Study area 1. Management and communication tools

Type: Compulsory

Character: Theoretical, applied, technological and procedural training.

ECTS credits: 12

Year: First

Semester: First

Language of instruction: Catalan, Spanish and English

Prerequisites: -

1. Study area presentation

The "Management and communication tools" study area includes a set of four subjects that deal with a series of basic knowledge and resources to be able to approach a design project. The contents of the subjects provide theoretical, applied, technological and procedural training. The study area provides the tools to manage data, understand the role of narrative constructs in the context of design, explore agile methodologies, and tackle digital challenges. The study area contents enable addressing social issues and collaborating creatively and efficiently in design projects.

2. Study area competences

Study area		General competences					
		CG1	CG2	CG3	CG4	CG5	CG6
EGC	Management and communication tools	X	X		X	X	X

CG1. The graduate must be able to formulate, design and manage projects creatively and in an entrepreneurial manner, integrating knowledge and attitudes to make proposals for social change and innovation through design.
CG2. The graduate must be able to develop analytical and critical thinking that enables analysing dynamics of change and solving social innovation challenges.
CG4. The graduate must have the ability to appreciate society's diversity and multiculturalism to integrate knowledge in a transdisciplinary manner.
CG5. The graduate must be able to generate and evaluate new ideas, proposals and design social solutions applied to the public sphere, based on the theoretical and practical aspects of the working methodology in the field of social codesign.
CG6. The graduate must be able to express themselves and communicate orally, in writing and through visual resources for leadership, organizational creativity, and teamwork in codesign.

Study area	Specific competences

		CE1	CE2	CE3	CE4	CE5	CE6	CE7	CE8	CE9	CE10
EGC	**Management and communication tools**		**X**	**X**		**X**		**X**			**X**

CE2. The graduate must be able to create solution designs that satisfy both social and functional as well as technical and usability requirements of problems in new or little-known environments within broader (or multidisciplinary) contexts related to their area of study.
CE3. The graduate must be able to design and plan a project considering its monitoring and evaluation in a responsible, ethical and realistic manner.
CE5. The graduate must be able to express themselves clearly and convey conclusions, knowledge and ultimate reasons that support them to specialized and non-specialized audiences clearly and unambiguously, having a command of the integration of all narrative resources.
CE7. The graduate must be able to plan research in all its phases: produce and obtain information, apply methods and techniques of social research and design, analyse, present and discuss the results.
CE10. The graduate must be able to acquire knowledge of the different communication processes, technologies and resources required to implement, manage and promote projects.

3. Study area learning outcomes

Learning outcomes

RA1. Understand that the activities involved in design structure a process that can have different formalizations depending on the project, the work perspective and the people to whom it is addressed.
RA2. Understand information architecture and know how to place it in the design process focused on users and people.
RA3. Get to know and design organization, navigation, labelling and research systems.
RA4. Get to know and apply specific methods, techniques and activities of information architecture.
RA5. Understand the importance of prototyping and the construct of user-centred design project prototypes.
RA6. Learn and know how to use the main tools for data management and visualization.
RA7. Understand interface design based on technologies and devices.
RA8. Learn and know how to apply the different principles of interface design.
RA9. Develop capacities for research and the analysis of information and the integration of complex information.

4. Study area subjects and contents

Study area 1 Management and communication tools

120 h teaching (55% face-to-face + 45% online) 1st semester Compulsory ECTS: 12
180 h of autonomous work

Subjects

IRD – Introduction to digital resources, free software and open source

Contents: 1st semester Compulsory ECTS: 3

I. The principles of free and open source software.
II. Main resources and tools for service design.
III. Use of tools and techniques in relation to design.
IV. Examples of digital applications.

IMA – Introduction to agile methodologies

Contents: 1st semester Compulsory ECTS: 3

I. Basics of agile methodologies and change.
II. Agile processes, tools and software.
III. Agile practices.
IV. Examples of agile experiences.

CNS – Narrative building and storytelling

Contents: 1st semester Compulsory ECTS: 3

I. Basics of design and infographic process.
II. Main resources and tools for data processing and visualization.
III. Infographic practices.
IV. Examples of infographic applications of service and social design.

RDI – Resources for social design and innovation

Contents: 1st semester Compulsory ECTS: 3

I. Resource bases in innovation and social design.
II. Processes and techniques.
III. Practices and applications
IV. Examples of resources for social design and innovation.

5. Study area training activities

Training activities		Hours	Face-to-face
AF1	Theory.	10	50%

AF2	Theoretical-practical activity.	20	50%
AF3	Face-to-face group practice.	15	100%
AF4	Online group practice.	15	0%
AF6	Field trips (visits to institutions, archives, medialabs, fablabs...).	15	50%
AF7	Student self-study.	180	0%
AF8	Supervised work.	20	50%
AF11	Interventions, analysis and values of codesign	15	50%
AF12	Exposition /presentation.	10	50%

6. Study area teaching methods

Teaching methods

M1	Group work - collaborative learning.
M2	Supervised individual work.
M3	Supervised autonomous work.
M4	Autonomous work.
M5	Practice of designing services based on a real context.
M6	Common (interdisciplinary) supervised assignments and codesign practice in a real context.
M7	Expository method/lecture.
M8	Participatory expository class.
M9	Doing exercises and problem solving.
M10	Problem/project-based learning
M11	Case study.
M12	Completion of the learning folder (dossier).

7. Assessment systems

Assessment criteria

- Ability to assimilate and convey theoretical knowledge in writing and/or orally.
- Correct use of specific terminology.
- Student participation in the proposed activities.
- Interest in searching for information related to the proposed activities.

Assessment tools

- The performance of all the proposed activities.
- Assessment of the knowledge acquired through theoretical work and/or knowledge tests.
- Assessment of the student's participation in classroom activities.

Assessment system	Min. weighting	Max. weighting

1.	Written evidence	0	25%
2.7.10	Oral tests	0	25%
3.	Assignments	25%	100%
4.	Practical exercises	25%	50%

8. Information sources and didactic resources

Basic bibliography

- (2017). Agile practice guide. Project Management Institute.
- (2017). La guía de los fundamentos para la dirección de proyectos. Guía del PMBOK (6a Edición). Project Management Institute.
- Maylor, H. (2005). Project management (3rd media ed. with MS project CD.). FT Prentice Hall.
- McCandless, David (2022). Beautiful News: Positive Trends, Uplifting Stats, Creative Solutions
- Thorp, Jer (2012). Living in Data: A Citizen's Guide to a Better Information Future. ISBN: 978-0374189907.
- Verlag, Niggli (2022). The Age of Data – Embracing Algorithms in Art & Design.ISBN: 978-3721210156
- Krug, S. (2017). Don't make me think!: Web & Mobile Usability: Das intuitive Web (2014a ed.). MITP.

Reference bibliography and other resources

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- Anderson, D. J., & Carmichael, A. (2016). Essential kanban condensed. Lean Kanban University Press.
- Schwaber, K., Beedle, M. (2006). Agile Software Development with SCRUM. Prentice Hall
- Barcelona open data: https://opendata-ajuntament.barcelona.cat/data/es/dataset
- Dataset repository: https://www.kaggle.com/datasets?fileType=csv
- Unger, R., & Chandler, C. (2021). Project Guide to UX Design, A: For user experience designers in the field or in the making. New Riders Publishing.

Audiovisuals

- Laufenberg, D. (10 November 2010). ¿Cómo aprender? De los errores. TED. Retrieved from: https://www.ted.com/talks/diana_laufenberg_3_ways_to_ teach?language=es
- Rosling, Hans (2006). Las mejores estadísticas que jamás hayas visto. TED. Retrieved from: https://www.youtube.com/watch?v=hVimVzgtD6w&t=1038s
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https://www.youtube.com/watch?v=MbhNaj88uL4&t=124s
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