POLI ESCOLA SUPERIOR EDUCAÇÃO COMUNICAÇÃO DESPORTO TÉCNICO GUARDA	SUBJECT DESCRIPTION	MODELO PED.012.03

Course	Multimedia Communication					
Subject	Development for Mobile Devices					
Academic year	2023/2024	Curricular year	3rd	Study period	1st semester	
Type of subject	Compulsory	Student workload (H)	Total: 135	Contact: 67.5	ECTS	5
Professor(s)	Prof. Doutor Gonçalo Leitão					

☒ Area/Group Coordinator ☐ Head of Department	Prof. Doutor José Carlos Fonseca

PLANNED SUBJECT DESCRIPTION

1. **LEARNING OBJECTIVES**

    Plan, structure and develop applications for mobile devices, applying design concepts and methods; Students will develop practical working prototypes optimized for operating systems and understand the differences between the various platforms.

2. **PROGRAMME**

    1. The mobile applications market. Market evolution and maturation;

    2. Platforms and operating systems. The various types of mobile applications. Native Applications and Web Applications;

    3. Information design for mobile platforms. Interactions and features;

    4. Prototyping tools. Creation of functional applications using prototyping tools and Android development IDE.

3. **COHERENCE BETWEEN PROGRAMME AND OBJECTIVES**

    Presented syllabus includes all topics described in the presented objectives. The syllabus is consistent with the objectives of the course as the program was designed to correctly address the planning and development of applications for mobile devices, introducing concepts and methods of content design.

4. **MAIN BIBLIOGRAPHY**

    - Queirós, R. (2013) Android Introdução ao desenvolvimento de aplicações. Lisboa: FCA.

    - Kristin Marsicano, Brian Gardner, Bryan Sills, Chris Stewart (2022). Android Programming: The Big Nerd Ranch Guide (Big Nerd Ranch Guides) 5th Edition. ISBN-13: 978-0137645541, ISBN-10: 0137645546.

    - Banga, C. & Weinhold, J. (2014). Essential Mobile Interaction Design. EUA: Wesley Professional.

    - Mcneil, P. (2013). The Mobile Web Designer's Idea Book. EUA: HOW Books.

    - Mureta, C. (2014). App Empire: Make Money, Have a Life and Let Technology Work for you.

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- *Nudelman, G. (2013). Android Design Patterns: Interaction Solutions for Developers. EUA: Wiley Professional.*

- *Phan, H., Khanna, R. & Yusuf, S. (2017). Ionic: Hybrid Mobile App Development. EUA: Packt Publishing.*

- *https://m3.material.io [outubro 2023], site Material Design*

- *https://developer.android.com/studio [outubro 2023], site android Studio*

- *https://docs.github.com/pt [outubro 2023], site documentação github.com*

5. TEACHING METHODOLOGIES (INCLUDING EVALUATION)

Teaching Methodology:

Expository lesson;

Interactive Lesson;

Individual work;

Evaluation Rules:

- Continuous evaluation:

Practical assignments (70%) + Theoretical Test (30%)

- Final Exam Evaluation (regular season):

Practical assignments (70%) + Theoretical Test (30%) *

(* The student must complete the practical component to be admitted to the exam)

- Final Exam Evaluation (supplementary or special season):

Theoretical-Practical Test (100%)

6. COHERENCE BETWEEN TEACHING METHODOLOGIES AND OBJECTIVES

Expository lesson is consistent with the objectives due to the need to present and show the origin and purpose of concepts and theoretical results to students in the field of plane geometry and geometry in space.

The interactive lesson is consistent with the objectives as the interaction between students/professors helps the learning of concepts and their applications, namely in the knowledge and application of specific notions, relationships and operations of the two-dimensional and three-dimensional space, thus establishing a dialogue with the students and stimulating the imagination of these, in order to lead them, whenever possible, to rediscovery.

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Carrying out an individual job that consists of developing a mobile application is consistent with the objectives as it is the central objective of the course to teach how to develop mobile applications.

7. ATTENDANCE

Students must attend a mandatory 2/3 of the classes taught.

8. CONTACTS AND OFFICE HOURS

Gonçalo Leitão | gleitao@ipg.pt | Office 31 (ESTG)

Office hours: Friday, 14:00-16:00

9. OTHERS

Not applicable.

DATE

08 November 2023

SIGNATURES

Professor

(signature)

Area/Group Coordinator

(signature)