

University of Rajasthan Jaipur

SYLLABUS

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

I to IV Semester Examination-2024-25

As per NEP - 2020



FOUR-YEAR UNDERGRADUATE PROGRAMME in Faculty of Fine Arts

Bachelor of Design (Jewelry Design)

As Per UGC Curriculum & Credit Framework for Undergraduate Programmes under NEP 2020

Medium of Instruction: English

W.e.f. Academic Session 2024-25



SEMESTER I & II
SEMESTER III & IV

UNIVERSITY OF RAJASTHAN, JAIPUR

Pr Taw Dy. Registrar (Academic) University of Rajasthan

PROGRAMME OUTCOMES:

- 1. **Design Skills**: Graduates will have developed advanced skills in designing jewelry, including conceptualization, sketching, CAD (Computer-Aided Design), and prototype development.
- 2. **Technical Proficiency**: They will be proficient in using various jewelry-making techniques and materials, such as metalsmithing, gemstone setting, enameling, and casting.
- 3. **Creativity and Innovation**: Graduates will demonstrate creative thinking and innovation in their designs, incorporating new trends, materials, and technologies into their work.
- 4. **Knowledge of Jewelry History and Styles**: They will have a solid understanding of the history of jewelry design, as well as knowledge of different styles and cultural influences.
- 5. **Business and Marketing Skills**: Programs often include courses on business practices specific to the jewelry industry, including pricing, marketing, branding, and entrepreneurship.
- 6. **Professional Development**: Graduates will be prepared for careers in the jewelry industry, with skills in portfolio development, presentation, and networking.
- 7. **Ethical and Sustainable Practices**: Increasingly, programs emphasize ethical and sustainable practices in jewelry design and production, preparing students to consider environmental and social impacts.
- 8. **Collaboration and Communication**: They will have experience working collaboratively with others in the industry, such as gemologists, manufacturers, and retailers, and will be effective communicators of their design concepts.
- 9. **Critical Thinking and Problem Solving**: Graduates will be able to analyze design challenges and solve problems creatively and effectively.
- 10. **Portfolio of Work**: By the end of the program, students will have developed a comprehensive portfolio showcasing their skills and creativity, which will be essential for seeking employment or further studies in the field.

Overall, the outcome of a bachelor's degree in Jewelry Design equips graduates with a combination of artistic creativity, technical skills, and business acumen necessary to succeed in the competitive and diverse field of jewelry design.



	CURRICULUM FOR B.DES (JEWELRY DESIGN)							
	PROGRAM CODE UG0504							
	COURSE							
<u>S.No</u>	CATEGO RY	TYPE	COURSE CODE	COURSE NAME	L	Т	P	TOTAL CREDIT
				YEAR 1				
				SEMESTER I				
			T					
1	DCC-1L	MJR	JEW-51L-101	Fundamental Of Design & Methods(theory)	2	0	0	2
2	DCC-1P	MJR	JEW-51P-102	Fundamental Of Design & Methods(practical)	0	0	4	4
3	DCC-2L	MJR	JEW-51L-103	History Of Art & Design (theory)	4	0	0	4
4	DCC-2P	MJR	JEW-51P-104	History Of Art & Design (practical)	0	0	2	2
5	DCC-3P	MJR	JEW-51P-105	Visualization, Ideation and representation	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
TOTAL CREDITS ACHIEVED AFTER SEMESTER I						26		
	SEMESTER II							
1	DCC-4L	MJR	JEW-52L-106	Overview & Evolution of Jewelry Industry	4	0	0	4



2	DCC 4P	MJR	JEW-52P-107	Overview & Evolution of Jewelry Industry	0	0	2	2
3	DCC-5P	MJR	JEW-52P-108	Jewelry Drawing & Techniques	0	0	6	6
4	DCC-6L	MJR	JEW-52L-109	Material & Form Exploration	2	0	0	2
5	DCC 6P	MJR	JEW-52P-110	Material & Form 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
TOTAL CREDITS ACHIEVED AFTER SEMESTER II					26			
	Year 1 Internship					Total		

Exit Level 5 --- Credits Acquired - 52 --- Award - Certificate in jewelry design

Credits Offered for 1 year Certificate

"For EXIT AFTER 1st year minimum credits requirements is 48 from course and 4 credits from the internship, hence certificate @ 52 Credits. After 1st year, internship is mandatory for exiting at this stage.

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Career	UUU	UI LUI	IILIES.

Freelance Designer

Design Consultant

Design Assistant

CAD Technician



Credits

4

= 56

52

Sales executive, merchandiser	

SEMESTER - 1



DCC-1L

JEW-51L-101: Fundamental Of Design & Methods(THEORY)

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

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

UNITS	TOPICS	TEACHING HOURS
UNIT I	Six limbs of art: Shadang Principles of Design: contrast, balance, emphasis, proportion, hierarchy, repetition, rhythm, pattern, white space, movement, variety, and unity	8



UNIT II	Elements of design: Line, shape, form, color, texture, space.	7
UNIT III	 Sustainable Design Minimize non-renewable energy consumption and waste. Use environmentally preferable products. Enhance operational and maintenance practices. 	8
UNIT IV	Introduction to design thinking - Empathize, define, ideate, prototype, test.	7

SUGGESTED BOOKS AND REFERENCES:

- "The Natya Shastra" by Bharata Muni
- "Universal Principles of Design" by William Lidwell, Kritina Holden, and Jill Butler.
- "Design Elements: A Graphic Style Manual" by Timothy Samara.
- "Sustainable Design: A Critical Guide" by David Bergman.
- "Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation" by Tim Brown.

LEARNING OUTCOMES:

- To Comprehend Historical Art Principles
- To Apply Design Principles and Elements
- To Implement Sustainable Design Practices
- To Master Design Thinking Process
- To Produce Cohesive Design Projects

COURSE OUTCOMES

- To apply "Six Limbs of Art" (Shadang) effectively across diverse art forms.
- To implement Principles of Design to create cohesive and impactful designs.
- To utilize Elements of Design to communicate artistic concepts effectively.



- To design sustainable solutions by minimizing energy consumption and waste and using environmentally preferable products.
- To employ Design Thinking to innovate and solve design challenges through usercentered approaches.

DCC-1P

JEW-51P-102: Fundamental Of Design & Methods(PRACTICAL)

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

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 ideas, and develop a critical understanding of the design process.

UNITS	TOPIC	TEACHING HOURS
UNIT I	PRINCIPLES OF DESIGN	30



	Introduction to Design Principles	
	Six limbs of art - Shadang	
	 Course overview and introduction to design principles. 	
	 Elements of design: line, shape, form, color, texture, space. 	
	Composition and Layout	
	 Principles of composition: balance, contrast, emphasis. 	
	 Principles of layout: alignment, proximity, repetition. 	
	Typography	
	 Basics of typography: typefaces, fonts, readability. 	
	 Application of typography in design. 	
UNIT II	DESIGN METHODS AND PROCESSES	30
	Design Thinking	
	 Introduction to design thinking. 	
	 Stages of design thinking: empathize, define, ideate, prototype, test. 	
	Ideation Techniques	
	Brainstorming and mind mapping.	
	Sketching and prototyping.	
	Concept Development	
	Developing design concepts.	
	Concept evaluation and selection.	
	Design Process in Practice	
	Case studies and examples of design processes.	
	 Applying design methods to a project. 	
UNIT III	TOOLS AND TECHNOLOGIES IN DESIGN	30



Traditional Design Tools Sketching and drawing techniques. Model making and physical prototyping. **Material Exploration** POP – Plaster of Paris Different Types of Clay **Digital Design Tools** Introduction to design software Digital illustration and image manipulation. **Tools and Technologies in Practice** Applying tools and technologies to a project. **UNIT IV** 30 **Environment - Centered Design and Sustainability Understanding Users** Basics of environment-centered design. User needs and behaviors. Sustainable Design Principles of sustainable design. Life cycle assessment and eco-friendly materials. Social Responsibility and Ethics in Design The role of design in society. Ethical considerations in design practice. **Environment - Centered Design and Sustainability in Practice** Case studies and examples of environment-centered and sustainable design. Applying environment-centered and sustainable design principles to a project.



SUGGESTED BOOKS AND REFERENCES:

- Design Thinking: Understanding How Designers Think and Work by Nigel Cross
- The Design of Everyday Things by Don Norman
- A Designer's Art by Paul Rand
- Design Basics by David A. Lauer and Stephen Pentak

LEARNING OUTCOMES:

- To Understand fundamental principles of design.
- To Explore various design methodologies and their applications.
- To Develop problem-solving and critical-thinking skills through design projects.
- To Enhance creativity and innovation in design thinking.
- To Build a strong foundation in design theory and practice.

COURSE OUTCOMES:

- To demonstrate comprehensive understanding of fundamental principles of design.
- To apply diverse design methodologies effectively in various applications.
- To develop strong problem-solving and critical-thinking skills through hands-on design projects.
- To enhance creativity and foster innovation in design thinking processes.
- To build a solid foundation in both theoretical knowledge and practical skills of design theory and practice.

DCC-2L

JEW-51L-103: History of Art - Western(THEORY)

Pr Taw Dy. Registrar (Academic) University of Rajasthan

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

OBJECTIVE: The objective of this course is to provide students with a comprehensive understanding of the evolution of art and design from Prehistoric times to the Romantic era. Students will analyze key artistic movements, styles, and innovations, while recognizing their lasting influence on contemporary design. Through the study of significant works of art and architecture, the course aims to develop students' ability to critically assess historical context and its impact on the development of artistic expression.

	торіс	HOURS
UNITS		
UNIT I	Prehistoric Art (40,000 - 4,000 BCE)	15
	 Early human creativity: cave paintings, carvings, and tools. Key Artworks: Altamira, Lascaux Cave paintings, Venus of Willendorf. 	
	Ancient Egyptian Art (3,100 - 332 BCE)	
	 Monumental art and architecture with a focus on the afterlife and pharaohs. 	



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	Key Artworks: Pyramids of Giza, Bust of Nefertiti.	
	Ancient Greek Art (800 - 31 BCE)	
	 The idealization of human forms, mythology, and classical beauty. Key Artworks: Parthenon, Discobolus. 	
	Ancient Roman Art (500 BCE - 476 CE)	
	 Realism, public monuments, and advancements in architecture. Key Artworks: Colosseum, Augustus of Prima Porta. 	
UNIT II	Byzantine Art (500 - 1453 CE)	15
	 Religious mosaics, icons, and church decoration. Key Works: Hagia Sophia, Byzantine Icons. 	
	Romanesque Art (1000 - 1200 CE)	
	 Thick walls, rounded arches in architecture, and simple, symbolic art. Key Works: Basilica of Saint-Sernin. 	
	Gothic Art (1100 - 1400 CE)	
	 Pointed arches, flying buttresses, and stained-glass windows. Key Works: Notre Dame Cathedral, Chartres Cathedral. 	
UNIT III	Renaissance (1400 - 1600 CE)	15
	 Revival of classical antiquity, focus on humanism, perspective, and naturalism. Key Artists: Leonardo da Vinci, Michelangelo, Raphael. Key Artworks: Mona Lisa, Sistine Chapel, The School of Athens. 	
	Northern Renaissance (1400 - 1600 CE)	
	 Detailed, realistic art with symbolic meaning in Northern Europe. Key Artists: Jan van Eyck, Albrecht Dürer. Key Artworks: The Arnolfini Portrait, Melancholia I. 	
UNIT IV	Baroque Art (1600 - 1750 CE)	15



- Dramatic, emotional art with strong contrasts of light and shadow (chiaroscuro).
- **Key Artists**: Caravaggio, Bernini, Rembrandt.
- **Key Artworks**: The Ecstasy of Saint Teresa, The Night Watch.

Rococo Art (1700 - 1770 CE)

- Light-hearted, decorative, and playful style focusing on aristocratic leisure.
- **Key Artists**: Jean-Honoré Fragonard, Antoine Watteau.
- **Key Artworks**: The Swing, Pilgrimage to Cythera.

LEARNING OUTCOMES:

- 1. To understand the evolution of art and design from Prehistoric to Romanticism.
- 2. To analyze artistic styles, techniques, and innovations across major movements.
- 3. To recognize the influence of historical art on contemporary design practices.
- 4. To develop critical thinking by studying key works in their historical context.

COURSE OUTCOMES.

- To understand the progression of art and design from Prehistoric to Romanticism and its cultural impact.
- To analyze key artistic styles, techniques, and innovations across major historical movements.
- To recognize the influence of historical art on modern design practices.
- To apply critical thinking when evaluating significant works within their historical and cultural contexts.

SUGGESTED READINGS:

- "Art History" by Marilyn Stokstad and Michael W. Cothren
- "The Story of Art" by E.H. Gombrich
- "Gardner's Art Through the Ages" by Fred S. Kleiner
- "The Art Book" by Phaidon Editors
- "The Oxford History of Western Art" by Martin Kemp



- "Art: A World History" by Elke Linda Buchholz, Susanne Kaeppele, and others
- "The Complete History of Art" by Andrew Graham-Dixon
- "History of Art" by H.W. Janson and Dora Janson
- "The Art of the Renaissance" by Patrick de Rynck
- "Baroque and Rococo Art and Architecture" by Robert C. Smith

<u>DCC-2P</u>

JEW-51P-104: History of Art - Western(PRACTICAL)

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

OBJECTIVE: This course explores the major developments in art and design from ancient times to the present day. Students will learn about significant movements, influential artists and designers, and the cultural and historical contexts that shaped their work. Through lectures, readings, discussions, and hands-on projects, students will gain a deeper understanding of the evolution of art and design and its impact on contemporary practice.



SYLLABUS:

UNITS	ТОРІС	TEACHING HOURS
UNIT I	INFORMATIVE SCRAPBOOK Create an informative and aesthetic scrapbook from two of the following art eras from Pre - Historic to Rococo Art. (Follow the Theory Syllabus)	40
UNIT II	REPLICATING AN ARTWORK Replicate one popular artwork from Pre - Historic to Rococo Art. (Follow the Theory Syllabus)	20

LEARNING OUTCOMES:

- To craft a visually captivating and informative scrapbook that brings a chosen art era to life.
- To transform a simple box into a canvas by painting iconic masterpieces from history.
- To reimagine and design a fashion look that channels the essence of a past artistic era.
- To dive into the rich worlds of art history through dynamic, hands-on creative projects.

SUGGESTED READINGS:

- 1. "The Story of Art" by E.H. Gombrich
- 2. "A World History of Art" by Hugh Honour and John Fleming
- 3. "Fashion: The Definitive History of Costume and Style" by DK Publishing
- 4. "A History of Fashion" by J. Anderson Black and Madge Garland
- 5. "Design: A Very Short Introduction" by John Heskett
- 6. "Design as Art" by Bruno Munari
- 7. "The Language of Clothes" by Alison Lurie



8. "Survey of Historic Costumes" by Phyllis G. Tortora

COURSE OUTCOMES:

- To gain an overview of key art and design movements across historical periods.
- To understand the cultural, social, and technological contexts influencing art and design evolution.
- To critically analyze and evaluate diverse works of art and design.
- To develop a comprehensive visual and historical vocabulary for articulate discussions on art and design.
- To foster appreciation for the diversity of artistic and design expressions across various cultures and epochs.

<u>DCC-3P</u>

<u>JEW-51P-105: Visualization, Ideation and representation</u>

NSQF LEVEL: 5/SEM I	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

Pr Taw Dy. Registrar (Academic) University of Rajasthan **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.

UNITS	TOPIC	TEACHING HOURS
UNIT I	INTRODUCTION TO VISUALIZATION TECHNIQUES	50
	Tools and Materials	
	 Introduction to drawing tools: pencils, pens, markers, and digital tools. Paper types and their uses. 	
	Material Exploration Terracotta Wood Metal	
	Basic Drawing Skills	
	 Line, shape, form, and texture. Freehand drawing and observational sketching. Perspective drawing (one-point, two-point, and three-point perspective) 	
	Basic Rendering Techniques	
	Shading, hatching, and cross-hatching.Rendering light, shadow, and reflections.	
UNIT II	INTRODUCTION TO IDEATION TECHNIQUES	50
	Brainstorming Methods	
	 Mind mapping, free writing, and rapid ideation. 	



	Collaborative brainstorming sessions.	
	Sketching for Ideation	
	Thumbnail sketches and quick concept drawings.Iterative sketching and refining ideas.	
	Visual Thinking and Creativity	
	Techniques to stimulate creativityVisual storytelling and narrative techniques.	
	INTRODUCTION TO REPRESENTATION TECHNIQUES	
	Model Making and Prototyping	
	 Basics of physical model making Materials Tools, and techniques. 	
UNIT III	INTRODUCTION TO ADVANCED IDEATION TECHNIQUES	40
	Concept Development	
	 From initial idea to refined concept. Use of mood boards, inspiration boards, and reference imagery. 	
	User-Centered Design and Empathy Mapping	
	Understanding user needs and behaviors.Creating personas and empathy maps.	
	Mixed Media Techniques	
	 Experimentation with collage, assemblage, and mixed media art. 	
	Presentation Skills (CAD)	



	 Effective visual communication and presentation techniques. Creating compelling presentations and pitches. 	
UNIT IV	INTRODUCTION TO ADVANCED VISUALIZATION TECHNIQUES	40
	 Still life and nature study Still life of various objects Study of nature Rendering different materials and textures 	

SUGGESTED READINGS:

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

LEARNING OUTCOMES:

- To develop fundamental drawing techniques used in the field of design.
- To apply perspective drawing techniques to create 3D visualizations.
- To use rendering techniques to create realistic textures and materials.
- To communicate design ideas visually through freehand sketching.
- To create effective compositions and layouts.
- To present design ideas effectively through visual aids.

COURSE OUTCOMES

- To master fundamental drawing techniques essential for design practice.
- To apply perspective drawing skills to produce accurate and compelling 3D visualizations.
- To utilize rendering techniques proficiently to depict realistic textures and materials in designs.



- To communicate design concepts visually through skilled freehand sketching.
- To create compelling compositions and layouts that effectively convey design concepts.
- To present design ideas convincingly using well-crafted visual aids and presentations.



AECC-1

Hindi + English

*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.



Semester - II

DCC-4L

JEW-52L-106: Overview and Evolution of Jewelry 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

OBJECTIVE: The aim of this unit is to extend knowledge and understanding of the research, analysis and application of historical and contextual skills to a selected field of study. Establish a clear link between art, craft and design movements and how they have impacted Jewelry. Knowing various periods, time zones and prevailing socio-cultural conditions impacted the transition and development of Jewelry. Understand that the happenings in a society at a given period of time and the major events lead to the development of art, craft and design.

UNITS	CONTENT	TEACHING HOURS
	INTRODUCTION TO JEWELLERY INDUSTRY & DESIGN STAGES	20
UNIT I	Overview of the jewelry design industry	
	Historical evolution of jewelry- DESIGN ERAS	
	Current trends in the industry	
	Pre-design phase: Research and client brief	
	 Design development phase: Inspiration, Concept development, CAD and material selection phase 	
	 Prototype Creation, Production, Quality Control and Finishing 	
	Costing and pricing	
	Packaging and Presentation	



	STUDY OF PROMINENT DESIGNERS & THEIR JOURNEY	20
	Key Players and Competition	
UNIT II	 Challenges and Opportunities: Sustainability and Ethics, Digital Transformation, Changing Consumer Preferences 	
	 Exploration of influential jewelry designers and their design philosophies 	
	SUSTAINABILITY IN JEWELRY DESIGN	10
	Green design principles	
UNIT III	Sustainable materials and technologies	
	LEED certification	
	 Sustainable and ethical jewelry certifications 	
UNIT IV	ETHICAL AND SUSTAINABLE PRACTICES IN JEWELRY	10
	Environmental and social impacts of the jewelry industry	

REFERENCES:

- http://www.erasofelegance.com/history/georgian.html
- http://www.modernsilver.com/artnouveaudeco.html
- http://www.victorianweb.org/art/design/craftintro.html
- Indian jewelry (book)- M. L. Nigam

LEARNING OUTCOMES OF THE COURSE:

- 1. Understand the role of jewelry designers and their responsibilities in the industry.
- 2. Explain the evolution of the jewelry industry and current trends.
- 3. Recognize various design styles, layouts, materials and market.
- 4. Demonstrate effective communication and presentation skills.
- 5. Understand the importance of sustainability in jewelry design and identify sustainable materials and technologies.

COURSE OUTCOMES:



- 1. Understanding the Historical Context of the jewelry industry.
- 2. Knowledge of Cultural Influences.
- 3. Appreciation of Artistic Styles.
- 4. Understanding Materials and Techniques used in the making of jewelry products.
- 5. Impact of Technology on the new age of manufacturing.

<u>DCC - 4P</u>

JEW-52P-107:Overview and Evolution of Jewelry Industry

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

OBJECTIVE: The aim of this unit is to extend knowledge and understanding of the research, analysis and application of historical and contextual skills to a selected field of study. Establish a clear link between art, craft and design movements and how they have impacted Jewelry. Knowing various periods, time zones and prevailing socio-cultural conditions impacted the transition and development of Jewelry. Understand that the happenings in a society at a given period of time and the major events lead to the development of art, craft and design.

SYLLABUS:

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UNITS	CONTENT	TEACHING HOURS
	DESIGN STYLES IN THE CREATIVE INDUSTRY	20
UNIT I	Traditional	
	• Modern	
	Contemporary	
	Minimalist	
	• Eclectic	
	VARIOUS CAREER OPPORTUNITIES IN THE CREATIVE INDUSTRY	15
	 Overview of various career paths in jewelry design and related fields 	
UNIT II	Entrepreneurship and freelancing opportunities	
	 Collaboration with other design professionals (retailers, wholesalers, etc.) 	
UNIT III	STUDY OF PROMINENT DESIGNERS & THEIR JOURNEY	15
	Key Players and Competition	
	 Exploration of influential jewelry designers and their design philosophies 	
	Case studies of renowned jewelry brands	
UNIT IV	CHALLENGES AND OPPORTUNITIES	10
	 Sustainability and Ethics, Digital Transformation, Changing Consumer Preferences 	

REFERENCES:

• http://www.erasofelegance.com/history/georgian.html



- http://www.modernsilver.com/artnouveaudeco.html
- http://www.victorianweb.org/art/design/craftintro.html
- Indian jewelry (book)- M. L. Nigam

LEARNING OUTCOMES:

- 1. Understand the role of jewelry designers and their responsibilities in the industry.
- 2. Explain the evolution of the jewelry industry and current trends.
- 3. Recognize various design styles, layouts, materials and market.
- 4. Demonstrate effective communication and presentation skills.
- 5. Understand the importance of sustainability in jewelry design and identify sustainable materials and technologies.

COURSE OUTCOMES:

- 1. Understanding the Ethical and Environmental Considerations of the jewelry industry.
- 2. Knowledge of Market Trends and Consumer Behavior.
- 3. Understanding Materials and Techniques used in the making of jewelry products.
- 4. Impact of Technology on the new age of manufacturing.

DCC-5P

JEW-52P-108: Jewelry Drawing & Techniques

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

- The learner should know the basics of line drawing, use of set squares, etc.
- The learner should have a fair understanding of color wheel and color compositions.

Objective: Learn to choose when to use a specific tool while designing and drawing so that you can speed up and bring industry accepted quality in your design. Represent different cuts and shapes of stones (faceted & cabochon).

Know different types of settings and their representation on paper. Understand different types of chains and how to render them. Render different metal surfaces and forms and shadow formation, Rendering of faceted and cabochon stones, beads and drops.

UNITS	CONTENT	TEACHING HOURS
UNIT I	 GRAPHICAL REPRESENTATION OF METALS Materials required for drawing of Jewelry Color Rendering (Basic Rendering Technique) Metal forms (Representation of Metal Colors, Types of Textures & Decoration) 	50
UNIT II	 GRAPHICAL REPRESENTATION OF STONES Graphic representation of Gemstones (Drawing of Faceted Stones, Colour and Rendering of Faceted Stones and cabochon stones) 	40
UNIT III	MECHANISMS IN JEWELLERY	40



	 Chain, Clasps and its representation (Types of Chain, Representation of Chain, Types of Clasps, Representation of Clasps) 	
	 Settings (Representation of different types of Settings) 	
UNIT IV	Freehand Drawing Techniques	20

SUGGESTED BOOKS AND REFERENCES:

- www.gemstonejewellerydesigns.co.uk
- www.angara.com
- www.jewellerygemstone.com

LEARNING OUTCOMES

- To build an understanding of jewelry drawing and rendering techniques
- To demonstrate and practice the graphical representation of Gemstones and cuts.
- To employ professional color rendering techniques in developing a product.
- Be able to use drawing and sketching techniques to ideate a jewelry product.

COURSE OUTCOMES:

- 1. To build Proficiency in Sketching and Rendering.
- 2. To understand the Design Principles.
- 3. To understand various Design Tools
- 4. Be able to use technical Drawing Skills
- 5. To build an understanding of Materials.



DCC-6L

JEW-52L-109: Material & Form Exploration(THEORY)

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

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 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.

UNITS	TOPICS	TEACHING HOURS
UNIT I	INTRODUCTION TO FORM AND MATERIAL EXPLORATION Understanding the relationship between form and material in design	5



	_	1
	 Overview of techniques for form exploration Introduction to different materials and their properties 	
	properties.	
UNIT II	 INTRODUCTION TO TECHNIQUES AND MATERIALS Introduction to materials used in model making Techniques for constructing models and manipulating materials 	5
UNIT III	 SUSTAINABLE MATERIAL PRACTICES Introduction to sustainable materials and their role in design Exploring eco-friendly material options and considerations Future trends in sustainable material exploration 	10
UNIT IV	 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 	10

SUGGESTED BOOKS AND REFERENCES:

- Design Thinking: Understanding How Designers Think and Work by Nigel Cross
- Form, Function, and Design by Paul A. Heskett
- Sketching: The Basics by Roselien Steur and Koos Eissen



- Material Revolution: Sustainable and Multi-Purpose Materials for Design
- Architecture by Sascha Peters

Learning Outcomes:

- Understanding the relationship between form and material.
- 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.

COURSE OUTCOMES:

- 1. Understanding of Materials in jewelry design.
- 2. To be able to use techniques and processes.
- 3. To innovate and create unique designs that challenge conventions and reflect personal creativity and style.
- 4. The ability to critically analyze the suitability of materials and forms for specific design concepts.

DCC-6P

JEW-52P-110: Material & Form Exploration(PRACTICAL)

NSQF LEVEL: 5/SEM II	EOSE :-	4 HOURS	
CREDITS: 4 CREDITS	MARKS	MIDTERM	EOSE
SUB-TYPE: PRACTICAL	MAX	20	80



DELIVERY: TUTORIAL	MIN	8	32

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 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.

UNITS	TOPICS	TEACHING HOURS
UNIT I	 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 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 	30 hours
UNIT II	MODEL MAKING AND MATERIAL MANIPULATION • Exploring form through physical models DIGITAL TOOLS FOR FORM EXPLORATION	30 hours



	 Introduction to 3D modeling software (e.g., SketchUp)/ 3D printed products, laser cutting. 	
	 Techniques for generating and manipulating forms digitally through 	
	 Integrating material properties and textures in digital models 	
UNIT III	EVALUATION, REFINEMENT, AND MATERIAL SELECTION	
	Methods for evaluating and refining different form options	30 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 	
	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	
		l .



Introduction to new and emerging materials in design

SUGGESTED BOOKS AND REFERENCES:

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

Learning Outcomes:

- Understanding the relationship between form and material.
- 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.

COURSE OUTCOMES:

- 1. Experimentation with Materials and techniques.
- 2. Prototyping and Iteration.
- 3. Documentation and Presentation of work done.

AECC-2

Hindi + English

*Syllabus Prescribed by the University of Rajasthan

VAC-2

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Value Added Course-II

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

SEC-2

Skill Enhancement Course-II

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

UNIVERSITY OF RAJASTHAN, JAIPUR

	CURRICULUM FOR B.DES (JEWELRY DESIGN) PROGRAM CODE UG0504							
<u>S.No</u>	COURSE CATEGOR Y	ТҮРЕ	COURSE CODE	COURSE NAME	L	т	P	TOTAL CREDIT
				YEAR 2				
	SEMESTER III							
1	DCC-7P	MJR	JEW-63P-201	Jewelry Manufacturing	0	0	6	6
2	DCC-8P	MJR	JEW-63P-202	Technical Drawing	0	0	6	6
3	DCC-9P	MJR	JEW-63P-203	Design Project-1 Fashion jewelry and Accessories	0	0	6	6
4	MEC-1L		JEW-63L-204	Professional development	4	0	0	4
5	SEC-3			SEC	2	0	0	2
6	VAC-3			VAC	2	0	0	2



TOTAL CREDITS ACHIEVED AFTER SEMESTER III						26		
				SEMESTER IV				
1	DCC-10P	MJR	JEW-64P-205	Computer Aided Design-I	0	0	6	6
2	DCC-11L	MJR	JEW-64L-206	Gemology and metallurgy(theory)	2	0	0	2
3	DCC-11P	MJR	JEW-64P-207	Gemology and metallurgy(practical)	0	0	4	4
4	DCC-12P	MJR	JEW-64P-208	Design Project-2 (Precious jewelry)	0	0	6	6
5	MEC-2L		JEW-64L-209	Styling & Photography(Theory)	2	0	0	2
6	MEC-2P		JEW-64P-210	Styling & Photography (practical)	0	0	2	2
7	SEC-4			SEC				2
8	VAC-4			VAC				2
TOTAL CREDITS ACHIEVED AFTER SEMESTER IV					26			

Year 2 Internship Total Credits

Credits Offered for 2 year diploma in Jewelry Design

52 + 4= 56

Duration of internship: 120 hours or 3 weeks (4 Credits)

Credits offered for a two-year diploma: Year I Year II Internship total credits

52 52 4 = 108

For exit after IInd year, the minimum credit requirement is 96 from the course and 4 credits from the internship, hence the UG Diploma @100 credits.





Semester - III

DCC-7P <u>JEW-63P-201: Jewelry Manufacturing</u>

NSQF LEVEL: 6/SEM III	EOSE :-	4 HOURS	
CREDITS: 6 CREDITS	MARKS	MIDTERM	EOSE



SUB-TYPE: PRACTICAL	MAX	30	120
DELIVERY: PRACTICAL, TUTORIAL, FIELD VISIT	MIN	12	48

PRE-REQUISITE OF THE COURSE: None

Objective: Convert and represent different types of surfaces and finishes, shading three dimensional surfaces and translate a two-dimensional surface into three dimensional form. This unit aims to develop learners' practical skills and understanding when working with light metals and in translating designs into 3D outcomes.

UNITS	CONTENT	TEACHING HOURS
UNIT I	 Jewelry Manufacturing process - A Brief History, Work Space & Tools, Materials used in Jewelry Industry (Pre Civilization Era, Growth of Civilization, Metals, GemStones, Natural Material, Man Made Material, Other Material used in Jewelry Making), Techniques & Technology used in Jewelry Industry (Basic Techniques of Jewelry Manufacturing, 	50
UNIT II	 Metalsmithing and Jewelry making techniques Jewelry Product Making – Sawing, Piercing, Filling, Milling, Process on Sheet Metal – Repousse, Chasing, Stamping, Stretching, Embossing, Blanking, Processes with wire – Chains, Draw plates, Cross section), 	40



UNIT III	 Metal Surface Decoration & Ornamentation Techniques (Engraving, Scoring, Chip Carving, Metal Inlay, Etching, Granulation, Enameling), Texturing Metal, Jewelry Making & Manufacturing Techniques (Soldering, Findings, Stone Settings), Jewelry Manufacturing Techniques of Different Metals & Materials (Pickle, Fusion, Fusing), 	45
UNIT IV	 Jewelry production process: Cad Cam Technology, Production Process (Casting) 	50

SUGGESTED BOOKS AND REFERENCES:

- www.cutting-mats.net/2634.html
- Untracht, Oppi. (1982) Jewelry concepts and technology. Doubleday & Co., Garden City, N.Y.
- Hoke, C. M. (1940) Refining precious metal wastes: gold silver platinum metals, a handbook for the jeweler, dentist and small refiner. Metallurgical Publishing Co., New York.
- Loosli, Fritz, Herbert Merz and Alexander Schaffner. (1982) *Practical jewelry making*. Berne, UBOS/SCRIPTAR, Switzerland.
- McCreight, Tim. (1997) *Jewelry: fundamentals of metalsmithing.* Hand Books Press, Madison, WI.
- Revere, Alan. (2011) *Professional jewelry making: a contemporary guide to traditional jewelry techniques*. Brynmorgen Press, Brunswick, ME.

Learning Outcomes

- To build an understanding of Metal Properties & its manufacturing tools.
- Be able to learn the Jewelry Manufacturing process.
- To build an understanding of Metalsmithing and Jewelry making techniques.
- Be able to Metal Surface Decoration & Ornamentation Techniques
- Be able to understand Jewelry production process

Course outcomes:

1. To understand principles of quality control and precision in jewelry manufacturing.



- 2. CAD- CAM integration into the manufacturing processes.
- 3. Emphasize ethical considerations in manufacturing.
- 4. To understand workshop safety protocols and equipment maintenance practices.

<u>DCC-8P</u> JEW-63P-202: Technical Drawing

NSQF LEVEL: 6/SEM III	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: The objective of orthographic projection in jewelry design is to facilitate clear communication, ensure precision in manufacturing, maintain consistency in design elements, and provide comprehensive documentation of the design process. It is a crucial tool in the technical and visual aspects of bringing a jewelry design from concept to reality.

UNITS	CONTENT	TEACHING HOURS
UNIT I	Introduction to Orthographic Projection:	10
	 Definition and basic principles of orthographic projection. 	



	Importance of orthographic projection in jewelry design.	
UNIT II	Technical Drawing Tools and Materials:	20
	 Introduction to drafting tools used in orthographic projection. Use of drawing boards, T-squares, triangles, and compasses. Appropriate paper types for technical drawings. 	
UNIT III	Orthographic Drawing Techniques:	40
	 Drawing views: front, top and side views. Creating multiple views to fully represent a three-dimensional jewelry piece. Scale factor and dimensioning. 	
UNIT IV	Orthographic Projection for Gem Settings:	40
	 Special considerations for representing gemstone settings. Detailing prong positions, bezels, and other mounting features. Understanding and creating sectional views in jewelry design. Representing internal details and components. 	
UNIT V	Digital Orthographic Projection:	50
	 Transitioning to digital tools for orthographic projection. Software applications used in jewelry design and rendering. Understanding industry standards for technical drawings. Creating documentation suitable for manufacturing and communication. 	

SUGGESTED BOOKS AND REFERENCES:

- "Jewelry Concepts & Technology" by Oppi Untracht
- "Jewelry Illustration" by Dominique Audette
- "Design Language: Interpretive Edition" by Tim McCreight



Learning Outcomes

- Enhanced Communication and Clarity
- Improved Customer Trust and Perception
- Legal and Ethical Considerations
- Educational and Instructional Value

Course Outcomes

- 1. To understand orthographic projection in jewelry design.
- 2. To ensure precision in manufacturing
- 3. To provide comprehensive documentation of the design process

<u>DCC-9P</u> <u>JEW-63P-203: Design Project-1 (Fashion Jewelry and Accessories)</u>

NSQF LEVEL: 6/SEM III	EOSE :-	4 HOURS	
CREDITS: 6 CREDITS	MARKS	MIDTERM	EOSE
SUB-TYPE: PRACTICAL	MAX	30	120
DELIVERY: TUTORIAL, FIELD VISIT	MIN	12	48

PRE-REQUISITE OF THE COURSE: None

Objective: The objective of this unit is to enable learners to explore the decorative and aesthetic potential of various materials for accessories and body adornment and create innovative products. To develop learners' skills of independent enquiry by undertaking a sustained investigation of direct relevance to their vocational, academic and professional development. Understanding of gemstones & metals-precious and non-precious, various materials like resin, wood, ivory, leather, glass, etc. , different markets of costume jewelry and their use so that students can use his knowledge for industry demand. Basic knowledge of materials used in Jewelry with understanding of how to apply them on paper.



UNITS	CONTENT	TEACHING HOURS
UNIT I	Research and understand Costume/Fashion jewelry brands.	15 hours
UNIT II	 Introduction to Mix Materials in Jewelry Design Overview of mix materials in jewelry and its significance in contemporary design Exploring different materials suitable for jewelry making, including metals, gemstones, wood, ceramics, glass, textiles, plastics, etc. Understanding the properties and characteristics of different materials Introduction to design principles and considerations when combining materials 	30 hours
UNIT III	Creating Visual Boards Market Identification, Culture board, Jewelry board, Client board, Mood board, Inspiration board, Conceptualization and Form Generation.	20 hours
UNIT IV	 Design Concepts and Ideation Generating ideas and concepts for jewelry designs using mix materials Sketching and visualizing design concepts Developing a design language and theme for the project Considering aesthetics, balance, and harmony when combining materials 	60 hours
UNIT V	 Finishing and Presentation Refining the design through finishing techniques, such as polishing, oxidizing, or patinating Considering appropriate clasps, findings, and closures for the jewelry piece Creating a cohesive and professional presentation of the final design Documenting the design process and creating a portfolio or collection 	30 hours



SUGGESTED E-resources:

- https://outhouse-jewellery.com/
- https://www.zariin.com/
- https://www.suhanipittie.com/
- https://isharya.co/
- https://www.madihajaipur.com/
- https://www.tribeamrapali.com/

Learning Outcomes

- Be able to formulate a project
- Be able to implement the project within agreed procedures and to specification.
- To build an understanding of different materials, its properties & its manufacturing tools.
- Be able to understand the manufacturing process used in costume jewelry brands.
- To build an understanding of form generation through materials and accessories making techniques.
- On the completion of this task students will be able to prepare Jewelry Board, Client Board, Inspiration Board, Mood Board, Conceptualization and Form Generation, Final Design Development, Prototype Development & Portfolio.

Course Outcomes:

- 1. To explore the decorative and aesthetic potential of various materials.
- 2. To create innovative products.
- 3. Understanding of gemstones & metals-precious and non-precious.
- 4. To understand the manufacturing process used in costume jewelry brands.

MEC-1L

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JEW-63L-204: Professional Development

NSQF LEVEL: 6/SEM IV	EOSE :-	3 HOURS	
CREDITS: 4 CREDITS	MARKS	MIDTERM	EOSE
SUB-TYPE: THEORY	MAX	20	80
DELIVERY: LECTURE, TUTORIAL, FIELD VISIT	MIN	8	32

PRE-REQUISITE OF THE COURSE: English Vocabulary and Soft Skills Communication

OBJECTIVES:

The creative industries are always changing; in response to development in technology, social change and cultural conditions. These, in turn, have an effect on the professions and roles that are required within the industries. Through this unit, students will explore the development of the professions within the creative industries and the roles that make up those professions. The aim of this unit is for students to begin to define areas for personal professional development, in the context of a growing awareness of the broad scope of the creative industries.

UNITS	TOPICS	TEACHING HOURS
Unit-I	 5 S: Sort, Set in order, Shine, Standardize, and Self-discipline 8 Wastages: TIMWOODS - Transportation, Inventory, Motion, Waiting time, Overproduction, Over processing, Defect and Skills wastage. 	15



Unit-II	 The role of reflection for creative practitioners Methods to document: Annotations, blogs, case studies, journals, photographs, planning, sketch 	15
Unit-III	 How Reflective practice can assist lifelong learning Creative competencies of the future. 	15
Unit-IV	 Defining career goals Employability skills and qualities SMART Goals and PDCA 	15

SUGGESTED READINGS:

- BARTON, G. (2016) Don't Get a Job... Make a Job: How to make it as a creative
- graduate. London: Laurence King.
- CLEAVER, P. (2014) What they didn't teach you in design school: What you actually
- need to know to make a success in the industry. London: ILEX.
- DEWEY, J. (1933) How We Think. New York: D.C.Heath & CO.
- MOON, J. (1999) Reflection in Learning and Professional Development: Theory and
- Practice. Oxon: Routledge Farmer.
- SCHON, D. (1984) The Reflective Practitioner: How Professionals Think in Action.
- New York: Basic Books INC.

LEARNING OUTCOMES:

- To explore the creative industries professions, through research into historic and contemporary precedent.
- To discuss personal career goals in relation to the range of roles and subjects in the creative industries.
- To define personal development plans; highlighting areas to support specific career goals and general skills.
- To critically reflect on the achievement of personal development goals and plan for the future



COURSE OUTCOMES:

- Develop skills in self-assessment, and goal setting to align personal strengths and interests with professional aspirations.
- Develop networking skills to build and maintain professional relationships, including strategies for connecting with industry professionals, mentors, and alumni.
- Understand the importance of personal branding and develop strategies to cultivate a professional online presence.
- Develop skills in leadership, collaboration, and teamwork, including understanding team dynamics, conflict resolution, and decision-making processes.

VAC-3

Value Added Course-II

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

<u>SEC-3</u>

Skill Enhancement Course-II

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



Semester - IV



DCC-10P JEW-64P-205: Computer Aided Design-I

NSQF LEVEL: 6/SEM IV	EOSE :-	4 HOURS	
CREDITS: 6 CREDITS	MARKS	MIDTERM	EOSE
SUB-TYPE: PRACTICAL	MAX	30	120
DELIVERY: PRACTICAL, FIELD VISIT	MIN	12	48

PRE-REQUISITE OF THE COURSE:

- Basic Knowledge of Computers.
- Basic understanding of Jewelry Design.

Objective: Students will learn about different types of design software used in the designing process in the industry. Students will be taught basic understanding of software's interface, file extensions for machinery process, file formats and different design assignments to explore all different tools of the software.

UNITS	CONTENT	TEACHING
		HOURS



UNIT I	Drawing tools: These tools allow users to create freehand or geometric shapes, lines, curves, and other forms using a variety of brush sizes, textures, and colors. Editing tools: These tools help users manipulate and refine their artwork, such as erasers, selection tools, color pickers, and layer management tools.	40 hours
UNIT II	 Text tools: These tools allow users to add text to their artwork in various fonts, sizes, and styles. Image import and export: These features allow users to import existing images or export their artwork in various file formats, such as JPEG, PNG, SVG, or PDF. Create Technical Drawing of Pendant, Earring & Rings 	60 hours
UNIT III	 Effects and filters: These features allow users to apply various effects and filters to their artwork, such as blurs, shadows, gradients, and textures. Creating Different type of Jewelry Design like Pendant, Earring, Ring, Bangle, Bracelet & Necklace Exploring various tools in the software, to develop manipulation on existing creations. 	50 hours
UNIT IV	 A hard and soft copy of student work in the format of a Portfolio with proper documentation format will be submitted to college. 	20 hours

SUGGESTED BOOKS AND REFERENCES:

- www.gemstonejewellerydesigns.co.uk
- www.angara.com
- www.jewellerygemstone.com

Learning Outcome

- Students will be able to learn basic design software's.
- Students will have an understanding of basic 2D and 3D aspects of design.
- Students will be able to create a creative niche to use and create digital assets on digital platforms.
- Students will be able to explore related software's and its techniques through various learnings and teachings



Course Outcome:

- 1. To understand different types of design software used in the designing.
- 2. Be able to create creative outcomes using technology.
- 3. Be able to create digital assets on digital platforms.
- 4. To be able to apply digital understanding in the jewelry manufacturing process.

DCC-11L JEW-64L-206: Gemology and metallurgy(theory)

NSQF LEVEL: 6/SEM IV	EOSE :-	3 HOURS	
CREDITS: 2 CREDITS	MARKS	MIDTERM	EOSE
SUB-TYPE: THEORY	MAX	10	40
DELIVERY: LECTURE, TUTORIAL, FIELD VISIT	MIN	4	16

PRE-REQUISITE OF THE COURSE: None

Objective: This unit aims to develop learners' skills and understanding common to the broad area of 3D design and the potential design implications of selected materials.

In this unit the learner will know about definition, value of gemstone, classification and types, Geological occurrences, formation, origin, mining and methods, history and folklore, Introduction to physical properties.

Characteristics and classification of ores, metal groups-ferrous, non-ferrous, alloys, mining and techniques-surface mining, subsurface mining and types.

In this unit, the learner will learn about the techniques required in creating a tangible jewelry product. Cutting and shaping of different types of gemstones.



UNITS	CONTENT	TEACHING HOURS
UNIT I	 GEMOLOGY- Classification of Gemstones: Organic, Synthetic, Imitation & Composite Visual Observation Crystallography Physical Properties Optical Properties 	10 hours
UNIT II	 METALLURGY- Characteristics and Classification of metals Metal Groups - Ferrous & Non-Ferrous Alloys 	5 hours
UNIT III	 Mining and Techniques - Surface Mining, Subsurface Mining and types Basic Techniques of Jewelry Making- Measurement, Layout, Sawing, Drilling, Filing etc. 	5 hours
UNIT IV	 Precious Metals and their Mining Methods of Refinement & Recovery Quality Control – Lowering or Raising Metal Quality Hallmarking, Standard Weights and Measures. 	10 hours

SUGGESTED BOOKS AND REFERENCES:

- "The Science and Technology of Materials in Automotive Engines" by Hiroshi Yamagata
- "Jewelry Concepts & Technology" by Oppi Untracht

Learning outcomes

- To build an understanding about the quality check, certification and hallmarking process.
- To learn the techniques required to cut and shape cabochons and faceted gemstones.
- To analyze the nature of different materials used in making a jewelry product.
- To demonstrate the application of 3D materials in product creation.
- To manage various equipment required in shaping gemstones.

Course outcomes:



- 1. To understand the Classification of Gemstones.
- 2. To be able to characterize metals and gems.
- 3. To understand the Methods of Refinement & Recovery.
- 4. To understand the Quality Control process.

DCC-11P JEW-64P-207: Gemology and metallurgy(practical)

NSQF LEVEL: 6/SEM IV	EOSE :-	4 HOURS	
CREDITS: 4 CREDITS	MARKS	MIDTERM	EOSE
SUB-TYPE: PRACTICAL	MAX	20	80
DELIVERY: LECTURE, TUTORIAL, FIELD VISIT	MIN	8	32

PRE-REQUISITE OF THE COURSE: None

Objective: This unit aims to develop learners' skills and understanding common to the broad area of 3D design and the potential design implications of selected materials.

In this unit the learner will know about definition, value of gemstone, classification and types, Geological occurrences, formation, origin, mining and methods, history and folklore, Introduction to physical properties.

Characteristics and classification of ores, metal groups-ferrous, non-ferrous, alloys, mining and techniques-surface mining, subsurface mining and types.

In this unit, the learner will learn about the techniques required in creating a tangible jewelry product. Cutting and shaping of different types of gemstones.



SYLLABUS:

UNITS	CONTENT	TEACHING HOURS
UNIT I	 GEMOLOGY- Classification of Gemstones: Organic, Synthetic, Imitation & Composite Visual Observation Crystallography Physical Properties Optical Properties 	20
UNIT II	GEM CUTTING & POLISHING- ● Gemstone Processing: Cabochons (Sawing, Shaping, Doping, Polishing), Faceted Stones (Sawing, Shaping, Doping, Cutting & Polishing)	30
UNIT III	 METALLURGY- Characteristics and Classification of metals Metal Groups - Ferrous & Non-Ferrous Alloys 	30
UNIT IV	 Mining and Techniques - Surface Mining, Subsurface Mining and types Basic Techniques of Jewelry Making- Measurement, Layout, Sawing, Drilling, Filing etc. 	20
UNIT V	 Precious Metals and their Mining Methods of Refinement & Recovery Quality Control Lowering or Raising Metal Quality Hallmarking, Standard Weights and Measures. 	20

SUGGESTED BOOKS AND REFERENCES:

- Hall, Cally (2000) *Gemstones*. Dorling Kindersley, London; New York.
- Anderson, Basil W., and James Payne. (1998) The Spectroscope and Gemmology.
- Gem Stone Press, Woodstock, VT.



- Campbell Pedersen, Maggie. (2010) *Gem and Ornamental Materials of Organic Origin*. NAG Press, London.
- Gem Reference Guide (1993). Gemological Institute of America, Santa Monica, CA.
- Materials Science and Engineering : An Introduction by W.D. Callister
- Physical Metallurgy Principles by R. Abbaschian and R.E. Reed Hill
- Introduction to Materials Science for Engineers by James F. Shackelford
- Davies, Gordon. (1984) *Diamond*. A. Hilger, Bristol.
- Field, J.E., ed. (1992) *Properties of natural and synthetic diamond.* Academic Press, London, New York.
- Gems: Their Sources, Description and Identification. (2006) 6th Ed. by Michael O'Donoghue. Butterworth-Heinemann, Boston.
- Hall, Cally (2000) *Gemstones*. Dorling Kindersley, London; New York.
- O'Donoghue, Michael and Louise Joyner. (2003) *Identification of gemstones*. Butterworth Heinemann, Oxford.
- Powder Metallurgy: Science, Tech & Materials PB (English), ANISH UPADHYAYA;
 GOPAL SHANKAR, 2010, ORIENT BLACKSWAN PVT LTD.-NEW DELHI
- Metallurgical Thermodynamics Kinetics and Numericals PB (English) 1st Edition, Dutta S K, 2011, S. CHAND & COMPANY LTD-NEW DELHI
- Phase Transformations in Metals and Alloys (English) 3rd Edition, Sherif, Easterling, Porter, 2009, CRC Pr I Llc.

Learning Outcomes

- To build an understanding about the quality check, certification and hallmarking process.
- To learn the techniques required to cut and shape cabochons and faceted gemstones.
- To analyze the nature of different materials used in making a jewelry product.
- To demonstrate the application of 3D materials in product creation.
- To manage various equipment required in shaping gemstones.

Course outcomes:

- 1. To understand the potential design implications of selected materials.
- 2. To understand Geological occurrences, formation, origin, mining and methods
- 3. To understand the techniques required in creating a tangible jewelry product.
- 4. To understand the Basic Techniques of Jewelry Making.

DCC-12P

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JEW-64P-208: Design Project 2- Precious Jewelry

NSQF LEVEL: 6/SEM IV	EOSE :-	4 HOURS	
CREDITS: 6 CREDITS	MARKS	MIDTERM	EOSE
SUB-TYPE: PRACTICAL	MAX	30	120
DELIVERY: PRACTICAL, FIELD VISIT	MIN	12	48

PRE-REQUISITE OF THE COURSE:

- Basic understanding of the jewelry industry.
- Knowhow of elements & principles of design.

Objective: The aim of this unit is to enable learners to explore the decorative and aesthetic potential of Jewelry, accessories and body adornment to create wearable jewelry.

To familiarize the students with Indian as well as international Goldsmithing techniques to create new possibilities in this sector. To follow the design process and conceptualize products keeping gold as the main metal.

The intent is to study various styles ,eras and gold jewelry from various places in the world and then design a collection of products as per the same.

UNITS	CONTENT	TEACHING HOURS
UNIT I	 Introduction to various Jewelry market: Overview of gold and silver as precious metals in jewelry design Historical significance of gold jewelry Understanding the properties and characteristics of gold Current trends and styles in gold jewelry design 	10 hours
UNIT II	Goldsmithing Techniques • Introduction to goldsmithing tools and equipment	15 hours



	 Basic metalworking techniques for gold jewelry, including sawing, filing, and soldering Forming and shaping gold through techniques like forging, bending, and hammering Introduction to stone setting techniques for gold jewelry Surface treatments and finishes for gold jewelry 	
UNIT III	Creating Visual Boards: Inspiration board Colour & Material board Trend Board Client board Mood board	30 hours
UNIT IV	 Design Concepts and Ideation Generating design concepts and ideas for gold jewelry Sketching and visualizing designs Developing a cohesive design language and theme for the project Considering aesthetics, balance, and wearability in gold jewelry design 	30 hours
UNIT V	 Final Design Development and costings Refining the design through finishing techniques Applying appropriate clasps, findings, and closures for gold jewelry 	30 hours
UNIT VI	Prototype Development	30 hours
UNIT VII	 Documentation and presentation Creating a cohesive and professional presentation of the final design Documenting the design process and creating a portfolio or collection of work done. 	20 hours

E-REFERENCES:

- www.worldgoldcouncil.com
- www.vogueindia.com
- www.tanishq.com



- www.reliancejewels.com
- www.damas.com
- www.lazude.com
- www.vendorafa.com
- www.joyalukas.com

Learning Outcomes

- Understand the visual, tactile and decorative characteristics of gold.
- To develop a professional jewelry portfolio.
- Be able to respond and summarize design briefs.
- To summarize the knowledge acquired, and be proficient to design jewelry for commercial masses.
- Enhancing the skills in developing a graphical language of jewelry.
- To analyze the data acquired and illustrated in the form of visual boards (Jewelry Board, Client Board, Inspiration Board, Mood Board, Conceptualization and Form Generation, Final Design Development, Prototype Development & Portfolio.)

Course outcomes:

- 1. To understand Goldsmithing techniques to create new possibilities in the jewelry sector.
- 2. Be able to follow the design process and conceptualize products.
- 3. To understand the Historical significance of jewelry.
- 4. To critically analyze and understand Prototype Development.

MEC-2L

JEW-64L-209: Styling and Photography(theory)



NSQF LEVEL: 6/SEM III	EOSE :-	3 HOURS	
CREDITS: 2 CREDITS	MARKS	MIDTERM	EOSE
SUB-TYPE: THEORY	MAX	10	40
DELIVERY: LECTURE, TUTORIAL	MIN	4	16

PRE-REQUISITE OF THE COURSE: None

OBJECTIVE:

This course integrates theory application in the fields of visual merchandising, styling, and photography. Students will explore the principles of effective display techniques, styling practices, and photographic composition through theoretical discussions.

UNITS	TOPICS	TEACHING HOURS	
Unit I	 Unit 1: Introduction to Styling and Photography Overview of styling principles: Color, texture, proportion. Basic photography concepts: Composition, lighting, and framing. Visual storytelling across design disciplines 	10	
Unit II	 Discipline-Specific Styling and Photography Styling techniques for fashion, jewelry, interiors, and communication Photography: Lighting, angles, and shooting techniques for different materials and environments 	10	
Unit III	Creative and Advanced Techniques • Conceptual styling and editorial photography	10	



	 Advanced photography techniques: Aperture, exposure, post-processing. Styling for digital platforms 	
Unit IV	 Portfolio Development and Final Project Final Photoshoot: Create a styled photoshoot for a professional portfolio. Image Post-Processing: Learn basic editing using software (e.g., Photoshop, Lightroom). Compile a portfolio that showcases styling and photography work across different design disciplines 	15

SUGGESTED READINGS:

• "Styling for Photography: Techniques for Studio and Location Shoots" by Daniela Bowker

LEARNING OUTCOMES:

- To demonstrate proficiency in styling techniques across diverse media and contexts.
- To critically analyze and evaluate visual presentations within retail environments.
- To assess the effectiveness and impact of styling choices on consumer perception.
- To apply insights to enhance visual merchandising strategies and brand storytelling.

COURSE OUTCOME:

- To understand the principles and theories of visual merchandising, including layout design and product placement, to enhance the shopping experience.
- To master basic photography techniques, including lighting, composition, and camera settings, is essential for capturing fashion and product images.
- To learn how to effectively present products through photography, styling, and visual merchandising techniques.
- To consider brand identity and target audience when applying photography and visual merchandising strategies.



MEC-2P

JEW-64P-210 Styling and Photography(PRACTICAL)

NSQF LEVEL: 6/SEM IV	EOSE :-	4 HOURS	
CREDITS: 2 CREDITS	MARKS	MIDTERM	EOSE
SUB-TYPE: PRACTICAL	MAX	10	40
DELIVERY: DEMONSTRATION/ FIELD VISITS	MIN	4	16

PRE-REQUISITE OF THE COURSE: None

OBJECTIVE:

This course integrates practical application in the fields of visual merchandising, styling, and photography. Students will explore the principles of effective display techniques, styling practices, and photographic composition through hands-on projects. Emphasis will be placed on developing creative skills and understanding the impact of visual presentation in retail and marketing contexts.

UNITS	TOPICS	TEACHING HOURS
Unit I	 Fundamentals of Styling and Photography Create mood boards for fashion, jewelry, interior, or communication project. Practice basic photography techniques: composition, lighting, framing. Styled Photoshoot: Conduct a basic shoot using mood board concepts 	15



Unit II	Styling and Photography Techniques for Specific Disciplines Style and photograph a product/look/space based on specific disciplines: Fashion, Jewelry, Interior, or Communication Design. Experiment with lighting: Natural vs. artificial. Explore material textures and how to capture them effectively in photography	15
Unit III	 Creative and Advanced Styling Develop a concept for an editorial photoshoot: Define theme, color palette, and styling. Advanced Photography: Work with aperture, exposure, and depth of field. Experiment with different environments and settings for creative styling. 	15
Unit IV	 Portfolio Development and Final Project Final Photoshoot: Create a styled photoshoot for a professional portfolio. Image Post-Processing: Learn basic editing using software (e.g., Photoshop, Lightroom). Compile a portfolio that showcases styling and photography work across different design disciplines 	15

SUGGESTED READINGS:

- "Visual Merchandising: Window and In-Store Displays for Retail" by Tony Morgan
- "Styling for Photography: Techniques for Studio and Location Shoots" by Daniela Bowker

LEARNING OUTCOMES:

- To apply fundamental principles of visual merchandising to create compelling displays.
- To utilize photography skills to effectively capture and enhance visual merchandising displays.



• To develop a portfolio showcasing creative work in visual merchandising, styling, and photography.

COURSE OUTCOMES:

- To develop skills in designing and arranging retail spaces, including window displays, store layouts, and promotional areas, to attract and engage customers.
- To learn styling techniques for fashion products such as apparel, accessories, and props, ensuring cohesive and visually appealing presentations.
- To gain hands-on experience in studio and on-location photography setups, mastering equipment management, model direction, and scene styling.
- To apply learned skills in creating compelling visual narratives that align with brand identity and consumer preferences.
- To enhance retail environments and product presentations through effective design, styling, and photography techniques.

SEC-4

Skill Enhancement course - IV

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

VAC-4

Value Added Course-IV

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

Dy. Registrar
(Academic)
University of Rajasthan

	CURRICULUM FOR B.DES (JEWELRY DESIGN) PROGRAM CODE UG0504							
	COURSE							
<u>S.N</u>	CATEGOR Y	ТҮРЕ	COURSE CODE	COURSE NAME	L	Т	P	TOTAL CREDIT



	YEAR 3							
				SEMESTER V				
1	DCC-13L	MJR	JEW-75L-301	Jewelry Forecasting & Trends	6	0	0	6
2	DCC-14P	MJR	JEW-75P-302	Computer Aided Design -	0	0	6	6
3	DCC-15P	MJR	JEW-75P-303	Design Project 3- (Indigenous Art and Craft based Jewelry)	0	0	6	6

