

University of Rajasthan Jaipur

SYLLABUS

(Three/Four Year Under Graduate Programme in B.Des. - Interior Design)

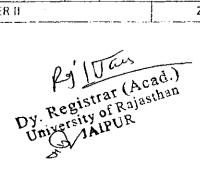
I & II Semester

Examination-2023-24

As per NEP - 2020

Dy. Registrar (Acad.)
University of Rajasthan
University of IAIPUR

CURRICULUM FOR B.DES (INTERIOR DESIGN)								
				ROGRAM CODE UGO503				
CONTROL OF THE	COURS	© (1672)¥380	· · · · · · · · · · · · · · · · · · ·					
	E							
	CATEG		COURSE					
S.No.	ORY	TYPE	CODE	COURSE NAME	L	T	Р	,TOTAL CREDIT
	開聯對		的					
307								·
1	DCC-1L	MJR	INT-51L-101	History of Art & Design	4	0	0	4
2	DCC-1P	MJR	INT-51P-102	History of Art & Design	0	0	2	2
				Fundamental of Design				
3	DCC-2L	MJR	INT-51L-103-	<u> </u>	2	0	0	2
				Fundamental of Design				Ī
4	DCC-2P	MJR	INT-51P-104	& Methods	0	0	4	4
5	DCC-3P	MJR	INT-51P-105	Visualisation & Ideation	0	0	6	6
6	AECC-1			Hindi + English	2+2	0	0	4
	 							-
7	VAC-1			Value Added Course-I	2	0	0	2
8	SEC-1			Skill Enhancement course - I	2	0	0	2
	1 5 5 5	TC	TAL CREDITS A	ACHIEVED AFTER SEMESTER I	<u> </u>	<u> </u>	1	26
		F 1/1/2		SEMESTER II		······		
144 1. (2 Page 1		er transfer		Overview & evolution of			1	
1	DCC-4L	MJR	INT-52L-201	Interior Design Industry	4	0	O	4
				Overview & evolution of			ļ	
· 2	DCC 4P	MJR	INT-52P-202	Interior Design Industry	0	0	2	2
				Anthropometrics &				
3	DCC-5L	MJR	INT-52P-203	Ergonomics	0	0	. 6	6
				Material & Form			T	
4	DCC-6L	MJR	INT-52L-204	Exploration	2	0	0	2
				Material & Form			+	1
5	DCC 6P	MJR	INT-52P-205	Exploration	0	0.	4	4
6	AECC-2			English + HIndi	2+2	0	0	4
7	VAC-2			Value Added Course-II	2	0	0	2
8	SEC-2			Skill Enhancement course II	2	0	0	2
	<u> </u>	ТО	TAL CREDITS A	CHIEVED AFTER SEMESTER II	· ·		•	26
								ار این محمد محمد محمد این این این است. این





Year 1 Internship = Total Credits
。 [1] [1] [1] [1] [1] [1] [1] [1] [1] [1]
Greatits Officered for it years Certificate the Secretary 52 in the California Secretary 1556 and
· · · · · · · · · · · · · · · · · · ·
FOR EXITIABLE R4 St. year minimum credits requirements is 52 from course and 4 credits from the
internal lip thence certificate 56 Gredits and the second and the second and the second and the second and the
Carear Opportunities: Preelance Designer/Design Assistant; cAD Jechnician; Assistant acumiture Designer
CateBlanbbottnuines: Ficelauce nesidual mesidu yesistatu e yang catinitian i assistan a catinitian a catinita a catin

Dy Rosing (Accd)

B.Des Semester

(Fashion Design, Interior Design, Jewellery Design, Communication Design, Product Design)

Examination Scheme

Time: Three Hours

Maximum Marks:80

No supplementary Answer book will be given to any candidate. The candidates should write the answers precisely in the main answer book only.

किसी भी परीक्षार्थी की पूरक उत्तर-पुस्तिका नहीं दी जीएगी प्रिक्षारियों को समस्त प्रश्नों के उत्तर मुख्य उत्तर पुस्तिका में ही लिखने बीहिए।

Answers to short answer-type questions must be given in sequential order. Similarly, all the parts of one question of descriptive part should be answered in one place in the answer-book.

लघुत्तरात्मक प्रश्नों के उत्तर प्रश्नों के क्रमानुसार ही देवें। इसी प्रकार किसी भी एक वर्णनात्मक प्रश्न के अन्तर्गत पूछे गए विभिन्न प्रश्नों के उत्तर उत्तर—पुस्तिका में एक ही स्थान पर क्रमानुसार हल करने चाहिए।

Write your roll number on the question paper before start writing the answers to questions.

प्रश्नों के उत्तर लिखने से पूर्व प्रश्न-पत्र पर रोल नम्बर अवस्य लिखिए।

Part A is compulsory having 10 very short answer-type questions (with a limit of 20 words) of two marks each. The first question is based on knowledge, understanding, and applications of the topics/text covered in the syllabus.

भाग अ में दो अंक के 10 अति लघु उत्तरीय प्रश्न (20 शब्दों की सीमा के साथ) अनिवार्य हैं। पहला प्रश्न पाठ्यक्रम में शामिल विषयों / पाठ के ज्ञान, समझ और अनुप्रयोगों पर आधारित है।

Part B of the question paper is divided into four units comprising question numbers 2-5. There is one descriptive question from each unit with internal choice. Each question will carry 15 marks.

भाग ब के प्रश्न पत्र को प्रश्न संख्या 2—5 सहित चार इकाइयाँ में विभाजित हैं। प्रत्येक इकाई से आंतरिक विकल्प के साथ एक वर्णनात्मक प्रश्न हैं। प्रत्येक प्रश्न 15 अंक का है।

Dy Registrar

Avection Property

(3A

B.Des Semester

ashion Design, Interior Design, Jewellery Design, Communication Design, Product Design

Examination Scheme

Time:- Three Hours

Maximum Marks :- 40

No supplementary Answer book will be given to any candidate. The candidates should write theanswers precisely in the main answer book only.

किसी भी परीक्षार्थी को पूरक उत्तर-पुस्तिका नहीं दी जाएगी। परीक्षार्थियों को समस्त प्रश्नों के उत्तर मुख्य उत्तर पुरितका में ही लिखने चाहिए।

Answers to short answer-type questions must be given in sequential order. Similarly, all the parts of one question of descriptive part should be answered in one place in the answer-book.

लघुत्तरात्मक प्रश्नों के उत्तर प्रश्नों के क्रमानसार ही देवें। इसी प्रकार किसी भी एक वर्णनात्मक प्रश्न गए विभिन्न प्रश्नों के उत्तर उत्तर-पुस्तिका में एक ही स्थान पर क्रमानुसार हल करने चाहिए।

Write your roll number on the question paper before start writing the answers to questions.

प्रश्नों के उत्तर लिखने से पूर्व प्रश्न-पत्र पर रोल नम्बर अवश्य लिखिए।

Part A is compulsory having 10 very short answer-type questions (with a limit of 20 words) of One marks each. The first question is based on knowledge, understanding, and applications of the topics/text covered in the syllabus.

नाग अ में एक ऑक के 10 अति लघ् उत्तरीय प्रश्न (20 शब्दों की सीमा के साथ) अनिवार्य है। पहला प्रश्न पाठ्यक्रम में शामिल विषयों / पाठ के ज्ञान, समझ और अनुप्रयोगों पर आधारित है।

Part B of the question paper is divided into four units comprising question numbers 2-5. There is one descriptive question from each unit with internal choice. Each question will carry 7.5 marks.

भाग ब के प्रश्न पत्र को प्रश्न संख्या 2-5 सहित चार इकाइयों में विभाजित हैं। प्रत्येक इकाई से आंतरिक विकल के साथ एक वर्णनात्मक प्रश्न हैं। प्रत्येक प्रश्न 7.5 अंक का है।

DCC-1L
INT-51L-101: History Of Art & Design

NSQF LEVEL: 5/SEM I	EOSE :-	3 HOURS	
CREDITS: 4 CREDITS	MARKS	MIDTERM	EOSE
SUB-TYPE: THEORY	MAX	20	80
DELIVERY: LECTURE, TUTORIAL	MIN	08 .	32

DCC-1P

INT-51P-102: History Of Art & Design

NSQF LEVEL: 5/SEM I	EOSE :-	4 HOURS	
CREDITS: 2 CREDITS	MARKS	MIDTERM	EOSE
SUB-TYPE: PRACTICAL	MAX	10	40
DELIVERY: TUTORIAL	MIN	04	16

PRE-REQUISITE OF THE COURSE: None

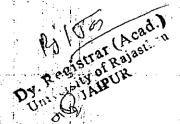
OBJECTIVE: The objective of this course is to provide students with a comprehensive understanding of the history of art and design and its influence on contemporary interior design. The course will explore various art movements, design styles, and influential design ers throughout history. Students will analyze add interpret art and design within their historical and cultural contexts and apply this knowledge to inform their design practice.

Dy. Registrar (A.cad.)
University of Rajustian
University of Rajustian

Ċ

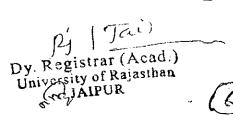
SYLLABUS:

UNITS	ТОРІС	TEACHING HOURS
UNIT I	INTRODUCTION TO ART AND DESIGN HISTORY	20 Hours
	 Importance of studying art and design history in Product design Overview of major art movements and design styles Understanding the relationship between art, design, and culture Social, historical and cultural context of key art and design movements, theories and practices Use primary and secondary research methods to investigate an area of practice, with consideration of 	
	research ethics ANCIENT ART AND DESIGN Indian Art, Craft and Culture	
	 Egyptian, Greek, and Roman art and architecture Prehistoric art and cave paintings Byzantine and Islamic art and design influences 	e e
u n it ii.	RENAISSANCE AND BAROQUE ART	20 Hours
	 Italian Renaissance art and architecture Northern Renaissance and its impact on design Baroque art and architecture TLAND DESIGN OF THE 18TH AND 19TH CENTURIES 	
	Neoclassical and Romantic movements Judistrial Revolution and its impact on design.	





	 Arts and Crafts movement, Art Nouveau, Modernism, Futurism 	
UNIT III	MODERN ART AND DESIGN MOVEMENTS	20 Hours
	 Art Deco, Bauhaus, Surrealism, Streamlining, Organic Design Scandinavian Modern, Contemporary, Pop Art Impressionism and Post-Impressionism Art Nouveau and Jugendstil Cubism, Futurism, and Constructivism Bauhaus and the International Style CONTEMPORARY ART AND DESIGN Space Age, Minimalism, Postmodernism, Memphis, Deconstructivism Postmodernism and its influence on design Contemporary art movements and design trends Sustainable and socially responsible design practices 	
UNIT IV	FIELD VISITS TO MUSEUMS AND GALLERIES	30 Hours
	 Visit local museums and galleries to observe and analyze artworks and design objects in person Analyze historical and contemporary design elements and influences 	
	INTEGRATION OF ART AND DESIGN HISTORY INTO PRODUCT DESIGN	
	 Applying knowledge of art and design history to inform design decisions Incorporating historical design styles and elements into contemporary projects 	



 Creating design concepts inspired by specific art movements or periods

SUGGESTED BOOKS AND REFERENCES:

- 1. "A World History of Art" by Hugh Honour and John Fleming
- 2. "A History of Interior Design" by John Pile
- 3. "The Story of Art" by E.H. Gombrich

LEARNING OUTCOMES:

By the end of the course, students should be able to:

- 1. Demonstrate knowledge of major art movements and design styles throughout history.
- 2. Analyze and interpret artworks and design objects within their historical and cultural contexts.
- 3. Understand the impact of historical art and design on contemporary interior design.
- 4. Apply historical design elements and styles to inform their design concepts and projects.
- 5. Recognize and appreciate the contributions of influential designers throughout history.
- 6. Conduct visual analysis and critical interpretation of art and design works.
- 7. Communicate the historical and cultural significance of art and design in written and only presentations.

MOOC: Students are encouraged to enroll in the following MOOCs to supplement their learning:

- 1. "Art and Ideas: Teaching with Themes" on Coursera
- 2. "Design Thinking: Creativity for the 21st Century" on edX



Dy Romietrar (Acadan
Dyn Romietrar (Acadan
Dyn Romietrar (Acadan

DCC-2L

INT-51L-103: Fundamental Of Design & Methods

NSQF LEVEL: 5/SEM I	EOSE :-	3 HOURS	
CREDITS: 2 CREDITS	MARKS	MIDTERM ,	EOSE
SUB-TYPE: THEORY	MAX	10	40
DELIVERY: LECTURE, TUTORIAL	MIN	04	16

INT-51P-104: Fundamental Of Design & Methods

DCC-2P

NSQF LEVEL: 5/SEM I	EOSE :-	4 HOURS		
CREDITS: 4 CREDITS	MARKS	MIDTERM	FOSE	:
SUB-TYPE: PRACTICAL	MAX	20	80	 -
DELIVERY: TUTORIAL	MIN	08	32	

PRE-REQUISITE OF THE COURSE: None

OBJECTIVE: The objective of this course is to introduce students to the fundamental principles of design and design methods. Through hands on practice and experimentation, students will learn how to generate and refine design concepts, create visual representations of their deats, and develop a critical understanding of the design process.





SYLLABUS:

UNITS	TOPIC	TEACHING HOURS
UNITI	INTRODUCTION TO DESIGN THINKING Understanding design as problem-solving Introduction to design thinking and its application Case studies on successful designs ELEMENTS AND PRINCIPLES OF DESIGN Basic elements of design: line, shape, form, texture, color Principles of design: balance, proportion, rhythm, contrast, unity Examples of designs that demonstrate effective use of elements and principles	20 hours
UNIT II	SKETCHING AND VISUAL COMMUNICATION Techniques for sketching and drawing Principles of visual communication Basic principles of composition DESIGN PROCESS AND METHODOLOGIES Overview of design process and methodology User-centered design process Prototyping and testing	20 hours
UNIT III	DESIGN TOOLS AND TECHNOLOGIES Introduction to design tools and software Selecting appropriate tools for design projects	20 hours
UNITIV	FIELD WORK • Visiting design studios, exhibitions, and design shows. • Collecting reference material for projects.	30 hours

SUGGESTED BOOKS AND REFERENCES:

- 1. Design Thinking: Understanding How Designers Think and Work by Nigel Cross
- 2. The Design of Everyday Things by Don Norman
- 3. A Designer's Art by Paul Rand





4. Design Basics by David A. Lauer and Stephen Pentak

LEARNING OUTCOMES:

- 1. Understand the basic principles of design and design thinking.
- 2. Develop a critical understanding of the design process and methodologies.
- 3. Demonstrate an ability to generate and refine design concepts.
- 4. Develop visual communication and presentation skills.
- 5. Understand the importance of user-centered design and prototyping.
- 6. Be able to select and use appropriate design tools and technologies.
- 7. Gain exposure to the design industry through fieldwork and studio visits.

Dy. Registrar (Acad.)
University of Rajasthan

DCC-3

INT-51P-105: Visualisation & Ideation

NSQF LEVEL: 5/ŞEM	EOSE	4 HOURS		
CREDITS: 6 CREDITS	MARKS	MIDTERM	EOSE	
SUB-TYPE: PRACTICAL	MAX	30	120	
DELIVERY: PRACTICAL	MIN	12 •	48	

PRE-REQUISITE OF THE COURSE: None

OBJECTIVE: This course aims to provide students with fundamental drawing techniques and visual communication skills used in the field of design. By the end of the course, students will be able to sketch, draw, and present their ideas visually using various tools and techniques.

SYLLABUS:

UNITS	TOPIC	TEACHING HOURS
UNITI	INTRODUCTION TO VISUAL COMMUNICATION	20 hours

Dy. Registrar (Acad.)
University of Rajasthan
A JAIPUR

(1)

12

	Introduction to the basics of visual communication and its significance in design, an overview of the course content and objectives. DRAWING BASICS Line, Shape, Form, and Proportion: Introduction to basic drawing techniques including line work, geometric shapes, freehand sketching, and understanding the proportions and forms of objects.	
UNIT II	PERSPECTIVE DRAWING TECHNIQUES Introduction to 1-point, 2-point, and 3-point perspective drawing techniques and how to use them to create 3D visualizations.	40 hours
UNIT III	RENDERING TECHNIQUES Introduction to different rendering techniques such as hatching, cross-hatching, stippling, and shading, and how to use them to create realistic textures and materials. COMPOSITION AND LAYOUT DESIGN Introduction to the principles of composition and layout design, and how to apply them to create ofference visual communications.	40 hours
UNIT IV	 and how to apply them to create effective visual communication. PRESENTATION TECHNIQUES Introduction to presentation techniques and how to use them to present design ideas effectively. Introduction to Technologies of Virtuality Producing VR and AR Experiences I: Design Overview 	10 hours





SUGGESTED BOOKS AND REFERENCES:

- 1. "Drawing for Designers" by Alan Pipes
- 2. "Design Drawing" by Francis D.K. Ching and Steven P. Juroszek
- 3. "Sketching: Drawing Techniques for Product Designers" by Koos Eissen and Roselien Steur

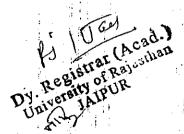
LEARNING OUTCOMES:

- 1. Develop fundamental drawing techniques used in the field of design.
- 2. Apply perspective drawing techniques to create 3D visualizations.
- 3. Use rendering techniques to create realistic textures and materials.
- 4. Communicate design ideas visually through freehand sketching.
- 5. Create effective compositions and layouts.
- 6. Understand color theory and application in design.
- 7. Present design ideas effectively through visual aids.

MOOCS:

- 1. "Drawing for Designers" by Alan Pipes Online Course available on Udemy (https://www.udemy.com/course/drawing-for-designers/)
- 2. "Introduction to Sketching for Product Designers" Online Course available on Coursera (https://www.coursera.org/learn/sketching)
- 3. "Color Theory for Designers" Online Course available on Skillshare

 (https://www.skillshare.com/classes/Color-Theory-for-Designers-Core-Concepts-and-Exercises/1675562632)



AECC-1

<u>Hindi</u>

*Syllabus Prescribed by the University of Rajasthan

VAC-1

Value Added Course-I

*Select a course from the list provided by the University of Rajasthan for the Value Added Course.

SEC-1

Skill Enhancement Course-I

*Select a course from the list provided by the University of Rajasthan for the Skill Enhancement Course.

Fi Tan (Acad.) Universal Rajasthan JAIPUR

DCC - 4L

INT-52L-201:Overview and Evolution of Interior Design Industry

NSQF LEVEL: 5/SEM Ii	EOSE :-	3 HOURS	
CREDITS: 4 CREDITS	MARKS	MIDTERM	EOSE
SUB-TYPE: THEORY	MAX	20	80
DELIVERY: LECTURE, TUTORIAL	MIN	08	32

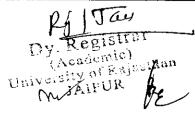
DCC - 4P

INT- 52P -202: Overview and Evolution of Interior Design Industry

NSQF LEVEL: 5/SEM II	EOSE :-	2 HOURS	
CREDITS: 2 CREDITS	MARKS	MIDTERM	EOSE
SUB-TYPE: PRACTICAL	MAX	10	40
DELIVERY: TUTORIAL	MIN	04	16

DCC- 5
INT-52P-203: Anthropometrics & Ergonomics

NSQF LEVEL: 5/SEM II	EOSE :-	4 HOURS	
CREDITS: 6 CREDITS	MARKS	MIDTERM	EOSE
SUB-TYPE: PRACTICAL	MAX	30	120
DELIVERY: PRACTICAL	MIN	12	48

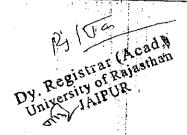




Students will also be introduced to various design styles, materials, and technologies used in the industry.

SYLLABUS:

UNITS	TOPIC	TEACHING HOURS
UNITI	INTRODUCTION & OVERVIEW OF INTERIOR DESIGN INDUSTRY	21 hours
	 Overview of the interior design industry Historical evolution of interior design Current trends in the industry 	
	 Interior design sectors: Residential, commercial, hospitality, healthcare, etc. 	
	Market trends and emerging design styles	
	Technological advancements and their impact on the industry	
	Responsibilities and tasks of an interior designer.	
	Collaboration with clients, contractors, and suppliers	
	Time management and project organization	
וו דואע	INTERIOR DESIGN PROJECT STAGES	25 hours
	 Pre-design phase: Research, site analysis, and client brief Design development phase: Concept development, space planning, and material selection Construction phase: Documentation, coordination, and project management Post-construction phase: Installation, styling, and project evaluation 	
INIT III	KEY STAKEHOLDERS IN INTERIOR DESIGN AND CONSTRUCTION INDUSTRY	25 hours
	 Clients: Residential, commercial, and institutional Architects and builders 	



	 Exploration of influential interior designers and their design philosophies Contractors and subcontractors Suppliers and manufacturers Regulatory authorities and building codes 	,
UNITIV	PROFESSIONAL ETHICS & CAREER OPPORTUNITIES IN INTERIOR DESIGN, • Ethical responsibilities towards clients, colleagues, and the environment • Industry standards and best practices • Code of conduct and professional associations • Overview of various career paths in interior design and related fields • Entrepreneurship and freelancing opportunities • Collaboration with other design professionals (architects, decorators, etc.) • Green design principles • Sustainable materials and technologies • LEED certification	25 hours

SCHEMES OF EXAMINATION:

- 1. MIDTERM assessment 40 marks (20 marks for theory and 20 marks for practical)
- 2. End semester examination 60 marks (30 marks for theory and 30 marks for practical)

SUGGESTED BOOKS AND REFERENCES:

- 1. Interior Design: A Critical Introduction by Clive Edwards
- 2. Interior Design Since 1900 by Anne Massey
- 3. Interior Design Reference Manual: Everything You Need to Know to Pass the NCIDQ Exam by David Kent Ballast
- 4. Interior Design Since 1900 by Anne Massey
- 5. Interior Design Reference Manual: Everything You Need to Know to Pass the NCIDQ Exam by David Kent Ballast





6. Time-Saver Standards for Interior Design and Space Planning by Joseph DeChiara, Julius Panero, and Martin Zelnik

LEARNING OUTCOMES:

- 1. Understand the role of interior designers and their responsibilities in the industry.
- 2. Explain the evolution of the interior design industry and current trends.
- 3. Understand the various stages involved in an interior design project.
- 4. Identify and describe the key stakeholders in the interior design and construction industry.
- 5. Demonstrate knowledge of professional ethics and industry standards in interior design.
- 6. Demonstrate effective communication and presentation skills.
- 7. Understand the importance of sustainability in interior design and identify sustainable materials and technologies.

Dy Registrat Rajastlan



PRE-REQUISITE OF THE COURSE: None

OBJECTIVE:

- 1. To provide students with a fundamental understanding of anthropometrics and ergonomics
- 2. To teach students how to apply anthropometric data and ergonomic principles in interior design
- 3. To enable students to design spaces that are comfortable, functional, and safe for users
- 4. To introduce students to the importance of human-centered design in interior design practice

SYLLABUS:

UNITS	TOPIC		TEACHING HOURS
UNIT!	INTRODUCTION TO ANTHROPOMETRICS	.	10 hour.
1			1





	 Definition and scope of Anthropometrics Measurement techniques and tools Anthropometric data collection and analysis 	
UNITII	ERGONOMICS AND INTERIOR DESIGN	20 hours
	 Introduction to Ergonomics Applying ergonomic principles in interior design Ergonomic considerations for furniture design Ergonomic considerations for space planning 	
	 Range of Motion Human factors and the design process Applications of Ergonomics in Interior design 	
UNIT III	HUMAN-CENTERED CENTRIC DESIGN	25 hours
	 The importance of human-centered design in interior design Standard dimensions 	
	Designing for a given space	
	Design considerations for different user groups	
	Designing for universal accessibility and inclusivity	
UNIT IV	ANTHROPOMETRICS IN INTERIOR DESIGN	25 hours
	 Applying anthropometric data in interior design Anthropometric considerations for furniture design Anthropometric considerations for space planning 	

NOTE: The Unit must be accomplished by practical application of the learnt subject. Students must engage in developing an actual product based on their learning from the course.

SUGGESTED BOOKS AND REFERENCES:

- 1. "Anthropometry for Designers" by A. M. Chakrabarti
- 2. "Ergonomics for Beginners" by Jan Dul and Bernard Weerdmeester '
- 3. "Human Dimension and Interior Space" by Julius Panero and Martin Zelnik

LEARNING OUTCOMES:





- 1. Understand the fundamental concepts and techniques of anthropometrics and ergonomics
- 2. Apply anthropometric data and ergonomic principles in interior design
- 3. Design spaces that are comfortable, functional, and safe for users
- 4. Incorporate human-centered design principles into their design practice

MOOC:

Students are encouraged to enroll in the following MOOCs to supplement their learning:

- 1. "Designing for People: An Introduction to Human-Computer Interaction" by University of California San Diego
- 2. "Ergonomics and Human Factors: An Introduction" by University of Derby

Dy. Registrar (Acad.)
University of Rajasthan
TAIPUR

DCC-6L , INT-52L-204: Material & Form Exploration

NSQF LEVEL: 5/SEM II	EOSE :-	3 HOURS		
CREDITS: 2 CREDITS	MARKS	MIDTERM	EOSE	
SUB-TYPE: THEORY	MAX	10	40	
DELIVERY: LECTURE, TUTORIAL	MIN	04	16	

<u>DCC-6P</u> INT-52P-205: Material & Form Exploration

NSQF LEVEL: 5/SEM II	EOSE :-	4 HOURS		
CREDITS: 4 CREDITS	MARKS	MIDTERM	EOSE	
SUB-TYPE: PRACTICAL	KAKS	20	80	ŷ
DELIVERY: TUTORIAL	MIN	08	32	· · · · · · · · · · · · · · · · · · ·

PRE-REQUISITE OF THE COURSE: None

OBJECTIVE: The objective of this course is to provide students with a comprehensive understanding of the interplay between materials and form in design. The course will focus on

Dy. Registrar (Acad.)
University of Pages than
University of Pages than

(19)

developing students' skills in exploring and manipulating form while integrating material properties. By integrating material and form exploration, students will'learn to create innovative and sustainable design solutions.

SYLLABUS:

UNITS	TOPICS	TEACHING HOURS
UNITI	INTRODUCTION TO FORM AND MATERIAL EXPLORATION	
	 Understanding the relationship between form and material in design Overview of techniques for form exploration Introduction to different materials and their properties 	20 hours
	SKETCHING AND DOODLING FOR FORM EXPLORATION	
	 Techniques for sketching and doodling to explore form Developing observational skills and hand-eye coordination Integrating materials into sketching exercises 	
UNIT II	MODEL MAKING AND MATERIAL MANIPULATION	
	 Introduction to materials used in model making Techniques for constructing models and manipulating materials Exploring form through physical models 	20 hours
	DIGITAL TOOLS FOR FORM EXPLORATION	
	 Introduction to 3D modeling software (e.g., SketchUp) Techniques for generating and manipulating forms digitally Integrating material properties and textures in digital models 	

Dy. Registrar (Acad.)
University of Rajasthan
JAIPUR

UNIT III	EVALUATION, REFINEMENT, AND MATERIAL SELECTION	
	Methods for evaluating and refining different form options	20 hours
	Critique sessions for evaluating student work	
	Consideration of material properties in form selection and refinement	
	MATERIAL APPLICATION AND INTEGRATION IN DESIGN	,
	 Hands-on exploration of different materials and their applications 	
e general	Experimentation with material combinations to enhance form	
	 Integrating materials and form into design projects 	
UNIT IV	SUSTAINABLE MATERIAL PRACTICES	30 hours
	Introduction to sustainable materials and their role in design	
	 Exploring eco-friendly material options and considerations Future trends in sustainable material exploration 	
	MATERIAL AND FORM INNOVATION	
·	Introduction to new and emerging materials in design	
	Case studies of innovative material applications	
	Discussion on future directions of material and form exploration	

SUGGESTED BOOKS AND REFERENCES:

(29)

Py Registrat (Acad)

Dy Registrat Rajasubau

Dyniversity of UR

- 1. Design Thinking: Understanding How Designers Think and Work by Nigel Cross
- 2. Form, Function, and Design by Paul A. Heskett
- 3. Sketching: The Basics by Roselien Steur and Koos Eissen
- 4. Material Revolution: Sustainable and Multi-Purpose Materials for Design and Architecture by Sascha Peters

MOOCS AND SELF-LEARNING INSTRUCTIONS:

- Sketching for Product Designers: https://www.udemy.com/course/sketching-for-product-designers/
- 2. 3D Modeling for Beginners: https://www.udemy.com/course/3d-modeling-for-beginners-learn-to-create-3d-models-from-scratch/
- 3. "Materials Science and Engineering: A Comprehensive Introduction" offered by MIT OpenCourseWare
- 4. "Sustainable Materials for Emerging Technologies" offered by Coursera

SELF-LEARNING INSTRUCTIONS:

- 1. Practice sketching and doodling to explore different forms and integrate material elements.
- 2. Experiment with different materials for model making and document the outcomes.
- 3. Explore and learn different 3D modeling software to create digital models that incorporate both material and form.
- 4. Visit material suppliers and manufacturers to gain hands-on experience with materials and understand their properties.
- Conduct material testing experiments to explore the physical properties and behavior of materials.
- 6. Explore online resources, case studies, and industry publications to stay updated.

LEARNING OUTCOME:

Understanding the relationship between form and material.

Dy. Registrar (Acad.)
University of Rajasthan

(25)

- To explore and manipulate form while integrating material properties
- To create innovative and sustainable design solutions.
- To critically evaluate, refine and select material and their properties.

My Resident A Cad.

AECC-2

English

*Syllabus Prescribed by the University of Rajasthan

NSQF LEVEL: 5/SEM Ii	EOSE :-	3 HOURS	
CREDITS: 2 CREDITS	MARKS	MIDTERM	EOSE
SUB-TYPE: THEORY	MAX	10	40
DELIVERY: LECTURE, TUTORIAL	MIN	04	16

AECC-2

<u>Hindi</u>

*Syllabus Prescribed by the University of Rajasthan

NSQF LEVEL: 5/SEM Ii	EOSE :-	3 HOURS	
CREDITS: 2 CREDITS	MARKS	MIDTERM	EOSE
SUB-TYPE: THEORY	MAX	10	40
DELIVERY: LECTURE, TUTORIAL	MIN	04	16

Dy Registrat

(Academyojasthan

University of yojasthan

VAC-2

Value Added Course-II VAC (Understanding Indian society & Culture)

*Select a course from the list provided by the University of Rajasthanfor the Value Added Course.

NSQF LEVEL: 5/SEM Ii	EOSE :-	3 HOURS	
CREDITS: 2 CREDITS	MARKS	MIDTERM	EOSE
SUB-TYPE: THEORY	MAX	10	40
DELIVERY: LECTURE, TUTORIAL	MIN	04	16

SEC-2

Skill Enhancement Course-II SEC (Effective Communication Skills)

*Select a course from the list provided by the University of Rajasthanfor the Skill Enhancement Course.

NSQF LEVEL: 5/SEM Ii	EOSE :-	3 HOURS	
CREDITS: 2 CREDITS	MARKS	MIDTERM	EOSE
SUB-TYPE: THEORY	MAX	10	40
DELIVERY: LECTURE, TUTORIAL	MIN	04	16

Dy Registrar
(Assuration)
Unit ensity y Regissihan
MALPUR

28