



Vishwavidyanilaya Karyasoudha  
Crawford Hall, Mysuru- 570 005

No.AC6/387/2015-16

Dated: 25<sup>th</sup> May 2016

**NOTIFICATION**

Sub: Modification of Syllabus of Bachelor in Jewellery Design and Management from the academic year 2016-17.

- Ref: 1. Decision of the Faculty of Commerce Meeting held on 19<sup>th</sup> February 2016.  
2. Decision of the Academic Council Meeting held on 29<sup>th</sup> March 2016.

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The Board of studies in Bachelor in Jewellery Design and Management has recommended some modifications in the syllabus of Bachelor in Jewellery Design and Management from the academic year 2016-17.

The Faculty of Commerce and the Academic Council at their Meetings held on 19<sup>th</sup> February 2016 and 29<sup>th</sup> March 2016 respectively have also approved the above said proposal and it is hereby notified.

The revised syllabus copy of the Bachelor in Jewellery Design and Management is annexed.

The contents may be downloaded from the University Website i.e., [www.uni-mysore.ac.in](http://www.uni-mysore.ac.in)

Draft Approved by the Registrar

Deputy Registrar (Academic)  
9/5/16

To:

1. The Dean, Faculty of Commerce, Post Graduate Centre, Hemangotri, Hassan.
2. The Chairman, Department of Studies in Commerce, Manasagangotri, Mysuru.
3. The Chairman, Board of Studies in Business Administration, BIMS, MGM.
4. The Chairman, Department of Studies in Business Administration, BIMS, MGM.
5. The Chairman, Board of Studies in Commerce (UG), DOS in Commerce, MGM.
6. The Co-ordinator, Directorate of Out Reach and Online Programme, Parakalamath, MGM.
7. All the Principals of Affiliated Colleges running Under Graduate Programme.
8. The Director, College Development Council, Maharaja College Centenary Building, University of Mysore, Mysuru.
9. The Deputy Registrar/Assistant Registrar/Superintendent, Administrative Branch, Academic Section, University of Mysore, Mysuru.
10. The Deputy Registrar/Assistant Registrar/Superintendent (Evaluation), UOM, Mysuru.
11. The PA to Vice-Chancellor/Registrar/Registrar (Evaluation), UOM, Mysuru.
12. Office Copy.

# **REGULATIONS FOR**

## **Bachelor in**

### **Jewellery Design and Management**

**(Under specialized program)**

**1. Course title: Earlier proposed as B.Sc Jewelry Design and Management**

Now, program shall be called as **Bachelors in Jewelry Design and Management.**

It is three years program consisting of six semesters; two semesters in each year. Candidate admitted to this course shall be governed by following rules and regulations

**2. Eligibility, mode of selection**

- a. A candidate passed in 10+2 standard or equivalent (any stream) from a recognized board is eligible for admission to the first semester of the program.
- b. **Eligibility for lateral admission to 2<sup>nd</sup> year:** 3 years diploma in Jewelry Design and Manufacturing from recognized Technical Board from state/ central Govt.
- c. Eligibility is as per the norms of University of Mysore and Govt of Karnataka.
- d. There shall be a total intake of 40 candidates, any excess intake shall be considered only after obtaining approval from the university, duly observing all the formalities.

**3. Course content and instruction**

**Course content:** The course of study for the **Bachelor in Jewelry Design and Management** comprises of subjects, internship project and field work and final project as prescribed. The academic calendar shall be proposed from Vogue institute of Fashion Technology and approved by the university from time to time. Pedagogy includes PowerPoint Presentation, lecturing, case studies, group discussion, seminar, computer practical, internship, factory visit etc

**4. Medium of instruction: -English.**

**5. Attendance, and conduct**

- a. Each semester shall be taken as a unit for the purpose of calculating attendance.
- b. The students shall attend practical and theory classes as prescribed by the University during each semester.
- c. Minimum attendance of 75% of actual working hours is required in each paper, a student who doesn't satisfy the requirement of attendance shall not be permitted to write the examination in concerned subject
- d. If the conduct/behavior of the student is not found to be satisfactory, action shall be initiated as per the University regulations.

- e. A candidate can take a maximum of six years for completion as per double the duration norms of University of Mysore.

## 6. Formation of Board of Examiners

- a. Chairman Board of Studies shall form Board of Examiners members consisting of Principal Partnership Institution, Head of the Concerned Department, Subject Faculties and University Representatives. The duties of Board of Examiners includes setting question papers, conducting the examinations, valuation of answer scripts and submitting the marks list to University for result announcement.
- b. **Question paper:** Three sets of question papers shall be submitted by the subject faculty one month in advance both in hard and soft copies.
- c. **Valuation:** Valuation will be conducted by respective subject experts selected by BOE.

## 7. Scheme of examination

- There shall be a University examination at the end of each semester.
- There shall be a term end examination of 3 hrs duration for each theory subject and 4 hrs duration for practical subject at the end of the semester except project VIVA VOCE
- Repeaters has to take exam during respective semesters
- Each subject is divided into internal assessment and end term exam with marks allotted as shown below

<b>a) Total Marks -Theory papers</b>	100 marks
i. External examination:	70 marks
ii. Continues Assessment	30 marks
<i>Continues Assessment (1<sup>st</sup> to 8<sup>th</sup> week)</i>	<i>15 marks</i>
<i>Continues Assessment (9<sup>th</sup> to 16<sup>th</sup> week)</i>	<i>15 marks</i>

*(Continues assessment involves any of these activities i.e. , presentation, assignments, tests, portfolio)*

- Each student has to score minimum of 40% in each papers.

**b) Total marks –Practical papers** 100 marks

i. External examination: 70 marks

ii. Continues Assessment 30 marks

*Continues Assessment (1<sup>st</sup> to 8<sup>th</sup> week) 15 marks*

*Continues Assessment (9<sup>th</sup> to 16<sup>th</sup> week) 15 marks*

*(Continues assessment involves any of these activities i.e. , presentation, assignments, tests, portfolio)*

- Each student has to score minimum of 40% in each papers.

**e) Industrial Internship:**

- After completion of 5<sup>th</sup> semester, including semester holidays during 6<sup>th</sup> semester an internship program shall be attended by the students under the supervision of internal and external guide and submit a report
- Evaluation of internship project: 30 marks for Continues Assessment, 40 marks for Report by subject faculty, VIVA VOCE for 30 marks conducted by Internal and external examiner selected by BOE

**c) project work (Portfolio)**

- During the 6<sup>th</sup> semester students will work on their final portfolio under the guidance of the allotted guide.
- Continues Assessment will evaluated by 30 marks, portfolio work shall be evaluated for 40 by internal guide, VIVA VOCE for 30 marks conducted by Internal and external examiner selected by BOE

**8. Declaration of results:**

- Within 30 days of completion of examination declared result sheet will be submitted to university for approval
- If the students applies for revaluation it will be done after collecting nominal fees of Rs 500/- per paper
- If the students apply for challenge revaluation, the BOE appoints the subject expert to evaluate after collecting nominal fees of Rs 3000/- per paper.
- The results and grades of the Bachelor in Jewellery Design and Management shall be declared as per the regulations of the Choice Based Credit System of University of Mysore.

## 9. Scheme of academics

### I SEMESTER

PAPER	TITLE OF THE PAPER	Credits			Credits	Marks						Total	
		L	T	P		CA		Theory exam		Practical exam			
						Max	Min	Max	Min	Max	Min	Max	Min
JDM1.1	ENGLISH	3	0	0	3	30		70	28			100	40
JDM1.2	LANGUAGE	3	0	0	3	30		70	28			100	40
JDM1.3	HISTORY OF JEWELLERY AND ART	2	0	0	2	30		70	28			100	40
JDM1.4	FUNDAMENTALS OF DESIGN (practical)	0	0	3	3	30				70	28	100	40
JDM1.5	COMPUTER FUNDAMENTALS	3	0	0	3	30		70	28			100	40
JDM1.6	INDIAN CONSTITUTION	3	0	0	3	30		70	28			100	40
JDM1.7	MANAGEMENT OF ORGANISATION	3	0	0	3	30		70	28			100	40
	<b>TOTAL</b>				<b>20</b>							<b>700</b>	

### II SEMESTER

PAPER	TITLE OF THE PAPER	Credits			Credits	Marks						Total	
		L	T	P		CA		Theory exam		Practical exam			
						Max	Min	Max	Min	Max	Min	Max	Min
JDM2.1	ENGLISH	3	0	0	3	30		70	28			100	40
JDM2.2	LANGUAGE	3	0	0	3	30		70	28			100	40
JDM2.3	BASIC TECHNIQUES IN JEWELLERY DESIGN (Practical)	0	0	3	3	30				70	28	100	40
JDM2.4	CLASSIFICATION OF JEWELLERY PRODUCTS (Practical)	0	0	3	3	30				70	28	100	40
JDM2.5	HUMAN RESOURCE MANAGEMENT	3	0	0	3	30		70	28			100	40
JDM2.6	ENVIRONMENTAL STUDIES	3	0	0	3	30		70	28			100	40
JDM2.7	METALLURGY	2	0	0	2	30		70	28			100	40
	<b>TOTAL</b>				<b>20</b>							<b>700</b>	

### III SEMESTER

PAPER	TITLE OF THE PAPER	Credits			Credits	Marks						Total	
		L	T	P		CA		Theory exam		Practical exam			
						Max	Min	Max	Min	Max	Min	Max	Min
JDM3.1	ENGLISH	3	0	0	3	30		70	28			100	40
JDM3.2	LANGUAGE	3	0	0	3	30		70	28			100	40
JDM3.3	ADVANCED TECHNICAL DESIGN (PLAIN METAL)/ (Practical)	0	0	3	3	30				70	28	100	40
JDM3.4	DIAMONDS – I	2	0	0	2	30		70	28			100	40
JDM3.5	DIAMONDS - II (Practical)	0	0	3	3	30				70	28	100	40
JDM3.6	COREL DRAW (Practical)	0	0	3	3	30				70	28	100	40
JDM3.7	FINANCIAL MANAGEMENT	3	0	0	3	30		70	28			100	40
	<b>TOTAL</b>				<b>20</b>							<b>700</b>	

### IV SEMESTER

PAPER	TITLE OF THE PAPER	Credits			Credits	Marks						Total	
		L	T	P		CA		Theory exam		Practical exam			
						Max	Min	Max	Min	Max	Min	Max	Min
JDM4.1	ENGLISH	3	0	0	3	30		70	28			100	40
JDM4.2	LANGUAGE	3	0	0	3	30		70	28			100	40
JDM4.3	GEMMOLOGY – I	3	0	0	3	30		70	28			100	40
JDM4.4	GEMMOLOGY – II (Practical)	0	0	3	3	30				70	28	100	40
JDM4.5	ADVANCED TECHNICAL DESIGN (STUDED)/ (Practical)	0	0	3	3	30				70	28	100	40
JDM4.6	ENTREPRENEURSHIP DEVELOPMENT	2	0	0	2	30		70	28			100	40
JDM4.7	MANUFACTURING TOOLS AND TECHNIQUES – I	3	0	0	3	30		70	28			100	40
	<b>TOTAL</b>				<b>20</b>							<b>700</b>	

### V SEMESTER

PAPER	TITLE OF THE PAPER	Credits			Credits	Marks						Total	
		L	T	P		CA		Theory exam		Practical exam			
						Max	Min	Max	Min	Max	Min	Max	Min
JDM5.1	ADVANCED TREND DESIGN AND PORTFOLIO (Practical)	0	0	3	3	30				70	28	100	40
JDM5.2	CAJD (RHINO)/(Practical)	0	0	3	3	30				70	28	100	40
JDM5.3	LUXURY & RETAIL JEWELLERY SEGMENTS	3	0	0	3	30		70	28			100	40
JDM5.4	GEM AND JEWELLERY EXPORTS	2	0	0	2	30		70	28			100	40
JDM5.5	MANUFACTURING TOOLS AND TECHNIQUES – II (Practical)	0	0	3	3	30				70	28	100	40
JDM5.6	INSTRUMENTAL STUDIES	3	0	0	3	30		70	28			100	40
JDM5.7	MARKETING, BRANDING AND MANAGEMENT	3	0	0	3	30		70	28			100	40
	<b>TOTAL</b>				<b>20</b>							<b>700</b>	

### VI SEMESTER

PAPER	TITLE OF THE PAPER	Credits			Credits	Marks						Total	
		L	T	P		CA		Theory exam		Practical exam			
						Max	Min	Max	Min	Max	Min	Max	Min
JDM6.1	INTERNSHIP PROJECT	0	5	5	10	30		30 marks for Continues Assessment, 40 marks for Report by subject faculty, VIVA VOCE for 30 marks conducted by Internal and external examiner selected by BOE, minimum marks 28				100	40
JDM6.2	PORTFOLIO PRESENTATION	0	5	5	10	30		Continues Assessment will be evaluated by 30 marks, portfolio work shall be evaluated for 40 by internal guide, VIVA VOCE for 30 marks conducted by Internal and external examiner selected by BOE, minimum marks 28				100	40
	<b>TOTAL</b>				<b>20</b>							<b>200</b>	



# **BSc - JEWELLERY DESIGN AND MANAGEMENT**

## **SEMESTER - I**

**Paper code:** JDM1.1

**ENGLISH**

**Total No Hrs:** 48 Hrs

As per university syllabus

**Paper code:** JDM1.2

**LANGUAGE**

**Total No Hrs:** 48 Hrs

As per university syllabus

# **HISTORY OF JEWELLERY AND ART**

**Paper code:** JDM1.3

**Total No Hrs:** 64 Hrs

## **OBJECTIVES:**

The objective of this course is to impart knowledge of the History and importance of Jewellery from ancient times.

### **Unit I1**

#### **History of Art and Jewellery**

Introduction to art and ornament, The ancient world, The middle age / masterpiece of middle age, Materials used in jewellery and ancient methods, Baroque to revolution

### **Unit 2**

#### **Jewellery Eras from 18<sup>th</sup> & 19<sup>th</sup> century Great Britain**

Georgian era jewellery (1714 to 1830, Victorian era jewellery (1837 to 1901)...mid and late Victorian period, Edwardian period jewellery, La Belle époque jewellery (1895 to 1914)

### **Unit 3**

#### **Art Nouveau**

Origins, Form and character, Relationship with contemporary style and movements, Sculpture and jewellery

### **Unit 4**

#### **Art Deco or style modern**

Etymology, origins and history, Art deco characteristics and materials, Retro, Influence.

### **Unit 5**

#### **Indian jewellery**

History of Indian jewellery (The origin and growth of jewellery in India), Types of Indian Jewellery, A historic recount of Mughal jewellery, Significances of Indian jewellery, Tribal jewellery.

### **Unit 6**

**JBI (Jewellery business in India)**

Identification of ancient jewellery using Sanskrit, Hindi & other metallic coins and their trend, Specialty in ornaments worn by people in different state and region, Importance of jewellery – Currency, Functional use, Symbolism, Protection, Artistic Display and Personal Expression.

Modern trends in jewellery designs in India, Application of knowledge on ancient Indian jewellery to design modern jewellery.

**References Books**

1. Jewellery of India by Chaturvedi.
2. Jewellery and personal adornment by Kamala Dong.
3. Traditional jewellery by Oppi Untracht.

# **FUNDAMENTALS OF DESIGN**

**Paper code:** JDM1.4

**Total No Hrs:** 128

## **OBJECTIVES:**

### **Unit 1**

#### **Foundation Art**

Introduction to materials-(black and white), Drawing Lines (horizontal, vertical, wavy, diagonal, broken, thick and thin, gradation, spirals etc), Different pencils and their uses, Forms-circles, squares, other Geometrical shapes.

### **Unit 2**

#### **Introduction to Color Concept**

Basic colour concept, Different color groups, Simple and complex color wheel, colour Gradation

### **Unit 3**

#### **Rendering**

Basic rendering concept, Light effect on different objects, Shading of different forms and shapes  
Black and white object rendering,

### **Unit 4**

#### **Métal rende ring techniques**

metal effect rendering-different objects, plain metal rendering-14kt, 18kt, 22kt &24kt, Brush finish, hammering, sand blast, rosé gold, Antique finish (Silver and Gold)

### **Unit 5**

#### **Motif formation**

Définition & types of Motifs, composition with motifs-formal / informal & Positive and negative, motif development-form generation & Manipulation, Translating motif compositions into Jewellery design.

## **Unit 6**

### **Perspective**

Introduction to various perspective views, use of perspective in representing jewellery, One& Two point perspective- vanishing point, construction of objects in various angles, Isometric Projection- methodology, uses, construction of objects using isometric projection & Planometric drawing, Orthographic projection

# **COMPUTER FUNDAMENTALS**

**Paper code:** JDM1.5

**Total No Hrs:** 48 Hrs

## **OBJECTIVES:**

### **Unit 1**

#### **Introduction**

Introduction and basic concepts of computer, Development of computer systems, Generations of computer, Applications of Computer, Input/output devices, Types of computer- Super Computer, Mainframe Computer, Mini Computer, Micro Computer, Components of a computer.

### **Unit 2**

Computer Storage, Computer memory, RAM, ROM, Secondary storage devices, Hardware and software, Types of software, System software- Computer languages, Translators, Application software's, Operating systems.

### **Unit 3**

Computer Networking, Types of Networks- LAN, WAN, MAN, Internet and intranet, connecting to Internet, Internet Applications, Search Engines, and Network Topology.

### **Unit 4**

Database, Elements of database, Database Management System, Types of Database Management Systems, Applications of DBMS, Database Administrator, Data warehouse.

### **Unit 5**

DOS (Disk operating system), Command prompt, Microsoft Office, MS word, MS Excel, Basic Functions, Microsoft PowerPoint, Computer Aided Design, Electronic Data processing.

### **Unit 6**

Computer Security & Ethics, Issues and Internet Privacy, Computer Viruses, Spyware and malware, Security solutions, Disaster Recovery.

**REFERENCE BOOKS:**

- Computer Fundamentals- HK Gundu Rao, N.S Manjunath & M.N Nachappa, Sumukha Publications, Third Edition.
- Computer Fundamentals- Pradeep K. Sinha & Priti Sinha, BPB Publications, 6<sup>th</sup> edition.
- Fundamentals of Computers- V. Rajaraman, PHI Publications.
- Computer Fundamentals- Anita Goel, Pearson Publications.
- Fundamentals of Computers- E Balagurusamy, McGraw Hill Education, 2009.
- Fundamentals of Computers- Reema Thareja, Oxford Publications.
- Fundamentals of Computers- Vishal Soni, Himalaya Publishing House.

**Paper code:** JDM1.6

**INDIAN CONSTITUTION**

**Total No Hrs:** 48 Hrs

As per university syllabus

# **MANAGEMENT OF ORGANISATION**

**Paper code:** JDM1.7

**Total No Hrs:** 64 Hrs

## **OBJECTIVE:**

The objective of this course is to familiarize the students with the basic Management concepts. It deals with the evolution and development of Management thoughts, nature and description of managerial functions.

### **Unit 1**

#### **Introduction**

History of management thought, Role of a manager, managerial level and skills, managerial functions- Leadership, Leader vs. Manager, types of leaders, effective leadership

### **Unit 2**

#### **Planning and Management**

definition-meaning-importance, types of plans, process of planning, by objectives, process of management, strengths and limitations.

### **Unit 3**

#### **Organization, Control and coordination**

Organization structure, different types of structures, design process, Controlling- process, types of control, importance of control in management, Coordination- need for coordination- effective coordination- principles of coordination

### **Unit 4**

#### **Decision making and problem solving**

Introduction to problem solving and decision making, types of decision- programmed and non-programmed , Decision making stages, making steps, Cognitive and personal Biases, Post decision analysis



## Unit 5:

### Hours-16

**Foundations of Individual Behaviour:** Individual behaviour: Foundations of individual behaviour. Ability: Intellectual abilities, Physical ability, the role of disabilities.

**Personality:** Meaning, formation, determinants, traits of personality, big five and MBTI, personality attributes influencing OB.

**Attitude:** Formation, components of attitudes, relation between attitude and behaviour.

**Perception:** Process of perception, factors influencing perception, link between perception and individual decision making.

**Emotions:** Affect, mood and emotion and their significance, basic emotions, emotional intelligence, self-awareness, self-management, social awareness, relationship management.

## Unit 6:

### Motivation and Leadership:

**Motivation:** Meaning, theories of motivation-needs theory, two factor theory, Theory X and Y, application of motivational theories.

**Leadership:** Meaning, styles of leadership, leadership theories, trait theory, behavioural theories, managerial grid, situational theories-Fiedler's model, SLT, transactional and transformation leadership.

1. Koontz, Essentials of Management, 8/e, McGraw Hill
2. VSP Rao, *Management: Text and Cases* Excel BOOKS
3. Chuck Williams, An *Innovative approach to teaching and learning Principles of Management*, Cengage Publications, 2010
4. Kiran Nerkar, *Principles and practices of Management*, Vilas Chopde, Dreamtech Press, 2011
5. Stephen P Robbins, Timothy A. Judge, *Organizational behaviour*., Neharika Vohra, 14<sup>th</sup> Edition, Pearson, 2012.
6. Michael Butler, *Introduction to Organisational Behaviour*, Jaico Publishing House,
7. Ashwathappa, *Organization Behaviour*, Himalaya Publication House

## **SEMESTER -II**

**Paper code:** JDM2.1

**ENGLISH**

**Total No Hrs:** 48 Hrs

As per university Syllabus

**Paper code:** JDM2.2

**LANGUAGE**

**Total No Hrs:** 48 Hrs

As per university Syllabus

## **BASIC TECHNIQUES IN JEWELLERY DESIGN (PR)**

**Paper code:** JDM2.3

**Total No Hrs:** 128 Hrs

### **OBJECTIVES:**

The aim of this course is to impart knowledge on alternative materials and the techniques that can be used to create Jewellery.

### **Unit 1**

#### **Introduction**

Historical perspective, usage of experimental jewellery, Designers creating experimental jewellery, Researching themes and ideas, Design considerations, techniques

### **Unit 2**

#### **Materials**

Plastic and acrylic, glass, fabric, paper, wood, new age/organic materials- resins, unusual metals, fibres, leather etc.

### **Unit 3**

#### **Techniques**

Plastic and acrylic- joining mechanisms, colouring, shaping and moulding etc, glass- blowing colouring, design possibilities, Fabric – pleating, stitching, braiding etc, Paper- folding, paper Mache, joining mechanisms, Wood – carving, drilling, shaping etc, other techniques used as per materials

### **Unit 4**

#### **Designing Experimental Jewellery**

selecting a theme/ material for experimentation, understanding and exploring possibilities in chosen materials, combining traditional jewellery techniques with experimental material, design developments, exploring end users and sale points, showcasing experimental jewellery

# **CLASSIFICATION OF JEWELLERY PRODUCTS**

**Paper code:** JDM2.4

**Total No Hrs:** 64 Hrs

## **OBJECTIVES:**

- This course aims to educate the students on the important categories and sub-types in Jewellery. Students will have an in-depth knowledge of the various product types and their special features.

## **Unit 1**

### **Rings**

Introduction and historical perspective on rings, Classification of rings- Bridal rings- wedding bands, engagement rings, bridal set rings, Solitaire rings, eternity rings, promise rings, Cluster rings, Right Hand rings, Cocktail rings, other fancy rings, Technical considerations while designing rings, Introduction and historical perspective on earrings

## **Unit 2**

### **Earrings**

Classification of Studs & earrings, On the ear -Studs and buttons, Hanging style – Drops, dangles Hoop style- Huggies, Bali's etc., styles – Chandeliers, Shoulder dusters, Design and technical considerations for earrings, Perspective design techniques

## **Unit 3**

### **Pendants and Necklaces**

Introduction and historical perspective on Pendants, Classification of Pendants- Locketts, medallions, tassels, sliders etc, Introduction and historical perspective on Necklaces, Classification of necklaces- by lengths, Types of necklaces- Bib, collarets, Festoon, Riviere, Y-necklace, Asymmetrical, Design and technical considerations for necklaces and pendants

## **Unit 4**

Bangles and Bracelets

Introduction and historical perspective on Bangles and Bracelets, Classification- Bangles, Fixed and elliptical bracelets, Tennis bracelets, link bracelets, Cuff bracelets, charm bracelets, Design and technical considerations for bangles and bracelets

## **Unit 5**

### **Brooches, tiepins and other product categories**

Introduction and historical perspective, Brooches, cufflinks, tiepins, Tiara, head ornaments, nose pins etc, Belt style ornaments, anklets and other foot ornaments

## **Unit 6**

### **Other product Categories**

Mangalsutras, Antique Jewellery to Latest, Detachable jewellery, Watches, Pens, Miscellaneous Jewellery

# **HUMAN RESOURCE MANAGEMENT**

**Paper code:** JDM2.5

**Total No Hrs:** 48 Hrs

## **OBJECTIVES**

- To prepare the students to understand the changing environment and its implication for managing the Human Resources to achieve the competitive advantage and corporate excellence.
- To make the students to understand the linkages between corporate vision mission strategies policies and human resources management.
- To help the students to understand the intricacies of Human Resources management and acquire skills in effectively managing human resources in whatever functional areas of management they would be engaged

## **Unit 1**

### **Human Resource Management**

Introduction, meaning, nature, scope of HRM. Importance and Evolution of the concept of HRM. Major functions of HRM, Principles of HRM, Role of HR Manager.

## **Unit 2**

### **Job Analysis**

Meaning, process of Job Analysis, methods of collecting job analysis data, Job Description and Job Specification,

### **Human Resource Planning**

Objectives, Importance and process of Human Resource Planning,

## **Unit 3:**

**Recruitment:** Definition, Constraints and Challenges, Sources and Methods of Recruitment,

**Selection:** Definition and Process of Selection.

**Placement:** Meaning, Induction/Orientation, Internal Mobility, Transfer, Promotion, Demotion and Employee Separation.

## **Unit 4**

### **Training and development**

Training v/s development, Training v/s Education, Systematic Approach to Training, Training Methods

## **Unit 5**

### **Performance Appraisal**

Concept of Performance Appraisal, the Performance Appraisal Process, Methods of Performance Appraisal

## **Unit: 6**

**Employee Welfare:** Introduction, Types of Welfare Facilities and Statutory Provisions.

**Employee Grievances:** Employee Grievance procedure, Grievances Management in India

**Trade unions and trade unionism:** Theories of trade unions, trade union law, trade unionism in India, issues and problems, employees associations

### **Reference Books**

1. VSP Rao, Human Resource Management, EB
2. Wayne F Cascio, Managing Human Resources, TMH
3. Fisher, Schoenfeldt and James Shaw, Human Resource Management, Biztantra
4. Raymond, John, Barry and Patrick, Human Resources Management, TMH
5. Robert Mathis and John Jackson, Human Resource Management, Thomson
6. Gary Dessler, Human Resource Management, Pearson
7. Jyothi and Venkatesh, Human Resource Management, Oxford
8. Angelo DeNisi and Ricky Griffin, Human resource Management, Biztantra
9. Wayne Mondy and Robert Noe, Human Resource Management, Pearson

## **ENVIRONMENT STUDIES**

**Paper code:** JDM2.6

**Total No Hrs:** 48 Hrs

As per University syllabus



# **METALLURGY**

**Paper code:** JDM2.7

**Total No Hrs:** 64 Hrs

## **OBJECTIVES:**

This course instructs the students on the types of metals, their occurrence and the production techniques involved with respect to Jewellery.

### **Unit 1**

#### **Introduction to Metallurgy**

Introduction to the field of metallurgy, History of metallurgy- discovery, ancient uses, developments through various ages, Microscopic structure, Composition and properties of metals, Equipments and tests used in metallurgy, Occurrence of metals, its Classification – ferrous/non ferrous, noble, base, light, Definition of alloys, reasons for alloying

### **Unit 2**

#### **Precious Metals and Their Properties**

Introduction to metals used in jewellery- precious metals, Gold- properties of gold, occurrence, extraction methods, recovery and refining process, Alloys of gold, gold testing methods, Silver- properties of silver, occurrence and extraction of silver, alloys of silver, silver testing methods, Platinum group- Properties of Platinum, occurrence and extraction of Platinum, alloys of platinum, platinum working methods, Other metals used in jewellery- copper, brass, aluminium etc, their properties, Metals used in jewellery tools and industries

### **Unit 3**

#### **Production processes used for metals**

Melting, alloying, casting, working and annealing, Joining techniques, electroplating and allied, Powder metallurgy in jewellery manufacture

### **Unit 4**

#### **Assaying and Hallmarking Metals**

introduction and importance of metallurgical assaying, The touchstone, X-ray fluorescence, assay/Cupellation, introduction to hallmarking, marks and symbols, and international hallmarking standards

## **SEMESTER III**

**Paper code:** JDM3.1

**ENGLISH**

**Total No Hrs:** 48 Hrs

As per University syllabus

**Paper code:** JDM3.2

**LANGUAGE**

**Total No Hrs:** 48 Hrs

As per University syllabus

## **ADVANCED TECHNICAL DESIGN (PLAIN METAL)**

**Paper code:** JDM3.3

**Total No Hrs:** 128 Hrs

### **OBJECTIVES:**

This course will inform the students on the advanced techniques involved in designing jewellery. This includes the technical aspects like components and surface textures. Students will also be able to produce thematic design collections at the end of this course.

#### **Unit 1**

##### **Jewellery Components**

Introduction and usage of jewellery components- Types of jewellery findings and components, Links- types of links, usage of links, Catches- types of catches, bar catch, 'S' catch, pin catch, box clasp etc, Hinges – types of hinges, pin hinge, dovetail hinge etc, Findings – earring findings (posts, screw back, ear clips etc), pendants (bails, loops), brooch (pin stems), jewellery components-Rivets, chain ends, beads, jump rings etc

#### **Unit 2**

##### **Theme based Jewellery Design**

Introduction to themes, Categories of themes – natural, historic, architectural, symbolic, emotional, etc, Researching and documenting a theme, exploring various aspects of the theme, Understanding the importance of mood boards, creating mood boards, Creating inspiration boards based on the selected theme, layouts and presentation of mood boards, Deriving inspiration for designs, brainstorming methods, thinking laterally, Design developments – possibilities

#### **Unit 3**

##### **Techniques-1**

Introduction and historical perspective, Rolling mill techniques, Acid Etching and Patinas- techniques and materials used, types of patinas - materials used, process, applications, Filligree, Piercing, Granulation & Doming

#### **Unit 4**

## **Techniques-2**

Types, materials and techniques, Reticulation, Repouse & chasing, Chisseling /Engraving, Stamping/punching, Mokume-gane- techniques and materials used

## **Unit 5**

### **Textures, Finishes**

Introduction to different textures and finishes, Sand Blast, Glossy finish (10Kt,14Kt,18Kt,22kt), Brush finish, Antique gold & Silver finish, other modified textures and finishes

## **Unit 5**

### **Enamelling & Inlay**

Introduction and historical perspective, types of enamelling- champlevé, Basse-taille, cloisonné , plique-a-jour, other varieties of enamelling- grisaille, Limoges, etc.

# **DIAMONDS - I**

**Paper code:** JDM3.4

**Total No Hrs:** 64 Hrs

## **OBJECTIVES:**

The objective of this course is to train the students in the origins, processes and properties of Diamonds.

### **Unit 1**

#### **Introduction**

Overview and historical perspective, Diamond crystallography, formation of diamonds, types of deposits, Diamond Sources worldwide, Mining Companies and Diamond Mining Companies and Diamond Mining Origin, Extracting of Diamonds from rough Crystallography, Diamond as light

### **Unit 2**

#### **Colour**

Introduction and Overview, History of colour grading, Equipments used for colour grading, Colour grading Classification as per international system, Procedure for colour grading theory, diamond and fluorescence

### **Unit 3**

#### **Clarity**

Introduction and overview, Historical perspective, Clarity grading Classification as per international system, Inclusion & Blemishes, Five factors of clarity grading, Clarity Treatments

### **Unit 4**

#### **Cut and Carat**

Introduction to Cut and finish Grading, Types of cuts, Theory on cutting diamonds, Proportions grading, Polish and symmetry grading, Sewing and Gauging Carat weight estimation, Overview of Mounted jewellery

## **Unit 5**

### **Synthetic Diamonds and treatments**

Synthetic Diamonds process (CVD and HTPT) , Identification of diamonds from different synthetic and imitation diamonds , Color treatments & their identification, Clarity treatments & their identification, Diamond manufacturing: Designing the rough to polishing the diamond, Pricing: For polished and rough diamonds

## **Unit 6**

### **DIAMOND PIPELINE**

Rough diamond market- Sizing and Shape, DTC – History and importance, Conflict diamond, Kimberly process, Sorting for quality and color, The polished diamond market

## **DIAMONDS – II**

**Paper code:** JDM3.

**Total No Hrs:** 128 Hrs

### **Unit 1**

#### **Identification of diamonds**

Understanding the 4 'c of diamond grading, Use of 10 x loupe, Use of microscope, Use of other equipments for diamond grading – Ultraviolet lamp, Sorting tray, Balance scale etc.

Unit 5: International grading scales like HRD, IGI etc.

### **Unit 2**

#### **Clarity grading**

Introduction to clarity grading, Use of 10 x Loupe in clarity grading, Types of inclusions, Use of microscope for clarity grading, Clarity Grading according to the GIA System, Assess clarity grade using other international grading systems

### **Unit 3**

#### **Color grading**

Introduction to color grading, Use of folded white card and Grading lamp, Color comparison master stones, Assess color grade using the GIA system, Assess color grade using other international grading systems

### **Unit 4**

#### **Cut grading and carat weight**

Introduction to cut grading and carat weight, Visual estimation of clarity grading, Use microscope for cut grading, Assess cut grade using the GIA system, Assess cut grade using other international grading systems

### **Unit 5**

## **Grading Chart**

Grading with the GIA system chart, Grading with 10x loupe, Grading using microscope, Grading of 10 diamonds with the GIA system chart, Grading of 10 diamonds with other international standards like IGI, HRD etc

## **Unit 6**

### **Differentiating between diamonds and simulants**

Types of simulants, Differentiating between diamonds and simulants by using of 10 x loupe, Differentiating between diamonds and simulants by using Microscope, Differentiating using diamond testers, SG, Ultraviolet rays etc, Practically differentiating 10 diamond simulants

## **Unit 7**

### **Rough diamonds and treatments**

Observation: Use of 10 x loupe, Observation: using microscope, Crystal faces, cleavage and forms and twinning, Inclusions – identification of different types of inclusions in rough diamonds, General description of quality, transparency and color



# **COREL DRAW**

**Paper code:** JDM3.6

**Total No Hrs:** 96 Hrs

## **Unit 1**

### **Introduction to CDR**

Saving in different formats, exporting and importing files and opening files, Creating basis shapes, Filling with colour, changing outline properties, colour palette, Drawing with line tools, brush styles, Shaping and re-shaping.

## **Unit 2**

Changing fill properties – Texture, pattern, fountain fill, Picking, moving and deletion of objects, Resizing, rotating, transforming objects, Cropping, slicing, erasing, Smudging, roughening objects, Grouping, arranging objects, using guidelines.

## **Unit 3**

Duplicating, copying objects, mirroring, Table and graph paper, Trimming objects, Special fill tools – smart fill, interactive fill tool, interactive mesh tool/drawing tools, Connector tools, linking objects, Using symbols & clip art.

## **Unit 4**

Blending objects, contouring, Distorting objects, Perspective effects / shadow effects, Transparency effect, Text properties, enveloping text, Using symbols & clip art, Zooming / viewing, showing printable area.

# FINANCIAL MANAGEMENT

**Paper code:** JDM3.7

**Total No Hrs:** 48 Hrs

## **Objectives:**

- To explain the basic functions and responsibilities of a financial department in a business/firm;
- To elaborate the key decision areas in financial management-investment, financing, dividend and working capital management
- To explain the various techniques of evaluation of investment proposals
- To discuss the various factors to be considered in designing the target capital structure.

## **Unit 1**

### **Financial management**

Introduction to financial management, objectives of financial management – profit maximization and wealth maximization. Changing role of finance managers.

## **Unit 2**

**Indian financial system** – Primary market, Secondary market – stocks & commodities market, Money market, Forex markets. (Theory Only)

## **Unit3:**

### **Time value of money**

Future value of single cash flow & annuity, present value of single cash flow, annuity & perpetuity. Simple interest & Compound interest, Capital recovery & loan amortization.

## **Unit4:**

### **Cost of Capital**

Cost of capital – basic concepts. Cost of debenture capital, cost of preferential capital, cost of term loans, cost of equity capital (Dividend discounting and CAPM model). Cost of retained earnings. (theory)

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## Unit 5

### Working capital management

factors influencing working capital requirements. Estimation of working capital requirements of a firm Only theory

### Reference Books

1. Prasanna Chandra , *Financial management* -, 8/e, TMH, 2011.
2. R K Sharma and Shashi K Gupta, *Financial management*, Kalyani Publications -2012
3. Khan M. Y.& Jain P. K *Financial management*, 6/e, TMH, 2011.
4. Rajiv Srivastava and Anil Misra, *Financial management*, Second edition, Oxford University Press,2011
5. Vanhorne, James C, *Financial management & policy*-. , 12/e, Pearson, 2002
6. M Pandey, *Financial management*, Vikas Publications -2013
7. Brigham & Houston, *Fundamentals of financial management*, 10/e, Cengage Learning
8. Damodaran, *Corporate finance*, , 2/e, Wiley India (P) Ltd., 2000
9. Paresh P., Shah, *Financial management*, 2/e, Biztantra.
10. Sheeba Kapil, *Fundamentals of financial management*, Pearson, 2013

## **SEMESTER IV**

**Paper code:** JDM4.1

**ENGLISH**

**Total No Hrs:** 48 Hrs

As per university syllabus

**Paper code:** JDM4.1

**LANGUAGE**

**Total No Hrs:** 48

Hrs As per university syllabus

# GEMMOLOGY – I

**Paper code:** JDM4.3

**Total No Hrs:** 64 Hrs

## **OBJECTIVES:**

- To introduce the students to the world of gemstones, their properties and their sources. Students will be able to identify and differentiate between the various categories of gemstones.

## **Unit 1**

### **Introduction**

Overview of gemstones, History of gems, Learning the general observations of gemstones - Color, Luster, Phenomena, Fracture, Habit etc, Formation of gemstones- Different types of rocks, Pegmatite rocks, subduction, Mining: Different mining operations of gemstones- open pit mining- alluvial mining-Underground Mining, Carat: Carat meaning, history. Different units of conversation of carat to points, cents, grams and milligrams.

## **Unit 2**

### **Instruments used in gemmology and its applications**

Loupe and Refractrometer- Applications and uses, Polariscope and Dichroscope - Applications and uses, Microscope and Spectroscope - Applications and uses, Chelsea filter, Tripod, Calipers & Leveridge Gauges - Applications and uses, Grading gemstones according to GIA standards, Grading gemstones according to other international standards.

## **UNIT 3**

### **Properties of gemstones**

Study of Physics for gemstone: Introduction to light, Types of light used in gemology lab: Reflection, Refraction, Color : Hue , tone , Saturation, Physical & Optical properties:Hardness: ScratchHardness,Moh's Hardness Sale, Density: Determination of density by different methods: 1 Hydrostatic Balance 2.Suspension Method 3. Weights used in the Gem trade, Optical properties using instruments: Determination of Refractive Index using Refractometer, polariscopic: Single reflection, Double reflection, Optical properties with light:Double Refraction,Dispersion, Absorption Spectra,Transparency, Luster, Pleochroism,And

Luminescence, Study of inclusions :Natural inclusion :Needles, clouds, fluids, and crystals Man made inclusion , Inclusion by treatments : Fissures, cleavages, fractures.

#### **Unit 4**

##### **Gemstones Varieties, Properties, sources and identification**

Ruby: Sapphire: Emerald, Quartz and chalcedony, Opal: Tourmaline: Peridot, Topaz: Beryl: Chrysoberyl, Tanzanite: iolite: andalusite: Zircon: Garnet, Lapis lazuli: Turquoise: Spinel: Feldspar: Etc

#### **Unit 5**

##### **Treatments and Synthetic processes used in gemstones and identification**

Introduction to treatments: Heat treatment, Lattice and beryllium diffusion, Smoke and sugar treatment, Ceramic process, Coating, Doublet, Fracture filling.

**Unit 4:** Wax impregnation, Oiling, Quench Cracking etc, Introduction to Synthetic gemstones: Flame Fusion, Skull Method, Hydrothermal Process, The process method

#### **UNIT 6**

##### **Organic gems and identification**

Pearl – Properties and identification, Natural & cultured Pearls- Properties and identification, Jet- Properties and identification, Ivory - Properties and identification, Coral - Properties and identification, Amber- Properties and identification

#### **REFERENCES**

**GIA.edu, Gemmology- by Peter Read**

## **GEMMOLOGY – II**

**Paper code:** JDM4.4

**Total No Hrs:** 96 Hrs

### **Unit 1**

#### **Introduction to Gemstone identification**

Observation using loupe, Observation using Microscope, Evaluating the cut

### **Unit 2**

#### **Gemstone Chart**

Grading with Loupe, Grading with microscope, Evaluating color, hue, tone and saturating, Grading set stones

### **Unit 3**

#### **Clarity identification:**

Types of inclusions, How to differentiate different types of inclusions, Grading clarity according to GIA system, Grading clarity according to International systems like HRD and IGI

### **Unit 4**

#### **Gemstone identification:**

Ruby: Sapphire: Emerald, Quartz and chalcedony, Opal: Tourmaline: Peridot, Topaz: Beryl: Chrysoberyl, Tanzanite: iolite: andalusite: Zircon: Garnet, Lapis lazuli: Turquoise: Spinel: Feldspar: Etc

### **Unit 5**

#### **Gemstone identification : Organic gemstones**

Pearl – Properties and identification, Natural & cultured- Properties and identification, Jet- Properties and identification, Ivory - Properties and identification, Coral - Properties and identification, Amber- Properties and identification

### **Unit 6**

#### **Gemstone treatment identification**

Heat treatment, Lattice and beryllium diffusion, Smoke and sugar treatment, Ceramic process etc, Coating, Doublet, Fracture filling, Wax impregnation, Oiling, Quench Cracking etc

**References: GIA.edu, Gemmology- by Peter Read**



## **ADVANCED TECHNICAL DESIGN (STUDDDED)**

**Paper code:** JDM4.5

**Total No Hrs:** 96 Hrs

### **OBJECTIVES:**

This course will inform the students on the advanced techniques involved in designing Studded jewellery. This includes the technical aspects like components and stone settings. Students will also be able to produce thematic design collections at the end of this course.

### **Unit 1**

#### **Stone Settings**

Pa've setting, prong setting, channel setting, bezel setting, invisible setting, cluster and other fancy settings

### **Unit 2**

#### **Rendering**

Stone Rendering, different shaped gems, Rendering color gem stones Rendering diamonds, Rendering translucent gems, Rendering opaque gems, Rendering Semi precious stones

### **Unit 3**

#### **Findings-studded Jewellery**

Studded findings and its uses, Solitaire Pendant baskets, Solitaire Ring baskets, Ring shanks, B-bands, Bangles

### **Unit 4**

#### **Theme based Jewellery Design**

Introduction to themes, Categories of themes – natural, historic, architectural, symbolic, emotional, etc, Researching and documenting a theme, exploring various aspects of the theme, , Understanding the importance of mood boards, creating mood boards, Creating inspiration boards based on the selected theme, layouts and presentation of mood boards, Deriving inspiration for designs, brainstorming methods, thinking laterally

## **Unit 5**

### **Design Methodology**

Form Generation, Form Manipulation, Mirroring and Sizing, Detailing, Rendering, Final presentation and submission ideas.

# **ENTREPRENEURSHIP DEVELOPMENT**

**Paper code:** JDM4.6

**Total No Hrs:** 64 Hrs

## **OBJECTIVE**

The objective of this course is to impart the knowledge required to setup an entrepreneurship enterprise. Students will learn about the advantages and the methods for being a successful entrepreneur.

## **Unit 1**

### **Introduction**

Nature and development of entrepreneurship, meaning of entrepreneur, entrepreneurship, enterprise, Meaning of self-employment, employment and entrepreneurship, Entrepreneurial competencies- charm of being an entrepreneur, entrepreneurship for career growth, and support for self-employment, Brief history of entrepreneurship development in India.

## **Unit 2**

### **Motivation techniques**

Goal setting techniques, systematic planning, self assessment techniques, Risk taking, Tolerance for ambiguity, self efficacy

## **Unit 3**

### **Business planning**

Creativity for Entrepreneurial Excellence, Business Research Methods, Business Environment & Finance, Quantitative Techniques, Marketing Management, Human Resource Management

## **Unit 4**

### **Steps in launching an enterprise**

Market survey- concepts and practices, assessment of demand and supply, preparation of survey questionnaire, Business plan preparation- detailed project report, small and medium enterprises- meaning, definition, importance, problems and prospects, Impact of WTO on small and medium enterprises. Industrial sickness-cause and remedies

# **MANUFACTURING TOOLS AND TECHNIQUES - I**

**Paper code:** JDM4.7

**Total No Hrs:** 64 Hrs

## **OBJECTIVE:**

- The objective of the course is to train the students in the important manufacturing techniques both in handcrafted and mass manufacturing methods of producing jewellery. Students will learn to work with metal and set stones by various methods.

### **Unit 1**

#### **Handmade Jewellery**

Introduction and historical perspective, methods of melting metal and alloying, metal shaping techniques- cutting, rolling, drawing, etc., filing and grinding, piercing and sawing, annealing and pickling, joining techniques, finishing and polishing

### **Unit 2**

#### **Casting Technology**

Introduction and historical perspective, types of casting process, wax modelling techniques, investment casting techniques, centrifugal casting, end finishing and polishing techniques

### **Unit 3**

#### **Stamping and electroforming**

Introduction to stamping, tools and materials used in stamping, creative application of stamping for designing, introduction to electroforming, materials and tools used, design applications of electroforming

### **Unit 4**

#### **Stone setting**

Introduction to stone setting, stone setting tools and materials, Closed settings (bezel, gypsy, tube etc.), open settings- prong, bead, carre, etc, group settings- cluster, channel, pave etc, special setting techniques- tension, invisible, pressure etc.

## **Unit V5**

### **Enameling**

Introduction to Enameling, Types of enameling, Process of empanelling, Uses of enameling

## **Unit 6**

### **Wax Modeling**

Introduction to Wax modeling, Understanding and taking a master, types and shapes, Repairs of waxes, Pre setting, Designing and tree making

## **SEMESTER V**

### **ADVANCED TREND DESIGN AND PORTFOLIO**

**Paper code:** JDM5.1

**Total No Hrs:** 64 Hrs

#### **OBJECTIVES**

- This course aims to practically educate the students on the important categories and sub-types in Jewellery. Students will have an in-depth knowledge of the various product types and their special features.

#### **Unit 1**

##### **Rings**

Introduction and historical perspective on rings, Classification of rings- Bridal rings- wedding bands, engagement rings, bridal set rings, Solitaire rings, eternity rings, promise rings, Cluster rings, Right Hand rings, Cocktail rings, other fancy rings, Technical considerations while designing rings, Introduction and historical perspective on earrings

#### **Unit 2**

##### **Earrings**

Classification of Studs & earrings, on the ear -Studs and buttons, hanging style – Drops, dangles Hoop style- Huggies, Bali's etc., fancy styles – Chandeliers, Shoulder dusters, Design and technical considerations for earrings, Perspective design techniques

#### **Unit 3**

##### **Pendants and Necklaces**

Introduction and historical perspective on Pendants, Classification of Pendants- Locketts, medallions, tassels, sliders etc., Introduction and historical perspective on Necklaces, Classification of necklaces- by lengths, Types of necklaces- Bib, collarets, Festoon, Riviere, Y-necklace, Asymmetrical, Design and technical considerations for necklaces and pendants

## **Unit 4**

### **Bangles and Bracelets**

Introduction and historical perspective on Bangles and Bracelets, Classification- Bangles, Fixed and elliptical bracelets, Tennis bracelets, link bracelets, Cuff bracelets, charm bracelets, Design and technical considerations for bangles and bracelets

## **Unit 5**

### **Brooches, tiepins and other product categories**

Introduction and historical perspective, Brooches, cufflinks, tiepins, Tiara, head ornaments, nose pins etc., Belt style ornaments, anklets and other foot ornaments

## **Unit 6**

### **Other product Categories**

Mangalsutras, Antique Jewellery to Latest, Detachable jewellery, Watches, Pens, Miscellaneous Jewellery

# **COMPUTER AIDED JEWELLERY DESIGNING (RHINO)**

**Paper code:** JDM5.2

**Total No Hrs:** 128 Hrs

## **OBJECTIVES**

- This course will train the students in all the tools and techniques of jewellery specific software to enable them to design jewellery with the aid of the computer.

## **Unit 1**

### **Rhino Basics**

The rhino for windows interface- Menus, Toolbars, Graphic area, Command area, the mouse, navigating around the model, panning and zooming, changing the view, moving objects, copying objects, entering commands and viewing command history

## **Unit 2**

### **Creating 2 dimensional shapes**

Points, lines, curves, Creating arcs, shapes- circles, ellipses, polygons, curve tools

## **Unit 3**

### **Creating 3 dimensional shapes and stone settings**

creating surfaces from curves, manipulating surfaces, surface tools, creating solids, solid tools- creating holes, manipulating solids, Prong setting, Bezel setting

## **Unit 4**

### **Rings and bangles**

Making of shank, Setting stone on the shank, Making of bangles, Stone setting on bangles, Types of finishes, Presentation of rings and bangles

## **Unit 5**

### **Pendants and necklaces**

Making of pendants, Making of pendants with stone setting, Making of necklaces, Making of necklaces with stone setting, Different clasps and locks, Final presentation of pendant and necklace



## **Unit 6**

### **Rendering and Printing**

Types of rendering software and usage, material possibilities- yellow gold, white gold, textures etc., lighting and backgrounds, saving, importing, exporting, bitmaps etc., introduction to CAM and printing possibilities, Final presentation of 5 jewellery products

## **LUXURY & RETAIL JEWELLERY SEGMENTS**

**Paper code:** JDM5.3

**Total No Hrs:** 48 Hrs

### **OBJECTIVES:**

- The objective of this course is to introduce students to the various segments in Jewellery. Students will be able to design luxury and retail Jewellery and also understand the distinctive qualities of Men's & Kid's Jewellery.

### **Unit 1 Luxury jewellery segment**

Introduction to luxury jewellery segments, Fine jewellery- historical references, types of materials used, renowned fine jewellery designers, design considerations for fine jewellery, Couture Jewellery- introduction to couture jewellery, Design considerations for couture jewellery

### **Unit 2**

#### **Film & Theatre Jewellery**

Introduction to film & theatre jewellery, Research- themes, characters, period etc., Material considerations, Creating designs for a film production, Creating designs for a Theatre production, Study of renowned film and theatre jewellery

### **Unit 3**

#### **Retail Jewellery**

Introduction to retail jewellery, Brands- definition, types of brands, brand positioning etc, Market study and research considerations, Materials, design considerations, forecasting, pricing and positioning, Developing a collection/ range for a selected brand

### **Unit 4**

#### **Men & Kid's jewellery**

Introduction to men's jewellery, Types of jewellery available for men, Design considerations, materials, price points etc, Introduction to Kid's jewellery, Types of jewellery available for Kid's, Design considerations, materials, price points etc.

## **GEM AND JEWELLERY EXPORTS**

**Paper code:** JDM5.4

**Total No Hrs:** 48 Hrs

### **OBJECTIVES**

- This course is an introduction to the various formalities, acts involved in the export sector and the function of the export promotion council.

### **Unit 1**

#### **Introduction**

Introduction and overview, Exim policy, customs act, other acts relating to export/import, formalities for commencing, customs formalities

### **Unit 2**

#### **Exports**

Introduction and overview, export documentation, project exports, export of services - export of excisable goods, 100% export oriented units, export processing zones - special economic zones, duty drawback procedure - export/import by post customs house agents

### **Unit 3**

#### **Imports**

Introduction, import documentation, clearance of import goods, import of different products, Import incentives, import licences etc.

### **Unit 4**

#### **Gem and Jewellery export market**

Introduction - Scope of study - Statistics of Gem & Jewellery export, Markets - Global Competition, Export Promotion schemes, product development, Technical aspects of gold jewellery, Role of export Promotion Council

## **MANUFACTURING TOOLS AND TECHNIQUES - II**

**Paper code:** JDM5.5

**Total No Hrs:** 128 Hrs

### **OBJECTIVE:**

The objective of the course is to train the students in the important manufacturing techniques both in handcrafted and mass manufacturing methods of producing jewellery. Students will learn to work with metal and set stones by various methods.

### **Unit 1**

#### **Introduction to Manufacturing**

Tools and equipments and it's uses, Soldering and heating, Gas supply and emergency shut off, Safety precautions, Safety precautions

### **Unit 2**

#### **Basic techniques**

Cutting of metals, Drilling, Filing, Heating, Soldering

### **Unit 3**

#### **Technical exercises and earring making**

Wire work and chain making, Use of different shapes in draw plate, Drawing readymade chain, Use of rolling mill, Simple domed earrings, Earrings using other techniques

### **Unit 4**

#### **Stone setting and ring making**

Introduction to stone setting, Simple bezel collet making, Polishing and finishing, Stamping and pressing, Simple prong making, Making of rings set with stone

### **Unit 5**

#### **Polishing and finishing**

Uses of files for finishing, Polishing materials like leather, cloth etc., Polishing compounds (liquid and solid), Emery paper grades and uses, Cleaning methods like steam cleaning, Other hand finishes (scratch, brush)

### **Unit 6**

#### **WAX MODELING**

Introduction to Wax modeling, Understanding and taking a master, types and shapes, Carving various 3d forms, Sprue placement, Designing and tree making, Casting

## **INSTRUMENTAL STUDIES**

**Paper code:** JDM5.6

**Total No Hrs:** 48 Hrs

### **OBJECTIVES:**

#### **Unit 1**

##### **Introduction**

Significance and method of measurement, Direct and indirect method of measurement configuration of measuring instruments and measurement system., Definition and type of transducers, Definition of the term –dispersion, monochromaticity, refraction, refractive index, total internal refraction, optical activity.

#### **Unit 2**

##### **Linear Measurement**

Measurement of weight, temperature measurement, time speed measurement, Concept of different physical properties of density, hardness and tensile strength, Atomic structure of metal, basic structure materials-atoms-composition of atoms.(only gold,silver,platinum, copper), Element in periodic table, table-electronic configuration of different metal.

#### **Unit 3**

##### **Classifications of Instruments**

Usages of loop, Principle of operation of simple and compound microscope, XRF( X-Ray fluorescence) principle, Karat meter.

#### **Unit 4**

Gold and silver purity measurement by touch stone method, Density method – composition of karat age of metals, Gravimetric analysis (procedure-significance-numerical) Determination of unknown metal composition, Method of precipitation.

#### **Unit 5**

Photometry (construction and working), Pleochroism and Dichroism (optical properties), Principle of mass spectrometer, Introduction to hallmarking.

### **Unit 6**

#### **Construction and usage**

Dichroscope (testing for single and double refraction, reflectivity and reflect meters, Polariscopes (construction and working), Introduction to UV Lamp, Chelsea filter, diamond tester, Hardness definition on Mohr's scale, Brinell, Test Rock, Test Micro hardness.

#### **Reference Books**

A course in electrical and electronics measurement and instrumentation by A.K Swahney.  
Gemology by Peter Read, third edition.

# **MARKETING, BRANDING AND MANAGEMENT**

**Paper code:** JDM5.7

**Total No Hrs:** 48 Hrs

## **OBJECTIVES:**

- The objective of this course is to introduce students to the various types of marketing and branding, and gives an overview of the Luxury retail Market. This course is to understand the retail scenario with respect to Jeweler. It will also impart knowledge on the functioning of stores, brand positioning and management.

## **Unit 1**

### **Introduction**

Introduction to retailing, types of retail markets – domestic, International, retail environment and retail mix strategies, Retail Marketing Management, Human Resource Management, Retail Information Technology Management, **Store Layout:** store window display, exterior of store, illumination, Visual merchandising, fixture and dressings, purchase display systems, store interiors and display locations

## **Unit 2**

### **Merchandise planning**

Types of stores and planning, layout and storing, Assortment management, seasonal planning, buying, maintain customer relationships

## **Unit 3**

### **Brand building**

Importance of brand, creation of brands, market research, importance of advertising and customer loyalty, franchising, business ethics,

### **Brand Management,**

Evaluation of Brands, brands and their relationship with consumers, Brand equity

## **SEMESTER VI**

### **INTERNSHIP**

**Paper code: JDM6.1**

The objective of the internship is to enable students to gain knowledge on functioning of jewellery enterprise through on the job training.

Students will be sent to various reputed jewellery organizations individually or in groups to carry out project work under the supervision of a factory guide on a specific topic related to jewellery design and management. The progress on the project will also be continuously monitored by a faculty guide.

The report will be submitted to the principal and also evaluated by internal and external examiners detailed by the university

### **DESIGN PORTFOLIO**

The objective of this unit is to enable the students to prepare a professional design portfolio to showcase their best work. It will educate the students on the importance of portfolios, their various types and layouts. The portfolio will include a comprehensive compilation of jewellery design categories with material details and technical aspects. The aim is to equip the students with a strong design portfolio for their successful entry into the Jewellery industry.

### **PORTFOLIO PRESENTATION**

**Paper code: JDM6.2**

A Jewellery collection based on a selected theme has to be designed and produced Sequence of collections – conceptualization, mood board, inspirations, design development, material selection, final design production, presentation with technical details and costing