B.Des in Jewellery Design

Affiliation Through

Rajasthan ILD Skill University (RISU)

Course Structure and Curriculum

For Academic Year

2022-2026

B.Des in Jewellery Design

Year 1 - Semester 1

Course Code: **Paper Code:**

Title: Material Exploration and Techniques

Pre-requisite: N.A.

Objectives: The Module Aims

- To familiarize with various materials and their basic properties and use of tools & techniques in order to train the students' material skills, tactile abilities, behavioral understanding
- to enable the students to handle various materials, tools & processes appropriately to their intended application in design realization and applications

Syllabus:

- Introduction to the general workshop, tools & materials.
- Handling of tools and types of material (Hard & soft material)
- Limitation and inherent strengths of the material.
- Sculpting & modeling
- Apply additive & subtractive material manipulation.
- Apply decorative techniques and different surface finishes

Suggested books and references:

- Chris.L. (2004). **Inspirational Design: Metal**, Rotovision.
- Beata, T. (2001) **Paper** , Conran, Octopus Limited.
- Verhelst, W (1973) **Sculpture: Tools, Materials and Techniques**, Prentice Hall.
- Jaya.J. (1990) **Craft Traditions of India,** Tiger books,
- Oppi.U. **(**1985) **Jewellery Concepts and Technology**, New York, Doubleday,

Assignments: Documentation 30% and Final products 70%

Scheme of Examination: Self (Jury)

Learning Outcome:

By the end of this unit, Students will be able to:

- Orient themselves to a variety of materials & their behavioral differences
- Set standards of precision & accuracy levels of materials
- Handle various materials & related tools in different technical ways
- Understand the link between the character of materials & their appropriate use
- Choose & handle various material appropriately for different artistic or design visualization/realization purposes

Course Code: **Paper Code:**

Title: Visualization & Representation

Pre-requisite: N.A.

Objectives: The Module Aims

- To develop drawing as an essential skill of form visualization & articulation.
- To enable students to understand characteristics of physical & visual nature of natural as well as manmade forms with reference to surface, mass, volume, proportion, perspective, color.
- To develop a basic understanding of form & geometry.

Syllabus:

- Visualization & Representation Methods
- Analytical drawing
- Form & Structure Development
- Technical Specification
- Developing two dimensional growth patterns
- Fundamental & Application of Colors

Suggested books and references:

- Dantzig C. M. (1999) How to Draw London, Laurence King.
- Roberts G. (1999) Basic Rendering London, Thames & Hudson.
- David R. (2000) Fast Sketching Techniques Ohio, North Light.
- Kurt. H. (2002) Rapidviz USA, Crisp Publications.

Assignments: Portfolio 100%

Scheme of Examination: Self (Jury)

Learning Outcome:

By the end of this unit, Students will be able to:

- Establish an appropriate standard of drawing skills
- Understand form structure as physical & visual phenomenon and their representation.
- Understand basic composition & visual balance.
- Understanding geometric principles and their application.
- Understanding perspective, isometry and orthography drawing

Course Code: **Paper Code:**

Title: Fundamentals of Art & Design (History of Jewellery, Overview of G&J Industry)

Pre-requisite: N.A.

Objectives: The Module Aims

- To develop an appreciation of all creative fields especially History of Craft, Body Adornment, Ornamentation and design.
- To broaden the students, range of cultural references in styles, ornamentation & material expression.
- To introduce students to key cultural developments, practices and movements related to jewellery.
- To familiarize students to basic overview of Gems and Jewellery Industry - different jewellery markets, basic working methodology, business and trade models.
- To familiarize students to renowned domestic and international jewellery brands.

Syllabus:

- Social, historical and cultural context of jewellery
- Art movements popular for jewellery
- History of Body Adornment and Ornamentation (adornment in different cultures)
- History of Gems & Jewellery (Emergence and journey of Jewellery as a universal form of adornment and journey of Gemstones)
- Overview of different jewellery markets
- Basic overview of working methodology of jewellery industry
- Types of G&J business enterprises
- Production systems & sourcing of products & components in G&J sector.
- Overview of renowned domestic and international jewellery brands.

Suggested books and references:

- Raren.G.D.H& Prescott, (1998) **100 Style & Designs** Bristol, Dempsey, Parr.
- Kyoto.S.Co. Ltd (1993) **Positive Design for Fashion Creations**, Japan.
- Johannes.I. **(**1997) **Design & Form: Basic Course at Bauhaus,** Thomas & Hudson Ltd,
- Danger, E.P**. (**1987) **Colour Handbook**, England, Gower Technical Press Ltd.
- Fashion from Concept to Consumer, Gini Stephens published by Pearson ,2005
- Clothing technology, H.Eberly Berger Verlag Europa published by Leher Mittel, 2010

Assignments: Documentation 100%

Scheme of Examination: Self Exam (Jury)

Learning Outcome:

By the end of this unit, Students will be able to:

- Discuss the social, historical and cultural context jewellery

- Understand the popular art movements for jewellery
- Understand history of craft, adornment and journey of Gems & Jewellery
- Appreciate differences between traditional & contemporary trade practices and understand broad differences in domestic & export business concerns
- Understand basic working methodology in jewelry industry & quality bench marks in different types of Jewellery
- Present research findings, through written work, visually and orally.

Year 1 - Semester 2

Course Code: **Paper Code:**

Title: Jewellery Manufacturing Process

Pre-requisite: N.A.

Objectives: The Module Aims

- To develop hand skills of Jewellery fabrication techniques with familiarity of related tools & processes.
- Orientation to various processes used in Jewellery making.
- To appreciate conceptual understanding of materials & process relationship from their limits & potential.
- To introduce skills & capabilities to apply hand crafting process of jewellery making

Syllabus:

- Safety measures: Orientation to issues related to safety, health and environmental related issues.
- Jewellery Construction: skills development & process understanding of basic techniques of Jewellery fabrication as well as application of related tools & equipment. Construct jewellery including includes pendant, earring, types of ring, etc.
- Jewellery components: understanding of Jewellery classification, various components used in fabrication, assembly, findings & hardware as well as related terminology

Suggested books and references:

- Codina.C. (2000) The Complete Book of Jewelry Making: A Full-Color Introduction to The Jeweler's Art, Lark
- Oppi.U.(1985) Jewellery Concepts and Technology, New York, Doubleday.
- Sylvia.W. (1990), Jewellery Making manual, London, McDonalds Illustrated.
- MacGrath,J. (1995), Encyclopedia of Jewellery Making Techniques, USA ,Running Press Publishers,
- Joanna.G. (2003), Making Metal Jewellery: Projects, Techniques,Inspiration, Lark.

Assignments: Documentation 30% and final products 70%

Scheme of Examination: Self (Jury)

Learning Outcome:

By the end of this unit, Students will be able to:

- Appreciate and incorporate safety systems in the workshop.
- Explore and expand their knowledge and understanding of Jewellery classification, components, clasps & findings

- Apply fabrication techniques and processes for product development
- Display work & process planning skills during the process of making
- Appreciate specific use of tools, equipment & material behavior
- Identify the different materials & processes used in Jewellery.
- Acquire the skills & operating knowledge of the Machines used for different processes

Course Code: **Paper Code:**

Title: Jewellery Drawing & Rendering

Pre-requisite: N.A.

Objectives: The Module Aims

- To orient the students to develop understanding of various methods of drawing and representing jewellery and gemstones
- To develop understanding & apply methods of orthographic & isometric drawing for technical specification, size & scale of products as a means of production specs & details
- to develop skills of product rendering through representation of different materials, forms & finishes using suitable rendering media

Syllabus:

- Gems and Jewellery Size convention and charts
- Introduction to metal rendering, forms, textures & finishes
- Gemstone rendering
- Stone setting & representation
- Functional and opening & closing mechanism
- Jewellery Drawing
- Orthographic and isometric projection of jewellery
- Technical specification: sections, scale, nomenclature & spec chart
- Surface decorative technique (enameling, filigree, repose, kundan & granulation)
- Draw and renderer different types of jewellery (Kundan meena, diamond, gold, studded, etc.)

Suggested books and references:

- Techniques in jewelry illustration and color rendering by Adolfo Mattiello
- Creative variation in jewelry design by Maurice P Galli, Dominique Riviere, Fanfan Li.
- Parkinson,A.C. (1999) A First Year Engineering Drawing, New Delhi, Wheeler.
- Bhatt, N.D. (1993) Elementary Engineering Drawing, Anand, India Charter Publishing House.
- Giesecke, Frederick E.M., Alva, Henry C.S., Leroy, Ivan.H.l, John T. D., James E.N., Ivan L.H., (2002)

Assignments: Portfolio 100%

Scheme of Examination: Self (Jury)

Learning Outcome: By the end of this unit, Students will be able to:

- Demonstrating knowledge of technical specification
- Competency of rendering & product presentation

- Understanding orthographic and isometric representation of jewellery product
- Creating jewellery product giving them a realistic look understanding the light & property of metal & stones.
- Understand and apply methods of orthographic drawing for technical specifications, size, scale of product as a means of production specification & detail.

Course Code: **Paper Code:**

Title: Jewellery Design Project -1 (2 D CAD Based)

Pre-requisite: SC205S

Objectives: The Module Aims

- To orient the students to develop understanding of application of 2D CAD software to develop jewellery design
- To implement various designing skills and techniques for generating self-create design on 2D CAD Software
- Develop skills of product drawing and rendering through representation of different materials, forms & finishes using appropriate tool.
- To develop the skill of graphical representation of jewellery using appropriate graphic software

Syllabus:

- Learn 2D CAD Software, tool and commands to develop design sheets
- Gems and Jewellery Size convention and charts
- Metal rendering, forms, textures & finishes
- Design Manipulation Techniques
- Gemstone rendering, Stone setting & representation
- Surface decorative technique (enameling, filigree, repose, kundan & granulation)
- Develop Independent design range of jewellery products e.g. pendant, earring, rings, bangle, necklace, accessories, etc. as per industrial standards
- Develop jewellery graphic pages for digital representation and business promotional activity

Suggested books and references:

- www.corel.com
- www.psd.tutsplus.com

Assignments: Portfolio 100%

Scheme of Examination: Self (Jury)

Learning Outcome:

By the end of this unit, Students will be able to:

- Demonstrating knowledge of technical specification using appropriate 2D CAD software
- Competency of rendering & product presentation on 2D CAD Software
- Creating jewellery product giving them a realistic look understanding the light & property of metal & stones.
- Develop graphical presentation of jewellery
- Submit an Independent Jewellery Design Project with range and style as per industrial standards

- Develop digital portfolio and design graphical pages for business and promotional activity like poster, webpages, brochures etc.

Year 2 - Semester 3

Course Code: **Paper Code:**

Title: 3D Computer Aided Jewellery Design - 1

Pre-requisite: N. A.

Objectives: The Module Aims

To introduce the students to

- Develop a thorough understanding of 3D Cad Application.
- Enable the student to work with 3DCAD software effectively and apply the learnt skills successfully to 3D design assignments.
- To develop a Confidence for creating a Jewellery Design in 2D form and Converting in 3D object. Develop divergent thinking abilities to create innovative solutions.
- To develop a brief & develop design collection and submit a digital portfolio

Syllabus:

- Vector & raster-based systems
- Functions of 3D CAD software & their applications
- Creating 3D object by orthographic projections & manipulating basic solid forms
- Sections, volumes, weights & surface areas
- Rendering & use/development of materials library
- Presentations through tools of lighting, background, special effects
- Prototyping & product realization
- Presentation & documentation of process & final design products

Suggested books and references:

- AutoCAD, 3D Studio Max, SDRC Ideas, Jewel CAD, Rhinoceros software manuals

Assignments:

Scheme of Examination: Self (Jury)

Learning Outcome:

By the end of this unit, Students will be able to:

- Develop confidence in using 3D CAD applications in design visualization, presentations & technical specifications
- Apply solid modeling to their design projects
- Create files with requisite technical specifications for rapid prototyping system
- Evaluate technical parameters, visual feel & material optimization of design prior to being made physically.
- Submit a digital & printed portfolio.

Course Code: **Paper Code:**

Title: Gemstone Studies & Processing

Pre-requisite: N.A.

Objectives: The Module Aims

- To orient the students to broad based understanding of various precious and semi -precious gemstones on basis of their characteristic.
- To enable the students to develop an understanding of basic parameters of various gemstones according to different end uses.
- Understanding the process of gemstone identification and recognition of different cuts & their uses in relation to various Jewellery products.

Syllabus:

- Introduction to various colours of Precious and semi-precious gemstones, their characteristics, simulant, Physical &optical properties etc.
- Different types of shapes and cuts & terminology.
- Study Crystallography of gemstones
- Study of Synthetic Gemstones
- Quality assessment of gemstones on the basis of color and transparency.
- Process of assortment and grading rough stone, sawing, Pre-shaping, Calibration, dopping, Faceting and polishing of faceted and cabochon

Suggested books and references:

- Michael.O'D. (1994) TheColour Dictionary of Gemstones & Minerals, London, Blackcat.
- Richard.L. (1993) Handbook of Gem Identification,CA., Gemological Institute of America.
- DanaiMohsen.M. (2000) Dictionary of Gems and Gemology, Springer-VerlagTelos
- Gem Cutting: A Lapidary's Manual by John Sinkankas
- Cutting Gemstones: A Beginner's Guide to Faceting By John Broadfoot, Peter Collings

Assignments: Documentation 30% and final products 70%

Scheme of Examination: Self (Jury)

Learning Outcome:

By the end of this unit, Students will be able to:

- Identify different precious & semi-precious stones
- Identify various cuts, their application in different Jewellery & begin to appreciate colour & visual appeal
- Identify various parameters including the 4 c's etc in order to develop an overview of the BRD factors behind most natural & synthetic gemstones which form the underpinning of the global gem trade
- Identify different shape, size and cut of gemstones

- Understand the process involved in cutting and polishing of faceted and cabochon gemstone

Course Code: **Paper Code:**

Title: Modelling & Sculpting for Jewellery

Pre-requisite: N.A.

Objectives: The Module Aims

- To familiarize with basic wax/ terracotta/moldable ceramic / pop carving techniques.
- to develop skills of wax/ terracotta/ moldable ceramic / carving techniques using tools and process appropriately to the intended application in design realization and applications

Syllabus:

- Introduction to wax / terracotta/moldable ceramic / sheets, blocks, tubes, wires etc.
- Introduction to wax / terracotta/moldable ceramic / pop carving techniques
- Limitation and inherent strengths of wax / terracotta/moldable ceramic / pop as a modelling material.
- Sculpting & modeling
- Apply additive & subtractive material manipulation.
- Master Model

Suggested books and references:

- Chris.L. (2004). Inspirational Design: Metal, Rotovision.
- Beata, T. (2001) Paper, Conran, Octopus Limited.
- Verhelst, W (1973) Sculpture: Tools, Materials and Techniques, Prentice Hall.
- Jaya.J. (1990) Craft Traditions of India, Tiger books,
- Oppi.U. (1985) Jewellery Concepts and Technology, New York, Doubleday,
- History of Indian Jewellery

Assignments: Documentation 30% and Final products 70%

Scheme of Examination: Self Exam (Jury)

Learning Outcome:

By the end of this unit, Students will be able to:

- Handle wax/ terracotta/moldable ceramic /pop as medium for communication of design ideas
- Translate 2D into 3D using different wax/ terracotta/moldable ceramic / pop carving and model making
- Develop skills for creating a master model in wax. / terracotta/moldable ceramic / pop

Course Code: **Paper Code:** SC

Title: Jewellery Design Project - 2 (Hand Crafted)

Pre-requisite: N.A.

Objectives: The Module Aims

- Provide advanced experience to the students to design & develop "precious jewellery collection" (traditional or contemporary)
- Students would be encouraged to work independently.
- To inculcate the concept of contextual design research. This module aims to develop in students an ability to develop a brief professionally.
- To apply creativity to develop their own uniquely styled design collection from concept to final prototype/mockup of original design.
- To approach precious Jewellery with flair & abundance of stretching pre-conceived limits.

Syllabus:

- To design & develop "precious jewellery collection" (traditional or contemporary)
- Development of individual style through experimentation of themes,
- innovative techniques & form manifestation
- Extensive exploration of concepts for collection through material & visual
- mediums
- Detailing & materials/treatment/components finalization
- Prototyping & product realization
- Presentation & documentation of process & final design products

Suggested books and references:

- Mascetti, Daniaela&Triossi, Amanda, (1996). "Bvlgari", Milan, Leonardo Arte
- srl.
- Bennett, David &Mascetti, Daniaela,(1990), Understanding Jewellery, UK,
- Antique Collectors Club.
- Usha.B. (1999). Dance of the Peocock, New Delhi, India Book House.
- Frings, (1996). Fashion from Concept to Consumer, New Jersey, Prentice
- Hall.
- Elizabeth.R. (1999). Understanding Fashion, London, Blackwell Science.
- Trade Journals & Magazines
- Fashion magazines- Vogue, Jewellery Key Stone, JCK, Collezioni, Simplicity,
- Femina etc.

Assignments: Documentation 60% and Final products 40%

Scheme of Examination: Self (Jury)

Learning Outcome: By the end of this unit, Students will be able to:

- On completion of this module the student should be able to:
- Understand & apply the process of precious jewellery collection design
- Undertake critical self and peer evaluation
- Demonstrate an individual sense of research & critical analysis through explorations.
- Demonstrate individual flair beyond typically commercial products in precious Jewellery
- Confidently approach new concepts & styles demonstrating potential of materials & processes.
- Realize products in finer details as working prototypes
- Present the design collections with aesthetic sophistication

Year 2 – Semester 4

Course Code: **Paper Code:**

Title: Jewellery Production Processes

Pre-requisite: N. A.

Objectives: The Module Aims

- Develop knowledge of various production methods and evaluate various Jewellery manufacturing & business systems and equipment in the industry.
- To analyze the impact of these on the workforce, productivity and quality of manufacture, enable insight of technical processes & chemistry of alloying & metallurgy and to understand relationship between alloys & behavioral & visual implications of their use.
- To familiarize with methods of testing alloy composition, expose students to different processes of finishing & finishes and to provide hands on experience of some of the processes to appreciate tools, equipment, safety & timescale involved in such processes.

Syllabus:

- Reinforcing the inputs on safety related issues pertaining to Jewellery sector.
- Casting (gravity pour casting, lost wax casting, centrifugal casting)
- Rubber packing, die cutting, wax injection and tree making
- Tools & machinery
- Available forms, sources, unit measures, sizes & sections, popular technology
- Quality control of precious metal
- (Lowering and raising the metal quality, hallmark and standards, touchstone method, cupellation – assaying, recovery and refinement.)
- Study of Industrial practices
- Introduction to Jewellery production in organized industry & unorganized sector
- Environmental friendly approaches of production.
- Study of Production Process and Planning in dealing with both production set ups
- Hands on operations of dominant production processes in Jewellery
- Emerging technology in Jewellery production
- Quality control & systems in in-house & outsourced products / components

Suggested books and references:

- MacGrath, Jinks, (1995) Encyclopedia of Jewellery Making Techniques, USA, Running Press Publishers.
- Oppi.U. (1985). Jewellery Concepts and Technology, New York, Doubleday.

- Hughes, Richard & Rowe, Michael, (1994). The Colouring, Bronzing & Patination of Metals, London, Thames & Hudson
- Oppi.U. (1985). Jewellery Concepts and Technology, New York, Doubleday.
- Schlesinger, Mordechay (Editor), Paunovic Milan (Editor), (2000) Modern Electroplating, 4th Edition, Wiley-Interscience.

Assignments: Documentation 30% and Final products 70%

Scheme of Examination: Self (Jury)

Learning Outcome: By the end of this unit, Students will be able to:

- Understand the various Industrial Jewellery production processes & techniques used in real life.
- Should be able to anticipate production process for their own designs in detail with a specific focus on environmentally friendly approaches of production.
- Understand the applications of quality functions in the Jewellery industry.
- Understand the systems of documentation, quality, inventory, security, out sourcing & ordering
- Adopt right process / technique for their work considering environmentally friendly systems.

Course Code: **Paper Code:**

Title: Jewellery Field Study

Pre-requisite: N. A.

Objectives: The Module Aims

- .

Syllabus:

Suggested books and references:

Assignments

Scheme of Examination:

Learning Outcome:

Course Code: **Paper Code:**

Title: Jewellery Costing & Pricing

Pre-requisite: N. A.

Objectives: The Module Aims

- Understand & Explore local market for material &labour Price
- Calculate the stone weightage
- Calculate the cost of jewellery Product
- Costing of sample piece and casting piece
- Pricing jewellery Product
- Determine Markup / profits of sample & wholesale orders of jewellery products

Syllabus:

- Analyze the local market,
- Resourcing and understand the price of material & labor through survey and market exploration.
- Analyze the process of jewellery Product development
- Calculating price of gemstone (using size & carat conversion chart)
- Calculating the cost of jewellery product
- Calculating the costing of sample piece and casting piece,
- Preparing cost sheet of particular design
- Calculating price, adding profit margins for single or wholesale order
- Understanding Markup price and determining markup price for single or wholesale order.
- Provisioning standard / permissible metal wastages during the process of product development.

Suggested books and references:

Assignments

Scheme of Examination:

- Project - 50%
- Report - 50%

Learning Outcome: On completion of this module students shall be able to:

- Calculate the average cost of jewellery Product
- Design jewellery product keeping cost in mind
- Pricing Jewellery Product
- Determine markup price for single and wholesale order jewellery.

Course Code: **Paper Code:**

Title: Jewellery Design Project - 3 (Mass/Casting Based)

Pre-requisite:N. A.

Objectives: The Module Aims

- Design and present a project.
- Develop exploration & product ideation through sketches with all details & specs and utilizing the skill learned during semester I – IV

Syllabus:

- Students to clearly articulate features/personality of the identity to be developed
- Students to develop samples/prototypes/scale models of selected design alternative.
- Development of theme/story board
- Concept exploration & product ideation through sketches.
- Style exploration
- Realization of products with refinement & detailing
- Students to document the entire process of design development & present it as display

Suggested books and references:

- Current fashion, Jewellery and business magazines
- Trade journals

Assignments: Documentation 30% and Final products 70%

Scheme of Examination: Self (Jury)

Learning Outcome:

By the end of this unit, Students will be able to:

- Conduct independent research on the given brief
- Demonstrate analytical, critical and evaluation skills
- Apply design & brand development principles to develop a distinct demonstrate ability to plan schedules and manage time effectively
- Present design alternatives in an innovative manner

Year 3 – Semester 5

Course Code: **Paper Code:**

Title: Visual Merchandising & Packaging

Pre-requisite:N. A.

Objectives: The Module Aims

- Expand design application across various consumer interfaces of packaging, visual merchandising, retail/brand, Jewellery Marketing, identity in relation to product styles, consumer/market niche & overall design strategy.

Syllabus:

- Students to explore concepts of product/collection look, develop collection concepts & brand/store identity as well as packaging & graphics
- Brand direction with broad parameters
- Students to research and conduct study related to consumer niche, retail environment, store/brands identity in similar categories, consumer interaction to identify design approach
- Understand the concept of jewellery Marketing

Suggested books and references:

- Laszlo.R. (1981). Package Design: An Introduction to The Art of Packaging, UK, Prentice Hall.
- Steven.S. (1990). Packaging Design: Graphics, Materials and Technology, London, Thames & Hudson.
- Stewart.B. (1996). Packaging as an Effective Marketing Tool, London, Kogan Page.
- (2000). Visual Merchandising 2: Image & Identity, Ohio, ST Publishers.
- (2002). Visual Merchandising 3, Media Group International.

Assignments: Documentation 30% and Final products 70%

Scheme of Examination: Self (Jury)

Learning Outcome:

By the end of this unit, Students will be able to:

- Apply design & brand development principles to develop a distinct identity
- Apply design understanding to broader areas of brand/retail identity
- Demonstrate analytical, critical and evaluation skills
- Present design alternatives in an innovative manner
- Understand about jewellery market and concept of marketing

Course Code: **Paper Code:**

Title: 3D Computer Aided Jewellery Design - 2

Pre-requisite:N. A.

Objectives: The Module Aims-

- To develop competency in solid modelling software
- To understand the potential of 3D CAD software & modeling as tools for product visualization, presentation, material/costing analysis & distant manufacturing through rapid prototyping.
- To have hands on application of software for design realization

Syllabus:

- Vector & raster based systems
- Functions of 3D CAD software & their applications
- Creating 3D object by orthographic projections & manipulating basic solid forms
- Sections, volumes, weights & surface areas
- Rendering & use/development of materials library.
- Presentations through tools of lighting, background, special effects

Suggested books and references: Software manuals-

- AutoCAD,
- 3D Studio Max,
- SDRC Ideas,
- Rhinoceros

Assignments

Scheme of Examination:

- Assignment - 50%.
- Project -50 %

Learning Outcome: After completing this module, the students should be able to:

- Develop confidence in using 3D CAD applications in design visualisation, presentations & technical specifications
- Apply solid modelling to their design projects
- Create files with requisite technical specifications for rapid prototyping system.
- Evaluate technical parameters, visual feel & material optimisation of design prior to being made physically.

Course Code: **Paper Code:**

Title: Jewellery Design Project - 4 (Luxury Jewellery, Color Stone & Diamond Jewellery)

Pre-requisite: N. A.

Objectives: The Module Aims

- .

Syllabus:

Suggested books and references:

Assignments

Scheme of Examination:

Learning Outcome:

Year 3 – Semester 6

Course Code: **Paper Code:**

Title: Jewellery Business Management (Retail, Wholesales, Exports & E Commerce)

Pre-requisite: N. A.

Objectives: The Module Aims

- To orient the students to various business processes, business models & trade practices prevalent in retail and wholesale operations
- To create awareness about organizational structures, roles, sourcing & supply chain, production to wholesaling as well as retailing
- To familiarize students to types of wholesaling, and retailing operations

Syllabus:

- Understanding Retail and Wholesale Markets & Operations
- Emergence of retailing and wholesaling in India & abroad
- Wholesale Strategy & Marketing Practices
- Production systems & sourcing of products & components both in wholesaling and retail setup
- Understand methods of sourcing & supply chain in different types of Jewelry
- Quality control & benchmarks
- Vendor and Customer Management
- Competitor Analysis
- Retail Promotion Mix
- Role of Advertising Promotional Schemes & Publicity
- Case study on selected Retail and Wholesale players

Suggested books and references:

- B. Swati – S. Anuraag: Visual Merchandising. New Delhi: Tata McGrawHill Education Private Limited. 2010. 262s. ISBN 978-0-07-015321-9
- C. Ebster – M. Garaus: Strore Design and Visual Merchandising. New York: Business Expert Press. 2011. 205s. ISBN: 978-1-60649-094-5
- S. Pardhan: Retail Merchandising. New Delhi: Tata McGrawHill Education Private Limited. 2010. 225s. ISBN: 978-0-07-014497-2
- Verley Rosemary: Retail Product Management Buying and Merchandising. Florida : Routledge. 2006. 263 s. ISBN: 0415327148 21.30

Assignments: Documentation 30% and Final products 70%

Scheme of Examination: Self (Jury)

Learning Outcome:

By the end of this unit, Students will be able to:

- Understand methods of sourcing, supply chain & quality bench marks in different types of Jewelry

- To have a good understanding and knowledge about the wholesaling and retailing logistics and operations.
- To have a good understanding of in store logistics.

Course Code: **Paper Code:**

Title: Internship

Pre-requisite: N. A.

Objectives: The Module Aims

- Prevalent commercial and industrial practice and reinforce theoretical knowledge with practical experience.
- To develop the ability to work as an effective and willing member of a team and sharpen people skills.
- To develop an understanding of organizational structure, decision making, operational roles & business concerns.
- To provide an understanding of the pressures of a fast-moving industry

Syllabus:

- Reinforcing the inputs on safety related issues pertaining to Jewellery sector.
- Casting (gravity pour casting, lost wax casting, centrifugal casting)
- Rubber packing, die cutting, wax injection and tree making
- Quality control of precious metal
- Study of Industrial practices
- Introduction to Jewellery production in organized industry & unorganized sector
- Environmental friendly approaches of production.
- Study of Production Process and Planning in dealing with both production set ups
- Hands on operations of dominant production processes in Jewellery
- Quality control & systems in in-house & outsourced products / components

Suggested books and references:

- Host company profile and other related data
- Current fashion and business magazines / related and relevant bibliography if and as relevant to work experience / job responsibility
- Trade journals / news papers

Assignments: Documentation 100%

Scheme of Examination: Self (Jury)

Learning Outcome: By the end of this unit, Students will be able to:

- Understand the workings of a Jewellery firm
- Familiarity to the practices of the Indian Jewellery industry and associated technology levels, markets and practices
- Relate classroom learning to real – life applications, gauge and evaluate differences between the two

- Further develop generic and cognitive skills required for advanced learning and application in the Degree phase

Course Code: **Paper Code:**

Title: Portfolio Development

Pre-requisite: N. A.

Objectives: The Module Aims

- To make the students understand the importance of documentation & presentation.
- To enable the students to understand the basic criteria (steps) of making a good portfolio.
- To help the students come up with their individual ideas and styles of documentation &presentation in order to create good portfolios.
- To make the students learn the process of compilation.

Syllabus:

- Objective of documentation of compilation.
- Steps of documentation to make a good portfolio (Acknowledgement, Preface, Brief, Market research, Analysis & conclusion, Consumer Profile, Design Methodology, Design collection along with technical drawings, Retrospection).
- Compilation (categories/ themes, color coding, and an interesting cover page)

Suggested books and references:

Assignments

Scheme of Examination:

Learning Outcome: On the completion of this module the students will be able to:

- Identify and isolate their errors.
- Identify their strengths.
- Learn the importance of documentation- as a protection against copying and duplicating.
- Compile their work with convenience.
- To show their growth and progress as a designer.
- Build a strong portfolio to be shown to prospective clients.

Year 4 – Semester 7

Course Code: **Paper Code:**

Title: Jewellery Design Project – 5 (International Market, Brand Study)

Pre-requisite: N. A.

Objectives: The Module Aims

- To research and conduct study related to consumer niche, retail environment, store/brands identity and study jewellery market
- To expand design application across various consumer interfaces of packaging, visual merchandising, retail/brand identity in relation to product styles, consumer/market niche & overall design strategy.
- To develop prototypes/mock-ups, scale models of one design proposal with all details & specs.
- To provide advanced experience to the students to design & develop precious jewellery collection.

Syllabus:

- Selection of topic/area
- To research a particular market and application of the research in design
- Students to clearly articulate features/personality of the identity to be developed
- Students to explore concepts of product/collection look, develop collection concepts & brand/store identity as well as packaging & graphics
- Students to develop samples/prototypes/ scale models of selected design alternative.
- Extensive exploration of concepts for collection through material & visual mediums.
- Detailing & materials/treatment/components finalization.
- Prototyping & product realization
- Students to document the entire process of design development & present it as display
- Development of designs understanding the design styles of major International Jewellery markets

Suggested books and references:

- Laszlo.R. (1981). Package Design: An Introduction to The Art of Packaging, UK, Prentice Hall.
- Steven.S. (1990). Packaging Design: Graphics, Materials and Technology, London, Thames & Hudson.
- (2002). Visual Merchandising 3, Media Group International.
- Current fashion, Jewellery and business magazines
- Trade journals
- Current Packaging, Identity & Store Design Annuals

Assignments: Documentation 30% and Final products 70%

Scheme of Examination: Self (Jury)

Learning Outcome:

By the end of this unit, Students will be able to:

- Apply design understanding to broader areas of brand/retail identity
- Demonstrate analytical, critical and evaluation skills
- Apply research and analytical skills
- Apply design & brand development principles to develop a distinct identity
- Conduct independent research on the given brief
- Present design alternatives in an innovative manner
- Understand & apply the process of precious jewellery collection design
- Confidently approach new concepts & styles demonstrating potential of materials & processes
- Realize products in finer details as working prototypes
- Present the design collections with aesthetic sophistication

Course Code: **Paper Code:**

Title: Advance 3 D Jewellery CAD & Rendering (Matrix)

Pre-requisite: N. A.

Objectives: The Module Aims

- To develop a thorough understanding of 3D Cad Application.
- Main aims to enable the student to work with 3DCAD software effectively and apply the learnt skills successfully to 3D design assignments. It also emphasizes on guiding students about implementation of various designing skills and techniques for generating self-create design.
- To develop a Confidence for creating a Jewellery Design in 2D form and converting in 3D object.
- Develop divergent thinking abilities to create innovative solutions.

Syllabus:

- Loading a Gem with different types and sizes.
- Apply Prong setting for different type of diamonds.
- Apply Bezel setting for different types of diamonds.
- Create a simple ring with Prong & Bezel Setting.
- Placing Gems along with the prongs on the ring surfaces.
- Apply Pave Setting with pave prong on design
- Cut to figure Rail, Plane & Cube Cutters, Metal Weight Checker and Gem Reporter.
- Crete Collates for diamond.
- Create a Cluster Setting.
- Create a Plain Ring bands with name or designs.
- Calculate the Gold Weight of your design.
- Render your CAD Module.
- Channel Builder, Bright-Cut Channel, Bright Cutters.
- STL Conversion

Suggested books and references:

www.gemvision.com,
www.gemvisionforum.com

Assignments

Scheme of Examination: Class Assignment 40% + Project 60%

Learning Outcome:

- Develop skills in working with Rhino software.
- Develop 3D CAD skills for effective Designing for Earring, Ring, Necklace, Bangle, Bracelets, Pendants, Cufflink and different products for Jewellery.
- Develop setting in Matrix Software. Like: Prong Setting, Bezel Setting, Channel Setting, And Pave Setting.

Course Code: **Paper Code:**

Title: Sustainable Design in Jewellery

Pre-requisite: N. A.

Objectives: The Module Aims

-

Syllabus:

Suggested books and references:

Assignments

Scheme of Examination:

Learning Outcome:

Course Code: **Paper Code:**

Title: Professional Practices

Pre-requisite:N. A.

Objectives: The Module Aims

- To give a formal introduction to the necessity of Soft Skills in today's work environment.
- How it can help all the learners to perform efficiently with these soft skills imbibed in their attitude and behavior.

Syllabus:

- Strong Work Ethic
- Positive Attitude
- Good Communication Skills
- Problem-Solving Skills
- Acting as a Team Player
- Self-Confidence
- Ability to Accept and Learn From Criticism
- Flexibility/Adaptability
- Working Well Under Pressure
- **Personal effectiveness skills**
- **Interview techniques and grooming standards.**

Suggested books and references:

Assignments- Interview, presentation,

Scheme of Examination:

Learning Outcome: By the end of this unit, learners will be able to:

- Work effectively in a team in the workplace.
- Know the techniques to succeed in one's roles.
- Manage their time effectively and efficiently.
- Follow the required etiquette of the workplace.
- Maintain a positive attitude at the workplace.
- Communicate effectively at the workplace.
- Develop active listening skills.
- Communicate clearly over the telephone.
- Orient them for a desirable career.
- Demonstrate effective customer service skills.
- Practice positive body language while communicating with others.
- Develop good interpersonal skills at personal and professional front.

- Confidently talk about them in the pre Assessment.
- Refine their answer to the basic interview question
- Modify their answers to suit the expected interview questions.
- Get to face a complete mock interview and put their learning into practice. They will receive action plans to enable them to develop further.

Course Code: **Paper Code:**

Title: Jewellery Entrepreneurship

Pre-requisite:N. A.

Objectives: The Module Aims

- To orient the students to various business & trade models
- To create awareness about organizational structures, roles, sourcing & supply chain, production to retailing
- To familiarize students to types of organizational structures
- To orient them to entrepreneurial models by exposing them to systems and procedures involved in setting up a business
- To understand professional design practice, contracts, procedures & operational aspects of design service

Syllabus:

- Traditional Indian & contemporary organizational models & their structures
- Production systems & sourcing of products & components
- Quality control & benchmarks
- Understanding of value chain in domestic & export markets
- Entrepreneurship and classification of industries
- Design service valuation & costs, royalty, fees, salaries & other structures of remuneration

Suggested books and references:

- Frings, (1996). Fashion from Concept to Consumer, New Jersey, Prentice Hall.
- Elizabeth.R. (1999). Understanding Fashion, London, Blackwell Science
- Malik, P. L. Handbook of Labour& Industrial Law
- Lydiate, Liz, (1992). Professional Practice in Design Consultancy.
- Press. Mike & Cooper, Rachel, (2003). The Role of Design & Designers in Twenty First Century, London, Ashgate.

Assignments- Report - 100%

Scheme of Examination:

Learning Outcome:

After completing this module, the student should be able to :

- Appreciate differences between traditional & contemporary trade practices
- Differentiate between different production systems
- Understand methods of sourcing, supply chain & quality bench marks in different types of Jewellery
- Familiarize themselves with trade cycles, events, occasions & lead time
- Appreciate broad differences in domestic & export business concerns
- Understand procedures required to set up business enterprise

- Articulate terms, fees/salaries/payments against rendering of design as a service

Year 4 – Semester 8

Course Code: **Paper Code:**

Title: Final Graduation Report

Pre-requisite:N. A.

Objectives: The Module Aims

- .

Syllabus:

Suggested books and references:

Assignments

Scheme of Examination:

Learning Outcome:

Course Code: **Paper Code:**

Title: Final Graduation Project

Pre-requisite: N. A.

Objectives: The Module Aims

- To guide the students to draw upon and integrate the learning of the modules completed in Semesters I to V and apply this integrative learning to identify and respond to design opportunities in the Jewellery sector

Syllabus:

- Development & finalization of initial project brief with faculty guide and/or industry sponsor
- Students to research and conduct study in the areas of trends, markets, consumer segments, competition.
- Students to critically analyze the compiled results & propose design direction & design parameters to arrive at specific design brief on their research conclusions
- Students to develop at least three collections based on the design brief
- Students will do pricing and costing of the product
- Students to document the entire design process as a project presentation for evaluation

Suggested books and references:

- Host company profile and other related data
- Current fashion and business magazines / related and relevant bibliography if and as relevant to work experience / job responsibility
- Trade journals / news papers
- Current fashion, Jewellery and business magazines

Assignments: Documentation 30% and Final products 70%

Scheme of Examination: Self (Jury)

Learning Outcome:

By the end of this unit, Students will be able to:

- Develop design brief & design directions independently
- Demonstrate analytical, critical and evaluation skills
- Apply research and information gathering skills
- Conduct independent research on self-elected briefs
- Apply techniques of interpreting trend forecasts, market/consumer study inferences & other production parameters in realizing design collections
- Do pricing and costing of the product taking into consideration all the costs, (direct and indirect), involved in producing the product
- Consider social responsibility of design and choose / modify appropriate manufacturing system addressing various environmental issues, health and safety related issues.
- Demonstrate ability to plan schedules and manage time effectively

- Present and defend their project in front of a jury

****