Course guide
804323 - FDD-A - Fundamentals of Design

Last modified: 18/05/2026

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

Degree: **Academic year:** 2026 **ECTS Credits:** 6.0
Languages: Spanish

LECTURER

Coordinating lecturer: Eguia Gómez, Jose Luis

Others:

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:
CEAAD 2. Schematically and visually represent complex concepts, ideas and/or data based on personal skills and external references, in order to convey attractiveness, originality and creativity.
CEAAD 3. Master the wide range of professional tools in the sector for developing all kinds of digital content.

Transversal:
07 AAT. SELF-DIRECTED LEARNING. Detecting gaps in one's knowledge and overcoming them through critical self-appraisal. Choosing the best path for broadening one's knowledge.
04 COE. EFFICIENT ORAL AND WRITTEN COMMUNICATION. Communicating verbally and in writing about learning outcomes, thought-building and decision-making. Taking part in debates about issues related to the own field of specialization.
06 URI. EFFECTIVE USE OF INFORMATION RESOURCES. Managing the acquisition, structure, analysis and display of information from the own field of specialization. Taking a critical stance with regard to the results obtained.

TEACHING METHODOLOGY

Class sessions are divided into two segments of activity:

Descriptive part, where the teacher introduces new content and describes the materials (work plan, notes, presentations, links, exercise statements, etc.) provided for work during the following week. (80% of the activity).

Participative part involving activities such as:
a. Answering questions on studied content or proposed exercises from the previous session.
b. Explanation and defense of solved problems.
c. Debates or discussion forums on content covered in the previous class.
d. Knowledge assessment on theoretical content covered in the previous class or ongoing exercises.

LEARNING OBJECTIVES OF THE SUBJECT

- Demonstrate creativity in defining, creating, or adapting illustration style and graphic style suitable for the professional field of design, animation, and digital art.
- Demonstrate the ability to identify, differentiate, and name the illustration style and corresponding graphic style of each animation or audiovisual production.
- Ability to apply concepts, procedures, techniques, and technologies and software programs correctly to illustrate animation and digital art products.

STUDY LOAD

Type	Hours	Percentage
Hours medium group	22,0	14.67
Self study	90,0	60.00
Hours large group	24,0	16.00
Guided activities	14,0	9.33

Total learning time: 150 h

CONTENTS

Week 1: Introduction to Design

Description:
1. Design Objectives.
2. Design Function.
3. Design and Art.
4. Design Methodology.

Full-or-part-time: 10h
Guided activities: 4h
Self study : 6h

Week 2: Semiotics and Study of Form and Color: Their Application in Design.

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

Full-or-part-time: 10h
Guided activities: 4h
Self study : 6h

Week 3: Visual Alphabet

Description:
1. Semiotics in practice:
2. Example: Posters and symbolism.
3. Art Nouveau Poster
4. Hippie Poster

Vector illustration software
Using the layers palette.
Changing layer options.
Consolidating layers.
Organizing objects into separate layers.
Finding objects in a layer.
Applying transparency to an entire layer.

Full-or-part-time: 10h
Theory classes: 4h
Self study : 6h

Week 4: The Form

Description:
1. Balance and tension.
2. Rhythm.
3. Contrast.
4. Format, size, scale, and proportion.
Vector illustration software

Control of selection tools.
Selection via menu.
Drawing basic shapes: circle, square, polygonal objects, lines.
Options bar.
Combining objects.

Full-or-part-time: 10h
Guided activities: 4h
Self study : 6h

Week 5: Graphic Space Structure and Compositional Hierarchies

Description:
Visual Composition: Weight and Direction.
Hierarchy.
The Grid.
Influence of Formal Artistic Movements on Design.
· Bauhaus: From Formal Modernism to Decorative Modernism.
· Constructivism.
· De Stijl.
Vector Illustration Software
Group and Ungroup Shapes.
· Selecting Objects Within a Group.
· Resizing, Rotating, and Shaping an Element with the Main Toolbar.
· Resizing and Shaping an Element with the Scale Tool.

Full-or-part-time: 10h
Guided activities: 4h
Self study : 6h

Week 6: Typography as a Formal Element

Description:
Character.
Anatomy of Typography.
Style and Families.
Distinguishing Features.
Vector Illustration Software
Text Formatting
· Paragraph Formation and Alignment.
· Use of Tabs.
· Creation of Styles, Paragraph, and Character.
· Creation of Text on a Path

Full-or-part-time: 10h
Theory classes: 4h
Self study : 6h

Week 7: Historical Evolution of Typography

Description:
1. Main Characteristics of Typeface Families.
2. The Most Significant Distinguishing Features of Typefaces.
3. Letters and Text as Artistic Resources.

Full-or-part-time: 10h
Guided activities: 4h
Self study : 6h

Week 8: Color and Color Perceptiontitle english

Description:
1. The Language of Color.
2. Technical Aspects of Color.

Vector Illustration Software
Working with Color Palette Options.
· Adding and Modifying Colors.
· Modifying Color Palettes.
· Using Preset Gradients.
· Creating a Two-Color Gradient.
· Saving Gradients as Swatches.

Full-or-part-time: 10h
Guided activities: 4h
Self study : 6h

Week 9: Color Perception

Description:
1. Historical Evolution of Color Perception.
2. Color as an Abstract Symbol.

Vector Illustration Software
· Use of Pattern Brushes.
· Creation of Calligraphic Brush Strokes.
· Scatter Brushes.
· Artistic Brushes.
· Sharing Custom Brushes.

Full-or-part-time: 5h
Guided activities: 2h
Self study : 3h

Week 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 Points.
· Using the Align Palette.
· Positioning Objects on the Artboard.

Full-or-part-time: 10h
Guided activities: 4h
Self study : 6h

Week 11: Historical Evolution of Composition

Description:
Case Studies:

1. Swiss Design or International Typographic Style.
2. Design Plus.
3. 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: 10h
Guided activities: 4h
Self study : 6h

Semana 12: Design and Society

Description:
1. Social and Environmental Responsibilities.
2. Translating Global Design into Local Contexts.
3. How to Measure Design Success.
4. Most Significant Manifestations of Political Design.
Innovation Based on Design.
Vector Illustration Software
· Editing a Clipping Mask.
· Using Text with a Mask.
· Clipping a Bitmap with a Mask.

Full-or-part-time: 10h
Guided activities: 4h
Self study : 6h

Semana 13: Trends

Description:
1. Trends, Authors, and Significant Contributions of Contemporary Graphic Design.
2. Trends in Persuasive Communication.
3. Trends in Informative Communication.
4. Trends in Identity Communication.
Vector Illustration Software
· How to Prepare an Illustration for the Web.
· Using New Vector Options for the Web.
· Linking Assignments with Illustrator.
· Creating Image Maps.
· Creating Web-Safe Colors.

Full-or-part-time: 10h
Guided activities: 4h
Self study : 6h

ACTIVITIES

PRACTICE P01: INTRODUCTION TO DESIGN

Description:
Research and Analysis

Specific objectives:
- Researching and analyzing the profession of the designer through the work of professionals.
- Differentiating the fields, particularities, and main applications of graphic design.

Material:
Practice P01 Script.doc

Full-or-part-time: 4h
Self study: 4h

PRACTICE P02: SEMIOTICS: ITS APPLICATION IN DESIGN

Description:
Creating an icon for a mobile application

Specific objectives:
Using symbolic language to communicate messages and ideas.

Material:
Practice P02 Script.doc

Full-or-part-time: 4h
Self study: 4h

PRACTICE P03: VISUAL ALPHABET

Description:
Creating Iconic Shapes

Specific objectives:
Developing Abstract Thinking Skills

Material:
Practice P03 Script.doc

Full-or-part-time: 4h
Self study: 4h

PRACTICE P04: THE FORM

Description:
Creating a Poster

Specific objectives:
Analyzing the formal and functional characteristics of form.

Material:
Practice P04 Script.doc

Full-or-part-time: 4h
Self study: 4h

PRACTICE P05: STRUCTURE OF GRAPHIC SPACE AND COMPOSITIONAL HIERARCHIES

Description:
Analysis of principles related to form

Specific objectives:
Developing the communicative capacity of geometric shapes and compositions.

Material:
Practice Script P05.doc

Full-or-part-time: 4h
Self study: 4h

PRACTICE P06: TYPOGRAPHY AS A FORMAL ELEMENT

Specific objectives:
Analysis of the principles related to typography.

Material:

Practice Script P06.doc

Full-or-part-time: 4h
Self study: 4h

PRACTICE P07: HISTORICAL EVOLUTION OF TYPOGRAPHY

Description:
Creation of a poster using typography and geometric shapes.

Specific objectives:
Apply the most suitable typographic style according to the theme.

Material:
Practice Script P07.doc

Full-or-part-time: 4h
Theory classes: 4h

PRACTICE P08: COLOR

Description:
Application of color in the previous poster to reinforce the message

Specific objectives:
Analysis of the principles related to color

Material:
Practice Script P08.doc

Full-or-part-time: 4h
Self study: 4h

name english

Description:
Construct a message using color as the primary element and geometric shapes and fonts as secondary elements within a particular graphic style.

Specific objectives:
To create a message using color as the primary element and geometric shapes and typography as secondary elements within a specific graphic style.

Material:
Practice Script P09.doc

Full-or-part-time: 4h
Self study: 4h

PRACTICE P10: COMPOSITION

Description:
Compose a magazine prioritizing readability and adapting typography to project specifications

Specific objectives:
Analysis of the principles related to composition

Material:
Practice Script P10.doc

Full-or-part-time: 4h
Self study: 4h

name english

Description:
Work rhythm in a magazine layout, prioritizing readability.

Specific objectives:
Practical application of graphic principles in a case study.

Material:
Practice Script P11.doc

Full-or-part-time: 4h
Self study: 4h

name english

Description:
Create a graphic message that invites us to think about a specific topic, following the resources used in a particular study.

Specific objectives:
Act on the user's perception through control of graphic design principles.
Exercise the designer's ability to adapt to the needs of a study.

Material:
Practice Script P12.doc

Full-or-part-time: 4h
Theory classes: 4h

GRADING SYSTEM

Any academic fraud, plagiarism or use or possession of unauthorised means in an assessment activity leads to a mark of zero (0) for the affected test or assignment. Furthermore, in accordance with the University's regulations, if disciplinary proceedings are initiated the subject is recorded as "Pending Assessment" until a decision is reached. These incidents are managed in accordance with the **Action Framework for Academic Integrity in Assessment at the UPC**.

Practical exercises weighted at 30% of the final grade for the course.
Total: 30%
2 Mid-term exams, each weighted at 15% of the final grade for the course.
Total: 30%
One Final exam weighted at 30% of the final grade for the course.
Generic competencies

Evaluation of generic competencies weighted at 10% of the final grade for the course.
Students who fail due to the curriculum assessment will have the option to take the re-evaluation exam. The grade from this exam will replace the grades of the mid-term and final exams. If the course is passed, the maximum final grade achievable will be a 5.

Review and/or appeals regarding exams will be conducted exclusively on dates and times established in the academic calendar, upon request by the student to the professor.

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 work document.

Once completed, the exercise should be submitted on the Virtual Campus under the classroom delivery section by the specified date. Only exercises submitted before 24:00 on the deadline will be considered for evaluation.

Evaluation of the exercises involves not only solving them but also defending the results and preparing relevant documents.

Any issue preventing the completion of an exercise within the indicated deadline must be communicated in advance to the teacher. Following this communication, and depending on the justified reasons for non-submission, alternatives will be found to complete the evaluation. Justified reasons for non-submission of exercises communicated by the administration will also be considered valid.

Documents must be completed following the instructions, especially regarding file names. Proper management of the provided documentation is a component of the skills to be acquired and is part of the evaluation.

BIBLIOGRAPHY

Basic:
- Arnheim, Rudolf. Arte y percepción visual: psicología del ojo creador: nueva versión. 2ª ed. Madrid: Alianza, 2002. ISBN 8420678740.
- Dondis, Donis A. La sintaxis de la imagen: introducción al alfabeto visual. Barcelona: Gustavo Gili, 1976. ISBN 842520609X.
- González, R.C.; Woods, R.E. Digital image processing. 3rd ed. Upper Saddle River, NJ: Pearson, 2010. ISBN 0132345633.
- Jardí, Enric. Veintidós consejos sobre tipografía que algunos diseñadores jamás revelarán. Barcelona: Actar, 2007. ISBN 9788496540910.
- Corazón, Alberto. Palabra e icono: signos. Madrid: Real Academia de Bellas Artes de San Fernando, 2006. ISBN 9788496209770.

Complementary:
- Munari, Bruno. Diseño y comunicación visual: contribución a una metodología didáctica. Barcelona: Gustavo Gili, 1985. ISBN 9788425212031.
- Frutiger, Adrian. Signos, símbolos, marcas, señales. Barcelona: Gustavo Gili, 1981. ISBN 8425220858.
- Satué, Enric. El diseño grafico: desde los orígenes hasta nuestros días. Madrid: Alianza, 1988. ISBN 8420670715.
- Calavera, Anna (ed.). Arte y diseño. Barcelona: Gustavo Gili, 2003. ISBN 9788425215438.