



PRESENTACIÓN

Breve descripción:

This subject aims to clarify the relationship between the digital world and the physical world. Its contents provide a practical experience and a deep understanding of how they function and their purpose. The course covers various tools and techniques used in design, such as digital computer systems, vector object representation, bitmap images, printing techniques on flat supports, 3D rendering, and bookbinding.

Throughout the course, bridges will be built between the different subjects and projects, creating connections between the manual/practical and digital/practical aspects.

The program focuses on two types of projects:

- Specific projects that correspond to contents related to the subject of Form and Technique.
- Shared projects that involve all other subjects in the course.

The course emphasizes practical work, but also includes theoretical sessions to explain the underlying languages of the tools and software used in design projects.

- **Titulación:** Grado en Diseño/Degree in Design
- **Módulo/Materia:** Módulo 2. Técnica del diseño; Área 2. Fundamentos productivos del diseño.
- **ECTS:** 6 ECTS
- **Curso, semestre:** 2nd year, 1st semester
- **Carácter:** Mandatory
- **Profesorado:** Adam Jorquera. Responsible teacher; María Duro. PAD.
- **Idioma:** English
- **Aula, Horario:** Aula 6, Aula1 and Lab. Thursday, 12-2pm and 3-5pm

RESULTADOS DE APRENDIZAJE (Competencias)

BASIC

BC1 Students should have demonstrable knowledge and understanding of an area of study that builds on the base knowledge of general secondary education, and at a level at which, although supported by advanced text books, also includes aspects that imply knowledge related to the vanguard of the field of study.

BC2 Students should know how to apply their knowledge to their work or vocation in a professional manner and should have abilities that can be demonstrated by means of elaboration and defense of arguments, as well as problem solving within their field of study.

BC5 Students should have developed the learning and study skills that are necessary for undertaking studies with a high degree of autonomy.

GENERAL



Universidad de Navarra

GC5 – Skillfully manage modern technologies geared toward creation and manufacturing processes specific to the design world.

GC6 – Ability to speak English, B2 level, with knowledge of scientific and academic terminology related to the world of art, design, and applied arts.

GC7 – Analyze products or services in relation to the technological and productive possibilities of the creative industry.

SPECIFIC

SC6 – Know the concepts and techniques utilized in applied, traditional and contemporary arts, as well as their application to design.

SC10 – Know the systems and industrial manufacture processes specialized according to the different fields of design.

SC11 – Apply technological graphic design and modeling techniques creatively.

SC16 – Understand the importance of social needs and the demand for quality of life in their application to design.

SC27 – Know the principles of innovation and creative entrepreneurship and their application to design.

PROGRAMA

WEEK 1-2

PRESENTACIÓN ASIGNATURA

TEORÍA DE IMAGEN

Mapas de Bits vs Vectores

Introducción

Diseño Vectorial: INKSCAPE

Introducción - interfaz

WEEK 3-4

TEORÍA DE IMAGEN

Vectores

Diseño Vectorial: INKSCAPE

Diseño Vectorial: INKSCAPE

WEEK 5-6

Diseño Vectorial: INKSCAPE

CORTE Y APLICACION DE VINILOS ADHESIVOS



Universidad
de Navarra

WEEK 7-8

MATERIALES PLANOS

INTRODUCCIÓN

Fabricación herramienta para corte de ranuras

MATERIALES PLANOS: Corte marcado y plegado

WEEK 9-10

INTRODUCCIÓN AL DISEÑO PARAMÉTRICO

AUTODESK FUSION 360

FUSION 360

WEEK 11-12

FUSION 360

WEEK 13

FUSION 360

ACTIVIDADES FORMATIVAS

AF01 Attendance and participation in theoretical face-to-face classes (30 h)

AF02 Attendance and participation in practical face-to-face classes (30 h)

AF03 Seminar's participation (6 h)

AF04 Tutor-driven exercises (individual and in groups) (40 h)

AF05 Office hours (2 h)

AF06 Personal work and study (42 h)

EVALUACIÓN

CONVOCATORIA ORDINARIA

SE01 Attendance control and level of participation* 10%

SE02 Practical exercises - individual/group projects 60%

SE03 Oral defense of the projects - public presentations 30%

SE04 Exams 0%

Final mark will be the result of the calculation made according to the table above. It is passed with a mark equal or higher to five. In accordance with what is established in Article 5 of



Universidad de Navarra

Royal Decree 1125/2003, the results obtained are adjusted to the numerical scale from 0 to 10, with one decimal expression, to which the corresponding qualitative qualification can be added:

0,0 - 4,9 Suspenso (SS)

5,0 - 6,9 Aprobado (AP)

7,0 - 8,9 Notable (NT)

9,0 - 10 Sobresaliente (SB)

CONVOCATORIA EXTRAORDINARIA

As stated in the General Evaluation Regulations of the University of Navarra approved in May 2019, "Students who request it may be evaluated in the extraordinary call, even if they have passed the course in that course. To do this they must request to be included in the minutes at least five days before the start of the exam period of that call. The final grade of the subject will be that of the extraordinary call, even if it is lower than the one obtained previously".

Therefore, the grade obtained in the extraordinary call will be the valid one, regardless of that obtained in the ordinary call, even the student may not pass the subject if he/she fails to attend.

HORARIOS DE ATENCIÓN

Prof. Adam Jorquera Ortega (ajorquero@unav.es)

Meetings by appointment (email)

BIBLIOGRAFÍA

MARI, Enzo. Autoprogettazione? Duchamp Centre, Milano, 1974

MUNARI, Bruno. ¿Cómo nacen los objetos? GG, Barcelona, 2016. (Q. 045.252). [Localízalo en la Biblioteca](#)

MUNARI, Bruno. Design as Art. Penguin Books, London, 1971(1966). (Q. 045.236). [Localízalo en la Biblioteca](#)

NORMAN, Don A. The design of everyday Things. Basic Books, New York, 2013 (Q. 045.267). [Localízalo en la Biblioteca](#)

NORMAN, Don A. El diseño emocional: por qué nos gustan (o no) los objetos cotidianos. Paidós, Barcelona. [Localízalo en la Biblioteca](#)

ROVIRA RAOUL, NORBERT. Fusion 360 con ejemplos y ejercicios prácticos. Marcombo, Barcelona, 2020.

Links



Universidad
de Navarra

<https://help.autodesk.com/view/fusion360/ENU/courses/>

<https://help.autodesk.com/view/fusion360/ENU/?guid=GUID-1C665B4D-7BF7-4FDF-98B0-AA7EE12B5AC2>