

Course Unit	Integrated Project 1		Field of study	Game design and development	
Master in	Digital Game Design and Development		School	School of Public Management, Communication and Tourism	
Academic Year	2023/2024	Year of study	1	Level	2-1
Type	Semestral	Semester	1	ECTS credits	6.0
			Code	5074-802-1106-00-23	
Workload (hours)	162	Contact hours	T	-	TP
			PL	45	TC
			S	-	E
			OT	-	O

T - Lectures; TP - Lectures and problem-solving; PL - Problem-solving, project or laboratory; TC - Fieldwork; S - Seminar; E - Placement; OT - Tutorial; O - Other

Name(s) of lecturer(s) Ana Lucia Jesus Pinto, Anabela Neves Alves de Pinho, Barbara Costa Vilas Boas Barroso

#### Learning outcomes and competences

At the end of the course unit the learner is expected to be able to:

1. integrate the knowledge and skills acquired in the other Curricular Units of the semester in the design and development of a game;
2. demonstrate capacity of self and hetero-analysis of the application of this knowledge and abilities, aiming the improvement of the project.

#### Prerequisites

Not applicable

#### Course contents

The focus is project-oriented, in the design and development of a low to medium complexity game, developed collaboratively in small teams, under an agile methodology, summoning knowledge and skills worked on the other courses of the semester. For systematization and aggregate application, transversal issues to praxis are addressed. Each team must conceptualize, develop and validate at least one solution, according to defined planning and respecting technical requirements and player's experience.

#### Course contents (extended version)

1. Design and development under agile methodologies:
  - Life cycle, planning, development phases of a project.
2. Communication:
  - Internal to the team;
  - External to the team;
  - As an incentive to individual and collective performance;
  - About the game as a product (presentations and demos).
3. Common tools for the different profiles of team members:
  - Iterative cycles and version control;
  - Use of shared repositories;
  - Dynamic documentation of design and development processes.
4. Critical reflection about the work developed:
  - Self-evaluation;
  - Peer review;
  - Playtesting data;
  - Postmortem.

#### Recommended reading

1. Ambler, S. W. & Lines, M. (2012). Disciplined Agile Delivery (DAD): Practitioner's Guide to Agile Software Delivery in the Enterprise. IBM Press. ISBN: 0132810131.
2. deWinter, J. & Moeller, R. M. (2014). Computer Games and Technical Communication. Critical Methods and Applications at the Intersection. Routledge. ISBN: 9781138710207.
3. Malakar, S. (2021). AGILE in Practice: Practical Use-cases on Project Management Methods including Agile, Kanban and Scrum. BPB Publications. ISBN: 978-9389423440.
4. Whitaker, J. & Mancini, R. (2012). Technical Documentation and Process. 1st Edition. CRC Press. ISBN: 978-1439861592.
5. Bibliografia específica a cada equipa / projeto articulada com os docentes da UC.

#### Teaching and learning methods

This course is characterized by a practice-laboratorial approach, using technical equipment suitable for the design and development of a digital game. Teams of 4 to 6 students are estimated. The micro-exposition of content will reinforce concepts, techniques or methodologies in the light of praxis. The dynamic and co-responsible attitude of the team will be encouraged in weekly sprint meetings.

#### Assessment methods

- Final Evaluation - (Regular, Student Worker) (Final, Supplementary, Special)
- Projects - 100% (Project developed collaboratively with final presentation of results.)

#### Language of instruction

1. Portuguese
2. English

#### Electronic validation

Ana Lucia Jesus Pinto, Anabela Neves Alves de Pinho, Barbara Costa Vilas Boas Barroso	João Paulo Pereira de Sousa	Barbara Costa Vilas Boas Barroso	Luisa Margarida Barata Lopes
11-10-2023	12-10-2023	12-10-2023	15-10-2023