

JEWELLERY AND OBJECT

1st and 2nd semesters

DESIGN BASICS

The content of this subject is based on developing creative experimentation work processes in which students will learn the necessary principles of visual language to undertake complex project processes.

It aims to initiate students in the conceptual tools that create and support this language: form, structure, composition, balance, repetition, colour, space, volume, synthesis and perception; providing them with the basic resources in formal, compositional and chromatic creation.

DRAWING AND GRAPHIC TECHNIQUES

This course provides students with an introduction into the theory and practice of techniques, methods and procedures that will enable them to represent three dimensional objects in a two dimensional plane using conventional drawing techniques. Students will develop their ability to graphically define ideas, forming part of the creation process by making these ideas visible through sketching techniques.

This subject fulfils two roles: it is based on students' ongoing work under the guidance of the teacher, as it is an essentially practical and experimental course, and it acts as a basic introduction to graphic expression applied to design.

SYSTEMS OF REPRESENTATION

In the Systems of Representation course, students will build on their knowledge and learn different communication and information languages.

They will learn to develop a spatial perspective of objects, incorporating logic into the drawings and constructions that they propose, which must always centre on the need to communicate. This will be in addition to other specific languages that will help to clarify ideas and the aesthetic, technical and formal information of the item in question.

Finally, to enable students to deal with any technical representation issues that may arise in design studies they will learn the following representation systems: Orthographic, Axonometric and Conical projections, and sketching.

PROCEDURES WORKSHOP

This subject is based on the "technical procedure" concept as a sequence of variable operations that depend on a practical context or goal. The aim is therefore to initiate students in working on project methodologies and experimentation that is typical in the workshop. They will also develop their ability to think up new technical and procedural strategies; a characteristic that defines the profile of professional jewellery and object designers today.

Both the technical procedures and materials employed have a huge impact in jewellery and object design on an aesthetic level; they are the mediators between the maker and the user and the choice of these is a reflection of the concepts the maker wishes to convey and the social trends that they are witnessing.

PRINCIPLES OF DESIGN HISTORY

The subject gives a detailed view of design history and links it to examples of contemporary art and architecture.

The subject provides future professionals with essential training in styles, movements, trends and designers. In this regard, the course contents support and add to the technical education of designers by asking them to critically consider the historical-conceptual context.

SCIENTIFIC PRINCIPLES OF DESIGN

This subject provides the scientific tools students need to be able to later approach the technological contents of the Jewellery and Object specialisation.

The course is a combination of theory and practice, and is prepared according to the artistic specialisation in order to adapt the scientific techniques to the student's profile.

SPACE AND VOLUME

Space and Volume is a pivotal subject for students to understand three-dimensional space and form. Space in itself as a point of study is covered across the different teaching units.

Within the Jewellery and Object syllabus, the aim of this module is to introduce students to the operational concepts of three-dimensional language and essential representation techniques, enabling them to conceptualise and carry out formal proposals. On one hand, the aim is to develop their ability to analyse and encapsulate volumetric and spatial configurations, while on the other hand to also learn the technical skills that will allow them to represent any type of three-dimensional object.

Finally, the aim is for students to learn an effective work methodology in the three-dimensional representation to apply the skills they have learned as a work tool in the various phases of a project, both in the ideation, in seeking formal solutions and in the final presentation of a design.

BASIC PROJECTS

As jewellery and object designers, we transform and combine materials and relate them to the body. Both jewellery and objects are always related to the human body and their personal and social rituals. In confrontation with art are fashion and the objects that surround us. It is through these that we work to continually develop the concept of jewellery and object, trying to give it new stimulation.

This subject acts as an introduction to jewellery-and-object projects, from initially developing an idea to producing and presenting it, considering aesthetic, formal, conceptual, emotional and cultural concepts. During the course, systematic, methodical work will be combined with practical, experimental work.

DIGITAL LANGUAGES AND TECHNIQUES

The aim of this subject is for students to learn the importance, relevance and application of IT tools in the product design sector and to gain the necessary skills to use basic procedures used in computer-based drawing and design. In short, students will use new technologies as a technique in their creative and productive process and as a tool for communication and management.

PHOTOGRAPHY AND AUDIOVISUAL MEDIA

Photography and Audiovisual Media is a tool for students to gain a scientific perspective to the audiovisual and photographic representation of projects, as well as gaining the necessary skills to effectively represent their own creations. An extensive range of photographic and audiovisual documents will be studied academically, using criteria employed in scientific documents and focusing this study on their needs as designers.

DESIGN AND BUSINESS

Society is changing quickly. In a highly competitive setting, designers now more than ever need basic knowledge on business management and regulations that affect their professional area. Decision-making, internal company practices and the relationships that businesses make with the market, as well as the protection of designers' rights, are key areas of knowledge for future designers to be able to successfully apply and exercise their technical and creative skills in the professional world.

Is a basic, first-year subject within the Design Management area of studies. It provides students with basic knowledge on the workings of the economy and industry.

3th and 4th semesters

DESIGN CULTURE

The objectives established in this teaching guide will orient and guide the design of the actions to achieve the established learning results.

The Design Culture subject has as its fundamental objectives to collaborate in the acquisition of the general objectives of the professional profile of the designer or jewelry designer.

Specifically, this course is aimed at achieving two main objectives:

- Provide the future professional in jewelry design with the ability to project knowing the symbolic, formal, functional values, quality, operation, value and aesthetic significance, social and environmental aspects of their productions.
- Collaborate in the acquisition of research competence, necessary in any design process and present as part of the design process itself, as well as necessary for the development of their professional activity, since it is one of the main areas where research can be developed. same.
- Know the basic foundations of Design Culture, such as research, society, communication and consumption, as well as its relationship with the rest of the subjects that make up the profile of designer or jewelry designer.
- Analyze and identify the concepts of semiology, aesthetics, form, function and structure and their development in the profession of the designer or jewelry designer.
- Value and identify the emotional values of jewelry.
- Master the research methodology.

MATERIALS, METALS AND FINISHINGS

The objectives established in this teaching guide will orient and guide the design of the actions to achieve the established learning results.

OBJ1: Determine the necessary amounts of each metal for the preparation of alloys.

OBJ2: Describe the metals commonly used in jewelry and choose the best one based on its properties and behavior.

OBJ3: Properly use metal recovery and finishing techniques.

OBJ4: Carry out a substantiated investigation of an experimental nature on metals and their chemical behavior, transmit said investigation orally as well as with a practical session.

The subject "Materials: Metals and finishes" provides the future jewelry professional with knowledge, a know-how to apply, identify and use, according to their properties and characteristics, metals, which constitute one of the fundamental pillars in performance of your activity. At the end of this subject, the student will know the possibilities and limitations offered by the various metals, making it possible to incorporate new metals into their designs. In this way, research, development and innovation of new products in the field of jewelry are promoted.

CAD TOOLS APPLIED TO JEWELLERY DESIGN

The purpose of the course is for students to know the incidence, relevance and application of computer media in the sector.

Objectives:

- Acquire the necessary knowledge to use digital technology as a means of information, ideation and project communication.
- Use new technologies for Drawing and 3D modeling.
- Perform advanced models and solid operations.
- Create 3D jewelry.

BODY ORNAMENTATION PROJECTS

Body Ornamentation Projects is a subject in the Product Design Projects subject and its objectives for students are:

1. Establish the body as the jewel's operations center.
2. Relate from its origins to jewelry as a functional sign in the group, together with other forms of body ornamentation such as tattoos, paintings, scarifications and other brands.
3. Use the different scientific disciplines connected to the body, such as anthropometry and ergonomics, and the search for models in nature to create mechanisms and systems, and global projects.
4. Connect with the movements of the new vanguards of contemporary art, especially body art, and with body extension experiments to overcome their limits or their shortcomings.
5. Integrate other design disciplines into their work, participating in the universal problems of creation and art.

MODELS, MOULDS AND PROTOTYPES

The subject of Models, Molds and Models has an experimental character. In it the students will investigate with different materials and procedures for the creation of models and the development of models. In it the students will investigate with different materials and procedures for the creation of models and the development of Molds and Models has an experimental character to investigate with different materials and procedures for the creation of models and the development of models. The students are going to make different types of molds for later use in the realization of as they are going to make different types of molds for later use in the realization of both jewelry and object projects. as they are going to make different types of molds for their later use in the realization of both jewelry and object projects. They will acquire knowledge about different procedures for serializing objects, applicable to the They will acquire knowledge about different procedures for serializing objects, applicable to the production of They will acquire knowledge about different procedures for serializing objects, applicable to pieces of jewelry and objects.

JEWELLERY AND OBJECT DRAWING

Drawing is a basic tool for the development of any project, its role is fundamental both in the gestation and in the communication of the project. Every drawing is manifested through techniques that admit a plurality of treatments, it is intended with this subject that the student is able to know them and apply them in projects, both at an industrial level and in artisanal processes.

- Use drawing as an instrument of ideation and communication in jewelry design projects.
- Master traditional graphic techniques and integrate them with new treatment technologies and image creation.
- Graphically plan a design process.

CAM TOOLS APPLIED TO JEWELLERY DESIGN

The purpose of the course is that students can materialize their virtual models in physical models.

Goals:

- Recognize the different materialization options of their virtual models.
- Prepare the 3D models in an optimal way so that their casting is possible and facilitate the final post process.
- Detect and repair common problems that arise during the preparation of an stl file for printing.
- Manufacture models and prototypes from CAD models of 3D objects.
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MATERIALS: GEMS

The objectives established in this teaching guide will lead us to achieve the results of established learning.

1. Know the basic concepts of gemology.
2. Get familiar with the study and identification of gems.
3. Provide the necessary knowledge for the use of gemological instruments.
4. Understand the particularities of the material for its correct choice and use in the development of a design project: jewelry.
5. Offer a first approximation to the study of the possibilities of sizes and settings.

The subject "Materials: gems" provides the future jewelry professional with knowledge, a know how to apply, identify and use, according to their properties and characteristics, the gems, which constitute one of the fundamental pillars in the performance of its activity. At the end of this subject, students will know how to acquire said resources, avoiding fraud and enabling the incorporation of new materials into the design. In this way, research, development and innovation of new products.

RESEARCH AND PROPOSALS PROJECTS

Research and Proposal Projects is a specific compulsory subject of 8 credits that is taught in the 2nd semester of the 2nd year of the Degree in Jewelry and Object Design.

The subject is understood as a continuation of the Basic Projects and Body Ornament Projects subjects and is closely linked to the Jewelry and Object Workshops.

In Research and Proposal Projects you learn to devise and develop unique pieces, collections or series of jewels and objects with their own personal identity in which research and experimentation articulates the project process.

In the confrontation with art, fashion and other artistic disciplines, we investigate and experiment with new strategies and working methods and try to give impulses and help students to position themselves and find their own aesthetic language.

General objectives:

1. Design and develop unique pieces and series of jewels with their own identity.
2. Investigate and experiment with artistic strategies and new working methods
3. Develop and carry out projects in the different fields of jewelry and objects.
4. Deepen communication and documentation techniques.

JEWELRY AND OBJECT WORKSHOP

Jewelry and Object Workshop is a subject of the Product Design Projects subject, and has as objectives for students:

1. Provide the fundamental technical skills of the specialty, to carry out end the jewels and objects that are projected.
2. Manually make pieces of jewelry and objects independently.
3. Apply your own technically expressive solutions.
4. Relate the aesthetic plane of their creations with the technical procedures and the selected materials to capture concepts in them.
5. Master the basic techniques as a launching pad for learning advanced techniques, experimentation with new techniques and exploration of unconventional materials.

HISTORY AND CULTURE OF JEWELLERY DESIGN

The subject History and culture of jewelery is integrated into the curriculum of the itinerary of Jewelry and Object of the Higher Education Degree in Design and is a subjectspecific mandatory Its contents are born from General Art History, but they take as a reference a very specific artistic specialty: jewelry. This art has counted, althroughout human history, with the activity and skill of magnificent artists and craftsmen, and with the best materials available. Despite the specific limits of this type of object, the jewelery has condensed -

like other artistic manifestations - the longings, fears, feelings, beliefs etc. of the different societies that have produced them. The developed contents in this subject will allow the future jeweler to achieve these goals:

- study the techniques, typologies, forms, themes, etc. which will illustrate the student and him they will open the vision to a very broad context, which will be of great help for the understanding of both past as of his own work.
- conceive the value of the study of jewelry in a historical context that gives meaning and context to the students' creations and projects.
- develop interest and curiosity for the uniqueness and specificity of this art decorative immersed in the historical and symbolic context of each society.
- analyze the theory and aesthetics of the designs of body beautifying objects and of contemporary goldsmithing and its relationship with political, cultural, social phenomena, economic, environmental and/or technological that are transforming the daily life of our society incessantly.
- use and use the bibliographic and documentary sources specific to the subject in compass them in an artistic and creative context that adds to fashion design, product and interior decoration in a broad sense of the applied arts.

5th and 6th semesters

ALTERNATIVE MATERIALS

Los objetivos que se establecen en esta guía docente nos llevarán a conseguir los resultados de aprendizaje establecidos.

- Proporcionar el conocimiento de materiales diferentes a los tradicionales empleados en joyería.
- Proporcionar información sobre materiales ecológicos aumentando las posibilidades de que el alumnado pueda desarrollar proyectos de joyería sostenible.

La asignatura "Materiales Alternativos", le aporta al futuro profesional de la joyería un conocimiento global de materiales diversos que poder aplicar a la joyería. Al finalizar esta asignatura el alumnado podrá incorporar nuevos materiales al diseño. Se potencia de este modo la investigación, desarrollo e innovación de nuevos productos en el ámbito de la joyería.

PERSONAL PROJECT DEVELOPMENT

The subject is defined as a practical and reflective workshop that, without forgetting its specificity, the jewel, has a clear will to interrelate with other artistic disciplines, participating in the universal problems of creation and art. Project tools are divided in a general way into ideas, contributions and identity.

The objectives of this subject are:

- Establish the bases of a correct Final Title Project.
- Find a solid line of research and personal work.
- Develop an open experimentation process with a future projection that goes far beyond the scope of the school. A process that has to be undertaken as a personal adventure, which has to lead the students to discover their artistic identity and the experience of recognizing themselves through the created object.

PRESENTATION AND COMMUNICATION WORKS

Know the basics of typography and paragraph composition.

Organize and present texts and images. Communicate the project both orally and graphically. Manage specific digital technology for project communication. In all design work there is, in each of the phases of the project, a task of great importance for its possible development, which is its presentation and communication both to the client and, on occasions, to the

general public.

A designer must become not only a designer but also a skilled communicator, capable of transmitting ideas, motivating and interacting with the other party. And it is precisely those verbal and non-verbal graphic means that the designer uses to communicate, transmit, motivate and interact, what this subject is about.

PRODUCTION WORKSHOP

The Production Workshop Subject has the objective of mastering, by the students, the phases for the production of small or large series of jewelry and objects, these processes are a fundamental part of the history of jewelry and goldsmithing, and They represent the connection between artisanal and industrial production, as well as being applicable in both modalities.

- Distinguish between specific processes and technologies that allow you to adapt projects to the type of process or vice versa.
- Manufacture the model from which a series will be drawn.
- Produce small series through microfusion processes, from metal models.
- Finish off the reproductions and set the stones.

MARKETING AND COMMUNICATION

The Marketing and Communication subject is a compulsory subject, within the Design Management subject.

The subject analyzes the concept and development of marketing in order for the designer to learn the principles, methods and techniques of marketing for the best exercise of his professional activity and to improve the success of his creations.

Marketing is concerned with generating a product or service that satisfies the customer's needs, offering it at the price the customer is willing to pay, making it available to the customer where and when the customer wishes to have it, and giving it to them. to know through codes and means related to the client.

For the jewelry and object designer, it is necessary to identify and understand the marketing strategy, business environment, target audience, positioning, and marketing mix of the company to design jewelry and objects that delight the customer.

In this sense, and throughout the seven topics that make up the subject's agenda, the relevance of marketing is highlighted as a decisive activity in the strategic approach to jewelry and object design.

AESTHETICS AND CONTEMPORARY TRENDS

Aesthetics and contemporary trends in jewelry design is a specific compulsory subject for the Degree in Product Design – Jewelry and Object Itinerary, framed in the subject of History of design and jewellery. The developed contents in this subject they will enable the future jeweler to achieve these goals:

- keep your training up-to-date so that you investigate the characteristics that are best they define the recent trends in the field of their professional activity.
- delve deeper into the task and style of contemporary jewelry that best represent it.
- analyze the theory and aesthetics of the designs of body embellishment objects and goldsmithing contemporary and its relationship with political, cultural, social, economic, environmental and/or technological that are transforming our daily lives society incessantly.- influence the knowledge of the latest trends in the production of goldsmith objects and contemporary jewellery, and also in the teaching of research techniques and methods and research specific to the specialty.
- contribute to the construction of the professional profile of the designer of jewelry objects with the knowledge and criticism of the aesthetic languages of the last decades in the different artistic trends of plastic expression.

JEWELRY DESIGN MANAGEMENT

The subject of design management is a subject that is taught in third grade and is the continuation of the Design and Business subject taught in the first year of the Title. The latter aims to provide an introduction to the basic notions of the company and in this more specific one the most important elements of the jewelry design project management.

The general objectives of the subject can be grouped into the following points:

- Correctly manage the legal implications of the design project
- Assess and correctly manage the innovation that the project may involve.
- Calculate and evaluate the economic viability of a design project.
- Promote both autonomous work and team and collaborative work
- Provide the student with the ability to access sources of information about the professional aspects, using relevant, truthful and updated sources

Contribution to the profile of the jewelry designer.

The subject “Design Management” collaborates in the acquisition of the general objectives of the professional profile of the sector, contributing to the training of these graduates in the aspects of a professional nature.

Specifically, this subject is aimed at achieving the objective of providing the future professional design of the skills necessary for the development of the profession in accordance with the legislation, taking into account the economic and commercial context, and with a proper innovation management.

WAX PROTOTYPE MODEL

The Subject Wax Models and Prototypes, which is taught in the third year, within the Subject Product Design Projects, deals with one of the prototyping methods most versatile and used in the design of jewelry and objects, and its training objectives for the students:

1. Perform effectively in the work environment.
2. Master the basic technical and procedural skills for wax modeling hard, controlling the material according to its characteristics.
3. Autonomously produce wax prototypes, applying their own technical-expressive solutions in their own designs and correctly interpreting the design data commissioned by others.
4. Explain the processes used.

Once the subject has been passed, the students will know how to work autonomously or joining companies in the jewelry and/or object sector, where they will contribute their mastery of hard wax carving. In addition, they will have an ideal base to research and experiment personal techniques, as well as to continue acquiring more advanced knowledge about The matter.

DIGITAL WORKSHOP

The Digital Workshop subject is framed within the design process, in the final phase of the workflow of digital design tools (CAD/CAM), that is, the rendering of the models developed with Modeling tools and the presentation of the projects.

The objectives of the subject are:

- Provide the student with fundamental rendering techniques, such as: lighting, creating materials, composing scenes and animating.
- Perform tests and obtain realistic final renders.
- Provide the necessary resources to adequately communicate and present your results.

ACCESORIES SYSTEM WORKSHOP

Systems and Findings Workshop is a subject of the subject of Product Design Projects, which contributes to the Jewelry and Object itinerary the construction practices and the understanding of those elements that make jewelry functional, in terms of its portability. It

is, therefore, about:

- Obtain an overview of this specific field, through the schematization and documentation provided by the teacher and that collected by the students.
- Execute some of the most commonly used systems, as a basis for students to master the creation of other findings and/or develop their own, using jewelry techniques.

PROCEDURES AND TECHNOLOGY

The objectives established in this teaching guide will guide and guide the design of the actions to achieve the established learning results.

OBJ1: Differentiate the operation and the most outstanding characteristics of the different forming techniques applied to metal.

OBJ2: Distinguish the different types of machining techniques applied to metals.

OBJ3: Describe the different types of joining systems applied to metal.

OBJ4: Determine the surface treatment to apply.

OBJ5: Autonomously select the most appropriate techniques depending on the type of project to be developed.

The subject “Jewelry Technology and Processes” provides the future jewelry professional with knowledge, knowing how to apply the various metal forming techniques, both industrial and artisanal, vital for the optimal resolution of a project. At the end of this subject, students will know how to choose the appropriate manufacturing processes for a design. In this way, research, development and innovation of new technologies in the field of jewelry are promoted.