

Semester-I

101 - HISTORY OF JEWELLERY INDUSTRY

History of ornamentation- indus valley, different periods-mauryan, sunga, gupta, kushan, chandella, mughal, tribal jewellery, jewellery-rest of the world & European, precious and semi-precious jewellery industry, advancement of techniques in India, today-its size and variations and aspirations

Credit hrs 20(T) 10(P) Int. Assessment (25) Ext Assessment (75)

102 - GEMMOLOGY - I

Definition, value of gemstone, classification and types, Geological occurrences, formation, origin, mining and methods, history and folklore, introduction to physical properties.

Credit hrs 30(T) 5(P) Int. Assessment (25) Ext. Assessment (75)

103 - METALS AND THEIR BEHAVIOUR - I

Characteristics and classification, ores, metal groups-ferrous, non-ferrous, alloys, mining and techniques-surface mining, subsurface mining and types. Basic techniques of jewellery making- measurement, layout, sawing, drilling, filing.

Credit hrs 30(T) 5(P) Int. Assessment (25) Ext Assessment (75)

104 - COMPUTER BASICS

Familiarization with all input and output devices, hardware and software, understanding windows operating system, internet technology, microsoft word, excel, powerpoint

Credit hrs 30(T) 10(P) Int. Assessment (25) Ext. Assessment (75)

105 - DRAWING AND SKETCHING

Free hand drawing and sketching, construction and analytical method, relation between size, scale and proportion, perspective drawing, free hand drawing, black and white and color rendering, life drawing,

Credit hrs 10(T) 40(P) Int. Asses(40) Ext Assessment (60)

106 - WORKSHOP

Beaded Jewellery, workshop, wherein, students learn beading techniques & make jewellery projects using the same.

Workshop on engraving & carving using metal plates (articles made from these techniques)

Credit hrs 5(T) 45(P) Int. Assessment (40) Ext. Assessment (60)

107- COMMUNICATION & SOFT SKILLS

Course contents same as other courses of PTU

Semester-II

201 - FUNDAMENTALS OF DESIGN

ELEMENTS- point, line, shape, plane, texture, color, pattern, form and space

PRINCIPLES- balance, rhythm, harmony, proportion, order and movement, Compositions, physical characteristics, 3-d forms, articulation and aesthetic principles

tangible non tangible aspect of 3-d forms, transition in 3-d forms

Credit hrs 40(T) Int. Assessment (25) Ext. Assessment (75)

202 - GEMMOLOGY - II

Optical properties, refractive index, sources, hardness, chemical composition of gemstones. Crystals structures and crystallography,

Credit hrs 30(T) 5(P) Int. Asses(25) Ext Assessment (75)

203 - METAL & THEIR BEHAVIOR - II

Precious metals and their mining, methods of refinement and recovery, application in jewellery, quality control –lowering or raising metal quality, hallmarking, standard weights and measures

Credit hrs 30(T) 5(P) Int. Assessment (25) Ext. Assessment (75)

204 - COMPUTER APPLICATIONS –(SOFTWARE)

Corel draw, photoshop, creating and editing 3-d images

Credit hrs 30(T) 10(P) Int. Assessment (25) Ext. Assessment (75)

205 - FUNDAMENTALS OF DESIGN

Practicals based on the theory taught.

Unity, proportion, balance, contrast, rhythm, repetition, pattern, dominance.

Credit hrs 40(P) Int. Assessment (40) Ext. Assessment (60)

206 - WORKSHOP

Workshop on threaded jewellery, using macramé knots & different kinds of threads & cords.

Enamelling, stone setting, pulling & twisting (articles of jewellery made from these techniques)

Credit hrs 5(T) 45(P) Int. Assessment (40) Ext. Assessment (60)

Semester-III

301 - SOCIO ECONOMIC FOUNDATIONS OF JEWELLERY

Introduction to the social system of India – Caste System; Value System; Traditions and Religious beliefs. Jewellery and the social identification. Tribal, rural and urban preferences of jewellery. Jewellery on social symbol. Jewellery as a store of value jewellery as an investment and cover against risk.

Credit hrs 25(T) 5(P) Int. Assessment (25) Ext. Assessment (75)

302 - ADVANCED GEMMOLOGY

Determining R.I, magnification, use of characteristic inclusions, as a means of gem identification. Manufacture of synthetic gemstones, types of simulants, identification of simulants with help of instruments

Credit hrs 35(T) 5(P) Int. Assessment (25) Ext. Assessment (75)

303 - GOLDSMITHING AND MANUFACTURING

Processes involved in goldsmithing, traditional manufacturing techniques, sheet metal, wire, filigree, chain making, advancement of techniques

Credit hrs 35(T) 5(P) Int. Assessment (25) Ext. Assessment (75)

304 - JEWEL CAD-1

Applications and usage of software for designing jewellery

Credit hrs 30(T) 20(P) Int. Assessment (25) Ext. Assessment (75)

305 - ILLUSTRATION AND RENDERING TECHNIQUES

Introduction to various mediums, application of these on different kinds of paper rendering of stones, to show cut, color, effect of different mediums, pencil shading usage of photo inks for design projects.

Rendering of metals, and other materials, metal rendering using various mediums rendering of materials used in costume jewellery like wood, plastic, glass, acrylic

Credit hrs 5(T) 30(P) Int. Assessment (40) Ext. Assessment (60)

306 - DESIGN DEVELOPMENT

Geometric principles, articulation and application in natural and man made environment analysis of form, generation of 2-d forms, construction of 3-d forms, geometry in art development of motifs, from nature by construction, floral geometric, application of these in jewellery design,

Credit hrs 5(T) 40(P) Int. Assessment (40) Ext. Assessment (60)

Semester-IV

401 - DIAMOND GRADING SORTING

Physical and optical properties of diamonds, cutting and polishing 4-c's, simulants and their identification, natural inclusions, polishing, faceting, clarity & colour grades.

Credit hrs 30(T) 5(P) Int. Assessment (25) Ext. Assessment (75)

402 - APPLICATION OF METALS IN JEWELLERY

Various enhancement techniques, metal finishing and patinas, colouring metals

Credit hrs 30(T) 5(P) Int. Assessment (25) Ext. Assessment (75)

403 - ESSENTIALS OF MANAGEMENT

Introduction to management as a Science and Art. Principles of management. Function of management. Approaches to management. Contributions of Taylor, Fyol, Maslow, Herzberg & Peter Drucker.

Credit hrs 30(T) 5(P) Int. Assessment (25) Ext. Assessment (75)

404 - JEWEL CAD-2

Applications of the software in jewellery design, designing rings bangles bracelets neckpieces mens jewellery

Credit hrs 30(T) 10(P) Int. Assessment (25) Ext. Assessment (75)

405 - TECHNICAL DRAWINGS

Rings, bangles, neckpieces, earrings, mens jewellery

Credit hrs 5(T) 45(P) Int. Assessment (40) Ext. Assessment (60)

406 - DIAMOND GRADING, SORTING & GEM IDENTIFICATION PRACTICAL

Instruments used for grading and sorting of diamonds, colour gem stones, their uses, applications & principles. Natural inclusions used to identify diamonds and coloured gem stones grading and sorting diamonds using these instruments according to the 4'c,s

Credit hrs 5(T) 40(P) Int. Assessment (40) Ext. Assessment (60)

SUMMER TRAINING (Craft based project)

Project report to be submitted. Evaluation to be done at the end of the course.
Total Marks (100)

Semester-V

501 - LARGE SCALE PRODUCTION OF JEWELLERY

Mass production-handmade and machine made jewellery, methodology and techniques involved, moulding casting etc, drawbacks of mass production, quality control of metal etc

credit hrs 30(t) 15(p) int. asses(25) ext asses(75)

502 - DOMESTIC AND INTERNATIONAL RETAILMENT OF JEWELLERY

World bullion market, how gold rates vary, retailing precious as well as costume jewellery

Credit hrs 30(T) 10(P) Int. Assessment (25) Ext. Assessment (75)

503 - EXPORT OF JEWELLERY

Procedure involved in exporting, different markets of the world, their regulations regarding precious metal jewellery, export of costume jewellery

Credit hrs 30(T) 15(P) Int. Assessment (25) Ext. Assessment (75)

504 - FUNDAMENTALS OF ACCOUNTING

Definition, scope, objective of financial accounting, accounting vs. book keeping, advantages and limitation of financial accounting, concepts and conventions, principles of accounting.

Depreciation - meaning, need and importance of depreciation, and methods of charging
Share capital and debentures-Features of equity share capital, preference share capital, share vs. debentures, issue of share capital, forfeiture and prorate allotments.

Credit hrs 40(T) Int. Assessment (25) Ext. Assessment (75)

505 - LAYOUT METHODOLOGY

Designs and laying out techniques, finishing and enhancement of designs using different methods, different outlay methods, presentation techniques, application of these techniques, arrangement of designs

Credit hrs 5(T) 30(P) Int. Assessment (40) Ext. Assessment (60)

506 - PORTFOLIO COMPILATION

Project given to students as a final design project, Applications of the layout technique for portfolio compilation. Theme based or technique based designs to be compiled in CD format

Credit hrs 5(T) 30(P) Int. Assessment (40) Ext. Assessment (60)

Semester-VI

601 - INDUSTRIAL TRAINING

Work experience with a jewellery manufacturing or retailing company for 6- months, indepth study of that field, transition of technology and designs. Project report of the above to be submitted. Presentation through seminars.

Credit hrs 240 (P) Int. Assessment (200)

602 – PROJECT REPORT

Credit hrs. (400) Ext. Assessment (300)

603 – SEMINAR PRESENTATION

Int. Assessment Total Marks (100)