

Course guide

804453 - FD - Fundamentals of Design

Last modified: 20/07/2026

Unit in charge: Image Processing and Multimedia Technology Centre
Teaching unit: 804 - CITM - Image Processing and Multimedia Technology Centre.

Degree: BACHELOR'S DEGREE IN DIGITAL DESIGN AND MULTIMEDIA TECHNOLOGIES (Syllabus 2023).
(Compulsory subject).

Academic year: 2026 **ECTS Credits:** 6.0 **Languages:** Catalan

LECTURER

Coordinating lecturer: Eguia Gomez, Jose Luis

Others:

TEACHING METHODOLOGY

LEARNING OBJECTIVES OF THE SUBJECT

Knowledge:

Recognize the fundamental concepts involved in graphic and visual communication, including knowledge related to the analysis and composition of images within the context of designing multimedia content and products.

Skills:

Apply appropriate technologies and techniques using graphic design software in the context of designing and developing digital content and multimedia products.

STUDY LOAD

Type	Hours	Percentage
Self study	90,0	60.00
Hours large group	30,0	20.00
Hours medium group	18,0	12.00
Guided activities	12,0	8.00

Total learning time: 150 h

CONTENTS

1: Introduction to Design

Description:

Design definitions.

1. Methodology of design.
2. Design objectives.
3. Design function.
4. Design and art.

Full-or-part-time: 12h 30m

Theory classes: 4h

Guided activities: 1h

Self study : 7h 30m

2: Semiotics: its application in design

Description:

1. Foundations and constituent elements.
2. The design process as a semiotic system of signification and communication.
3. Polysemy: Poetics and rhetoric of design.

Vector illustration software

Introduction to vector illustration software

- Vector image versus raster image.
- Presentation of the working *interface
- Setting up a new document.
- Defining colour options.
- Set preferences.
- Define page size.
- Define custom page sizes.
- Export formats.

Full-or-part-time: 12h 30m

Theory classes: 4h

Guided activities: 1h

Self study : 7h 30m

3: Visual Alphabet

Description:

1. Semiotics in practice:
2. Example: Posters and symbolism.

- Art Nouveau poster
- Hippies poster

Vector illustration software

- Using the layers palette.
- Changing layer options.
- Consolidating layers.
- Arrange objects on separate layers.
- Finding objects in a layer.
- Applying transparency to an entire layer.

Full-or-part-time: 12h 30m

Theory classes: 4h

Guided activities: 1h

Self study : 7h 30m

4: The form

Description:

1. Balance and tension.
2. Rhythm.
3. Contrast.
4. Format, size, scale and proportion.

Vector illustration software

- Control of the selection tools.
- Selecting by menu
- Drawing basic shapes: circle, square, polygonal objects, Lines.
- Options bar.
- Combining objects.

Full-or-part-time: 12h 30m

Theory classes: 4h

Guided activities: 1h

Self study : 7h 30m

5: Structure of the graphic space and compositional hierarchies

Description:

1. Visual composition: weight and direction.
 2. Hierarchy.
 3. The grid.
 4. Influence of formal art movements on design.
- Bauhaus: from formal modernism to decorative modernism.
 - Constructivism.
 - De Stijl.

Vector illustration software

Grouping and ungrouping shapes.

- Selecting objects within a group.
- Changing the size, rotation and shape of an element with the main bar.
- Changing the size and shape of an element with the scale tool.

Full-or-part-time: 12h 30m

Theory classes: 4h

Guided activities: 1h

Self study : 7h 30m

6: Typography as a formal element

Description:

1. Character.
2. Anatomy of typography.
3. Style and families.
4. Differentiating features.

Vector illustration software

Text formatting

- Paragraph formation and alignment.
- Use of tabulators.
- Creation of styles, paragraph and character.
- Creation of text in outline.

Full-or-part-time: 12h 30m

Theory classes: 4h

Guided activities: 1h

Self study : 7h 30m

7: Historical development of typography.

Description:

1. Main characteristics of the typeface families.
2. Most significant differentiating features of the typefaces.
3. The letter and the text as a plastic resource.

Vector illustration software

Text movement

- Movement between text boxes.
- Distributon of columns within a text box.
- Shaping text.
- Aligning text to a path.

Full-or-part-time: 12h 30m

Theory classes: 4h

Guided activities: 1h

Self study : 7h 30m

8: The colour

Description:

1. The language of colour.
2. Technical aspects of colour.

Vector illustration software

Working with the colour palette options.

- Adding and modifying colours.
- Modifying colour palettes.
- Using preset gradients.
- Create a 2-colour gradient.
- Save gradients as swatches.

Full-or-part-time: 12h 30m

Theory classes: 4h

Guided activities: 1h

Self study : 7h 30m

9: Colour perception

Description:

1. Historical evolution of colour perception.
2. Colour as an abstract symbol.

Vector illustration software

- Use of motif brushes.
- Creation of calligraphic brush strokes.
- Scatter brushes.
- Artistic brushes.
- Sharing custom brushes.

Full-or-part-time: 12h 30m

Theory classes: 4h

Guided activities: 1h

Self study : 7h 30m

10: Composition

Description:

1. Adapting typography to the specifications of the graphic project.
2. Basic rules of legibility.
3. Basic rules of composition.

Vector illustration software:

Using smart guides.

Grouping objects.

Aligning objects.

Aligning with rulers and guides.

Adjusting anchor points.

Utilizing the align panel.

Positioning objects on the canvas.

Full-or-part-time: 12h 30m

Theory classes: 4h

Guided activities: 1h

Self study : 7h 30m

11. Historical evolution of composition.

Description:

1. Art Deco.
2. Swiss design or International typographic style.
3. Design Plus.
4. Designers Republic.

Vector illustration software

- Importing or linking embedded illustrations.
- Understanding bitmap images.
- Working with bitmap formats.
- Preparing bitmaps.
- Applying effects to bitmaps.

Full-or-part-time: 12h 30m

Theory classes: 4h

Guided activities: 1h

Self study : 7h 30m

12: Design and society

Description:

1. Social and environmental responsibilities.
2. Translating global design into local.
3. Measuring design success.
4. Most significant manifestations of political design.
5. Innovation based on design.

Vector illustration software

- Editing a cut-out mask.
- Making use of text with a mask.
- Crop a bitmap with mask.

Full-or-part-time: 12h 30m

Theory classes: 4h

Guided activities: 1h

Self study : 7h 30m

GRADING SYSTEM

Two mid-term exams, each weighted at 30% of the final grade for the course.

Exercises:

Practical exercises, also weighted at 30% of the final course grade.

Participation and learning attitude:

Student participation in formative activities and learning attitude will be assessed based on class interactions and the completion of exercises or practices. This assessment constitutes 10% of the final grade.

Final exam:

A final exam weighted at 30% of the final grade for the subject.

Re-evaluation:

The final exam can be re-evaluated, accounting for 30% of the final course grade. Students who pass through continuous assessment or receive a "no-show" grade are not eligible for re-evaluation.

Irregular actions that may lead to a significant variation in the grade of one or more students constitute a fraudulent performance of an evaluation act. This action will lead to a descriptive grade of fail and a numerical grade of 0 for the ordinary global assessment of the subject, without the right to re-evaluation.

If the teachers have evidence of the use of AI tools that are not permitted in the assessment tests, they may summon the students involved to an oral test or a meeting to verify the authorship.

EXAMINATION RULES.

Exercises

Students are required to dedicate autonomous work time (outside of class hours) to complete the exercises. They should follow the instructions provided in the Exercise Statement document and those given during the corresponding classes.

The completed exercise should be submitted on the Virtual Campus under the Classroom Delivery section for the subject. Each Exercise Statement includes a specified deadline; only exercises submitted before 24:00 on the indicated date will be considered for evaluation.

Evaluation of the exercises encompasses not only their resolution, but also defending the results if required during class discussions, and completing the necessary documents.

Any issue preventing the completion of an exercise within the deadline must be communicated in advance to the teacher. Following this communication, a determination will be made regarding whether the reasons for non-submission are justified, and alternatives for completing the evaluation will be considered.

Documents must be completed as instructed, particularly regarding the labeling of file names. The document layout must not be altered or saved in any format or version other than the specified one. Proper management of the provided documentation is crucial for developing the required competencies and is therefore an evaluation objective.

BIBLIOGRAPHY

Basic:

- JENS MULLER. THE HISTORY OF GRAPHIC DESIGN. 40TH ED.. TASCHEN BENEDIKT, ISBN 9783836588072.
- KRISTIN CULLEN. COMPOSICION Y CREATIVIDAD: LA GUIA DEL DISEÑO GRAFICO (ESPACIO DE DISEÑO). ANAYA MULTIMEDIA, ISBN 9788441540927.
- JOHN GAGE. COLOR Y SIGNIFICADO: ARTE, CIENCIA Y SIMBOLOGIA. EL ACANTILADO, ISBN 9788419036407.
- Dondis, Donis A. La Sintaxis de la imagen : introducción al alfabeto visual . 6a ed. Barcelona [etc.] : Gili, 1985. ISBN 842520609X.
- González, Rafael C; Woods, Richard E. Digital image processing . 2nd ed. Upper Saddle River : Prentice Hall, 2002. ISBN 0201180758.

Complementary:

- Arnheim, Rudolf; Balseiro, María Luisa. Arte y percepción visual : psicología del ojo creador : nueva versión . 2a ed. Madrid : Alianza, 2002. ISBN 8420678740.
- Munari, Bruno. Diseño y comunicación visual : contribución a una metodología didáctica . 8a ed. Barcelona [etc.] : Gustavo Gili, 1985. ISBN 8425212030.
- Satué, Enric. El Diseño gráfico : desde los orígenes hasta nuestros días . Madrid : Alianza, 1988. ISBN 8420670715.
- Calavera, Anna. Arte ¿? diseño . Barcelona : Gustavo Gili, cop. 2003. ISBN 9788425215438.
- Wong, Wucius. Fundamentos del diseño . Barcelona : Gustavo Gili, DL 1995. ISBN 9788425216435.