-01	Communication Skills	2	-	-	2	30	70	100	2
2	Design	2BOD-02	Design concept & composition-II	3	1	-	4	30	70	100	4
3	Design	2BOD-03	Art & Design Concept	2	-	-	2	30	70	100	2
4	Design	2BOD-04	Textile Science-II	3	1	-	4	30	70	100	4
5	Design	2BOD-05	Environmental Studies	2	-		2	30	70	100	2
			Sub Total	12	2	-	14	150	350	500	14
			PRACTICAL & S	ESSIC	ONAL	•		•	•		
6	Design	2BOD-06	Textile Science Lab-II	-	-	3	3	60	40	100	1.5
7	Design	2BOD-07	Design concept & composition Lab-II	-	-	2	2	60	40	100	1
8	Design	2BOD-08	Language Lab-II	-	-	2	2	60	40	100	1
9	Design	2BOD-09	Computer Application Lab –II	-	-	3	3	60	40	100	1.5
10	Design	2BOD-10	Drawing and Coloring Lab-II	-	-	2	2	60	40	100	1
11	Design	2BOD-11	Foundation (Sports-II / NSS / NCC)	-	-	-	-	-	-	100	0.5
			Sub Total	-	-	12	12	300	200	600	6.5
		TO	TAL OF II SEMESTER	12	2	12	26	450	550	1100	20.5

L: Lecture, T: Tutorial, P: Practical.

ETE: End Term Exam, IA: Internal Assessment



Scheme & Syllabus I Year-II Semester: Textile Design

2BOD-01: Communication Skills-II

Credit: 2 Maximum Marks: 100 (IA: 30, ETE: 70)
2L+0T+0P End Term Exam: 3 Hours

Sr. no.	Торіс	No. of Hours
1.	LSRW Skills Active Listening: Meaning and Art of Listening, Pronunciation, Tongue-Twisters, Stress in English Language, Reading style: Skimming, Scanning, Churning & Assimilation, Effective writing tools.	5
2.	Conversational & Social Skills Definition of Conversation: Speech and Conversation: Distinction, Listening and Conversation, Sustaining Interest, Rules of Conversation, Conversation and Personality. Importance of Conversation: Competence Relationships. Social Skills: Role of Communication, Purposeful Socializing. Attributes: Effective Communication, Conflict Resolution, Relationship Management, and Respect. Improvement Techniques: Feedback, Goal Setting, Affording Resources, Adopting Interpersonal Skills.	6
3.	Motivation Skills, Motivation: Definition, Sources of Motivation: Initiative, Willingness To Work, Eagerness to take on Work Initiative Learning Ability, Going Extra Miles, Learning And Analysis, Motivating Others. Techniques; One To One Correspondence, Understanding, Individual Motivation, Mobilizing Optimal Performance, Praise and Compliment. Goal Setting for Individual Employee, Individual Cultivation of Skills, Facilitating Active Involvement, Trust in the Working Hands.	5
4.	Work-Place Skills Managing Stress Techniques: Application of 4 A's: Avoid, Alter, Access, Adapt. Resilience: Flexibility in Thought and Behavior. Tolerance and Self-Belief, Team-Work and Communication, Compassion in Leadership, Communication Skills, Listening and Responding, Speaking Skills. Positive Thinking: Controlling Mind.	5
5.	Creativity and Critical Thinking Creativity: Definition; Characteristics of Creative Person: Fluency, Originality, Curiosity, Critical Thinking. Definition: Abilities, Discerning Facts and Claims, Credibility Analysis, Identifying Valid Reasons, Distinguishing Relevant from Irrelevant Fact/Claims, Detecting Bias, Knowing the Hidden Motives, Creative Methods, Features.	5



Reference Books:

- Technical Communication, (Second Ed.), Meenakshi Raman & S. Sharma New Delhi.
- Personality Development, Harold R. Wallace, Cengage Learning India Pvt. Ltd; New Delhi
- Personality Development & Soft Skills, Barun K. Mitra, Oxford University Press, New Delhi.
- Practical Communication by L.U.B. Pandey; A.I.T.B.S. Publications India Ltd.; Krishan Nagar Delhi.
- Developing Communication Skills: by Krishna Mohan, Meera Banerji, McMillan India Ltd, Delhi.
- Communication Skills for Engineers and Scientists: Sangeeta Sharma, THI Learning Pvt. Ltd, New Delhi.
- Public Speaking, William S. Pfeiffer, Pearson, Delhi.



I Year-II Semester: Textile Design

2BOD-02: Design Concept and Composition-II

Credit: 4 Maximum Marks: 100 (IA: 30, ETE: 70)
3L+1T+0P End Term Exam: 3 Hours

Sr. no.	Topic	No. of Hours
1.	STEPS IN DESIGN PROCESS Research, Problem of Identification, Analysis and Planning Design Concept Development, Detailed Design Development, Final Implementation.	10
2.	Stages in Design process, Design planning – Design output, Design inputs, Selection of raw material and accessories, Customer involvement in design process, Inter phase in the design process.	9
3.	DESIGN DEVELOPMENT Introduction to Mood Board / Theme Board / Inspiration Board. Introduction to Colour Palette. Introduction to Look Board, Design Board and Story Board.	10
4.	PRESENTATION OF DESIGN Design related records and their maintenance, Design catalogue – preparation, need and maintenance, Evaluation of performance of designs, Elements and their Aesthetic value and marketing prospect.	10

Reference Books:

- Bloomsbury Academic, Fashion Theory Volume 18 issue 4- The Journal of Dress Body & Culture, UK September 2014. Bloomsbury Academic.
- Anderson Felsner & Ronald Reed, Color Studies, UK January 2014/US November 2014, Fairchild Books
- Michael Hann, Structure & Form in Design, UK September 2012/US November 2012,Berg Publishers
- Karl Aspelund, Designing- An Introduction, UK November 2014/US September 2014, Fairchild Books. Terry Jones, 100 contemporary Fashion Designers, Taschen 25 special ed edition, November 2000, Tuschen publishers.
- G.J Sumathi, Elements of Fashion and Apparel Design, New India 2007, New Age International publisher Kathryn Mckelvey, Fashion Design: process, Innovation and Practices, .UK 2012, Wiley



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2BOD-03: Art & Design Concept

Credit: 2 Maximum Marks: 100 (IA: 60, ETE: 40) 2L+0T+0P

Sr. no.	Торіс	No. of Hours
1.	Basic concept: Origin of Design. Definition and purpose of Art. Definition and Objective of Design. Difference between art and craft and design.	6
2.	Qualities of a good designer. Rules in Art and Design:	
	Rule of third. Golden Ratio. Rules of odds.	4
3.	Role and Influence Role of creativity in art. Role of design in society. Influence of nature on Art & Design.	6
4.	Folk Art:	
	Define Folk Art. Folk Arts of India a.) Madhubani. b.) Warli. c.) Phad Chitra. d.) Mandana. e.) Kalamkari.	10

Reference Books:

- Bhartiya Chitra Kala ka Itihas- Vachaspati Gairola
- Bhartiya Chitrakala ka Itihas- Avinash Bahadur Verma
- Bhartiya Chitrankan- R. K. Vishwakarma
- Arts and Architecture of India- Benjamin Rowland
- Indian Sculpture- Stella Kramrisch
- Bhartiya Chitrakala Avem Murtikala Ka Itihas- Dr. Rita Pratap.



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2BOD-04: Textile Science-II

Credit: 4 Maximum Marks: 100 (IA: 30, ETE: 70)
3L+1T+0P End Term Exam: 3 Hours

Sr. no.	Topic				
	Fibre Formation: -				
1.	i.)	Melt Spinning.			
	ii.)	ii.) Dry Spinning.	6		
	iii.)	iii.) Wet Spinning.			
	Regenera	nted Cellulosic Fibres: -			
2.	i) Viscos	e Rayon: - History of viscose Rayon, steps for manufacturing of viscose rayon,	17		
	spinning _I	process of viscose Rayon, Physical & chemical properties of viscose Rayon.			
	ii) Cupra	amonium Rayon: - History of Cupramonium Rayon, steps for manufacturing of			
	Cupramo	nium rayon, spinning process of Cupramonium rayon, Physical & chemical			
	properties	properties of Cupramonium rayon.			
	iii) Aceta	iii) Acetate Rayon: - History of Acetate Rayon, steps for manufacturing of Acetate Rayon,			
	spinning process of Acetate Rayon, Physical & chemical properties of Acetate Rayon.				
	Synthetic	e (Man Made) Fibres: -			
	i)	Polyester: - History of Polyester, manufacturing process of Polyester, spinning			
		process Polyester, Physical & chemical properties Polyester fibre.			
3.	ii)	Polyamide Fibres (Nylon):- History of nylon, Types of Nylon, manufacturing			
<i>3</i> .		process of Nylon 6 & 66, spinning process Nylon 6 &66, Physical & chemical			
		properties Nylon 6 & 66.	16		
	iii)	Acrylic: - History of Acrylic, manufacturing process of Acrylic, spinning process			
		Acrylic, Physical & chemical properties Acrylic fibre.			



I Year-II Semester: Textile Design

Reference Books:

- Textile Science: An explanation of fibre properties by E.P.G GOHL & L.D. VILENSKY.
- Textile Science by Rastogi Deepali & Chopra Sheetal.
- Textiles: Fibre to fabric by Bernard P. Corbman.
- Textile Fibres by V.A. Shenai.
- Textile Fibres by S.P.Mishra.
- Handbook of Textile Fibres by James Gordon Cook.
- Introduction to Textile Fibres by H. V. Sreenivasa Murthy.



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2BOD-05: Environmental Studies

Credit: 2 Maximum Marks: 100 (IA: 30, ETE: 70)
2L+0T+0P End Term Exam: 3 Hours

Sr. no.	Торіс	No. of Hours
1.	General: 1.1 Biotic and abiotic environment. 1.2 Adverse effects of Environmental Pollution 1.3 Control strategies	5
2.	Water Pollution: 2.1 Water Quality Standards 2.2 Surface and underground water sources 2.3 Impurities in water and their removal 2.4 Adverse effects of domestic waste water and industrial effluent to surface water sources 2.5 Self-purification of streams.	7
3.	Air Pollution: 3.1 Sources of air contaminants 3.2 Adverse effects on human health 3.3 Measures to check air pollution 3.4 Greenhouse effect 3.5 Global warming 3.6 Acid rain 3.7 Ozone depletion	7
4.	Solid Waste Management: 4.1 Introduction to solid waste. 4.2 Its collection and disposal. 4.3 Recovery of resources. 4.4 Sanitary land-filling 4.5 Vermi-composting 4.6 Hazardous waste management	7

Reference Books:

- Environmental chemistry S.S. Dora and pollution control.
- Ecology concepts and Manuel C. Muller application.
- Environmental protection Emil T. Chanlett.
- Environmental science Cumingham. Saigo.
- Solid waste management: C.I. Mantell.



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2BOD-06: Textile Science Lab-II

Credit: 1.5 Maximum Marks: 100 (IA: 60, ETE: 40)

0L+0T+3P

Sr.	Topic
no.	
	i.) Solubility Test. ii.) Feeling Test. iii) Burning Test. iii) Staining Test of synthetic material
1.	like Viscose Rayon, acrylic, polyester, nylon etc.
2.	Market Survey: Collect the samples of different synthetic fibers like viscose, acrylic, polyester,
	nylon etc. & explain about their in details with end uses.
3.	Field visit of any synthetic fibre production industry to know about the complete
	manufacturing process.

Reference Books:

- Textile Science: An explanation of fibre properties by E.P.G GOHL & L.D. VILENSKY.
- Textile Science by Rastogi Deepali & Chopra Sheetal.
- Textiles: Fibre to fabric by Bernard P. Corbman.
- Textile Fibres by V.A. Shenai.
- Textile Fibres by S.P.Mishra.
- Handbook of Textile Fibres by James Gordon Cook.
- Introduction to Textile Fibres by H. V. Sreenivasa Murthy.



2BOD-07: Design Concept and Composition Lab-II

Credit: 01 Maximum Marks: 100 (IA: 60, ETE: 40)

0L+0T+2P

Sr. no.	Торіс
1.	Prepare different types of design using the following themes:- Nature Historical place Modern design Traditional design
2.	Select product for development — Shoes, bag, scarf, Jewellery, caps, hats etc., table accessory — pen stand, file folder, napkin holder photo frames, pots, fruit basket, napkin rings etc., lifestyle product—key-chain, magazine holder, newspaper rack, umbrella, pocket mirror, storage pouch, display shelves etc.)
3.	Make a theme board, colour palette and story board based on the selected theme and product.
4.	Document the complete concept development process through appropriate scrap book, pictures, material swatches / samples, research material etc. Also, record the stepwise design development process through photography. Compile a portfolio of the theme board, colour palette, story board, all doodles, initial concepts, detailed illustration of the final selected design with specifications, proper mounting and appropriate labelling and the detailed product illustration in suitable surroundings.

Reference Books:-

- Anderson Felsner & Ronald Reed, Color Studies, UK January 2014/US November 2014,
- Fairchild Books & Michael Hann, Structure & Form in Design, UK September 2012/US November 2012,
- Berg Publishers & Karl A spelund, Designing- An Introduction, UK November 2014/US September 2014,
- Fairchild Books. &Terry Jones, 100 contemporary Fashion Designers, Taschen 25 special edition, November 2009.
- uschen publishers. & Kathryn Mckelvey, Fashion Design: process, Innovation and Practices, UK 2012, Wiley.



I Year-II Semester: Textile Design

2BOD-08: LANGUAGE LAB-II

Credit: 1 Maximum Marks: 100 (IA: 60, ETE: 40) 0L+0T+2P

Sr. no.	Торіс
1.	Phonetic Symbols and Transcriptions.
2.	Extempore.
3.	Group Discussion.
4.	Dialogue Writing.
5.	Listening comprehension.



2BOD-09: Computer Application Lab -II

Credit: 1.5 Maximum Marks: 100 (IA: 60, ETE: 40) 0L+0T+3P

Sr. no.	Topic
1.	Study of different types of Networks and Network Topologies. Visit to different Internet Sites.
2.	Content Searching using Search Engines. Downloading and uploading on Websites. Creating E-mail accounts, Composing and Sending E-mail. Sending E-mail with attachments and signature. Updating E-mail setting.
3.	Hands on Experience on different types of E-commerce Websites. Exercise on Online shopping showing use of payment gateways.
4.	Identifying Cyber Attacks. Multimedia Applications.

Reference Books:

- Computer Fundamentals P.K. Sinha and P. Sinha, BPB publication.
- Data Communications and Networking Forouzan TMH.
- Internet for Everyone Alexis Leon & Mathews Leon, Vikas Publishing House, New Delhi.
- Microsoft office for 2016 Amy Kinser, Pearson education.



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2BOD-10: Drawing and Coloring Lab-II

Credit: 1 Maximum Marks: 100 (IA: 60, ETE: 40) 0L+0T+2P

Sr. no.	Topic
1.	FREE HAND DRAWING: Line drawing- horizontal, vertical, diagonal, circular, spiral and curved. Pencil gradation. Object drawing- drawing both manmade and natural objects (both line drawing and shading)
2.	GEOMETRIC DRAWING: Drawing simple geometric objects like cubes, cylinders, cones etc. Drawing of same objects put together. Pencil shading to understand light and shade.
3.	STILL LIFE DRAWING: Drawing by composing different objects like flower vase, flowers, teapots, cups, bottles etc. with drapery as background. Pencil shading to understand light and shade and the three dimensional quality. Changing the object and the composition to colour rendering with different colour media (stadler colour pencils, oil pastels, water colours and pen and ink).
4.	OUTDOOR DRAWING: Drawing plants, trees and flowers with pencil shading and colour rendering them with different colour media. Drawing with compositions of different elements from landscape with pencil shading. Sketching of animals in the landscape. Changing composition of landscape to colour rendering with different colour media.

Reference Books:

- Bina Abling. UK June 2003/US May 2003. Model Drawing. Fairchild Books.
- Watson's Textile Design and Colour: Elementary Weaves and Figured Fabrics (Woodhead Publishing Series in Textiles)" by Grosicki Z.
- John Hopkins. UK November 2009/US December 2009. Basics Fashion Design.
- Fashion Drawing. Ava Publishing.
- Bina Abling. UK June 2012/US April 2012. Fashion Sketchbook. Fairchild Books.
- Bina Abling. UK November 2005/US September 2005, Marker, Rendering for Fashion, Accessories & Home Fashions, Fairchild Books.



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2BOD-11: Foundation: Sports-II

Credit: 0.5

Sr.	Topic (Any Two out of 4 Components)
1.	Sports for all (Any Two) (i) To participate in any intramural Tournaments (one team game and one Individual Game) of choice (ii) To participate/ attend at least 15 hours in Fitness training at Field or at Gymnasium. (iii) Participate in at least one track and one field event on Annual Sports day. (iv) To participate in Inter College Tournament.
2.	MEDIA AND CAREERS IN PHYSICAL EDUCATION (Any Two) (i) Organize an event / intramural / tournament in your college. Prepare a News Report of an observed Sports competition. (ii) Create a presentation on any topic from Physical Education using an audio-visual aid. iii) Demonstrate Warming-up / Conditioning / Cooling-down exercises
3.	 MANAGEMENT OF AEROBICS & GROUP TRAINING (Any Two) (i) Measurement of Fitness Components – Leg-raise for Minimal Strength (Muscular Strength); Situps (Muscular Endurance); Harvard Step Test or Run and Walk Test (Cardiovascular Endurance); Sit and Reach Test (Flexibility). (ii) Measurement of Pulse Rate / Heart Rate at Radial Artery and Carotid Artery, Calculation of Target Heart Rate developing a 5-10 minute routine of aerobics with appropriate music for each component of health related. (iii) (iii) Physical fitness.
4.	SPORTS INDUSTRY & MARKETING: Identify an issue or a trend in the sports industry: Players in professional or college sports/Ownership Marketing Plan: Environmental Factors and Product Plan Draft, Paper bibliography/works cited. (i) Sponsorship proposal (ii) Developing a budget plan for an event (iii) Athlete branding.

Reference Books:

- Motor Learning and Control: Concepts and Applications, Magill, R.A., McGraw Hill Publication.
- Principles and Practices of Sport Management, Master Alexis, L.P., C. Barr and M. Humms, Jones and Bartlett Publisher. Fitness through Aerobics, Bishop, J.G., Benjamin Cummings USA.
- Physical Activity and Health: An Interactive Approach, Brown K.M., Jones and Bartlett Publisher.
- Sponsorship in marketing: Effective communications through sports, arts and events, Cornwell. T.B, Routledge Publishers.
- Sports Marketing: A Practical Approach, De Garris, L., Routledge Publishers, USA.



2BOD-11: Foundation: Essentials of National Service Scheme (NSS)

Credit: 0.5

Sr. no.	Topic (Any Two out of 4 Components)
1.	INTRODUCTION TO NSS Orientation and structure of NSS, Objectives of NSS, History of Social Reforms in Modern India: Brahmo Samaj, Arya Samaj, Satya shodhak Samaj: Principles and Functions.
2.	REGULAR ACTIVITIES Distribution of working hours- association between issues and programs- Community projects- urban rural activities, association-modes of activity evaluation.
3.	WORKING FOR SOCIETY Participation in various activities like tree plantation, No tobacco awareness program, Heal th camps and health & hygiene awareness program, blood donation camps, literacy aware ness program etc.
4.	N.S.S REGULAR ACTIVITIES College campus activities, N.S.S. activities in Urban and Rural areas, Role of Non-Government Organisation (NGO) in social Reforms, Red Cross, Rotary, Celebration of important days.

Reference Books:

- National Service Scheme Manual, Govt. of India.
- Induction Training Module for NSS Program Officers, Rajiv Gandhi National institute of youth Development.
- Orientation Courses for N.S.S. programme officers, TISS.
- "Social Problems in India," Ram Ahuja, Rawat Publication.
- History of Social Reforms in Maharashtra, Ed. J. Y. Bhosale, S. U. Kolhapur.



2BOD-11: Foundation: Essentials of National Cadet Corps (NCC)

Credit: 0.5

Sr. no.	Topic (Any Two out of 7 Components)
1.	INTRODUCTION TO NCC: Aims, objective, Organization of NCC, incentives, duties of NCC cadet/volunteers, NCC comps: types and conduct.
2.	NATIONAL INTEGRATION & AWARENESS: Religions, Culture, Traditions and Customs of India, National Integration: Importance and Necessity, Factor affecting National Integration, Unity in Diversity, Threats National Security, Freedom Struggle.
3.	ENVIRONMENT AWARENESS & CONSERVATION: Natural Resourses Conservation and Management. Water Conservation and Rainwater Harvesting.
4.	DISASTER MANAGEMENT: Disaster Management Capsule, Organization, Types of Disasters. Essential Services, Assistance, Civil Defense Organization, Initiative Training, Organizing Skills, Dos and Don'ts, Natural Disasters, Man Made Disasters, Fire Services and Fire Fighting.
5	COMMUNICATION AND PERSONALITY DEVELOPMENT: Personality Development Capsule, Factors, Self- awareness, Empathy, critical and creative Thinking, Decision Making and Problem Solving. Communication Skills, Group Discussions, Coping with Stress and Emotions, Change your Mindset, Time Management, Social Skills, Team Work, Career counselling, SSB Procedure and Interview Skills, Public Speaking.
6	PERSONALITY DEVELOPMENT & LEADERSHIP: Introduction to Personality Development, Factors Influencing /Shaping Personality: Physical, Social, Physiological, Philosophical and Psychological. Self-Awareness Know yourself/Insight, Change Your Mind Set, Communication Skills: Group Discussion, Public Speaking, Leadership Traits, Types of Leadership.
7	HEALTH AND HYGINE: Hygiene and Sanitation (Personal and Camp), First Aid in Common Medical Emergencies and Treatment of Wounds. Introduction to Yoga.

Reference Books:

- NCC Cadets Handbook Common, Directorate General of NCC, New Delhi.
- NCC Cadets Handbook Special, Directorate General of NCC, New Delhi
- Chandra B. Khanduri, "Field Marshal KM Cariappa: a biographical sketch", Dev Publications, 2000.
- Gautam Sharma, "Valour and Sacrifice: Famous Regiments of the Indian Army", Allied Publishers, 1990.