CENTRO UNIVERSITARIO DE TECNOLOGÍA Y ARTE DIGITAL





ACADEMIC PROGRAM

GRAPHIC DESIGN FOR INTERFACES AND USER EXPERIENCE

1. BASIC INFORMATION/GENERAL INFORMATION

Degree:	Bachelor in Interactive Product Design
Faculty or Centre:	Centro Universitario de Tecnología y Arte Digital (U-TAD)
Area:	Audiovisual Production and Development
Course:	Graphic Design for interfaces and User Experience
Year:	Second
Teaching period:	Second
Type:	Basic Subject
ECTS credits:	6
Teaching modality:	classroom-based course
Language:	English
Lecturer/Teacher:	Antonio Alonso Francisco Javier Gayo
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2. SUBJECT DESCRIPTION

Area description

This subject belongs to the module of Conceptual Design and Ideation and, within this, to the area of Audiovisual Production and Development.
This area refers to the study and practice of the set of fundamental artistic techniques of creation and their application to the digital environment, such as video games. In it, the student obtains diverse skills related to art, and acquires the necessary knowledge of digital tools that will allow them to use them.

Subject description

This subject belongs to the module of Conceptual Design and Ideation and within this to the subject of Audiovisual Creation.

It is a subject based on applying creativity in the digital content environment, analysing the characteristics and needs of users in the humanistic environment as a fundamental element in the design of interactive products. And it is closely linked to the subjects "Perception and Visual Expression" and "Introduction to Game Design" and "Fundamentals of User Experience".
The subject of Graphic Design, Interface and User Experience provides competences and skills to use the knowledge of visual language to build basic designs and transform a concept or message into an interactive graphic manifestation.

3. SKILLS AND LEARNING OUTCOMES

3.1 Skills

GC1 Lifelong learning through self-study and lifelong learning.

GC2 To be able to adapt to change and new situations with flexibility and versatility.

GC3 To develop creativity and innovation and have the ability to present new resources, ideas and methods in order to subsequently turn them into actions.

GC5 Demonstrate initiative and entrepreneurial spirit.

GC6 Demonstrate motivation for quality.

CB1 Students should have demonstrated knowledge and understanding of an area of study that builds on the foundation of general secondary education, and is usually at a level that, while relying on advanced textbooks, also includes some aspects that involve knowledge from the general secondary school curriculum.
some aspects involving knowledge from the cutting edge of their field of study.

CB2 Students are able to apply their knowledge to their work or vocation in a professional manner and possess the competences usually demonstrated through the development and defence of arguments and problem solving within their field of study.

CB3 That students have the ability to gather and interpret relevant data (usually within their area of study) in order to make judgements that include reflection on relevant social, scientific or ethical issues.

GC12 Express a critical and self-critical sense and the ability to analyse in order to evaluate different alternatives.

SC10 Knowing the techniques of artistic representation and design of 2D and 3D contents.

SC11 Apply creativity in the digital content environment.

SC15 Analyse the characteristics and needs of users in the humanistic environment as a fundamental element in the design of interactive products.

SC18 Apply theoretical and practical knowledge of product design for the development of contents.

3.2 Learning outcomes

Transforming a concept or message into a graphic representation

Experiment with different drawing techniques

Use visual language knowledge to build basic designs

Transferring knowledge of the psychological and perceptual effects of light, colour, music and sound to game design

Use symbolism and iconography to convey information

Differentiate and categorize the different processes that take place in the generation of graphs within the graphical pipeline model.

4. CONTENTS

- Structural aspects of the image
- Typography
- Disposition
- Color and Composition
- Design and usability
- Interactivity and navigation
- Elements of visual language
- Graphic, visual and documentary information
- Fundamentals of visual perception
- Fundamentals of visual semiotics
- Types of visual products
- Visual rhetoric

5. SUBJECT SYLLABUS:

SECTION 1: DESIGN and VISUAL COMPOSITION

Theme 1: Structural aspects of the image.

- Visual language
- Conceptual / visual elements
- Relationship and/or layout elements
- Tools and project management
- Form and structure
- Positive / Negative
- Relationship of forms

Theme 2. On-screen typography: Typography and identity

- Classification and selection
- Organisation of text on screen
- Text and hierarchy
- Typographic appropriateness
- Typographic resources.
- Typography as a branding element

Theme 3. Composition and colour

- Colour management and tools
- The interaction of colour and legibility.
- Palettes and colour management tools.
- Branding and colour: logo, positioning and image.

Theme 4. Layout: Laws of composition

- Laws and guidelines of composition
- Balance and modular construction Hierarchy
- Grid design
- Presentation editing and layout

SECTION 2: CONCEPTUALISATION and INTERACTIVE STRUCTURING

Theme 0: Interface Development.

- Vector-Bitmap Tools
- Element Design. WorkFlow
- Icons, Buttons and Menus
- I18n Adaptation/Accessibility
- Actions and Automations
- Authors, Genres and Styles.
- Screen Flow and Animation

Theme 1: Interface Design and Interaction.

- Menus and Data Visualisation
- Infographics and Information Theory.
- Information Architecture.
- Data vs. Visual Experience.
- Cognitive Load: Mental Maps and Rhythms.

Interface Usability Attributes.
Usability, Learning and Environment.

Theme 2: Interface Typology and Design.
Definition and General Interface Typology
Interface in Videogames
Interface Design: General Considerations
Laws of Interaction UX Design
Tactile Devices: Size, Location, Orientation
Interaction Analysis

6. TRAINING ACTIVITIES AND TEACHING METHODS

Teaching methods

The subject will be developed through the following general methods and techniques, which will be applied differently depending on the characteristics of the subject:

- **Expository method/Master lecture:** the lecturer will develop the contents of the syllabus through master classes and dynamic lectures.
- **Case studies:** analysis of real cases related to the subject.
- **Exercise and problem solving:** students will develop the appropriate solutions by applying transformation procedures to the information available and interpreting the results.
- **Problem-based learning:** using problems as a starting point for the acquisition of new knowledge.
- **Cooperative learning**: students work in groups to carry out tasks collectively.

Training activities

LEARNING ACTIVITIES	Total hours	Hours of attendance	% attendance
Theory classes	30	30	100
Seminars and workshops	3	3	100
Practical classes	21	21	100
Tutoring	4	4	100
Evaluation activities	6	6	100
Study and group work	18	1	5
Self-study and individual work	68	0	0

7. TEMPORAL DEVELOPMENT

Subject	Week
Theme 1 Structural aspects of the image.	1,2
Theme 2 Screen typography: Typography and identity.	3,4
Theme 3 Composition and colour	5
Theme 4 Layout: Laws of composition	6,7
Theme 0 Interface Development.	8,9
Theme 1 Interface Design and Interaction.	10,11,12
Theme 2 Interface Typology and Design.	13,14,15

8. EVALUATION SYSTEM

ASSESSED ACTIVITY	MINIMUM SCORE RESPECT TO THE FINAL ASSESSMENT (%)	MAXIMUM SCORE RESPECT TO THE FINAL ASSESSMENT (%)
SE1 Assessment of participation in class, practicals or projects of the subject.	10%	30%
SE2 Evaluation of assignments, projects, reports, reports, reports	35%	70%
SE3 Objective assessment	30%	60%

Grading criteria:

EVALUATION ACTIVITY	EVALUATION CRITERIA	EVALUATION CRITERIA ASSESSMENT IN RELATION TO THE FINAL GRADE (%)
SE1 Assessment of participation in class, practicals or projects of the subject.	Students will be assessed on their active participation and the correct delivery of the practicals in due time and form. Critical capacity and incorporation of other people's ideas. Development of initial ideas in contrast with the contents presented and developed in class. Conceptual development and documentation Development of visual elements (form, colour and/or texture). Arrangement and relationship of visual elements Quality of the final artwork	10%
SE2 Evaluation of assignments, projects, reports, reports, reports		50%
SE3 Objective assessment		40%

	(presentation and appropriateness to the required format) Understand the implications and Development of Interactive and Graphic Solutions.	

General comments on the evaluations/assessments:

- Ordinary exams:

  - The student must hand in all the assignments in order to obtain a grade point average.

  - The marks for the work done during the course will account for 50% of the final mark.

  - The final exam will account for 40% of the final grade.

  - Both parts (assignments and exam) must have a grade higher than 5 in order to pass the course.

  - All the activities can be handed in after the deadline for each one, which will be indicated sufficiently in advance by the teacher. However, any of them that are submitted for the first time after the deadline will not be eligible for a grade higher than a pass mark (5) in any case.

- Extraordinary exams
  - In case of requiring an extraordinary call, the student must present the failed activities and pass the final exam, being the valuation with respect to the final grade of each activity the same as for the ordinary call.
  - Both parts (assignments and exam) must have a grade higher than 5 in order to pass the course.
  - The marks of the exams and activities passed in the ordinary exam will be kept until the extraordinary exam.

9. LIST OF REFERENCES (BOOKS, PUBLICATIONS, WEBSITES):

Key references

Sección 1: Diseño y Composición Visual:
WUCIUS, Wong, Fundamentos del diseño, Barcelona, Colección GG Diseño, GG,2012
LUPTON, Ellen, Tipografía en Pantalla, Colección GG Diseño, 2015
LEBORG, Christian, Gramática visual, Barcelona, GG, 2014

Sección 2: Conceptualización y Estructuración Interactiva:
D. SAUNDERS, Kevin y Novak, Saunders, Game Development Essentials: Game Interface Design. Delmar Cengage Learning. 2013

Recommended references

Sección 1: Diseño y Composición Visual:
HOFMANN, Armin, Graphic Design Manual, Principles and practice, Zürich, Niggli AG, 2004
ELAM, Kymberly, Grid systems principles of organizing type, New York, Princeton Architectural press, 2004
ELAM, Kymberly, La geometría del diseño. Estudios sobre la proporción y la composición, Barcelona, GG, 2014
MULLER Brockmann, Josef, Sistemas de retículas, Un manual para diseñadores gráficos, Barcelona, Colección GG Diseño, GG, 2012
DONDIS, Donis A., La Sintaxis de la imagen, Introducción al alfabeto visual, Barcelona, Colección GG Diseño, GG, 2012
ALBERS, Josef, La interacción del color, Madrid, Alianza Editorial, 2003
POYNOR, Rick, No más normas – Diseño gráfico posmoderno, Barcelona, GG, 2003
SAMARA, Timothy, El diseñador como chef, Barcelona , GG, 2010.

Sección 2: Conceptualización y Estructuración Interactiva:
CAIRO. Alberto. El Arte Funcional. Alamut. 2011
HOOBER, Steven, Berkman, Eric. 2011. Designing Mobile Interfaces: Patterns for Interaction Design. O'Reilly Media.
JOHNSON, Jeff. Designing with the Mind in Mind: Simple Guide to Understanding User Interface Design Rules. Elsevier. 2010.
KRUG, Steve. No me hagas pensar. Prentice hall. 2006
TIDWELL, Jenifer . Designing Interfaces: Patterns for Effective Interaction Design. O'Reilly Media. 2nd Edition

10. Required materials, software and tools

Type of classroom:

Projector and whiteboard.
BlackBoard

Materials:

- Laptop computer.
- Internet access.

Software:

Adobe Suite. Adobe Acrobat. Fontlab.