

## Course guide

### 804223 - FDD - Design Basics

**Last modified:** 25/04/2024

<b>Unit in charge:</b>	Image Processing and Multimedia Technology Centre	
<b>Teaching unit:</b>	804 - CITM - Image Processing and Multimedia Technology Centre.	
<b>Degree:</b>	BACHELOR'S DEGREE IN VIDEO GAME DESIGN AND DEVELOPMENT (Syllabus 2014). (Compulsory subject).	
<b>Academic year:</b> 2024	<b>ECTS Credits:</b> 6.0	<b>Languages:</b> Catalan, Spanish, English

#### LECTURER

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<b>Coordinating lecturer:</b>	Eguía Gómez, José Luís
<b>Others:</b>	Oliver Montroig, Maria

#### DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

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##### Specific:

4. Master the wide range of professional tools in the sector for developing all kinds of digital content.
5. 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.

##### Generical:

6. Apply the techniques of representation, spatial conception, standardisation and computer-aided design; knowledge of the basics of industrial design.

##### Transversal:

1. 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.
2. 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.
3. 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

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The class sessions are divided into two blocks:

1. Descriptive part, where the teacher introduces the contents and describes the materials (work plan, grades, presentations, links and statements of exercises, etc.) to work on during the following week. (80% of the activity).
2. Participatory part, with activities such as:
  - a. Resolution of questions about the contents studied or exercises proposed in the previous Meeting.
  - b. Explanation and defense of solved exercises.
  - c. Debates about the content discussed in the previous class.
  - d. Knowledge test on the theoretical content taught in the previous classes or the exercises in development.

## LEARNING OBJECTIVES OF THE SUBJECT

- . Make the proposed exercises applying the right methodology and design and typography procedures.
- . Improve the images' visualization with the image processing procedures.
- . Design graphic user interfaces.
- . Understand the concepts involved and make the related exercises and practices to the graphic communication.
- . Analyze and build images.
- . Make the jobs in the right time, work with the right fonts according to the guides given by the teacher.
- . Use strategies for preparing and make presentation speeches and redact documents and texts with the right contents, well-structured and a good level in the language usage.
- . Recognize the own necessities of information and use the available services and collections for designing final jobs.
- . Being able to identify the different parts of an academic document and organize the bibliography.
- . Plan the speeches, and answer in a right way the questions relating to the visual communication.

## STUDY LOAD

Type	Hours	Percentage
Hours medium group	16,0	10.67
Guided activities	20,0	13.33
Hours large group	24,0	16.00
Self study	90,0	60.00

**Total learning time:** 150 h

## CONTENTS

### Week 1: Design Basics

#### Description:

1. Design definition
2. Design objectives
3. Design purpose
4. Art and design
5. Design workflow

#### Rasterized image software

- . Vector based vs bitmap based
- . Working interface
  - a. New document
  - b. Color options (RGB and CMYK)
  - c. Preferences
  - d. Saving formats
- . Painting and editing tools
- . Brush and pencil
- . Keyboard fluidity
- . Customize brushes
- . Customize patterns
- . Gradients
- . History

#### Related activities:

P01 practice.

#### Full-or-part-time: 10h

Theory classes: 4h

Self study : 6h

## Week 2: Semiotics: its application to design.

### Description:

1. Basics and constitutive elements.
2. The design process as a semiotic system of sense and communication.
3. Poethics and retoric of design.

Rasterized image software.

- Working with selections and new layers.
- Square selection.
- Lasso selection.
- Magic wand.
- Quick selection.
- Enhance selection.
- Customized selections.
- Selection Masks.

### Related activities:

Practice P02.

**Full-or-part-time:** 10h

Theory classes: 1h

Guided activities: 3h

Self study : 6h

## Week 3: Posters and composition meanings.

### Description:

Rasterized image software.

- Layers.
- Changing layer options.
- Create new layer.
- Overlay of layers.
- Layer selection.
- Layer Groups.
- Layer alignment.
- Layer filters.
- Channels.

### Related activities:

Practice P3.

**Full-or-part-time:** 10h

Theory classes: 2h

Guided activities: 2h

Self study : 6h

#### Week 4: The shape

**Description:**

1. Tension and balance.
2. The rythm concept.
3. Contrast
4. Size, weight scale and proportion.

Rasterized image software.

- 3D objects.
- Interface 3D.
- 3D materials.
- 3D mesh.
- Rotate, move and scale.
- Lighting.
- Actions window.
- Customize actions.

**Related activities:**

Practice P4.

**Full-or-part-time:** 10h

Theory classes: 1h

Guided activities: 3h

Self study : 6h

#### Week 5: Graphic space structure and composition hierarchies

**Description:**

1. Visual composition: Weight and direction.
2. Hierarchy.
3. Grid.
4. Formal artistic tendencies.
  - a. Bauhaus
  - c. De Stijl

Rasterized image software.

- Synthetic images.

**Related activities:**

Practice P5.

**Full-or-part-time:** 10h

Theory classes: 2h

Guided activities: 2h

Self study : 6h

## Week 6: Typography

### Description:

1. Typography anatomy.
2. Families and styles.
3. Differences.

Vector image based software.

- Introduction to vector based illustration software.
- Vector image vs rasterized image.
- Working interface.
- New document.
- Color configuration.
- Preferences.
- Document size.
- Page size.
- Selection tools.
- Basic shapes.
- Options toolbar.
- Combine objects.

### Related activities:

Practice P6.

**Full-or-part-time:** 10h

Theory classes: 2h

Guided activities: 2h

Self study : 6h

## Week 7: Historic evolution of typography.

### Description:

1. Families and properties.
2. Text and character as artistic resources.

Vector based illustration software.

- Group shapes.
- Objects selection inside a group.
- Basic transformations through toolbar and deformation tool.

### Related activities:

Practice P7.

**Full-or-part-time:** 10h

Theory classes: 2h

Guided activities: 2h

Self study : 6h

## Week 8: Color perception

### Description:

1. Color language.
2. Technics issues of the color.
3. Historic evolution of the color perception.
4. Color abstract symbolism.

Vector based illustration software.

Text block format

- Format and alignment.
- Tabs usage.
- Styles, text block and character.
- Text stroke.

### Related activities:

Practice P8.

**Full-or-part-time:** 10h

Theory classes: 2h

Guided activities: 2h

Self study : 6h

## Week 9: Historic evolution of the visual composition

### Description:

1. Fit the typography to the role of the graphic project.
2. Readability.
3. Composition basics.

- Art Decó.
- Sweden design and International typography.
- Design Plus.
- Designers Republic.

Vector based illustration software.

Text placement.

- Text box connection.
- Text column distribution.
- Bring shape to text.
- Path alignment.

### Related activities:

Practice P9.

**Full-or-part-time:** 10h

Theory classes: 2h

Guided activities: 2h

Self study : 6h

## Week 10: Branding and positioning

### Description:

1. Design purpose
2. Product personality.
3. Seduction in design.

Vector based illustration software.

Color pallete options.

- Add custom colors.
- Modify existing color palletes.
- Using default gradients.
- 2 colors gradient.
- Gradients save.

### Related activities:

Practice P10.

**Full-or-part-time:** 10h

Theory classes: 2h

Guided activities: 2h

Self study : 6h

## Week 11: Visual identity

### Description:

1. Visual identity.
2. Identity and image.
3. Sign icon and brand.
4. Brand logo symbolism and color.
5. Subjects and strategies.
6. Basic construction of visual identity.

Vector based illustration software.

1. Pattern brushes.
2. Calligraphic brush strokes.
3. Spread brushes.
4. Artistic brushes.
5. Share custom brushes.
6. Smart guides.
7. Objects group.
8. Align.
9. Guides and rules alignment.
10. Points adjustment.
11. Align palette.
12. Object position in the canvas.

### Related activities:

Practice P11.

**Full-or-part-time:** 10h

Theory classes: 2h

Guided activities: 2h

Self study : 6h

## Week 12: Design and society

### Description:

1. Social and environmental responsibilities.
2. Translation of global design into local design.
3. How to rate the success of a design.
4. Cases of study of design in politics.
5. Design based innovation.

Vector based illustration software.

- Import and insert.
- Bitmaps.
- Working with different bitmap formats.
- Bitmap preparation.
- Effects on bitmaps.
- Cutmask.
- Cutmask text.
- Bitmap cutmask.

### Related activities:

Practice P12.

**Full-or-part-time:** 10h

Theory classes: 2h

Guided activities: 2h

Self study : 6h

## Week 13: Trends

### Description:

1. Trends and authors of contemporary design.
2. Trends on persuasive communication.
3. Trends on informative communication.
4. Trends on identity communication.

Vector based illustration software.

- Web use preparation.
- New vector options for web use.
- Links handling on illustration.
- Image map creation.
- Safe colors on web.

### Related activities:

Practice P13.

**Full-or-part-time:** 30h

Theory classes: 6h

Guided activities: 6h

Self study : 18h



## ACTIVITIES

### Practice P01: Design basics

**Description:**

Look for an interesting design of a poster or illustration and try to make the inverse engineering of the purpose and emotions handled by the illustration.

**Specific objectives:**

. Understanding the visual communication purposes.

**Material:**

Guió de practiques P01.doc

**Full-or-part-time:** 2h

Self study: 2h

### Practice P02: Semiotics

**Description:**

Building and application icon or an application logo.

**Specific objectives:**

. Right handling of the symbolic language.

**Material:**

Guió de practiques P02.doc

**Full-or-part-time:** 4h

Self study: 4h

### Practice P3: Visual communication

**Description:**

Creation of iconic shapes based on famous video games characters.

**Specific objectives:**

. Develop abstraction abilities.

**Material:**

Guió de practiques P03.doc

**Full-or-part-time:** 4h

Self study: 4h

### Practice P4 & P5

**Description:**

Analyse the shape principles applying to the creation of an strategy game board.

**Specific objectives:**

Develop the communication capacities of geometries and compositions.

**Material:**

Guió de practiques P05.doc

**Full-or-part-time:** 6h

Self study: 6h

### Practice P6 & P7: Typography

**Description:**

Application of the typography knowledge to the gaming board of the practice P5.

**Specific objectives:**

Apply the right typography to the theme of the visual message.

**Material:**

Guió de practiques P6.doc

**Full-or-part-time:** 4h

Self study: 4h

### Practice P8 & P9: COLOR

**Description:**

Color application in a card game representing in a right way all the powers involved: energy usage, attack, defense and legend.

**Specific objectives:**

Analysis of the principles related to color.

**Material:**

Guió de practiques P8.doc

**Full-or-part-time:** 6h

Self study: 6h

### Practice P10, P11, P12: Visual identity

**Description:**

Create a visual identity brand guide.

**Specific objectives:**

Practical application of graphic principles in a case study. Work on the readability and adaptation of the typography to the project specifications.

**Material:**

Guió de practiques P10.doc

**Full-or-part-time:** 6h

Self study: 6h

### Practice P13: Design and society

**Description:**

Create a graphic message to share a specific subject following a defined study resources.

**Specific objectives:**

To have influence on observer's perception using visual communication basics.

**Material:**

Guió de practiques P13.doc

**Full-or-part-time:** 6h

Self study: 6h

## GRADING SYSTEM

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- Exercises (total: 30%).
- 2 Partial Exams, 15% each (total: 30%).
- Final Exam (total: 30%).
- Assessment of generic competences (total: 10%).

Students who fail will have the chance to take the reevaluation exam. The mark of this exam will replace the mark of the partial and final exams and, in case of passing the course, the maximum final mark will be a 5.

\* The revisions and / or claims in relation to the exams will take place exclusively in the dates and schedules established in the academic calendar, previous request of the student to the professor.

## EXAMINATION RULES.

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### Exercises

Some exercises can be done during classes with the teacher. Students will also have to dedicate time to work independently (autonomous work hours), to perform the exercises. To do so, follow the instructions given in the working document.

## BIBLIOGRAPHY

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### Basic:

- Arnheim, Rudolph. Arte y percepción visual: psicología del ojo creador. 2ª ed. Madrid: Alianza, 2002. ISBN 8420678740.
- Coles, Stephen. The geometry of type: the anatomy of 100 essential typefaces. Thames & Hudson, 2013. ISBN 9780500241424.
- Costa, Joan. La imagen de marca: un fenómeno social. Barcelona: Paidós, 2004. ISBN 9788449315312.
- Roberts, Lucienne. Retículas: soluciones creativas para el diseñador gráfico. Barcelona: Gustavo Gili, 2008. ISBN 9788425222634.
- Jardí, Enric. Veintidós consejos sobre tipografía que algunos diseñadores jamás revelarán. Barcelona: Actar, 2007. ISBN 9788496540910.
- Lupton, Ellen. Pensar con tipos: una guía clave para estudiantes, diseñadores, editores y escritores. Barcelona: Gustavo Gili, 2011. ISBN 9788425224461.
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- Hyland, A.; Bateman, S. Símbolos. Barcelona: Gustavo Gili, 2011. ISBN 9788425224010.
- Tornquist, Jorrit. Color y luz: teoría y práctica. Barcelona: Gustavo Gili, 2008. ISBN 9788425222177.
- Sherin, Aaris. SustainAble: a handbook of materials and applications for graphic designers and their clients. Rockport, 2008. ISBN 9781592534012.

### Complementary:

- Corazón, Alberto; Vaquero, J. Palabra e icono: signos. Madrid: Real Academia de Bellas Artes de San Fernando, 2006. ISBN 9788496209770.
- Costa, Joan. Diseñar para los ojos. 2ª ed. Barcelona: Costa punto com, 2008. ISBN 9788461181377.
- Dondis, Donis A. La sintaxis de la imagen: introducción al alfabeto visual. Barcelona: Gustavo Gili, 1976. ISBN 842520609X.
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- NFGMan; Rodríguez, I. Diseño de personajes para consolas portátiles: videojuegos para móviles, sprites y gráficos con píxeles. Barcelona: Gustavo Gili, 2008. ISBN 9788425222597.
- Chaves, Norberto. La imagen corporativa: teoría y metodología de la identificación institucional. 6ª ed. Barcelona: Gustavo Gili, 2001. ISBN 8425218594.
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- Pastoureaux, Michel. Diccionario de los colores. Barcelona: Paidós, 2009. ISBN 9788449322396.
- Satué, Enric. El diseño gráfico: desde los orígenes hasta nuestros días. Madrid: Alianza, 1988. ISBN 8420670715.
- Zimmermann, Yves. El arte es arte, el diseño es diseño. Barcelona: Gustavo Gili, 2004.



## RESOURCES

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**Other resources:**

<http://www.fontspace.com> /> <http://www.urbanfonts.com> /> <http://www.1001freefonts.com> /> <https://kuler.adobe.com>  
/> <http://www.experimenta.es>