SNDT Women's University, Mumbai

Faculty of Interdisciplinary Studies

B.Design
(Jewelry Design)

As Per NEP – 2020

Semester – I To IV

Syllabus
(W.E.F. Academic Year 2025-26)

Terminologies

Abbreviation	Full-form	Remarks	Related to Major and Minor Courses
Major (Core)	Main Discipline		
Major (Elective)	Elective Options		related to the Major Discipline
Minor Stream	Other Disciplines (Inter/ Multidisciplinary) not related to the Major	either from the same Faculty or any other faculty	
OEC	Open Elective Courses/ Generic		Not Related to the Major and Minor
VSEC	Vocational and Skill Enhancement Courses		
VSC	Vocational Skill Courses		Related to the Major and Minor
SEC	Skill Enhancement Courses		Not Related to the Major and Minor
AEC	Ability Enhancement Courses	Communication skills, critical reading, academic writing, etc.	Not Related to the Major and Minor
VEC	Value Education Courses	Understanding India, Environmental science/education, Digital and technological solutions, Health & Wellness, Yoga education, sports, and fitness	Not Related to the Major and Minor
IKS	Indian Knowledge System	I. Generic IKS Course: basic knowledge of the IKS II. Subject Specific IKS Courses: advanced information pertaining to the subject: part of the major credit.	Subject Specific IKS related to Major
VEC	Value Education Courses		Not Related to the Major and Minor
OJT	On-Job Training (Internship/Apprenticeship)	corresponding to the Major Subject	Related to the Major

FP	Field projects	corresponding to the Major Subject	Related to the Major
CC	Co-curricular Courses	Health and Wellness, Yoga education sports, and fitness, Cultural Activities, NSS/NCC and Fine/ Applied/Visual/ Performing Arts	Not Related to the Major and Minor
CE	Community Engagement and service		Not Related to the Major and Minor
RP	Research Project	corresponding to the Major Subject	Related to the Major

Programme Template

B. Design - Jewelry Design

Programme	B. Design
Specialization	Jewelry Design
Introduction to the programme	The Jewelry Design specialization course is meticulously crafted to provide students with comprehensive knowledge and practical skills in design, merchandising, production, and technology relevant to the jewelry industry on both national and international levels. Students will be well-equipped with the knowledge, skills, and experience necessary to thrive in the jewelry design industry. They will be prepared to contribute effectively as designers, artisans, and entrepreneurs, capable of creating innovative and market-responsive jewelry that meets the highest standards of quality and craftsmanship.
Programme Specific Outcomes (PSOs)	After completing this programme, Learner will be able to develop abilities such as 1. Establish the capacity to generate original and innovative jewelry design concepts influenced by art, culture, history, and current trends. 2. Demonstrate the skills in jewelry design techniques, including metalworking, stone setting, and contemporary fabrication methods. 3. Demonstrate proficiency in the stage-wise design process, including research, concept development, sketching, prototyping, and creating cohesive jewelry collections. 4. Demonstrate the proficiency in designing jewelry both manually and digitally, using CAD software and other industry-standard tools. 5. Analyze various materials used in jewelry making, their properties, and their applications. 6. Analyze and demonstrate the requirements for high-quality finishing and craftsmanship in their jewelry creations. 7. Establish entrepreneurship skills and will be prepared to meet industry challenges with effective business strategies, marketing skills, and professional soft skills. 8. Demonstrate ethical and responsible practices in their jewelry designs, ensuring sustainability, fair trade, and social responsibility.
Eligibility Criteria for Programme	**1. Eligibility criteria for admitting students in First/Second/Third year in different Specializations of B. Design Program.** Eligibility criteria for admitting students in first/second/third year in different Specializations of B. Design Program. **1.1 B. Design- I Year** **i**. XIIth Pass in any Stream –

	Arts/Commerce/Science/Home-Science/Minimum Competency Vocational Course (MCVC)including National Institute of Open Schooling (NIOS). **ii.** Maharashtra State Board of Technical Education (MSBTE)/ State Govt. Technical Education full-time diploma of minimum three years after Std X^{th} (any stream) **iii.** For NRI & Foreign students with equivalence from the Association of Indian Universities (AIU), New Delhi Criteria for selecting students for the 1st year (entry-level) college shall conduct aptitude tests based on general knowledge, language and creative testing through studio test. Based on test performance, students may be considered for provisional admission. The provisional admitted students shall pass the 12th standard exam or equivalent as prescribed by the university with a minimum of 45%. Those colleges with fewer applications for seats may be filled up subject to availability; however, the concerned college will conduct the aptitude test. The benefits shall be parted for reservation criteria as per the Government of Maharashtra and SNDT University Mumbai. If the applicants are less for a particular college, the seats may be filled up subject to availability & interviews may be conducted. THE CET IS NOT COMPULSORY. THE COLLEGE MAY CONDUCT THE SAME AT COLLEGE LEVEL. IN THE CASE OF THE COLLEGES NOT FOLLOWING CET CRITERIA THE SELECTION OF THE CANDIDATES SHALL BE GIVEN ON THE BASIS OF PREFERENCE FOR THE ACADEMIC PERFORMANCE. (Minimum Eligibility 45%). **1.2 B. Design- II Year** **I.** Three-year Diploma, Dressmaking and Garment Manufacturing or Equivalent recognized by All India Council for Technical Education/ State Boards (AICTE) with Bridge course of 8 credits **II.** Five-year Diploma in Fine Arts recognized by the State Technical Board with a Bridge course of 8 credits. **III.** Successful completion of 1st year Degree from National Institute of Fashion Technology (NIFT)/ NID National Institute of Design **IV.** Successful completion of 1st year Degree of any B Design Specializations of the university Or Equivalent Course offered by Indian Universities / Foreign university with equivalence from AIU. **1.3 BRIDGE COURSE** If the **BRIDGE COURSE** is suggested, details of the same. The following bridge courses are suggested. •History of Art and Design - 4 Credits Theory 2 Practical 2credits •Material Studies – 2 Credits Practical. •Fundamentals of design – 2 Credits Practical. The candidate must complete the prescribed bridge course within 60 days from the date of admission. Admission to such candidates will be given up to 30 days from the commencement of the Semester.

	1.4 B. Design- III &IV Year Eligibility for admission to the third and fourth year of B. Design will be according to the passing criteria and rules for ATKT as prescribed by University (Controller of Examinations DOE) **1.5 CET Procedure** For the Institutes who conduct Common Entrance Test The Entrance Examination will consist of General Ability Test + Studio Test / Group Discussions + Personal Interview. All candidates must give all three tests.
Intake **(For SNDT WU Departments and Conducted Colleges)**	**1 division of 30 (AICTE)**

Structure with Course Title

Semester I

SN	Courses	Type of Course	Credits	Marks	Int	Ext
	Semester I					
10144511	Fundamentals of Design (Th & Pr)	Major (Core) 1	4	100	50	50
10144502	Drawing Skills (Pr)	Major (Core) 2A	2	50	50	0
10444511	Traditional Jewelry of India (Th & Pr)	OEC **(Any One)**	4	100	50	50
10444522	Jewelry Making - Metal Wires (Pr)					
10444513	Jewelry Essentials (Th & Pr)					
10644501	Elements of Jewelry (Pr)	VSC on major 1	2	50	50	0
10744521	Professional Computer Skills (Pr)	SEC	2	50	0	50
10810111	English For Academic Writing - Paper I (For Students of English Medium)	AEC **(Any One)**	2	50	0	50
10810112	English Language and Literature - I (For Students of Non-English medium) Follow the link as per SNDTWU https://www.sndt.ac.in/pdf/academics/syllabus-as-per-nep/aec-syllabus/ug-degree/ability-enhancement-course.pdf					
11051111	Inception of Indian Knowledge System Follow the link as per SNDTWU https://www.sndt.ac.in/pdf/academics/syllabus-as-per-	IKS (Generic)	2	50	0	50

	nep/iks-syllabus/ug-degree/inception-of-indian-knowledge-system.pdf					
10952111	Introduction to Indian Constitution Follow the link as per SNDTWU https://www.sndt.ac.in/pdf/academics/syllabus-as-per-nep/vec-syllabus/ug-degree/introduction-to-indian-constitution.pdf	VEC	2	50	0	50
11450121	Basics of National Service Scheme	CC **(Any One)**	2	50	50	0
11450221	National Cadets Corps. (NCC) Studies - I					
11450322	Health and Wellness					
11450421	Performing Arts Exploration					
	CC Link: https://www.sndt.ac.in/pdf/academics/syllabus-as-per-nep/cc-syllabus/ug-degree/co-curricular-course-as-per-nep-2020-semester-i-syllabus.pdf (Available on Website)					
			22	**550**	**250**	**300**

Semester II

SN	Courses	Type of Course	Credits	Marks	Int	Ext
20144521	Basic Jewelry Manufacturing- 1 (Pr)	Major (Core) 3	4	100	50	50
20144522	Basics of Jewelry Design (Pr)	Major (Core) 2B	2	50	0	50
20644501	Material Studies for Jewelry (Pr)	VSC on major 2	2	50	50	0
20644502	Accessory Design (Pr)	VSC on major 3	2	50	50	0
20444511	Traditional Jewelry of India TH. (Pr)	OEC (**Any One)**	4	100	50	50
20444522	Jewelry Making - Metal Wires (Pr)					
20744501	Jewelry Illustration (Pr)	SEC	2	50	50	0
20810111	English For Academic Writing - Paper II (For Students of English Medium)	AEC **(Any One)**	2	50	0	50
20810112	English Language and Literature - II (For Students of Non-English medium) Follow the link as per SNDTWU https://www.sndt.ac.in/pdf/academics/syllabus-as-per-nep/aec-syllabus/ug-degree/ability-enhancement-course.pdf					
20952111	Environment Awareness (Th) Follow the link as per SNDTWU https://sndt.ac.in/pdf/academics/syllabus-as-per-nep/vec-syllabus/ug-degree/environment-awareness.pdf	VEC	2	50	0	50

21450121	Volunteerism and National Service Scheme	CC **(Any One)**	2	50	50	0
21450221	National Cadets Corps. (NCC) Studies - II					
21450323	Yoga Education					
21450421	Fine Art					
	CC Link: https://www.sndt.ac.in/pdf/academics/syllabus-as-per-nep/cc-syllabus/ug-degree/co-curricular-course-as-per-nep-2020-semester-ii-syllabus.pdf (Available on Website)					
			22	**550**	**300**	**250**

Semester III						
SN	**Courses**	**Type of Course**	**Credits**	**Marks**	**Int**	**Ext**
30144521	Basics of Jewelry Manufacturing II (Pr)	Major (Core)	4	100	50	50
30144522	Advance Jewelry Design – I (Pr)	Major (Core)	4	100	50	50
30144523	Metal Studies for Jewelry - (Pr)	Major (Core)	2	50	0	50
30344521	Digital illustration – I (Pr)	Minor Stream	4	100	50	50
30444522	Precious and Semi-Precious Stones (Pr)	OEC **(Any One)**	2	50	0	50
30444523	Traditional Jewelry of India (PR)					
	Modern Indian Language Follow the link as per SNDTWU https://sndt.ac.in/pdf/academics/syllabus-as-per-nep/aec-syllabus/ug-degree/aec-semester-iii.pdf	AEC **(Any One)**	2	50	50	0
30810301	रचनात्मक लेखन (Hindi)					
30810401	मराठी भाषेचा परिचय - भाग १ (Marathi)					
30810501	Contemporary Sanskrit Nyaya (Sanskrit)					
30810201	શીખો ગુજરાતી – પ્રાથમિક ભાગ ૧: લિપિ પરિચય, શ્રવણ અને વાચન કૌશલ્ય (Gujarati)					
31344501	Filed work ON Indian Jewelry (Pr)	FP	2	50	50	0
	Co-Curricular Course (CC) Link: https://sndt.ac.in/pdf/academics/syllabus-as-per-nep/cc-syllabus/ug-degree/co-curricular-course-as-per-nep-2020-semester-	CC **(Any One)**	2	50	50	0

	iii-syllabus.pdf (Available on Websit2e)					
31450121	Social issues Advocacy and Action					
31450221	National Cadets Corps. (NCC) Studies – III					
31450321	Traditional Sports and Fitness					
31450421	Unfolding The Beauty of Indian Music					
			22	**550**	**300**	**250**

Semester IV						
SN	**Courses**	**Type of Course**	**Credits**	**Marks**	**Int**	**Ext**
40144521	Advance Manufacturing - I (Pr)	Major (Core)	4	100	50	50
40144522	Advance Jewelry Design – II (Pr)	Major (Core)	4	100	50	50
40344511	Gemology (Th /Pr)	Minor Stream	4	100	50	50
40444521	Jewelry Essentials (Pr)	OEC **(Any One)**	2	50	0	50
40444512	Precious and Semi-Precious Stones (Th and Pr)					
40744521	Digital Illustration – II (Pr)	SEC	2	50	0	50
	Modern Indian Language **Ability Enhancement Course (AEC) Link:** https://sndt.ac.in/pdf/academics/syllabus-as-per-nep/aec-syllabus/ug-degree/aec-semester-iv.pdf (Available on Website)	AEC **(Any One)**	2	50	0	50
40810411	मराठी भाषेचा परिचय - भाग २ (Marathi)					
40810411	सूचना प्रौद्योगिकी और हिंदी भाषा (Hindi)					
40810511	वाल्मिकीकिरामयणे अयोध्याकाण्ड: (Sanskrit)					
40810211	શીખો ગુજરાતી – ભાંમભિક (Gujarati)					
41544501	Community Engagement - Craft studies PR	CE	2	50	50	0

	Co-Curricular Course (CC) Link: https://sndt.ac.in/pdf/academics/syllabus-as-per-nep/cc-syllabus/ug-degree/co-curricular-course-as-per-nep-2020-semester-iv-syllabus.pdf (Available on Website)	CC **(Any One)**	2	50	50	0
41450122	Personality and Leadership Development through National Service Scheme					
41450121	NSS Volunteers under National service scheme special camp					
41450221	National Cadets Corps. (NCC) Studies – IV					
41450421	Theatre & Dance					
			22	**550**	**250**	**300**

Course Syllabus

Semester I (22Credits)

1.1 Major (Core)

<table>
<tr><td>Course code
10144511</td><td colspan="2">Course name
Fundamentals of Design (Th/Pr)</td><td>Crs
4</td></tr>
<tr><td>Course Outcome</td><td colspan="2">After going through the course, learners will be able to
1. Analyze the different elements of design and the psychological, formal and symbolic qualities of design
2. Demonstrate skills to co-relate the different elements of design
3. Carry out the application of design in jewelry design principles for effective design development</td><td></td></tr>
<tr><td>Sr. No.</td><td>Module Outcomes</td><td>Course Contents</td><td>Cr.</td></tr>
<tr><td>Module 1</td><td colspan="2">Elements of Design</td><td>1</td></tr>
<tr><td rowspan="2"></td><td>Learning Outcomes</td><td>Module Content</td><td rowspan="2"></td></tr>
<tr><td>After learning the module, learners will be able to
1. Define the elements of design.
2. Differentiate between different elements and analyze their cognitive effect in design.</td><td>● Introduction to Elements of Design
○ Point
○ Line (types and properties)
○ Shape (natural, abstract, geometric – shapes and forms, shapes and spaces)
○ Texture (visual, tactile, audible)
○ Color (hues, saturation, value, cool and warm colors, color schemes, color contrast)
● Relationship between elements
● Cognitive effect of the elements
● Practical exercises on element manipulation (like converting natural shapes to abstract shapes, color combinations and color contrast, etc.)</td></tr>
<tr><td>Module 2</td><td colspan="2">Principles of Design</td><td>1</td></tr>
<tr><td></td><td>Learning Outcomes</td><td>Module Content</td><td></td></tr>
</table>

	After learning the module, learners will be able to 1. Define the principles of design 2. Analyze the principles of design in jewelry design	● Define and identify the principles of design ○ Balance (symmetric and asymmetric) ○ Rhythm (gradation, radiation, repetition and their types) ○ Emphasis (Focus) ○ Contrast (color, texture, properties) ○ Proportion (scale) ○ Harmony (unity) ● Differentiate between the principles of design and their cognitive effect. ● Practical exercises on creating different design variations using the principles of design.	
Module 3	**Cognitive Understanding of Fundamentals of Design**		**1**
	Learning Outcomes	**Module Content**	
	After learning the module, learners will be able to 1. State the psychological and physiological responses to design elements. 2. Analyze the role of design elements in influencing perception and cognition.	● Psychology of perception in design ● Color theory and its psychological effects ● Gestalt principles in design ● User-centered design considerations	
Module 4	**Application of Fundamentals of Design**		**1**
	Learning Outcomes	**Module Content**	
	After learning the module, learners will be able to 1. Analyze and interpret the role of design fundamentals in jewelry 2. Implement the basic principles and elements of design to create original designs 3.Develop novel design details like motifs, patterns, textures, etc.	● Study and exploration of Design Fundamentals ● Project of design development using the elements and principles of design and their manipulations	
Assignments/ Activities towards CCE			

The project will run throughout the semester and will be divided into four separate evaluation stages. This will assist students in identifying elements and principles from their surroundings and implementing them to develop basic jewelry designs.

1. Stage One: Select one image from nature which has a composition of various objects and analyze it to identify the elements and principles of design and the effect of each observed element. This analysis can be recorded in the sketchbook in the form of sketches, doodles, words, and written text.
2. Stage Two: Sketch the elements from the images and apply manipulation techniques to them.

3. Stage Three: Using the extracted elements, develop designs while keeping the principles of design in mind.

4. Stage Four: study and explain the process of extraction and provide your analysis on the formal, psychological and physiological effects of each ensemble, in 200 words (each)

References

Cherry, N. (2013). Jewellery design & development. A&C Black Visual Arts.
Dorosz, C., & Watson, J. R. (1999). Designing with color. Fairchild Books.
Lam, L. (2020). Mastering contemporary jewelry design. Schiffer Publishing Ltd.
Lidwell, W., Holden, K., & Butler, J. (2003). Universal principles of design. Rockport Publishers.
Stecker, P. (1996). The fashion design manual. Macmillan Education AU.

1.2 Major (Core)

<table>
<tr><td>Course code
10144522</td><td colspan="2">Course name
Drawing Skills</td><td>Crs
2</td></tr>
<tr><td>Course Outcome</td><td colspan="2">After going through the course, learners will be able to
1. Draw free-hand sketching skills
2. Render with different mediums such as pencil, charcoal, and color.
3. Create textured drawings using different techniques.
4. Create 3 D effect in Geometrical Shapes</td><td></td></tr>
<tr><td>Sr. No.</td><td>Module Outcomes</td><td>Course Contents</td><td>Cr.</td></tr>
<tr><td>Module 1</td><td colspan="2">Drawing, Sketching and Medium Exploration</td><td>1</td></tr>
<tr><td></td><td>Learning Outcomes</td><td>Module Content</td><td></td></tr>
<tr><td></td><td>After learning the module, learners will be able to
1. Draw freehand drawing
2. Identify and illustrate different types of shapes.
3. Use pencil & Colour mediums for shading.
4. Differentiate and illustrate Symmetrical and Asymmetrical Drawing, Enlargement and reduction.</td><td>● Introduction to Basic Drawing
● Free-hand sketching
● Symmetrical and Asymmetrical Drawing
● Enlargement and reduction
Application of colour mediums like watercolours and poster colours.</td><td></td></tr>
<tr><td>Module 2</td><td colspan="2">Texturing and Rendering</td><td>1</td></tr>
<tr><td></td><td>Learning Outcomes</td><td>Module Content</td><td></td></tr>
<tr><td></td><td>After learning the module, learners will be able to
1. Render textures using different techniques with suitable color mediums.
2. Apply Three-dimensional rendering techniques for object drawing
3. Complete product sketching and rendering at a basic level</td><td>● Texturing techniques
o cross-hatching, stippling, and cross lines, with pencil
o color mediums.
● Shading to create three-dimensional effect and depth</td><td></td></tr>
<tr><td colspan="4">Assignments/ Activities towards CCE</td></tr>
<tr><td colspan="4">1. Students will create a sketchbook with a continuous stagewise development of skills and classwork exercises will be maintained.
● Sketching Exercises
● Shading Exercises
● Color Rendering Exercises – Nature / Object
● Texture Exercises
2. Project - develop over the semester and will be divided into 4 parts as follows:
● Select images of 3 different types of jewelry pieces.</td></tr>
</table>

- Sketch each one as basic line drawings.
- Render the same with grade pencil shading
- Render the same with texturing techniques and color applications.

References

Brambatti, M. (2022). *Show Jewellery Illustration and Design Vol. 1*. Hoaki Books. ISBN: 9788416851577

Brambatti, M. (2022). *Show Jewellery Illustration and Design Vol. 1*. Hoaki Books. ISBN: 9788416851577

Deshpande, R. (2004). *Colour Pencil* (1st ed.). Jyotsna Prakashan.

Kamath, V. (2006). *Sketching and Drawing* (2nd ed.). Jyotsna Prakashan.

Narvekar, S., & Narvekar, A. (n.d.). *Grade Examination-Drawing Made Easy*. Navneet Publication (India) Ltd

Mulik, M. (2004). *Perspective* (1st ed.). Jyotsna Prakashan.

Shelar, S. (2007). *Still Life* (1st ed.). Jyotsna Prakashan.

Rani, R. M. (n.d.). *Perspective Creative*. W & V Press. ISBN: 9789810883249

Vaze, P. (2002). *Draw and Paint* (1st ed.). Jyotsna Prakashan.

Van Vliet, R. (2013). *Abstract: Techniques and textures*. Search Press-Kent. ISBN: 9781844489558

1.3 OEC

<table>
<tr><td>Course code
10444512</td><td colspan="2">Course Name
Traditional Indian Jewelry (TH / PR)</td><td>Crs 4</td></tr>
<tr><td>Course Outcome</td><td colspan="2">After going through the course, learners will be able to
1. Understand traditional Indian jewelry
2. Explain the cultural and historical significance of traditional Indian jewelry.
3. Demonstrate basic techniques used in traditional Indian jewelry making.
4. Compare different regional styles of traditional Indian jewelry.
5. Appreciate and critique traditional Indian Jewelery
6. Design a piece of jewelry inspired by traditional Indian styles.</td><td></td></tr>
<tr><td>Sr. No.</td><td>Module Outcomes</td><td>Course Contents</td><td>Cr.</td></tr>
<tr><td>Module 1</td><td colspan="2">Fundamentals of Jewelry</td><td>1</td></tr>
<tr><td rowspan="2"></td><td>Learning Outcomes</td><td>Module Content</td><td rowspan="2"></td></tr>
<tr><td>After learning the module, learners will be able to
1. Identify various types of traditional Indian jewelry
2. List the techniques used in manufacturing jewelery.
3. Examine the role of traditional jewelry in contemporary fashion.</td><td>Introduction to Traditional Indian Jewelry
• Historical evolution and cultural significance
• Materials and techniques used like Metals (gold, silver, etc.) Gemstones and their meanings.
Explore regional Styles
• North Indian jewelry
• South Indian jewelry
• East and West Indian jewelry
Iconography and Symbolism
• Common motifs and their meanings
• Religious and cultural symbols
• Visit to a local jewelry museum or workshop
• Interview with a traditional jeweler</td></tr>
<tr><td>Module 2</td><td colspan="2">Advanced Techniques and Contemporary Practices</td><td>1</td></tr>
<tr><td rowspan="2"></td><td>Learning Outcomes</td><td>Module Content</td><td rowspan="2"></td></tr>
<tr><td>After learning the module, learners will be able to
1. List advanced techniques used in traditional Indian jewelry making
2. Describe the impact of modern influences on traditional Indian jewelry.
3. Utilize advanced techniques in creating</td><td>Advanced traditional techniques from various parts of India
• Filigree work
• Enameling
• Tarakashi
• Theva jewellery
• Bidari work
• Inlay work
Modern Influences
• Fusion styles
• Global trends</td></tr>
</table>

<table>
<tr><td></td><td>traditional Indian jewelry.
4. Develop a contemporary jewelry piece inspired by traditional designs.</td><td>• Technological advancements
Contemporary Applications
• Traditional jewelry in modern fashion
• Celebrity and bridal jewelry trends
Ethical Practices
• Sustainable sourcing
• Fair trade practices</td><td></td></tr>
<tr><td>Module 3</td><td colspan="2">Regional Variations and Influence</td><td>1</td></tr>
<tr><td rowspan="2"></td><td>Learning Outcomes</td><td>Module Content</td><td rowspan="2"></td></tr>
<tr><td>After learning the module, learners will be able to
1. Analyze the regional variations in traditional Indian jewelry, identifying the unique characteristics and designs of different regions.
2. Compare and contrast the influences of different cultures.
3. explain the impact of regional and cultural influences on the evolution of traditional Indian jewelry designs and techniques.
4. Evaluate the significance of regional variations and influences in shaping the identity and cultural heritage of traditional Indian jewelry.
5. Design a piece of traditional Indian jewelry that incorporates regional variations and influences, demonstrating an understanding of the cultural and historical context.</td><td>Introduction to Traditional Indian Jewelry
• Regional variations in traditional Indian jewelry (e.g. North region and South Regian
• Influences of other cultures on Indian jewelry (e.g., Mughal, British)
• Contemporary trends in Indian jewelry</td></tr>
<tr><td>Module 4</td><td colspan="2">Appreciation and Critique of Traditional Indian Jewelry</td><td>1</td></tr>
<tr><td rowspan="2"></td><td>Learning Outcomes</td><td>Module Content</td><td rowspan="2"></td></tr>
<tr><td>After learning the module, learners will be able to
1. Describe the aesthetic and cultural significance of traditional Indian jewelry, identifying its key characteristics and design elements.
2. Analyze the craftsmanship and artistry involved in creating traditional Indian</td><td>• Appreciation of traditional Indian jewelry
• Critique of traditional Indian jewelry
• Case studies of famous Indian jewelry pieces</td></tr>
</table>

	jewelry, evaluating the use of materials, techniques, and designs. 3. Critique the integration of traditional and modern elements in jewelry design. 4. Interpret the symbolic and cultural meanings embedded in traditional Indian jewelry, exploring its significance in different contexts. 5. Evaluate the artistic and cultural value of traditional Indian jewelry, considering its historical context, craftsmanship, and cultural relevance. 6. Demonstrate an appreciation for the cultural heritage and artistry of traditional Indian jewelry, recognizing its importance in Indian culture and its relevance in contemporary times.		
Assignments/ Activities towards CCE			
1. Design a contemporary jewelry piece incorporating traditional techniques. 2. Analyze the work of a contemporary jewelry designer who uses traditional Indian elements. 3. Discuss the ethical implications of sourcing materials for traditional jewelry. 4. Make a project report on the traditional techniques explored. 5. Case studies of famous Indian jewelry pieces. 6. Make a presentation and present the same.			

References

Bernadette van Gelder. (2018). Traditional Indian Jewellery: The Golden Smile of India. Covers legends behind traditional Indian jewelry, exploring its significance and spiritual importance. ACC Art Books Publications.

1.3 OEC

<table>
<tr><td>Course code
10444521</td><td colspan="2">Course Name
Jewelry Making - Metal Wires (Pr)</td><td>Crs 4</td></tr>
<tr><td>Course Outcome</td><td colspan="2">After going through the course, learners will be able to
1. Demonstrate foundational skills in wire manipulation and metalwork
2. Identify and work with various wire materials and gauges
3. Apply soldering, hammering, wrapping, and weaving techniques
4. Design and fabricate original pieces of wire jewelry
5. Critically evaluate and improve their work and the work of peers
6. Maintain safe practices in a jewelry studio environment</td><td></td></tr>
<tr><td>Sr. No.</td><td>Module Outcomes</td><td>Course Contents</td><td>Cr.</td></tr>
<tr><td>Module 1</td><td colspan="2">Introduction to Wire Jewelry</td><td></td></tr>
<tr><td rowspan="2"></td><td>Learning Outcomes</td><td>Module Content</td><td rowspan="2"></td></tr>
<tr><td>After learning the module, learners will be able to
1. Identify and describe different types of metal wires, their properties, and appropriate applications in jewelry making.
2. Demonstrate fundamental wire manipulation techniques such as cutting, bending, wrapping, weaving, soldering, and finishing.
3. Design original wire-based jewelry pieces by applying principles of form, function, and aesthetics.
4. Apply safe practices in handling tools, torches, and materials in a jewelry studio environment.
5. Evaluate and critique their own work and the work of peers to improve craftsmanship and creative expression.</td><td>● Introduction to materials: copper, brass, silver, aluminum wires
● Tools: pliers, cutters, mandrels, files, hammers
● Safety protocols while handling machinery</td></tr>
</table>

Module 2	**Basic Wire Techniques & Soldering**		
	Learning Outcomes	**Module Content**	
	After learning the module, learners will be able to 1. Create basic shapes with help of pliers 2. Learn - What is soldering, and how to do soldering? 3. Develop the ability to the surface filing & finishing with the help of required polishing tools on given exercise.	What is soldering? ● How to make various types of solder ● Calculate to prepare the metals (solder alloys percentage) for making solder ● Introduction of tools & equipment's required for soldering ● Different types of joints ● Types of flame and their application. ● Any 2 jewelry pieces use all the above techniques. ● Technical Exercises ● Polishing	
Module 3	**Wrapping Techniques**		
	Learning Outcomes	**Module Content**	
	After learning the module, learners will be able to 1. Utilize knowledge to recognize wire properties and acquire the skills required to construct stable wire frames. 2. Create functional and decorative structures using wire as a 3D support material. 3. Identify different tools and methods used in texturing wire surfaces. 4. Apply hammering and stamping techniques to create surface textures. 5. Define the principles of tension, spacing, and design in woven wirework.	● Creating structure with wire frames ● Shaping wire into 3D forms ● Hammering, texturing, stamping ● Layered and multi-strand weaving ● Soldering wire forms (rings, pendants, connections) ● Preparing joins, applying flux and solder	
Module 4	**Wire Weaving and Soldering**		**1**
	Learning Outcomes	**Module Content**	

	1. Analyze how different wire gauges and wrap styles affect the security and aesthetics of a setting. 2. Evaluate the craftsmanship and functionality of wrapped stones in jewelry. 3. Create original jewelry pieces using wrapped beads and stones as focal elements. 4. Define the difference between freeform and symmetrical wrapping techniques.	• Bead wrapping and stone setting with wire • Freeform and symmetrical wire wrapping • Combining multiple wires	
Assignments/ Activities towards CCE			
1. Design & create wire jewelry piece. Earring 5 pcs Pendent 2 Bracelet with beads 2 pcs			

References

The Art of Wire: Creative Techniques for Designer Jewelry – J. Marsha Michler **Publisher** Krause Publications

The Complete Guide to Making Wire Jewelry – Wing Mun Devenney Publication date 2015 Publisher Tunbridge Wells, Kent Search Press

The Complete Metalsmith – Tim McCreight , Davis Publication worcester, MA
Wire Jewelry Masterclass – Abby Hook, **Publisher :** Guild of Master Craftsman Pubns ltd (3 April 2012)

1.3 OEC

<table>
<tr><td>Course code
10444513</td><td colspan="2">Course Name
Jewelry Essentials (TH /PR)</td><td>Crs 4</td></tr>
<tr><td>Course Outcome</td><td colspan="2">After going through the course, learners will be able to
1. Study the different types of jewelry and their historical and cultural significance.
2. Analyze the jewelry making tools and materials safely and effectively.
3. Demonstrate fundamental techniques such as sawing, filing, soldering, and polishing.
4. Design original jewelry pieces using various materials.</td><td></td></tr>
<tr><td>Sr. No.</td><td>Module Outcomes</td><td>Course Contents</td><td>Cr.</td></tr>
<tr><td>Module 1</td><td colspan="2">History of Jewelry and Fundamentals of Jewelry</td><td>1</td></tr>
<tr><td rowspan="2"></td><td>Learning Outcomes</td><td>Module Content</td><td rowspan="2"></td></tr>
<tr><td>After learning the module, learners will be able to
1. Analyze significance of jewelry history, including its roles in religion, fashion, status, and adornment. Explore how historical jewelry styles and motifs continue to influence contemporary jewelry design
2. Develop observational skills for accurately depicting three-dimensional objects in drawings.
3. Explore motifs inspired by nature, geometry, culture, and historical references.
4. Demonstrate the skills in depicting surface textures, reflections, and highlights to enhance the realism of jewelry renderings.</td><td>● History of Indian and western jewelry
● Basic line and object drawing
● Motif Creation & design pattern using principles
● Shading & Rendering
● Design ring pendants, earring and necklace.</td></tr>
<tr><td>Module 2</td><td colspan="2">Introduction of Tools, Vernier Caliper, Formulas & Practice</td><td>1</td></tr>
<tr><td></td><td>Learning Outcomes</td><td>Module Content</td><td></td></tr>
</table>

	After learning the module, learners will be able to 1. Describe common tools and equipment used in jewelry making, including hand tools, bench tools, and machinery 2. Demonstrate the skills for marking in jewelry making to achieve precise and accurate results. 3. Practice soldering exercises such as butt joints, T-joints, and lap joints to develop proficiency in soldering techniques 4. Demonstrate proper handling and usage of tools, emphasizing safety practices such as wearing protective gear and handling tools with care. 5. Demonstrate proper techniques for using the Vernier caliper to measure dimensions of objects accurately. 6. Rise or lower the karat value on the properties and characteristics of the resulting alloy. 7. Define the Principles of melting metal and the different methods used in jewelry making, including torch melting, crucible melting, and casting	● Introduction to Tools, Safety Precautions & Workshop ● Orientation of Vernier Caliper ● Calculation of raising and lowering the karat ● Introduction to melting	
Module 3	**Introductions of machine & Basic Manufacturing Exercise**		**1**
	Learning Outcomes	**Module Content**	
	After learning the module, learners will be able to 1. Explain the history and significance of enameling in jewelry making. 2. Analyze the materials and tools required for enameling.	● Introduction of different types of Setting ● Enameling ● Polishing and finishing (chain and band ring) ● Introduction of gemstones & diamond	

	3. Demonstrate basic enameling techniques including preparation, application, and firing. 4. Demonstrate proper polishing techniques to achieve smooth and reflective surfaces. Apply finishing techniques such as patination or oxidation to enhance the appearance of jewelry pieces.		
Module 4	**Design and Concept Development**		**1**
	Learning Outcomes	**Module Content**	
	After learning the module, learners will be able to 1. Develop Design concept in jewelry making. 2. Demonstrate proficiency in sketching jewelry designs using traditional and digital drawing techniques. 3. Identify and explore potential themes, concepts, or narratives for a jewelry collection. 4. Present a collection of jewelry pieces in a professional and compelling manner.	**Project Work - Design and Concept Development** ● Sketching and planning ● Developing a collection ● Presentation techniques	

Assignments/ Activities towards CCE

1. Rendering pearls, cabochons, and beads is an essential skill for jewelry designers. Assessment will focus on your ability to accurately depict these elements through drawing.
2. The modern-day cuff bracelet is an open or closed rigid bracelet. On ones which are open, each end often has a ball so that the bracelet stays secure around your wrist. A totally closed bracelet can be snapped shut or you simply have to slide it onto your wrist.
3. Draw different shapes with facets. A diamond cut is a style or faceting used when shaping a diamond Single & Double brilliant cut as well as fancy shaped diamonds. Study of More Information About Different Types of Gem Cuts and Shapes.
4. Basic Manufacturing exercise (8 Exercise for each student in brass, copper and silver)
5. Project Work Design, Concept, Final Product development.

References

Crowe, J. (2006). The jeweler's directory of gemstones: A complete guide to appraising and using precious stones from cut and color to shape and settings. Firefly Books.

"McCreight, T. (2010). *The complete metalsmith: An illustrated handbook* (20th anniversary ed.). Davis Publications.

Mentock, D. (2014). The jewelry maker's design book: An alchemy of objects.

Snyder, J. B. (2004). Art jewelry today. Schiffer Publishing.

Untracht, O. (1982). *Jewelry concepts & technology*. Doubleday, North Light Books.

1.4 VSC

<table>
<tr><td>Course code 10644501</td><td colspan="2">Course Name
Elements of Jewelry (Pr)</td><td>Crs
2</td></tr>
<tr><td>Course Outcome</td><td colspan="2">After going through the course, learners will be able to
1. Illustrate different technical elements used to develop a jewellery product.
2. Analyse jewellery findings, individual elements that significantly enhance their jewellery-making skills,
3. Define the precious gemstones and their physical properties.
4. Demonstrate the different findings in the creation of intricate jewellery designs.</td><td></td></tr>
<tr><td>Sr. No.</td><td>Module Outcomes</td><td>Course Contents</td><td>Cr.</td></tr>
<tr><td>Module 1</td><td colspan="2">Introduction of Jewellery Finding</td><td>1</td></tr>
<tr><td></td><td>Learning Outcomes</td><td>Module Content</td><td></td></tr>
<tr><td></td><td>After learning the module, learners will be able to
1. Demonstrate different findings in the creation of intricate jewellery designs.
2. "Apply the appropriate findings to ensure the structural integrity and durability of jewellery."
3. Defining the types and purposes of findings can streamline the jewellery-making process.</td><td>● Jewellery Findings-
● Bails, Bead Caps, Chain by The Foot, Clasps Toggles, Crimp Heads, Crimp Covers, Eye Pins, Head, Pins, Link and Connectors Split, Ear wires, Lever backs, Earring Backs, Bezels Etc.Necklace linking.
● Different elements of pendent
● Gemstone, metal, Other Materials, Setting, bail, Backplate etc.</td><td></td></tr>
<tr><td>Module 2</td><td colspan="2">Designing Elements of Jewelry</td><td>1</td></tr>
<tr><td></td><td>Learning Outcomes</td><td>Module Content</td><td></td></tr>
<tr><td></td><td>After learning the module, learners will be able to
1. Identify and design various beads and naturally occurring stones and their structures.
2. Define the precious gemstones and their physical properties.
3. Differentiate the requirements in jewellery settings
4. Define the thickness of the metal and wire in jewelry findings.</td><td>Working on Article on Different Themes
● Resin Beads, Cabochons stones.
● Natural Stone Beads, Wire Size,
● Jewellery Wire Material.
● Gemstone Beads
● Properties of different gemstones
● Amazonite, Amber, Amethyst, Agate, Crystal
● Coral, Jasper, Jade, Black Stone, Beryl, Rose Quartz
● Different Types of setting through drawings</td><td></td></tr>
</table>

Assignments/ Activities towards CCE
1. Students can design their own piece of jewelry, focusing on incorporating various elements such as gemstones, metals, and textures. They should include sketches or renderings along with a written explanation of their design choices. (10 Design assessment for each student) 2. Assign specific materials used in jewelry making (e.g., gold, silver, diamonds, brass copper, beads,etc) and have them research the properties, sourcing, and cultural significance of each material. They can present their findings in a comparative analysis. (10 Design assessment for each student) 3. Students analyze current trends in the jewelry market, including popular materials, styles, and consumer preferences. They can conduct surveys or interviews to gather data and present their findings in a report or presentation. (10 Design assessment for each student)

References

Brambatti Manuela, MARC preview: Show Jewellery Illustration and Design Vol. 1, Spain Hoaki Books 2022, ISBN: 9788416851577
Bain, K. (1991). Dangles And Beads. By Weiner.Eastman Pubs
Ball, M. (2000). Wire Work. New Holland Publishers Ltd
Jargstorf, S. (1997). Baubles, Buttons And Beads: The Heritage Of Bohemia.Schiffer Publishing Ltd
Morris, D. (1999). Protective Amulets & Charms. Design Book. Element Books Limited.
Murray, M. (1995). All About Beads. Batsford Ltd

1.5 SEC

<table>
<tr><td>Course code 10744501</td><td colspan="2">Course name
Professional Computer Skills (Pr)</td><td>Crs
2</td></tr>
<tr><td>Course Outcome</td><td colspan="2">After going through the course, learners will be able to
1. Operate desktop computers to carry out computational tasks
2. Recognize working of hardware and software and the importance of operating systems
3. Design presentations using related Software
4. Acquire skills to present ideas digitally and manage digital content effectively</td><td></td></tr>
<tr><td>Sr. No.</td><td>Module Outcomes</td><td>Course Contents</td><td>Cr.</td></tr>
<tr><td>Module 1</td><td colspan="2">Computer Hardware and File Management</td><td>1</td></tr>
<tr><td rowspan="2"></td><td>Learning Outcomes</td><td>Module Content</td><td rowspan="2"></td></tr>
<tr><td>After learning the module, learners will be able to
1. Recognize fundamental concepts of computer hardware and software.
2. Manage files and folders effectively using different operating systems.
3. Create, edit, and format documents using related digital platforms</td><td>Introduction to Computers and Operating Systems
● Overview of computer basics: (processing power, memory & storage space, High-Quality Monitor; Graphic tablet, scanner, printer, external hard disk, Wacom stylus)
● Introduction to operating systems: Similar to or Windows, macOS, Linux and other sources.
File Management
● Creating, organizing, and managing files and folders
● Understanding file formats and extensions
● Using cloud storage for file backup and sharing
Word Processing Software
● Creating and formatting documents
● Using templates and styles
● Inserting images, tables, and charts
● Using track changes and comments for collaboration
Open-Source Equivalent: Google doc:
● Basic functionality mirroring</td></tr>
<tr><td>Module 2</td><td colspan="2">Spreadsheets, Presentation and Email fundamentals</td><td>1</td></tr>
<tr><td rowspan="2"></td><td>Learning Outcomes</td><td>Module Content</td><td rowspan="2"></td></tr>
<tr><td>After learning the module, learners will be able to
1. Create and manage spreadsheets using software (Licensed or Open Source)</td><td>Spreadsheet Software
● Basics of spreadsheets and data entry
● Formatting cells and using formulas
● Creating charts and graphs
● Basic data analysis and pivot tables
Open-Source Equivalent: Google</td></tr>
</table>

	2. Design and deliver presentations using effective and efficient software 3. Demonstrate effective use of email, internet, and online collaboration tools.	sheet: ● Basic functionalities mirroring Presentation Software ● Presentation slides: ● Creating and designing presentations ● Using themes and templates ● Adding multimedia elements (images, audio, video) ● Presentation techniques and tips Open-Source Equivalent: google slides/Canva: ● Basic functionalities mirroring Email and Internet Skills ● Setting up and managing email accounts ● Email etiquette and professional communication ● Using search engines effectively for research ● Basics of online collaboration tools Basic Troubleshooting and Maintenance ● Common computer issues and their solutions ● Maintaining system performance: updates, antivirus, and backups ● Basic network troubleshooting	

Assignments/ Activities towards CCE

(Any two)

Assignment 1: Computer Basics and File Management

1. Write a short note (300-500 words) explaining the difference between hardware and software. Include examples of each.
2. Create a folder structure on your computer for organizing your academic files. Take a screenshot of the folder structure and submit it.
3. Upload three different file types (e.g., a text document, an image, and a spreadsheet) to a cloud storage service. Share the links to these files.

Assignment 2: Word Processing Project

1. Create a 2-page newsletter for a fictional fashion event using Word processing software. The newsletter should include:
   - A header with the event title and date.
   - At least two images related to the event.
   - Text formatted in different styles (e.g., headings, subheadings, body text).
   - A table showing the event schedule.
   - A footer with page numbers.
2. Save both documents as PDF files and submit them.

Assignment 3: Spreadsheet Analysis Project

1. Create a spreadsheet containing hypothetical data for a fashion retail store. The data should include:

- Product names
- Categories
- Prices
- Quantities sold in the past month

2. Perform the following tasks:
- Calculate the total sales for each product.
- Identify the top-selling product category using a pivot table.
- Create a bar chart showing the sales figures for each product.

3. Save both spreadsheets as PDF files and submit them.

Assignment 4: Presentation Project

1. Create a 15-slide presentation about the latest trends in fashion using google slides or equivalent. The presentation should include:
- A title slide with your name and the presentation title.
- Slides with text and images illustrating different fashion trends.
- A conclusion slide summarizing the key points.
- Use of animations and transitions to enhance the presentation.

References

Brown, B. (2019). Microsoft PowerPoint 2019 in 90 pages. Belleayre Books.

Guide with Examples That Teaches Everything You Need to Know about Microsoft Excel 2020 (Formulas and Functions Inclusive). Independently Published.

Jackson, L. (2013). PowerPoint Surgery: How to create presentation slides that make your message stick. Engaging Books.

Jordan, J. (2021). Excel 2020 for Beginners: The Complete Dummy to Expert Illustrative
Lewis, C. M., Chatfield, C., & Johnson, T. (2019). Microsoft Project 2019 Step by step. Microsoft Press.

Professor, M. O., & Nordell, R. (2019). Microsoft Outlook 365 Complete: In Practice, 2019 Edition. McGraw-Hill Education.

Weverka, P. (2018). Office 2019 All-in-One for dummies. John Wiley & Sons.

Weverka, P. (2019). Office 365 All-in-One for dummies. John Wiley & Sons.

Semester II (22Credits)

2.1 Major (Core)

<table>
<tr><td>Course code
20144521</td><td colspan="2">Course Name
Basic Jewelry Manufacturing</td><td>Crs 4</td></tr>
<tr><td>Course Outcome</td><td colspan="2">After going through the course, learners will be able to
1. Learn the safety protocols and practices using tools, equipment, and materials in the jewelry workshop.
2. Demonstrate and learn with essential jewelry-making tools and equipment and learn how to use them safely and effectively.
3. Explore and experiment with different ideas and materials to develop a personal style and innovative approach in jewelry making.
4. Create a jewellery product using sawing, filing, soldering, and polishing techniques.
5. Solve common problems that arise during the jewelry making process.</td><td></td></tr>
<tr><td>Sr. No.</td><td>Module Outcomes</td><td>Course Contents</td><td>Cr.</td></tr>
<tr><td>Module 1</td><td colspan="2">Introduction of tools ,Vernier caliper & Practice</td><td>1</td></tr>
<tr><td rowspan="2"></td><td>Learning Outcomes</td><td>Module Content</td><td rowspan="2"></td></tr>
<tr><td>After learning the module, learners will be able to
1. Define the fundamentals of jewelry-making, and will differentiate between common tools and equipment
2. Vernier Calliper for Precise measurement.
3. Parts of a Vernier Calliper.
4. Take readings in Vernier Calliper
5. Practice measuring.
6. Differentiate the Saw blade and
7. Demonstration of fixing the saw blade in a saw frame.
8. Gradation of emery paper.
9. Hands on assemble jewelry components effectively using soldering joints</td><td>• Importance of safety measures in jewelry-making
• Introduction to workshop practice and procedure
• Purpose and function of the tool.
• Importance of safety measures in jewelry-making
• Hand Craft Jewellery technique for accurate measurement using a Vernier caliper.
• Introduction of Saw frame. Specification of saw blade. Gradation of emery
• The principles and importance of soldering in jewellery making process</td></tr>
</table>

<table>
<tr><td>Module 2</td><td colspan="2">Basic techniques & Formulas</td><td>1</td></tr>
<tr><td rowspan="2"></td><td>Learning Outcomes</td><td>Module Content</td><td rowspan="2"></td></tr>
<tr><td>After learning the module, learners will be able to
1. Define the basic techniques involved in manufacturing Jewellery.
2. Identify the processes involved in lowering and raising the karat of precious metals
3. Achieve desired metal compositions applying formulas in jewelry manufacturing.
4. Learn what is Annealing & Alloying</td><td>● Calculation of lowering and raising karat
● Calculation lowering and raising the karat.
● Annealing (purpose of Annealing)
● Alloying - (purpose of Alloying, alloys, Weighing the metal, preparing the ingots, melting, pouring,
● Periodic table to understand the melting points of metal, specific gravity, chemical symbol of silver, copper, gold etc</td></tr>
<tr><td>Module 3</td><td colspan="2">Introductions of machine & Basic technical Exercise</td><td>1</td></tr>
<tr><td></td><td>Learning Outcomes</td><td>Module Content</td><td></td></tr>
<tr><td></td><td>After learning the module, learners will be able to
1. Importance of Planning and Marking
2. Demonstrate basic techniques involved in manufacturing Jewellery
3. Demonstrate technicalities related to wire, its types, draw plates, etc.</td><td>● Demonstration of using rolling machine, pickling, Metal melting processes involved in Jewellery Manufacturing
● The technical details of wires, chains, draw plates
● Demonstration of Technical Exercises based on the lab assignment.</td><td></td></tr>
<tr><td>Module 4</td><td colspan="2">Basic Manufacturing Exercises</td><td>1</td></tr>
<tr><td rowspan="2"></td><td>Learning Outcomes</td><td>Module Content</td><td rowspan="2"></td></tr>
<tr><td>After learning the module, learners will be able to
1. Learn What is soldering and how to do soldering
2. Learn scoring and chamfering
3. Demonstrate doming techniques with help of dapping punch & die block
4. Achieve the surface filing & finishing with the help of required polishing tools on given exercise.</td><td>● What is soldering?
● How to make various types of solder
● Calculate to prepare the metals (solder alloys percentage) for making solder
● Introduction of tools & equipment’s required for soldering
● Different types of joints
● Types of flame and their application.
● Any 2 jewellery pieces use all the above techniques.
● Technical Exercises
● Polishing</td></tr>
<tr><td colspan="4">Assignments/ Activities towards CCE</td></tr>
</table>

1. Sawing straight & curve lines – Completion of the sawing exercise using manufacturing technique in handmade jewelry (1pcs in brass/ copper sheet)
2. Bimetal fitting --- Completion of the sawing exercise using manufacturing technique in handmade jewelry (1pcs in brass/ copper sheet)
3. Open cube---- complete the exercise as per given sheet or instruction. (1pcs in brass/ copper sheet)
4. Dome Pendant or Earring --- complete the exercise as per given sheet or instruction. (1pcs in silver sheet)
5. Curb chain ------ complete the exercise as per the given sheet or instruction. (1pcs in silver wire)
6. Brooch pins---- complete the exercise as per the given sheet or instruction. (1pcs in silver sheet)

References

Cogswell, J. (2008). *Creative Stonesetting*. Brynmorgen Press.
McCreight, T. (1991). *The Complete Metalsmith: An Illustrated Handbook*. Davis Publications.
Holschuh, B. (2009). *The Jeweler's Studio Handbook: Traditional and Contemporary Techniques for Working with Metal and Mixed Media Materials*. Quarry Books.
McCreight, T. (2004). *Complete Metalsmith: Professional Edition*. Davis Publications.
McCreight, T. (1991). *Jewelry Making: Techniques for Metal*. Davis Publications.
Untracht, O. (1982). *Jewelry: Concepts and Technology*. Doubleday.
Young, A. (2010). *The Workbench Guide to Jewelry Techniques*. Interweave Press.

2.2 Major (Core)

<table>
<tr><td>Course code
20144502</td><td colspan="2">Course Name
Basic Jewelry Design</td><td>Crs 2</td></tr>
<tr><td>Course Outcome</td><td colspan="2">After going through the course, learners will be able to
1. Differentiate & identify the types of rings, necklaces, and earrings, reflect the history and evolution of jewelry.
2. Demonstrate elements and principles of design, along with mastering basic drawing techniques, is for creating effective design sketches for jewellery.
3. Demonstrate the skill set to create contemporary jewellery design.
4. Create unique design of jewellery products</td><td></td></tr>
<tr><td>Sr. No.</td><td>Module Outcomes</td><td>Course Contents</td><td>Cr.</td></tr>
<tr><td>Module 1</td><td colspan="2">Illustration of Jewelry using elements and principles of Design</td><td>1</td></tr>
<tr><td rowspan="2"></td><td>Learning Outcomes</td><td>Module Content</td><td rowspan="2"></td></tr>
<tr><td>After learning the module, learners will be able to
1. Apply fundamental skills in jewellery design and creation.
2. Apply different techniques and materials used in illustrations of jewellery.</td><td>● History and Evolution of Jewellery
● Types of Jewellery (e.g., rings, necklaces, earrings)
● Elements of Design (line, shape, form, texture, color)
● Design Patterns using Design Principles (balance, contrast, emphasis, rhythm, unity)
● Basic Drawing Techniques
● Motif Creation & Simplification
● Concept Development</td></tr>
<tr><td>Module 2</td><td colspan="2">Advanced Design Techniques</td><td>1</td></tr>
<tr><td rowspan="2"></td><td>Learning Outcomes</td><td>Module Content</td><td rowspan="2"></td></tr>
<tr><td>After learning the module, learners will be able to
1. Design a thematic jewelry collection, incorporating advanced techniques
2. Design Balancing Aesthetic Appeal and Practicality in jewellery sketching</td><td>Advanced Design Techniques
● Incorporating Various Materials (precious metals, gemstones, alternative materials)
● Techniques for Enhancing Design Aesthetics
Aesthetics and Functionality
● Balancing Aesthetic Appeal and Practicality
● Ergonomics in Jewellery Design
Final Presentation
● Preparing a Cohesive Collection
● Presentation Skills and Techniques
Creating a Professional Portfolio</td></tr>
<tr><td colspan="4">Assignments/ Activities towards CCE</td></tr>
</table>

1. Designing and rendering various types of jewellery pieces using the design process.
    - Necklace, ring, earring, brooch, bracelet (10 Design assessment for each student)

2. Creating jewellery collections- commercial and statement. (10 Design assessment for each student)
3. Rendering various gemstones and their uses. (20 gemstone rendering assessment for each student)
4. Combining various elements of jewelry. (Polishes, techniques, gemstones, diamonds, metal, pearls, Finishes etc.) (10 Design assessment for each student)

References

Brambatti Manuela, MARC preview: Show Jewellery Illustration and Design Vol. 1, Spain Hoaki Books 2022, ISBN: 9788416851577

Galli, M. P., Giambelli, N., & Riviere, D. (1999). *The art of jewelry design: Principles of design, rings & earrings*. Schiffer Publishing.

Mattiello, A. (2009). *The jewelry designer's directory of shape and form*. Interweave.

Olver, E. (2002). *Jewelry design: The artisan's reference*. Krause Publications.

Olver, E. (2008). *Jewelry design handbook*. A & C Black.

Untracht, O. (1982). *Jewelry concepts and technology*. Doubleday.

2.3 VSC S2

<table>
<tr><td>Course code
20644521</td><td colspan="2">Course Name
Material Studies for Jewellery Design</td><td>Crs 2</td></tr>
<tr><td>Course Outcome</td><td colspan="2">After going through the course, learners will be able to
1. Define and differentiate the characteristics and properties of different materials used in jewellery design.
2. Explore contemporary trends and innovations in jewellery materials
3. Develop Skills to identify, evaluate and select appropriate materials for various Jewellery designs.
4. Design and develop various jewellery products by using different tools, techniques, and materials</td><td></td></tr>
<tr><td>Sr. No.</td><td>Module Outcomes</td><td>Course Contents</td><td>Cr.</td></tr>
<tr><td>Module 1</td><td colspan="2">Introduction to Basic materials & tools</td><td>1</td></tr>
<tr><td rowspan="2"></td><td>Learning Outcomes</td><td>Module Content</td><td rowspan="2"></td></tr>
<tr><td>After learning the module, learners will be able to
1. Identify and recognise various materials commonly used in jewellery making.
2. Demonstrate of tools and techniques with increased proficiency for making specific jewellery designs.</td><td>Introduction to Basic tools , Materials & their Properties
• Overview of common materials used in jewellery making (e.g., metals, gemstones, beads, ceramics, plastics).
• Study of behavior, characteristic, properties, dimensionality, physical and visual potential of the basic materials.
• Orientation of basic hand tools, cutting tools & techniques for material Manipulation.
• Demonstrations and hands-on exercises to develop fundamental skills in handling materials and tools.</td></tr>
<tr><td>Module 2</td><td colspan="2">Material Manipulation- (Common Materials)</td><td>1</td></tr>
<tr><td rowspan="2"></td><td>Learning Outcomes</td><td>Module Content</td><td rowspan="2"></td></tr>
<tr><td>After learning the module, learners will be able to
1. Identify and differentiate various types of materials
2. Explore and explain different variations of materials with aesthetic value.</td><td>• Orientation of basic material to be manipulated:
• Metal, Plastic, Ceramic
• Wood, Glass, Paper
• Fabric, Leather, Yarns
• Understanding advantages and challenges of the above-mentioned materials
• Introduction to advanced techniques for working with combined materials, (e.g. carving, molding, weaving, and embellishing.)</td></tr>
<tr><td>Module 3</td><td colspan="2">Design development and Material selection</td><td>1</td></tr>
</table>

<table>
<tr><td></td><td>Learning Outcomes</td><td>Module Content</td><td></td></tr>
<tr><td></td><td>After learning the module, learners will be able to
1. To analyze and interplay between various materials to achieve desired aesthetics and functionality.
2. Explore and experiment various kinds of materials for creativity and innovation Designs</td><td>Designing and Material selection for Jewellery Design:
● Design development as per concept/ theme
● Balancing aesthetics, functionality, and durability
● Choosing & Applying right material for a design concept/ theme
● Use of mix media materials for making single product
● Influence of Cultural heritage on choice of material
● Experimentation and innovation through guided products that combine multiple materials and techniques</td><td></td></tr>
<tr><td>Module 4</td><td colspan="2">Design Analysis & Evaluation</td><td>1</td></tr>
<tr><td rowspan="2"></td><td>Learning Outcomes</td><td>Module Content</td><td rowspan="2"></td></tr>
<tr><td>After learning the module, learners will be able to
1. Hands on experience in developing jewelry pieces using professional techniques and materials
2. Carry out projects of jewellery making using combined materials from concept to completion incorporating sustainable and ethical practices.</td><td>● Advance and Professional Practices & Project:
● Trends, Brands & Market research in Jewellery materials, design & consumer preferences.
● Incorporating Business & ethical practices- ethical consideration in material sourcing, making, Pricing, marketing, and selling.
● Design conceptualization and product development.
● Developing original and creative jewelry design based on the above points.
● Project- Developing and creating Mixed media jewellery project that demonstrates proficiency in material selection, technique application, and creative expression.</td></tr>
<tr><td colspan="4">Assignments/ Activities towards CCE</td></tr>
<tr><td colspan="4">1. Complete a worksheet with images and descriptions of 10 different materials, identify each material based on its properties, characteristics.
2. To experiment with one chosen material from the basic materials, create a small jewelry piece using the same. Write a small report on challenges faced while working on the material.
3. Design and create a jewellery piece by combining two or more different materials and apply at least one advanced technique.</td></tr>
</table>

4. Project- Design a small collection of minimum 3 pieces incorporating multiple materials and techniques, prepare a presentation detailing your design concept, material choices, process. Present the design along with a rationale explaining the creative process and discuss how ethical practices were implemented and monitored.

References

Bond C.(2013) "Design and Make Precious Jewellery from Plastics". Bloomsbury-London
Bosworth J.(2010) "Ceramics Jewellery: Handbook". Bloomsbury-London
Byrne, G. (2008) "Making Hair Jewels & Accessories". A & C Black-London
Cherry, N. (2013) "Jewellery Design & Development: From Concept to Object". Bloomsbury-New York
Devennet M.(2015) "The Complete Guide to Making Wire Jewellery From Beginner to Advanced Techniques, Projects & Patterns". Search Press-London
Estrada, N. (2016) "New Necklaces: 400 Designs In Contemporary Jewellery". Promopress-China
Keay, S.(2011) "Design & Make Jewellery Using Textile Techniques" A & C Black-London
Keay , S.(2012) "Design And Make Paper Jewellery" Bloomsbury-China
MacDonald, J.(2009) "Jewellery Form Recycled Materials." A & C Black.-London
Mcgrath, J.(2010) "The New Encyclopedia of Jewelry Making Techniques" Search Press-London
Okeeffe , S. (2011) "Practical Jewellery Making Techniques : Problem Solving" A & C Black-London

2.4 VSC S3

<table>
<tr><td>Course code
20344521</td><td colspan="2">Course Name
Accessory Design</td><td>Crs 2</td></tr>
<tr><td>Course Outcome</td><td colspan="2">After going through the course, learners will be able to
1. Describe different types of accessories through various cultures and eras.
2. Classify various categories of fashion accessories
3. Explore a variety of materials for creating different categories of accessories.
4. Design and present a cohesive accessory collection that showcases originality, craftsmanship, and market viability</td><td></td></tr>
<tr><td>Sr. No.</td><td>Module Outcomes</td><td>Course Contents</td><td>Cr.</td></tr>
<tr><td>Module 1</td><td colspan="2">Introduction to Fashion Accessories</td><td>1</td></tr>
<tr><td rowspan="2"></td><td>Learning Outcomes</td><td>Module Content</td><td rowspan="2"></td></tr>
<tr><td>After learning the module, learners will be able to
1. Analyze various categories of fashion accessories
2. Develop a solid foundation in the principles and elements of design applicable and materials used to create various types of accessories</td><td>● Historical overview of different categories of accessories from ancient to modern period
● Study the evolution of design and styles of different categories of accessories like bags, footwear, jewelry, headgears, belts etc.
● Develop comprehensive knowledge of a wide range of materials used across different accessory types like leather, wood, plastic, textile, metal, shells etc.
● Experimentation with one type of material to create an accessory demonstrating originality</td></tr>
<tr><td>Module 2</td><td colspan="2">Material Utilization for Accessory Design</td><td>1</td></tr>
<tr><td rowspan="2"></td><td>Learning Outcomes</td><td>Module Content</td><td rowspan="2"></td></tr>
<tr><td>After learning the module, learners will be able to
1. Demonstrate skills for incorporation of fashion trends and consumer preferences into creating accessory designs.
2. Demonstrate proficiency in creating innovative and functional accessory designs</td><td>● Analyzing fashion trends, market research and study of consumer behavior.
● Acquire hands-on skills in the manufacturing processes of accessories.
● Conceptualization and development of accessories taking into consideration materials and categories learnt in module 1.</td></tr>
<tr><td colspan="4">Assignments/ Activities towards CCE</td></tr>
</table>

7. Design and sketch an accessory taking inspiration from any era in history and explain the concept in the form of a presentation.
8. Design and create a piece of jewelry based on a chosen theme, taking into consideration any material. Document the process from concept to finished product.

References

Byrne, G. (2008). Making Hair Jewels and Accessories. A & C Black Publishers Ltd.
Devennet, M. (2015). Crochet: Fantastic Jewelry, Hats, Purses, Pillows and More. Search Press.
Harris C., (2000), Miller's Collecting Fashion & Accessories, Octopus publishing.
Wells W., (2008), Masters: Beadweaving: Major Works by Leading Artists, Lark Books.

2.5 OEC

<table>
<tr><td>Course code 20444521</td><td colspan="2">Course Name
Jewelry Making - Metal Wires (Pr)</td><td>Crs 4</td></tr>
<tr><td>Course Outcoe</td><td colspan="2">After going through the course, learners will be able to
7. Demonstrate foundational skills in wire manipulation and metalwork
8. Identify and work with various wire materials and gauges
9. Apply soldering, hammering, wrapping, and weaving techniques
10. Design and fabricate original pieces of wire jewelry
11. Critically evaluate and improve their work and the work of peers
12. Maintain safe practices in a jewelry studio environment</td><td></td></tr>
<tr><td>Sr. No.</td><td>Module Outcomes</td><td>Course Contents</td><td>Cr.</td></tr>
<tr><td>Module 1</td><td colspan="2">Introduction to Wire Jewelry</td><td></td></tr>
<tr><td rowspan="2"></td><td>Learning Outcomes</td><td>Module Content</td><td rowspan="2"></td></tr>
<tr><td>After learning the module, learners will be able to
6. Identify and describe different types of metal wires, their properties, and appropriate applications in jewelry making.
7. Demonstrate fundamental wire manipulation techniques such as cutting, bending, wrapping, weaving, soldering, and finishing.
8. Design original wire-based jewelry pieces by applying principles of form, function, and aesthetics.
9. Apply safe practices in handling tools, torches, and materials in a jewelry studio environment.
10. Evaluate and critique their own work and the work of peers to improve craftsmanship and creative expression</td><td>● Introduction to materials: copper, brass, silver, aluminum wires
● Tools: pliers, cutters, mandrels, files, hammers
● Safety protocols while handling machinery</td></tr>
</table>

Module 2	**Basic Wire Techniques & Soldering**		**1**
	Learning Outcomes	**Module Content**	
	After learning the module, learners will be able to 4. Create basic shapes with help of pliers 5. Learn What is soldering and how to do soldering 6. Achieve the surface filing & finishing with the help of required polishing tools on given exercise.	What is soldering? ● How to make various types of solder ● Calculate to prepare the metals (solder alloys percentage) for making solder ● Introduction of tools & equipment's required for soldering ● Different types of joints ● Types of flame and their application. ● Any 2 jewellery pieces use all the above techniques. ● Technical Exercises ● Polishing	
Module 3	**Wrapping Techniques**		**1**
	Learning Outcomes	**Module Content**	
	After learning the module, learners will be able to 6. Apply knowledge of wire properties to construct stable wire frames. 7. Create functional and decorative structures using wire as a 3D support material. 8. Identify different tools and methods used in texturing wire surfaces. 9. Apply hammering and stamping techniques to create surface textures. 10. Define the principles of tension, spacing, and design in woven wirework.	● Creating structure with wire frames ● Shaping wire into 3D forms ● Hammering, texturing, stamping ● Layered and multi-strand weaving ● Soldering wire forms (rings, pendants, connections) ● Preparing joins, applying flux and solder	
Module 4	**Wire Weaving and Soldering**		**1**
	Learning Outcomes	**Module Content**	

	5. Analyze how different wire gauges and wrap styles affect the security and aesthetics of a setting. 6. Evaluate the craftsmanship and functionality of wrapped stones in jewelry. 7. Create original jewelry pieces using wrapped beads and stones as focal elements. 8. Define the difference between freeform and symmetrical wrapping techniques.	• Bead wrapping and stone setting with wire • Freeform and symmetrical wire wrapping • Combining multiple wires	
Assignments/ Activities towards CCE			
2. Design & create wire jewelry piece. Earring 5 pcs Pendent 2 Bracelet with beads 2 pcs			

References

The Complete Metalsmith – Tim McCreight
The Art of Wire: Creative Techniques for Designer Jewelry – J. Marsha Michler
The Complete Guide to Making Wire Jewelry – Wing Mun Devenney
Wire Jewelry Masterclass – Abby Hook

2.6 SEC

<table>
<tr><td>Course code
20744502</td><td colspan="2">Course Name
Jewelry illustration</td><td>Crs 2</td></tr>
<tr><td>Course Outcome</td><td colspan="2">After going through the course, learners will be able to
1. Demonstrate jewelry designs with technical accuracy.
2. Create Jewelry from pre-defined perspectives related to metals, diamonds and gemstones.
3. Illustrate 3D effects using hand rendering techniques in jewelry designs.
4. Explore various rendering techniques to enhance the visual appeal of jewelry illustration.</td><td></td></tr>
<tr><td>Sr. No.</td><td>Module Outcomes</td><td>Course Contents</td><td>Cr.</td></tr>
<tr><td>Module 1</td><td colspan="2">Importance of Technical Drawings</td><td>1</td></tr>
<tr><td rowspan="2"></td><td>Learning Outcomes</td><td>Module Content</td><td rowspan="2"></td></tr>
<tr><td>After learning the module, learners will be able to
1. Define basics of technical jewelry design.
2. Illustrate jewelry from different perspectives (top, side, front).
3. Illustrate precise technical drawings of jewelry pieces</td><td>● Importance of Technical Drawings in Jewellery Design
● Tools and Materials for Technical Illustration
● Proportions and Scale
● Drawing Jewellery Components (settings, stones, clasps)
● Basics of Perspective in Jewellery Design
● Drawing Jewelry from Various Angles (top, side, front)
● Using Grids and Guides for Accurate Perspective</td></tr>
<tr><td>Module 2</td><td colspan="2">Jewelry Illustration</td><td>1</td></tr>
<tr><td rowspan="2"></td><td>Learning Outcomes</td><td>Module Content</td><td rowspan="2"></td></tr>
<tr><td>After learning the module, learners will be able to
1. Illustrate jewelry designs in 3D with larger ratios.
2. Illustrate realistic and visually appealing jewelry illustrations.
3. Apply various rendering techniques for jewelry illustrations.</td><td>3D Jewelry Illustration
● Introduction to 3D Drawing Techniques
● Scaling Jewellery Designs to Larger Ratios
● Adding Depth and Dimension to Illustrations
Rendering Techniques
● Basics of Rendering in Jewellery Design
● Shading and Highlighting Techniques
● Texturing to Mimic Various Materials (metals, gemstones)
Advanced Rendering
● Using Color to Enhance Jewelry Illustrations
● Creating Reflective and Translucent Effects
Digital Tools for Rendering</td></tr>
</table>

		Jewellery Designs	

Assignments/ Activities towards CCE
1. Designing jewellery pieces in different ratios and rendering the same. (10 Design assessments for each student) 2. Designing jewellery through a design process with technical details. (10 Design assessment for each student) 3. Advanced rendering techniques for giving a 3D look to jewelry pieces. (10 Design assessment for each student) 4. Visualized & application of light and shadow in jewelry rendering. (10 Design assessment for each student)

References

Audette, D., & Dobbins, R. (2010). *Jewelry Illustration*. Brynmorgen Press
Brambatti Manuela (2022) Jewellery Illustration And Design Vol. 1 From Technical Drawing to Professional Rendering Spain Hoaki Books
Colussy, M. K. (2006). *Rendering Fashion, Fabric, and Prints with Adobe Illustrator*. Pearson

Mentock, D. (2014). *The Jewelry Maker's Design Book: An Alchemy of Objects*. Quarry Books
McGrath, J. (2007). *The Complete Jewelry Making Course: Principles, Practice, and Techniques: A Beginner's Course for Aspiring Jewelry Makers*.
Untracht, O. (1982). *Jewelry Concepts and Technology*.

Semester III (22Credits)

3.1 Major (Core)

<table>
<tr><td>Course code
30144521</td><td colspan="2">Course Name
Basics of Jewelry Manufacturing II</td><td>Crs 4</td></tr>
<tr><td>Course Outcome</td><td colspan="2">After going through the course, learners will be able to
1. Learn the safety protocols and practices using tools, equipment, and materials in the jewelry workshop.
2. Demonstrate and learn with essential jewelry-making tools and equipment and learn how to use them safely and effectively.
3. Define and use different ideas and materials to develop a personal style and innovative approach in jewelry making.
4. Create a jewellery product using sawing, filing, soldering, and polishing techniques.
5. Solve common problems that arise during the jewelry making process.</td><td></td></tr>
<tr><td>Sr. No.</td><td>Module Outcomes</td><td>Course Contents</td><td>Cr.</td></tr>
<tr><td>Module 1</td><td colspan="2">Basic Technical Exercise</td><td>1</td></tr>
<tr><td></td><td>Learning Outcomes</td><td>Module Content</td><td></td></tr>
<tr><td></td><td>After learning the module, learners will be able to
1. Importance of Planning and Marking on precious metal
2. Achieve desired metal compositions applying formulas in jewelry manufacturing.
3. Hands on assemble jewelry components effectively using soldering joints
4. Strate Tapper techniques with help of tapper dapping punch & die block</td><td>● Calculation of lowering and raising karat
● Alloying - (purpose of Alloying, alloys, Weighing the metal, preparing the ingots, melting, pouring
● How to divide the collet equally and how to groove
● Demonstrate Tapper techniques</td><td></td></tr>
<tr><td>Module 2</td><td colspan="2">Tube Forming Jewelry</td><td>1</td></tr>
<tr><td></td><td>Learning Outcomes</td><td>Module Content</td><td></td></tr>
<tr><td></td><td>After learning the module, learners will be able to
1. Demonstrate desired metal compositions applying formulas in jewelry manufacturing
2. Hands on assemble jewelry components effectively using soldering joints
3. Define what is hollow Tube? How to make hollow tube with help of swaging block, draw plate & drawing machine
4. Demonstrate round shape with using proper tools</td><td>● Calculation of lowering and raising karat
● Alloying - (purpose of Alloying, alloys, Weighing the metal, preparing the ingots, melting, pouring
● How to make hollow tube with help of swaging block, draw plate & drawing machine
● how to solder hollow tube
● Remove extra solder & file properly to maintain</td><td></td></tr>
</table>

		the profile of the tube ● Make rounds according to the size with the help of bangle mandrel. ● Demonstration of Technical Exercises based on the lab assignment. ● Demonstration on surface filing & emery finishing with the help of required tools & consumables.	
Module 3	**Riveting Technique**		1
	Learning Outcomes	**Module Content**	
	● Demonstrate what riveting techniques are and how to use in jewelry products ● Demonstrate Riveting Materials and Tools ● Demonstrate and Familiarize with essential tools including a riveting hammer, bench block, hole punch, and rivet setter ● Practice drilling accurate holes and aligning components for secure riveting ● Demonstrate riveting techniques in jewelry making ● Solve the common issues like rivet misalignment or improper setting and learn how to repair a piece of jewelry with a faulty riveted connection	● Design a piece of jewelry that incorporates multiple riveted connections ● Experiment with different types of rivets (e.g., tube rivets, decorative rivets) to achieve desired aesthetic and functional outcomes. ● Pay attention to the alignment of components and the finishing of riveted joints. ● Create a piece of jewelry that combines riveting with techniques such as metal etching, texturing, or stone setting ● Explore how rivets can be used to attach non-metal elements (e.g., beads, leather) to metal components.	
Module 4	**Texturing, Stamping Frame and component making**		1
	Learning Outcomes	**Module Content**	
	After learning the module, learners will be able to 1. Develop proficiency in texturing metals using techniques such as hammering, rolling mill embossing, or etching 2. Experiment with combining different textures, stamping designs, and frame styles to	● Creating patterns using different hammering techniques. ● Transfer your chosen texture onto the metal sheet and create jewelry piece. ● Technical Exercises ● Polishing	

	create unique jewelry pieces 3. Demonstrate the skills for frame making, including cutting metal sheets, forming shapes, and soldering joints 4. Develop comprehensive skills in texturing, stamping, frame, and component making, enabling them to create aesthetically pleasing and professionally crafted jewelry pieces 5. Demonstration on surface filing & finishing with the help of required tools & consumables.		

Assignments/ Activities towards CCE

1. Exercise no 1 solitaire ear Completion of the exercise using manufacturing technique in handmade jewelry (1pcs in Silver)
2. Exercise no 2 Hollow tube jewelry (Bangle) -Completion of the exercise using manufacturing technique in handmade jewelry (1pcs in Silver)
3. Riveting Technique Exercise no 3 --- Completion of the sawing exercise using manufacturing technique in handmade jewelry (1pcs in brass/ copper sheet/ Silver Sheet)
4. Texturing ----complete the exercise as per the given sheet or instruction. (1pcs in silver sheet)
5. Stamping Frame and component making ---- complete the exercise as per the given sheet or instruction. (1pcs in silver sheet)

References

Art nouveau jewelry Becker, Vivienne Design Book Thames and Hudson Ltd
BVLGARI Mascetti, Daniela Design Book Abbeville Press Publishers
Jewelry from antiquity to the present Phillips, Clare Design Book Thames and Hudson
Traditional jewellery of India Oppi Untracht Design Book Thames and Hudson

3.2 Major (Core)

<table>
<tr><td>Course code
30144521</td><td colspan="2">Course Name
Advance Jewelry Design – I (Pr)</td><td>Crs 4</td></tr>
<tr><td>Course Outcome</td><td colspan="2">After going through the course, learners will be able to
1. Create designs using standard measurements and parameters of jewellery
2. Demonstrate of Jewellery findings.
3. Develop a 3d metal rendering skills
4. Identify Cuts of Diamond and Gemstones
5. Implement Stone Settings to create design.
6. Define various styles of necklaces</td><td></td></tr>
<tr><td>Sr. No.</td><td>Module Outcomes</td><td>Course Contents</td><td>Cr.</td></tr>
<tr><td>Module 1</td><td colspan="2">Design Various Products cattegories</td><td>1</td></tr>
<tr><td rowspan="2"></td><td>Learning Outcomes</td><td>Module Content</td><td rowspan="2"></td></tr>
<tr><td>After learning the module, learners will be able to
1. Designs various products categories
2. Demonstrate standard measurements and parameters
3. Implement types of gold as per the design requirement</td><td>• Advance Jewelry Design – I (Pr)
• Plain gold Jewellery
• Aesthetic of the design
• Incorporating measurements to design necklaces, pendants, earrings.
• Rendering designs in different types of gold like yellow gold, white gold, pink gold.
• Practicality and functional aspects
• Designing jewellery using Various types of linking, findings and clasps.
• Component and single unit designing Presentation
• Ways of presenting jewellery on paper
• Using various papers presentation techniques</td></tr>
<tr><td>Module 2</td><td colspan="2">Jewellery Rendering</td><td>1</td></tr>
<tr><td rowspan="2"></td><td>Learning Outcomes</td><td>Module Content</td><td rowspan="2"></td></tr>
<tr><td>After learning the module, learners will be able to
1. Define nature of diamonds and gemstones
2. Specify cuts of diamonds and gemstones
3. Create designs using gemstones</td><td>Studded jewellery

• Introduction to the precious and semi-precious gemstones
• Fancy cuts and shapes of diamonds and gemstones
• Older ways of cutting and polishing of diamonds
• Colour variation in the gemstones
• Sizes and weights of diamond and gemstone
• Faceted and cabochon stone
• Stone faceting and stone rendering (RBC, Princess, marquise, oval, pear, baguette, tapper</td></tr>
</table>

		baguette, trillion, emerald) • Various ways of rendering faceted and cabochon gemstone	
Module 3	Various Setting Techniques		1
	Learning Outcomes	**Module Content**	
	1. Define various setting and Apply appropriate Settings as per the design requirement 3. Demonstrate setting ideas 4. Create designs using unusual setting ideas 5. Identify settings used in history	• Evolution in the cuts and facets of gemstones and diamonds • Explore old ways of setting diamonds and gemstones • Manufacturing techniques of setting stones. • Ways of Using gemstones and diamonds to design a studded jewellery • Various types of setting • (prong, bezel, channel, flush, pave, illusion, invisible) •	
Module 4	Design various style of jewellery		1
	Learning Outcomes	**Module Content**	
	After learning the module, learners will be able to • Identify styles of necklaces • Create necklace using measurements according to the styles • Produce designs as per the design brief • Create relevant designs using fabrication parameters	• Designing various styles of necklaces • Trends and styling of necklaces • Basic templates of creating necklaces • Tapering necklaces • Round necklace • V-shape • U- shape • Choker designing • Styles used in domestic and internation market • Designing on the brief	

Assignments/ Activities towards CCE

1. Designing gold jewellery. A various product categories using standard measurements- Necklaces, Rings, bangles, bracelets – (students to make minimum 10 sketches in each category and finalize 1 in each of the above-mentioned product list)
2. Render these in yellow, white and rose gold
3. Design 3 pendant sets with variation of gemstones and diamonds (free to use unusual cuts and shapes, precious and semi-precious gemstones) use of cabochon, pearls or beads) (design as per the brief given).
4. Design V-shape, U-shape, tapper necklaces with variation in styling (like choker, lariat, matinee

Note: Students pay attention to the size of the diamonds and gemstones.
Use standard sizes while designing products.

Design has to be relevant to the brief.
Create designs keeping fabrication in mind

References

21 Different Types of Necklaces (Plus Interesting Facts) (threadcurve.com)
Gemstone Setting: Techniques and Selection Secrets (amusejewelry.com)
Jewelry Stone Settings: A Complete Guide - Jewepiter
Your Guide To Jewellery Stone Setting Types - BIRON® Gems (biron-gems.com)

3.3 Major (Core)

<table>
<tr><td>Course code
30144523</td><td colspan="2">Course Name
Metal Studies for Jewelry - (Pr)</td><td>Crs 2</td></tr>
<tr><td>Course Outcome</td><td colspan="2">After going through the course, learners will be able to
1. Demonstrate the fundamental principles of metallurgy as it applies to jewelry
2. Define key concepts in metallurgy, including metal, alloy, and crystalline structure.
3. Identify master alloys used for different carats and colors.
4. Describe the composition and density of various gold alloys.
5. Implement the process of BSI Hallmarking & testing of gold.</td><td></td></tr>
<tr><td>Sr. No.</td><td>Module Outcomes</td><td>Course Contents</td><td>Cr.</td></tr>
<tr><td>Module 1</td><td colspan="2">INTRODUCTION OF METALLURGY & QUALITY CONTROL</td><td>1</td></tr>
<tr><td></td><td>Learning Outcomes</td><td>Module Content</td><td></td></tr>
<tr><td></td><td>1. Learn the fundamentals of metallurgy, including the properties and structure of precious metals.
2. Learn the process of raising and lowering the karat in gold alloys and the importance of metal density.
3. Define what is metals, alloys, and crystals are, and understand their crystalline structures.
4. Identify the master alloys used for different carats and colors in jewelry making.
5. Explain the importance of heat treatment in jewelry making.
6. Describe the processes of quenching, annealing, hardening, and tempering.
7. Analyze the effects of heat treatment on the physical properties of metals.
8. Apply quality control measures to identify and rectify defects in jewelry.</td><td>● Introduction to Metallurgy (Precious Metal)
● What is Metal
● What is an Alloy
● What are Crystals
● Raising & Lowering of Karat
● Composition of Gold Alloys
● Density of metals
● Master alloys for different carat and colors
● Importance Of Quenching,
● Annealing, Hardening and Tempering
● Quality Control Importance of Q.C. Q.C. Check
● Types Of Defects – Soldering, Setting and Polishing</td><td></td></tr>
<tr><td>Module 2</td><td colspan="2">METALS & ALLOYS</td><td>1</td></tr>
<tr><td></td><td>Learning Outcomes</td><td>Module Content</td><td></td></tr>
<tr><td></td><td>1. Learn various casting methods and their applications in jewelry manufacturing.
2. Create and interpret jewelry manufacturing flowcharts.
3. Identify and analyze process parameters and casting defects
4. Perform techniques such as drawing, shaping, cutting, grinding, and polishing.
5. Demonstrate the processes and importance of gold and rhodium</td><td>● Investment castings, Sand castings
● Jewelry manufacturing flowcharts Process parameters, casting defects,
● Drawing, shaping
● cutting, grinding, polishing
● Gold and rhodium</td><td></td></tr>
</table>

	plating and electro polishing. 6. Implement dust collection methods in a jewelry workshop. 7. Analysis the significance of assaying and hallmarking in the jewelry industry 8. Recognize the importance of dust collection and refining processes. 9. Learn the techniques for rectification, recovery, refining, and recycling of gold 10. Identify customer perspectives and the role of BIS in hallmarking.	plating, Electro polishing • Recovery Refining • Gold Recycling • Dust Collection Methods • Refining Processes • Assaying & Hallmarking • Gold Assaying and Its Importance • Methods & Difficulties	
Assignments/ Activities towards CCE			
1. Lowering and Rasing carat formula practice. 2. Ppt Presentation on given topic 3. MCQ Question bank			

References

- Callister, W. D. (2007). Materials Science and Engineering: An Introduction (7th ed.). Wiley.
- Davis, J. R. (Ed.). (1993). Heat Treatment of Metals. ASM International.
- McCreight, T. (1991). The Complete Metalsmith: An Illustrated Handbook. Davis Publications.
- Mann S.” Design and Make Colored Aluminum Jewellery” A & C Black 2010
- Van M L.” Masters Gold: Major Works by Leading Artists” Lark Books 2006

3.4 Minor Stream

<table>
<tr><td>Course code
30344521</td><td colspan="2">Course Name
Digital illustration – I (Pr)</td><td>Crs 4</td></tr>
<tr><td>Course Outcome</td><td colspan="2">After going through the course, learners will be able to
1. Demonstrate proficiency in using industry-standard digital tools to visualize, construct, and refine jewellery design concepts.
2. Apply principles of form, symmetry, and detailing to create technically accurate digital jewellery sketches and illustrations.
3. Evaluate and manipulate visual elements such as textures, and materials to enhance the realism of digital jewellery renders.
4. Create professional presentations of digital jewellery design compositions suitable for global markets and industry standards.</td><td></td></tr>
<tr><td>Sr. No.</td><td>Module Outcomes</td><td>Course Contents</td><td>Cr.</td></tr>
<tr><td>Module 1</td><td colspan="2">Basics & Jewellery Shape Drawings</td><td>1</td></tr>
<tr><td rowspan="2"></td><td>Learning Outcomes</td><td>Module Content</td><td rowspan="2"></td></tr>
<tr><td>After learning the module, learners will be able to
1. Identify and describe the essential tools and interface components of vector based application applicable to jewellery design.
2. Construct foundational jewellery forms using geometric shapes.
3. Apply symmetry and pathfinder operations to develop clean, accurate jewellery base structures.
4. Organize digital artworks using layers, grouping, and alignment for modular and editable design compositions.</td><td>● Introduction to digital jewellery design: scope, relevance, and industry practices.
● Interface, tools, and workspace management in vector based application.
● Understanding vector vs. raster graphics in the context of jewellery design.
● Geometrical construction of basic jewellery components (beads, chains, settings).
● Developing symmetrical shapes using grid, guides, and pathfinder tools.
● Freehand drawing with the pen tool for organic jewellery forms.
● Layering, grouping, and managing objects for complex design structures.
● File saving formats, resolution settings, and output types for further use.</td></tr>
<tr><td>Module 2</td><td colspan="2">Jewellery Drawings</td><td>1</td></tr>
<tr><td></td><td>Learning Outcomes</td><td>Module Content</td><td></td></tr>
</table>

	After learning the module, learners will be able to 1. Design detailed jewellery pieces including rings, earrings, pendants, and bangles using advanced Illustrator techniques. 2. Integrate traditional and contemporary motifs into complex jewellery compositions with precision and creativity. 3. Manipulate strokes, fills, gradients, and vector brushes to enhance dimensionality and visual impact. 4. Compile presentation-ready digital design sheets using proper formatting, layout, and export settings.	• Conceptualizing and planning digital jewellery compositions. • Creating detailed forms: rings, pendants, earrings, and bangles. • Precision drawing of prongs, bezels, filigree, and ornamental motifs. • Integration of traditional motifs with contemporary design elements. • Applying line weights, strokes, and fills for dimension and clarity. • Custom brush creation for decorative elements and stone textures. • Color palettes and gem simulation through gradients and transparencies. • Presentation boards and layout formatting for design documentation.	
Module 3	**Image Editing & Texture Creation**		1
	Learning Outcomes	**Module Content**	
	After learning the module, learners will be able to 1. Demonstrate proficiency in basic image editing tools for refining scanned or digital jewellery sketches. 2. Create realistic metal and gemstone textures through the application of filters, blending modes, and brush tools. 3. Analyze image properties and modify contrast, color, and resolution for optimal visual clarity. 4. Develop custom patterns and overlays for surface detailing and use in digital renderings.	• Raster based application interface, layers, masks, and blending modes. • Cleaning and enhancing scanned jewellery sketches for digital use. • Adjusting color balance, contrast, and saturation for visual clarity. • Extracting elements using selection tools and image correction techniques. • Creating metal textures (gold, silver, platinum) from scratch. • Developing stone textures (diamond, ruby, emerald, pearl, etc.). • Exporting textures for integration into Illustrator or rendering workflows.	
Module 4	**Rendering and Enhancing Jewellery Designs**		1
	Learning Outcomes	**Module Content**	

	learning the module, learners will be able to 1. Apply shading, and texture blending techniques to render photorealistic jewellery visuals. 2. Use the layer styles, smart objects, and advanced editing tools to enhance depth and material effects. 3. Evaluate the quality and realism of rendered jewellery visuals and make informed improvements.	• Compositing vector art with textures and lighting in raster based application. • Shadowing, reflection, and glow techniques for realism. • Layer styles for embossing, inner glow, and bevel effects. • Photo-retouching jewellery renders for presentations. • Simulating depth and material variation using dodge, burn, and smudge tools. • Creating high-fidelity mockups for presentations and market testing. • Introduction to smart objects for non-destructive rendering workflow. • Preparing final artwork for print and digital publishing.	

Assignments/ Activities

1. Create a variety of basic and complex jewellery shapes
2. Develop precise faceted views to represent gemstone cuts and metal surface reflections.
3. Design and digitally illustrate: Earrings, Pendants, Choker Neckpiece, Brooches, Rings
4. Create realistic gemstone textures & apply these textures to different gemstone shapes to simulate realistic jewellery visuals.
5. Compile all the completed assignments into a single, professionally formatted presentation file (PDF or layered PSD/AI file), including Title pages for each section, Brief captions or design notes, Consistent layout and alignment

Note: Students pay attention to the size of the Jewellery.
Use standard sizes while designing products.
Design has to be relevant to the brief.
Create designs keeping fabrication in mind.

References

Jewellery Illustration and Design, Vol.2: From the Idea to the Project
by Manuela Brambatti & Vinci Cosimo

3.5 OEC

<table>
<tr><td>Course code
30444511</td><td colspan="2">Course Name
Precious and Semi-Precious Stones (Pr)</td><td>Crs
2</td></tr>
<tr><td>Course Outcome</td><td colspan="2">After going through the course, learners will be able to
1. Identify various types of gemstones and their characteristics
2. Learn basic terminology related to gemology, such as cut, color, clarity, and carat weight.
3. Demonstrate gemological tools and techniques to accurately assess and evaluate gemstones
4. Describe the different types of gem treatments and enhancements and their effects on gemstones.</td><td></td></tr>
<tr><td>Sr. No.</td><td>Module Outcomes</td><td>Course Contents</td><td>Cr.</td></tr>
<tr><td>Module 1</td><td colspan="2">Introduction to Gemology & Instruments and their applications.</td><td>1</td></tr>
<tr><td rowspan="2"></td><td>Learning Outcomes</td><td>Module Content</td><td rowspan="2"></td></tr>
<tr><td>After learning the module, learners will be able to
1. Apply knowledge of gemstone properties to assess quality and authenticity
2. Learn basic terminology related to gemology, such as cut, color, clarity, and carat weight.
3. Explain the formation and geological processes that create different types of gemstones
4. Summarize the classification systems used in gemology
5. Differentiate between natural and synthetic gemstones based on their physical and optical properties.
6. Demonstrate how to use gemological tools
7. Conduct basic gemological tests to identify gemstones</td><td>● Introduction of Gemology
● Introduction to type of cuts & shapes
● Types Of Rocks, Minerals and Gem Minerals
● Properties of Mineral/Gemstones
● Beauty, Durability and Rarity Of Gemstones
Instruments to use in gemology
● Dichroscope
● Principle
● Construction and working Isotropic and Anisotropic stones Dichroism and trichrome
● Polaris cope
● Principle
● Construction and working S.R., D.R., A.G.G. & A.D.R stone
● Optic character of gemstone Uniaxial and Biaxial optic signs Use of konoscope
● Refractometer
● Spectroscope
● Visual Identification</td></tr>
</table>

<table>
<tr><td>Module 2</td><td colspan="2">Types of Gemstones and their structure</td><td>1</td></tr>
<tr><td></td><td>Learning Outcomes</td><td>Module Content</td><td></td></tr>
<tr><td></td><td>After learning the module, learners will be able to
1. classification of gemstones into inorganic, organic, and gem rocks
2. crystalline and cryptocrystalline quartz, garnet, feldspar, tourmaline, and other gemstones.
3. Explain the difference between inorganic and organic gemstones.
4. Identify and classify various gemstones based on their physical characteristics and origin.
5. Explain the differences between natural, synthetic, and imitation gemstones.
6. Demonstrate the ability to distinguish between different synthesis methods based on inclusions and growth patterns.
7. techniques of synthetic diamonds and colored stones.
8. Differentiate synthetic gemstones from natural ones through microscopic observation.</td><td>● Various Types Of Gems: Inorganic Gems Like Crystalline And Cryptocrystalline Quartz, Garnet, Feldspar, Tourmaline, Topaz, Peridot, Chrysoberyl’s Cat’sEye, Alexandrite, Spinel, Zircon, Turquoise, Malachite, Diopside, Iolite, Tanzanite, Apatite And Other Rare Stones.
● Organic Gemstone Like Pearl, Ivory, Amber, Coral, Jet Gem Rock Like Lapis Lazuli
● Synthesis Of Diamonds and Color stones
● Identification Of Synthetic
● Synthetics, Treated & Imitations
● Certification Practice</td><td></td></tr>
<tr><td colspan="4">Assignments/ Activities towards CCE</td></tr>
<tr><td colspan="4">1. Lab assessment of identification of gemstone
2. Navratna chart of gemstones.
3. PPT presentation of natural and synthetic gemstones.</td></tr>
</table>

References

Hughes, R. W. (2018). *The book of gems*.
Hughes, R. W. (2017). *Gem identification made easy: A hands-on guide to more confident buying and selling*.
Liddicoat, R. W. (2005). *Gemology* (6th ed.). Gemological Institute of America (GIA).
Read, P. G. (2020). *Gemology*.
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Webster, R. (2004). *Introduction to gemology*. Robert Webster.
Webster, R. (2008). *Gemology* (3rd ed.). Wiley.

3.5 OEC

<table>
<tr><td>Course code
30444512</td><td colspan="2">Course Name
Traditional Indian Jewelry</td><td>Crs 2</td></tr>
<tr><td>Course Outcome</td><td colspan="2">After going through the course, learners will be able to
7. Understand traditional Indian jewelry
8. Explain the cultural and historical significance of traditional Indian jewelry.
9. Demonstrate basic techniques used in traditional Indian jewelry making.
10. Compare different regional styles of traditional Indian jewelry.
11. Design a piece of jewelry inspired by traditional Indian styles.</td><td></td></tr>
<tr><td>Sr. No.</td><td>Module Outcomes</td><td>Course Contents</td><td>Cr.</td></tr>
<tr><td>Module 1</td><td colspan="2">Fundamentals of Jewelry</td><td>1</td></tr>
<tr><td rowspan="2"></td><td>Learning Outcomes</td><td>Module Content</td><td rowspan="2"></td></tr>
<tr><td>After learning the module, learners will be able to
6. Identify various types of traditional Indian jewelry
7. List the techniques used in manufacturing jewelery.
8. Examine the role of traditional jewelry in contemporary fashion.</td><td>Introduction to Traditional Indian Jewelry
• Historical evolution and cultural significance
• Materials and techniques used like Metals (gold, silver, etc.) Gemstones and their meanings.
Explore regional Styles
• North Indian jewelry
• South Indian jewelry
• East and West Indian jewelry
Iconography and Symbolism
• Common motifs and their meanings
• Religious and cultural symbols
• Visit to a local jewelry museum or workshop
• Interview with a traditional jeweler</td></tr>
<tr><td>Module 2</td><td colspan="2">Advanced Techniques and Contemporary Practices</td><td>1</td></tr>
<tr><td rowspan="2"></td><td>Learning Outcomes</td><td>Module Content</td><td rowspan="2"></td></tr>
<tr><td>After learning the module, learners will be able to
5. List advanced techniques used in traditional Indian jewelry making
6. Describe the impact of modern influences on traditional Indian jewelry.
7. Utilize advanced techniques in creating traditional Indian</td><td>Advanced traditional techniques from various parts of India
• Filigree work
• Enameling
• Tarakashi
• Theva jewellery
• Bidari work
• Inlay work
Modern Influences
• Fusion styles
• Global trends
• Technological</td></tr>
</table>

	jewelry. 8. Critique the integration of traditional and modern elements in jewelry design. 9. Develop a contemporary jewelry piece inspired by traditional designs.	advancements Contemporary Applications • Traditional jewelry in modern fashion • Celebrity and bridal jewelry trends Ethical Practices • Sustainable sourcing • Fair trade practices	
Assignments/ Activities towards CCE			
7. Design a contemporary jewelry piece incorporating traditional techniques. 8. Analyze the work of a contemporary jewelry designer who uses traditional Indian elements. 9. Discuss the ethical implications of sourcing materials for traditional jewelry. 10. Make a project report on the traditional techniques explored 11. Make a presentation and present the same			

References

Bernadette van Gelder. (2018). Traditional Indian Jewellery: The Golden Smile of India. Covers legends behind traditional Indian jewelry, exploring its significance and spiritual importance. ACC Art Books Publications.
Oppi Untracht. (2008). Traditional Jewelry of India: culmination of over 30 years of research on personal adornment significance in India. Thames & Hudson publications

3.6 FP

<table>
<tr><td>Course code
31344501</td><td colspan="2">Course Name
Field work ON Indian Jewelry</td><td>Crs 2</td></tr>
<tr><td>Course Outcome</td><td colspan="2">1. Describe the historical evolution of Indian jewelry.
2. Define the cultural significance of different jewelry styles across India.
3. Analyze the materials and techniques used in Indian jewelry.
4. Synthesize their findings into a detailed fieldwork report.
5. Evaluate the authenticity and craftsmanship of jewelry pieces.</td><td></td></tr>
<tr><td>Sr. No.</td><td>Module Outcomes</td><td>Course Contents</td><td>Cr.</td></tr>
<tr><td>Module 1</td><td colspan="2">Introduction to Indian Jewelry and Field Work</td><td></td></tr>
<tr><td rowspan="2"></td><td>Learning Outcomes</td><td>Module Content</td><td rowspan="2"></td></tr>
<tr><td>1. Identify various types of traditional Indian jewelry and their historical significance.
2. Explain the cultural and regional variations in Indian jewelry.
3. Demonstrate basic fieldwork techniques for studying jewelry artifacts.</td><td>● Introduction to Indian Jewelry
● Historical overview of Indian Jewellery (Pre-historical, cave period, indus vally civilization, Gupta period, Mauryan Empire, Mughal era, British period)
● Types of traditional jewelry (e.g., Kundan, Meenakari, Temple jewelry)
● Regional variations (e.g., North Indian, South Indian, East Indian, West Indian)
Field Work documentation techniques
● Basics of fieldwork in jewelry studies
● Documentation methods (e.g., photography, sketching, note-taking)
● Ethical considerations in fieldwork</td></tr>
<tr><td>Module 2</td><td colspan="2">Advanced Field Work and Analysis</td><td></td></tr>
<tr><td rowspan="2"></td><td>Learning Outcomes</td><td>Module Content</td><td rowspan="2"></td></tr>
<tr><td>1. Analyze the materials and techniques used in traditional Indian jewelry.
2. Frame the comprehensive fieldwork report on a selected jewelry piece or collection.
3. Critically evaluate the authenticity and craftsmanship of jewelry artifacts.</td><td>Materials and Techniques
● Common materials used (e.g., gold, silver, gemstones)
● Traditional techniques (e.g., filigree, enameling, stone setting, Kundan, Polki, Theva and many more)
Field Work Report
● Visit to the museum or similar places
● Structuring a fieldwork report
● Integrating visual and textual documentation
● Presenting findings and conclusions
Evaluation of Jewelry</td></tr>
</table>

		• Criteria for evaluating authenticity • Assessing craftsmanship and quality • Identifying modern reproductions and fakes	

Assignments/ Activities towards CCE

1. Fieldwork Documentation and material and Technique Analysis
2. Conduct a fieldwork study on a local jewelry store or artisan or any of the traditional Indian jewellery or a museum.
3. Document the types of jewelry, materials used, and techniques observed. Use photographs, sketches, and detailed notes and include visual aids.
4. Apply fieldwork techniques and document findings effectively and design a suitable jewelelry piece.
5. Additional Activities
6. Group Discussion: Organize a group discussion on the cultural significance of different regional jewelry styles in India.
7. Presentation: Prepare a presentation on the ethical considerations in jewelry fieldwork.
8. **Note**
9. These assignments should help students achieve the learning and course outcomes while engaging deeply with the subject matter.

Semester IV

4.1 Major (Core)

<table>
<tr><td>Course code
40144521</td><td colspan="2">Course Name
Advance Manufacturing - I</td><td>Crs</td></tr>
<tr><td>Course Outcome</td><td colspan="2">After going through the course, learners will be able to
1. Learn how to create hollow sphere with help of dapping punch & die block.
2. Compare the effectiveness of different tools for specific metal setting techniques
3. Identify different metal setting techniques used in various jewelry designs
4. Design a piece of jewelry using a chosen metal setting technique that meets specific aesthetic and functional requirements.
5. Troubleshoot and solve common problems that arise during the jewelry making process.</td><td></td></tr>
<tr><td>Sr. No.</td><td>Module Outcomes</td><td>Course Contents</td><td>Cr.</td></tr>
<tr><td>Module 1</td><td colspan="2">Hand Craft Jewellery Techniques</td><td>1</td></tr>
<tr><td rowspan="2"></td><td>Learning Outcomes</td><td>Module Content</td><td rowspan="2"></td></tr>
<tr><td>After learning the module, learners will be able to
1. Importance of Planning and Marking on precious metal
2. Achieve desired metal compositions applying formulas in jewelry manufacturing.
3. Hands on assemble jewelry components effectively using soldering joints
4. Demonstrate hollow sphere with help of dapping punch & die block.</td><td>● Calculation of lowering and raising karat
● Alloying - (purpose of Alloying, alloys, Weighing the metal, preparing the ingots, melting, pouring.
● How to calculate the diameter of the circle for the hemisphere by using the formula
● Demonstrate Doming 2 hemispheres with help of dapping punch & die block.
● Soldering 2 hemispheres.</td></tr>
<tr><td>Module 2</td><td colspan="2">Bezel Forming box</td><td>1</td></tr>
<tr><td rowspan="2"></td><td>Learning Outcomes</td><td>Module Content</td><td rowspan="2"></td></tr>
<tr><td>After learning the module, learners will be able to
1. Achieve desired metal compositions applying formulas in jewelry manufacturing
2. Achieve round shape with using proper tools
3. Hands on assemble jewelry components effectively using soldering joints
4. Learn how to make</td><td>● Calculation of lowering and raising karat
● Alloying - (purpose of Alloying, alloys, Weighing the metal, preparing the ingots, melting, pouring
● Calculating the length of bezel, saw the metal strips of respective dimensions
● Remove extra solder & file properly to maintain the profile of bezel
● Make rounds according to the size with the help of</td></tr>
</table>

	box fitting.	bezel mandrel. ● Demonstration of Technical Exercises based on the lab assignment. ● Demonstration on surface filing & emery finishing with the help of required tools & consumables.	
Module 3	**Introduction on Metal Setting**		**1**
	Learning Outcomes	**Module Content**	
	After learning the module, learners will be able to 1. Implement safety practices while performing metal setting tasks 2. Describe the importance of metal setting in creating secure and aesthetically pleasing jewelry pieces. 3. Explain how metal settings contribute to the overall functionality and appearance of jewelry. 4. Explain the characteristics and uses of each type of metal setting. 5. Explain the purpose of using shellac in metal setting and describe the process of preparing shellac sticks and using them to fix ornaments 6. Identify the basic steps involved in sharpening gravers	● What is metal setting ● What are the types of metal setting ● Introduction of tools to use in settings ● Importance of metal settings ● Safety precaution ● Introduction of gravers ● Demonstration on sharpening gravers ● Shellac stick preparation & fixing the ornament in shellac	
Module 4	**Prong & Bezel Setting**		**1**
	Learning Outcomes	**Module Content**	
	After learning the module, learners will be able to 1. Develop a toolkit of essential tools for metal setting based on specific needs and preferences. 2. Judge the effectiveness of different metal setting methods in	Introduction of tools for prong setting ● Used in which type of jewelry ● Steps to follow for prong setting ● Introduction of diamonds measurements ● Demonstration of prong setting ● Introduction of tools for	

	achieving desired jewelry outcomes. 3. Acquire skills in Prong & bezel forming shapes, and soldering joints 4. Develop comprehensive skills in Setting Precious and semiprecious Gemstone. 5. Demonstration on surface filing & finishing with the help of required tools & consumables.	bezel setting ● Used in which type of jewelry ● Steps to follow for bezel setting ● Introduction of diamonds measurements ● Demonstration bezel setting ● Polishing	
Assignments/ Activities towards CCE			
1. Exercise no 1 --- Completion of the exercise using manufacturing technique in handmade jewelry (1pcs in Silver) 2. Exercise no 2 -Completion of the exercise using manufacturing technique in handmade jewelry (1pcs in Silver) 3. Exercise no 3 Prong Setting --- Completion of the exercise using manufacturing technique in handmade jewelry (1pcs in brass/ copper sheet/ Silver Sheet) 4. Bezel Setting Exercise no 4----Complete the exercise as per the given sheet or instruction. (1pcs in silver sheet) 5. Stamping Frame and component making ---- complete the exercise as per the given sheet or instruction. (1pcs in silver sheet)			

References

Gormley, A. (2003). *The complete metalsmith: An illustrated handbook*. Davis Publications.
Keystone, S. (2008). *Practical jewelry making*. Springer.
Murray, C. (2014). *Jewelry: Concepts and technology*. Routledge.
McCreight, T. (2017). *The complete metalsmith: An illustrated handbook*. Craftsmans Press.
Olver, E. (2011). *The art of jewelry design: Principles of design, rings, and earrings*. Thames & Hudson.
Revere, A. (2000). *Professional goldsmithing: A comprehensive guide to traditional and contemporary techniques*. Revere Academy Press.
Untracht, O. (1994). *Jewelry concepts and technology*. Doubleday.

4.2 Major (Core)

<table>
<tr><td>Course code
40144522</td><td colspan="2">Course Name
Advance Jewelry Design – II (Pr)</td><td>Crs 4</td></tr>
<tr><td>Course Outcome</td><td colspan="2">After going through the course, learners will be able to
1. Define the purpose and importance of technical drawings in jewellery design.
2. Draft jewelelry designs with technical views.
3. Apply skills of transforming designs from 2D to 3D
4. Explore essential tools such as setsquares, pencils and paper.
5. Apply technical drawing techniques to design views of the products
6. Demonstrate manufacturing techniques to design products
7. Define styles of rings
8. Define styles of earrings</td><td></td></tr>
<tr><td>Sr. No.</td><td>Module Outcomes</td><td>Course Contents</td><td>Cr.</td></tr>
<tr><td>Module 1</td><td colspan="2">jewellery designs from 2diamontional to 3 dimensional</td><td>1</td></tr>
<tr><td rowspan="2"></td><td>Learning Outcomes</td><td>Module Content</td><td rowspan="2"></td></tr>
<tr><td>After learning the module, learners will be able to
1. Use methodology of transforming jewellery designs from 2diamontional to 3 dimensional
2. Demonstrate designs in perspective view
3. Implementation of one point, two-point perspective to create designs</td><td>● Introduction to the technical drawing Setsquare handling practices
● Technical drafting using various methodology
● Designing using 30°,45°, 60° projection methods
● Understand one-point perspective
● Understand two- point perspective
● Transform designs using basic shapes and forms</td></tr>
<tr><td>Module 2</td><td colspan="2">Perspective view to draw jewellery</td><td>1</td></tr>
<tr><td rowspan="2"></td><td>Learning Outcomes</td><td>Module Content</td><td rowspan="2"></td></tr>
<tr><td>After learning the module, learners will be able to
Demonstrate methodology of perspective view to draw jewellery products
Implement the process of projecting designs in orthographic view
Apply accuracy and precision to design views</td><td>● Need of orthographic projection
● Use of orthographic projection in the jewellery
● Learn to handle set square
● Drafting the format
● Illustration of orthographic view
● Understand and execute methodology
● Creating front, top and side views
● Types of rings/ shank (flat band, concave band, convex band, contour band, knife edge, eternity band, solitaire ring, three</td></tr>
</table>

		stone ring) ● Construct rings ● Rings anatomy ● Stylings in ring's gallery and look	
Module 3	Isometric projection		**1**
	Learning Outcomes	**Module Content**	
	After learning the module, learners will be able to 1. Understanding isometric projection 2. Creating products in isometric drawing 3. Differentiating isometric projections than other forms of technical projections 4. Explore how isometric projections are used in jewellery sketching 5. Using ellipses techniques 6. Applying projections to showcase various angles	● Introduction to the isometric projection ● Differentiation of perspective, orthographic and isometric projection ● Basic concept of isometric ● Axonometric method and drafting ● Various planes and projections ● Visual representation of isometric view ● Methodology and ways of drawing the cubes, cuboids and ellipses ● Construction of collet ● Creating accurate and visually appealing representation ● Step by step process of creating views ● Drafting product categories	
Module 4	Styles of rings		**1**
	Learning Outcomes	**Module Content**	
	After learning the module, learners will be able to 1. Define the styles of rings 2. Explore the components of rings such as shank, settings, prongs and bands 3. Define the styles of earrings 4. Explore the finding of earrings	● Anatomy of ring ● Concepts of gallery ● Stylization as per the country demands ● Elaborate the styles of rings such as wedding bands, eternity bands, solitaire rings, men's rings, anniversary bands, fashion bands, birthstone rings, engagement rings, cross over, bypass bands, stackable and many more. ● Types of earrings ● Standard measurements and sizes	

		• Concept designing for the earrings • Stylization of designs as per the trends and demand • Categorization into Traditional, innovative and contemporary designs • Categories as per the jhumkas, studs, chandelier, stilettoes, balis, hoops, danglers	
Assignments/ Activities towards CCE			
1. Create a detail perspective view in one point and two points of the given objects. 2. Cubes, cuboids, cylinder, cone, sphere, pyramid with various projection with changed angles. 3. Create front side and top view of flat band, concave band, convex band, contour band, knife edge, eternity band, solitaire ring, three stone ring 4. Construct an isometric view of cube, cuboid, cylinder, cone, pyramid 5. Construct an ellipses of different sizes and measurements 6. Design bangles, bands and hoops using this technique			

References

Isometric Orthographic Drawing: Books - AbeBooks
Jewellery Illustration and Design: Techniques for Achieving Professional
Mastering Orthographic Drawing: A Guide for Jewellers
Modern Technical Drawing" by George Ellis
Results by Manuela Brambatti (Author), Cosimo Vinci (Author)

4.3 Minor Stream

<table>
<tr><td>Course code
40144513</td><td colspan="2">Course Name
Gemology</td><td>Crs 4</td></tr>
<tr><td>Course Outcome</td><td colspan="2">After going through the course, learners will be able to
1. Identify various types of gemstones and their characteristics
2. Learn basic terminology related to gemology, such as cut, color, clarity, and carat weight.
3. Demonstrate gemological tools and techniques to accurately assess and evaluate gemstones
4. Describe the different types of gem treatments and enhancements and their effects on gemstones.</td><td></td></tr>
<tr><td>Sr. No.</td><td>Module Outcomes</td><td>Course Contents</td><td>Cr.</td></tr>
<tr><td>Module 1</td><td colspan="2">Introduction to Gemology</td><td>1</td></tr>
<tr><td></td><td>Learning Outcomes</td><td>Module Content</td><td></td></tr>
<tr><td></td><td>After learning the module, learners will be able to
1. Apply knowledge of gemstone properties to assess quality and authenticity
2. Learn basic terminology related to gemology, such as cut, color, clarity, and carat weight.
3. Explain the formation and geological processes that create different types of gemstones
4. Summarize the classification systems used in gemology</td><td>● Introduction of Gemology
● Introduction to type of cuts & shapes
● Types Of Rocks, Minerals and Gem Minerals
● Properties of Mineral/Gemstones
● Beauty, Durability and Rarity Of Gemstones
● World Occurrence of Gem Minerals and their Specialties
●</td><td></td></tr>
<tr><td>Module 2</td><td colspan="2">Instruments and their applications.</td><td>1</td></tr>
<tr><td></td><td>Learning Outcomes</td><td>Module Content</td><td></td></tr>
<tr><td></td><td>After learning the module, learners will be able to
1. Differentiate between natural and synthetic gemstones based on their physical and optical properties.
2. Demonstrate how to use gemological tools
3. Conduct basic gemological tests to identify gemstones.</td><td>Instruments to use in gemology
● Dichroscope
● Principle
● Construction and working Isotropic and Anisotropic stones Dichroism and trichrome
● Polaris cope
● Principle
● Construction and working S.R., D.R., A.G.G. & A.D.R stone
● Optic character of gemstone Uniaxial and Biaxial optic signs Use of konoscope
● Refractometer
● Spectroscope</td><td></td></tr>
</table>

		• Visual Identification	
Module 3	**Types of Gemstones and their structure**		1
	Learning Outcomes	**Module Content**	
	1. classification of gemstones into inorganic, organic, and gem rocks 2. crystalline and cryptocrystalline quartz, garnet, feldspar, tourmaline, and other gemstones. 3. Explain the difference between inorganic and organic gemstones. 4. Describe the basic properties and origins of common gemstones like topaz, spinel, pearl, and amber. 5. Identify and classify various gemstones based on their physical characteristics and origin.	• Various Types Of Gems: Inorganic Gems Like Crystalline And Cryptocrystalline Quartz, Garnet, Feldspar, Tourmaline, Topaz, Peridot, Chrysoberyl's Cat'sEye, Alexandrite, Spinel, Zircon, Turquoise, Malachite, Diopside, Iolite, Tanzanite, Apatite And Other Rare Stones. • Organic Gemstone Like Pearl, Ivory, Amber, Coral, Jet Gem Rock Like Lapis Lazuli	
Module 4	**Synthetic Diamonds**		1
	Learning Outcomes	**Module Content**	
	1. Explain the differences between natural, synthetic, and imitation gemstones. 2. Demonstrate the ability to distinguish between different synthesis methods based on inclusions and growth patterns. 3. Compare and contrast the properties and growth techniques of synthetic diamonds and colored stones. 4. Design a basic flowchart to classify stones based on their synthesis method and observable properties. 5. Describe the principles and techniques used in identifying synthetic gemstones. 6. Differentiate synthetic gemstones from natural ones through microscopic observation.	• Synthesis Of Diamonds and Color stones • Identification Of Synthetic • Synthetics, Treated & Imitations • Certification Practice	

Assignments/ Activities towards CCE
1. Lab assessment of identification of gemstone 2. Navratna chart of gemstone. 3. PPT presentation of natural and synthetic gemstones.

References

Hughes, R. W. (2018). *The book of gems*.
Hughes, R. W. (2017). *Gem identification made easy: A hands-on guide to more confident buying and selling*.
Liddicoat, R. W. (2005). *Gemology* (6th ed.). Gemological Institute of America (GIA).
Read, P. G. (2020). *Gemology*.
Read, P. G. (2005). *Gems and gemology: A comprehensive guide to the nature, identification, and evaluation of gemstones*. Springer.
Webster, R. (2008). *Gemology* (3rd ed.). Wiley.
Read, P. (2005). *Gemology*. Butterworth-Heinemann.
Schumann, W. (2009). *Gemstones of the world*. Sterling Publishing.
Webster, R. (2004). *Introduction to gemology*. Robert Webster.

4.4 OEC

<table>
<tr><td>Course code
40444521</td><td colspan="2">Course Name
Jewelry Essentials (PR)</td><td>Crs 2</td></tr>
<tr><td>Course Outcome</td><td colspan="2">After going through the course, learners will be able to
1. Analyze the different types of jewelry and their historical and cultural significance.
2. Analyze the jewelry making tools and materials safely and effectively.
3. Demonstrate fundamental techniques such as sawing, filing, soldering, and polishing.
4. Design original jewelry pieces using various materials.</td><td></td></tr>
<tr><td>Sr. No.</td><td>Module Outcomes</td><td>Course Contents</td><td>Cr.</td></tr>
<tr><td>Module 1</td><td colspan="2">Fundamentals of Jewelry</td><td>1</td></tr>
<tr><td rowspan="2"></td><td>Learning Outcomes</td><td>Module Content</td><td rowspan="2"></td></tr>
<tr><td>After learning the module, learners will be able to
1. Analyze significance of jewelry history, including its roles in religion, fashion, status, and adornment. Explore how historical jewelry styles and motifs continue to influence contemporary jewelry design
2. Develop observational skills for accurately depicting three-dimensional objects in drawings.
3. Explore motifs inspired by nature, geometry, culture, and historical references.
4. Demonstrate the skills in depicting surface textures, reflections, and highlights to enhance the realism of jewelry renderings.</td><td>● History of Indian and western jewelry
● Basic line and object drawing
● Motif Creation & design pattern using principles
● Shading & Rendering
● Design ring pendants, earring and necklace.</td></tr>
<tr><td>Module 2</td><td colspan="2">Introduction of Tools, Vernier Caliper, Formulas & Practice</td><td>1</td></tr>
<tr><td rowspan="2"></td><td>Learning Outcomes</td><td>Module Content</td><td rowspan="2"></td></tr>
<tr><td>1. Describe common tools and equipment used in jewelry making, including hand tools, bench tools, and machinery
2. Demonstrate the skills for marking in jewelry making to achieve precise and accurate results.
3. Practice soldering exercises such as butt joints, T-joints, and lap joints to develop proficiency in soldering techniques</td><td>● Introduction to Tools, Safety Precautions & Workshop
● Orientation of Vernier Caliper
● Calculation of raising and lowering the karat
● Introduction to melting</td></tr>
</table>

	4. Demonstrate proper handling and usage of tools, emphasizing safety practices such as wearing protective gear and handling tools with care. 5. Demonstrate proper techniques for using the Vernier caliper to measure dimensions of objects accurately. 6. Rise or lower the karat value on the properties and characteristics of the resulting alloy. 7. Define the Principles of melting metal and the different methods used in jewelry making, including torch melting, crucible melting, and casting.		

Assignments/ Activities towards CCE

1. Rendering pearls, cabochons, and beads is an essential skill for jewelry designers. Assessment will focus on your ability to accurately depict these elements through drawing.
2. The modern-day cuff bracelet is an open or closed rigid bracelet. On ones which are open, each end often has a ball so that the bracelet stays secure around your wrist. A totally closed bracelet can be snapped shut or you simply have to slide it onto your wrist.
3. Draw different shapes with facets. A diamond cut is a style or faceting used when shaping a diamond Single & Double brilliant cut as well as fancy shaped diamonds. Study of More Information About Different Types of Gem Cuts and Shapes.

References

Crowe, J. (2006). The jeweler's directory of gemstones: A complete guide to appraising and using precious stones from cut and color to shape and settings. Firefly Books.
"McCreight, T. (2010). *The complete metalsmith: An illustrated handbook* (20th anniversary ed.). Davis Publications.
Mentock, D. (2014). The jewelry maker's design book: An alchemy of objects.
Snyder, J. B. (2004). Art jewelry today. Schiffer Publishing.
Untracht, O. (1982). *Jewelry concepts & technology*. Doubleday, North Light Books.

4.4 OEC

<table>
<tr><td>Course code
40444511</td><td colspan="2">Course Name
Precious and Semi-Precious Stones (Pr)</td><td>Crs
2</td></tr>
<tr><td>Course Outcome</td><td colspan="2">After going through the course, learners will be able to
5. Identify various types of gemstones and their characteristics
6. Learn basic terminology related to gemology, such as cut, color, clarity, and carat weight.
7. Demonstrate gemological tools and techniques to accurately assess and evaluate gemstones
8. Describe the different types of gem treatments and enhancements and their effects on gemstones.</td><td></td></tr>
<tr><td>Sr. No.</td><td>Module Outcomes</td><td>Course Contents</td><td>Cr.</td></tr>
<tr><td>Module 1</td><td colspan="2">Introduction to Gemology & Instruments and their applications</td><td>1</td></tr>
<tr><td rowspan="2"></td><td>Learning Outcomes</td><td>Module Content</td><td rowspan="2"></td></tr>
<tr><td>After learning the module, learners will be able to
1. Apply knowledge of gemstone properties to assess quality and authenticity
2. Learn basic terminology related to gemology, such as cut, color, clarity, and carat weight.
3. Explain the formation and geological processes that create different types of gemstones
4. Summarize the classification systems used in gemology
5. Differentiate between natural and synthetic gemstones based on their physical and optical properties.
6. Demonstrate how to use gemological tools
7. Conduct basic gemological tests to identify gemstones</td><td>● Introduction of Gemology
● Introduction to type of cuts & shapes
● Types Of Rocks, Minerals and Gem Minerals
● Properties of Mineral/Gemstones
● Beauty, Durability and Rarity Of Gemstones
Instruments to use in gemology
● Dichroscope
● Principle
● Construction and working Isotropic and Anisotropic stones Dichroism and trichrome
● Polaris cope
● Principle
● Construction and working S.R., D.R., A.G.G. & A.D.R stone
● Optic character of gemstone Uniaxial and Biaxial optic signs Use of konoscope
● Refractometer
● Spectroscope
● Visual Identification</td></tr>
<tr><td>Module 2</td><td colspan="2">Types of Gemstones and their structure</td><td>1</td></tr>
<tr><td></td><td>Learning Outcomes</td><td>Module Content</td><td></td></tr>
</table>

	After learning the module, learners will be able to 1. classification of gemstones into inorganic, organic, and gem rocks 2. crystalline and cryptocrystalline quartz, garnet, feldspar, tourmaline, and other gemstones. 3. Explain the difference between inorganic and organic gemstones. 4. Identify and classify various gemstones based on their physical characteristics and origin. 5. Explain the differences between natural, synthetic, and imitation gemstones. 6. Demonstrate the ability to distinguish between different synthesis methods based on inclusions and growth patterns. 7. techniques of synthetic diamonds and colored stones. 8. Differentiate synthetic gemstones from natural ones through microscopic observation	• Various Types Of Gems: Inorganic Gems Like Crystalline And Cryptocrystalline Quartz, Garnet, Feldspar, Tourmaline, Topaz, Peridot, Chrysoberyl's Cat'sEye, Alexandrite, Spinel, Zircon, Turquoise, Malachite, Diopside, Iolite, Tanzanite, Apatite And Other Rare Stones. • Organic Gemstone Like Pearl, Ivory, Amber, Coral, Jet Gem Rock Like Lapis Lazuli • Synthesis Of Diamonds and Color stones • Identification Of Synthetic • Synthetics, Treated & Imitations • Certification Practice	
Assignments/ Activities towards CCE			
1. Lab assessment of identification of gemstone 2. Navratna chart of gemstones. 3. PPT presentation of natural and synthetic gemstones.			

References

Hughes, R. W. (2018). *The book of gems*.
Hughes, R. W. (2017). *Gem identification made easy: A hands-on guide to more confident buying and selling*.
Liddicoat, R. W. (2005). *Gemology* (6th ed.). Gemological Institute of America (GIA).
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Read, P. G. (2005). *Gems and gemology: A comprehensive guide to the nature, identification, and evaluation of gemstones*. Springer.
Webster, R. (2008). *Gemology* (3rd ed.). Wiley.
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Schumann, W. (2009). *Gemstones of the world*. Sterling Publishing.
Webster, R. (2004). *Introduction to gemology*. Robert Webster.

4.5 SEC

<table>
<tr><td>Course code
40744521</td><td colspan="2">Course Name
Digital Illustration – II (Pr) JEWELLERY SOFTWARE</td><td>Crs 2</td></tr>
<tr><td>Course Outcome</td><td colspan="2">After going through the course, learners will be able to
1. Recognize the different types of modeling techniques available in Rhino.
2. Describe the purpose and function of various toolbars and panels.
3. Create Simple & Complex Surface Modeling with Practice session.
4. Analyze the structure of a complete 3D jewellery model to ensure it meets design specifications
5. Assess the final jewellery design for errors, improvements, and overall aesthetic value.</td><td></td></tr>
<tr><td>Sr. No.</td><td>Module Outcomes</td><td>Course Contents</td><td>Cr.</td></tr>
<tr><td>Module 1</td><td colspan="2">Introduction to Rhinoceros Software & Tools.</td><td>1</td></tr>
<tr><td></td><td>Learning Outcomes</td><td>Module Content</td><td></td></tr>
<tr><td></td><td>1. Identify and list the key characteristics of settings in jewelry
2. Explain the purpose and advantages of using settings in rings, pendants, and earrings.
3. Judge the effectiveness of settings for protecting gemstones in daily wear
4. Design a jewelry piece with a different setting using Rhino software
5. Define the illusion setting and its unique features</td><td>● INTRODUCTION CREATION OF 2D ENTITIES
● Introduction of Tools and Commands
● Wire work creating.2D shape maintaining/ Trim, Extend, Divide
● TRACING PIC BITMAP IMAGE
● Filter, Color, Align, Place
● Proper Pic Tracing
● SURFACE CREATION
● Wire to surface. Patching
● Sweep 2 Rail
● SOLIDE WORK & MODEL CREATION
● Geometric Shape
● Wire 2 Solid / Surface 2 Solid
● Chamfer & Fillet
● Basic Ring. Boolean Union / Boolean Difference
● Bitmap image
● Sizing / Linking
● Bitmap image/background/Rendered Images</td><td></td></tr>
<tr><td>Module 2</td><td colspan="2">BASIC 3 D MODLING</td><td>1</td></tr>
<tr><td></td><td>Learning Outcomes</td><td>Module Content</td><td></td></tr>
<tr><td></td><td>1. Identify and list the key characteristics of settings in jewelry
2. Explain the purpose and advantages of using settings in rings, pendants, and earrings.</td><td>● INTRODUCTION ON STONE Modification/Replacement Of Face
● Plate Prong setting RING / PENDANT / EARRING
● Bezel Setting RING / PENDANT / EARRING
● Channel setting RING / PENDANT / EARRING</td><td></td></tr>
</table>

	3. Judge the effectiveness of settings for protecting gemstones in daily wear 4. Design a jewelry piece with a different setting using Rhino software 5. Define the illusion setting and its unique features	• Pave setting RING / PENDANT / EARRING • Flush setting RING / PENDANT / EARRING • Scooping RING / PENDANT / EARRING	

Assignments/ Activities towards CCE

1. Design a piece of jewelry 3 Design Each setting (ring pendent earring). In rhino software.
2. Brooch, necklace, and bracelet ---- complete the exercise as per the given sheet or instruction

References

E Balagurusamy , 2009 "Fundamentals of Computers" , McGraw Hill Education.
Faulkner Andrew and Chavez Conrad, "Adobe Photoshop CC Classroom in a Book".
Pradeep K. Sinha & Priti Sinha , 6th edition, "Computer Fundamentals", BPB Publications.