

MODELO

PED.012.03

Course	Multimedia communication						
Subject	Interaction Laboratory I						
Academic year	2023/2024	Curricular year	2nd Year	Study period	1st sem	nester	
Type of subject	Mandatory	Student workload (H)	Total:162 0	Contact: 52.5	ECTS	6	
Professor(s)	Filipe José Neto Caetano						
☑ Area/Group Coordinator☐ Head of Department		José Carlos Fonseca					

Predicted sd

1. LEARNING OBJECTIVES

The course aims to create solid foundations for proper planning, structuring and creation of digital content, introducing concepts and methods to integrate concepts of usability and accessibility in the development of multimedia systems centered on the user in an inclusive perspective. the main methods for implementing and evaluating the usability and accessibility of information systems in the course of the unit are covered.

At the end of the course, students should be able to:

- List the human factors which determine the use of any multimedia system.
- Design and test an interface to any application, taking into account the types of target user.
- Identify the problems experienced by users interacting with an application.
- Weaving critical opinions about existing interfaces, suggesting changes as needed.
- Understanding the need to monitor the software development with usability testing and accessibility from the start.

2. PROGRAMME

- 1. Usability and Interface Design
 - a. Definition of Usability
 - b. Goals Usability Engineering
 - c. The Interface Design with User
 - d. The Development Centered on users and the cycle of Usability Engineering



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- e. Heuristic evaluation
- f. Predictive evaluation
- g. Evaluation with users
- 2. Accessibility and Interface Design
 - a. Introduction
 - b. WCAG 2.0 Approach Levels
 - c. WCAG 2.0 guidelines
 - i. perceivable
 - ii. Operable
 - iii. Understandable
 - iv. Robust
 - **d.** Compliance: Compliance Requirements.
 - e. Usability and Accessibility Seal
 - f. Decree of Law No. 83/2018

3. COHERENCE BETWEEN PROGRAMME AND OBJECTIVES

The presented curriculum includes all the topics described in our goals. The contents are consistent with the objectives of the course as the program was designed to address properly the planning and development of interfaces and digital content, introducing concepts and methodsfor the integration of HCI concepts, usability and accessibility in the development of multimedia systems centered on the user.

4. MAIN BIBLIOGRAPHY



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- M. FONSECA, FIELDS P., D. Goncalves (2012) Introduction to Interface Design. Lisbon: FCA, Computer Publisher ISBN 978-972-722-738-9.
- YONAITIS, R. (2002) Understanding Accessibility: A Guide to Achieving Compliance on Web Sites and Intranets. New Hampshire: HiSoftware.
- Preece J., Rogers, Y., & Sharp, H. (2002) Interaction Design: Beyond Human-Computer Interaction. John Wiley and Sons Ltd.
- STANTON, N., Salmon P., Walker, G., Baber, C., & Jenkins, D. (2005). Human Factors Methods: A Practical Guide for Engineering and Design. Ashgate Publishing Company.

5. TEACHING METHODOLOGIES (INCLUDING EVALUATION)

The course will be developed according to a theoretical and practical model that will alternate theoretical and practical lessons with classes dedicated to developing exercises and projects. The exercises will focus on the exploration and consolidation of knowledge through specific problem solving. Find It will develop the critical skills of students through analysis and collective discussion of the work done in class.

Summative dimension of continuous evaluation is defined by the following elements: weighted average of the written tests carried out throughout the semester, with a minimum grade of eight values in each of these b) Portfolio, which will be assessed summative implementation capacity of the theoretical and practical concepts of the course, with a mandatory minimum grade of eight values in each work. The final rating will be the sum of the two summative assessment elements.

Evaluation Grid	amount%	Absolute value
Written tests	30	6
portfolio	70	14
Total	100.0	20.0

The assessment examination phase and appeal will be made based on the following elements: a) Portfolio of practical work developed during the semester, giving the student the opportunity to improve them, with a minimum grade of eight values in each of these. The aim is to assess the implementation capacity of the theoretical and practical concepts of the course. b) Written test of theoretical base which aims to assess the



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knowledge and understanding of theoretical concepts addressed, with a minimum grade of eight. The final rating will be the sum of the two summative assessment elements.

Evaluation Grid	amount%	Absolute value
Practical work	30	6
Written test	70	14
Total	100.0	20.0

6. COHERENCE BETWEEN TEACHING METHODOLOGIES AND OBJECTIVES

The teaching methodologies are consistent with the objectives of the course as the exhibition of technologies and tools associated with the presentation of case studies and problem solving provides an adequate explanation of the contents. The case study analysis allow you to show the importance of usability and accessibility the development of multimedia systems centered on the user.

7. ATTENDANCE

Mandatory attendance 2/3 (with the exception of students covered by specific legislation).

8. CONTACTS AND OFFICE HOURS

Office 32, caetano@ipg.pt

Monday 14h00 – 17h30

Tuesday 09h00 - 12h00

DATE31 de outubro de 2023