

MODELO

PED.013.03

Course	Computer Science					
Subject	SAP Introduction					
Academic year	2023-2024	Curricular year	2nd, 3rd	Study period	2nd semester	
Type of subject	Elective	Student workload (H)	Total: 112	Contact: 45	ECTS	4
Professor(s)	Joana Ramos Quadrado, Paulo Saraiva, Maria Clara Silveira (PhD)					
☑ Area/Group Coordinator☐ Head of Department		José Carlos Fonseca (PhD)				

PLANNED SUBJECT DESCRIPTION

1. LEARNING OBJECTIVES

Upon completion of this course, students should be able to:

- 1. Learn SAP concepts and terminology.
- 2. Create data elements, domains, and data dictionary tables.
- 3. Build views, table dependencies using the concept of foreign keys.
- 4. Prepare simple reports using appropriate tools, with access to the database.
- 5. Create basic output reports.

2. PROGRAMME

- 1. SAP Overview
 - a. Overview of SAP business solutions (ERP, Fiori, Cloud, ...)
 - b. SAP Terminology
 - c. Navigate the SAPGlobal view of SAP business solutions system (ERP, Fiori, Cloud, ...).
- 2. ABAP Data Dictionary
 - a. Introduction to the concept of a transport system through Transport Organizer
 - b. Frontend installation and configuration
 - c. ABAP Data Dictionary Objectives
 - d. Type definitions
 - e. Building tables and views
 - f. Domains, Data Elements, Search Aids, Blocking Objects
 - g. Performance aspects, index creation
 - h. Defining foreign keys
 - i. Dependency of objects in the ABAP data dictionary
 - j. Construction of direct maintenance screens for access through the SM30 transaction
 - k. Construction of direct maintenance clusters for access via the SM34 transaction



MODELO

PED.013.03

- I. Practical exercises.
- 3. ABAP Workbench Fundamentals
 - a. Create ABAP programs using the appropriate tools
 - b. Navigate the Workbench and familiarize yourself with help tools
 - c. ABAP editor handling
 - d. Using debugger / break points / watchpoints
 - e. ABAP Statements Overview
 - f. Introduction to the concept of internal table
 - g. Introduction to local modularization techniques (subroutines)
 - h. Database read access
 - i. List concepts, selection screens, variants
 - j. Approach to function groups and respective modules
 - k. Basic output reports
 - I. Practical exercises.

3. COHERENCE BETWEEN PROGRAMME AND OBJECTIVES

- 1. Content 1 is consistent with Objective 1.
- 2. Content 2 is consistent with Objectives 2 and 3, because they focus on the database and support development.
- 3. Content 3 is consistent with Objectives 4 and 5 because they detail the area of system software development, back-end server code development.

4. MAIN BIBLIOGRAPHY

Mandatory:

- 1. Class notes provided by teachers.
- 2. SAP, system learning materials.
- 3. GUI installation for SAP.



MODELO

PED.013.03

5. TEACHING METHODOLOGIES (INCLUDING EVALUATION)

Teaching methodologies:

- Theoretical classes
- Practical classes
- Exercises
- 4. Problem-solving.

Evaluation methodologies:

Continuous evaluation/Normal season Exam

- 1. The student is required to attend at least 1/2 of the classes to be evaluated during the continuous assessment period. Students with worker-student status are not required to attend.
- 2. Practical tests at the end of each chapter:
 - a) Demos on dates to be defined (15%)
 - b) kahoot Quizzes (5%)
 - c) 1st practical test (20%): 18-03-2024
 - d) 2nd practical test (20%): 29-04-2024
 - e) Final test (40%): 06-05-2024

Appeal season Exam/Special season Exam: Final practical test (100%).

6. COHERENCE BETWEEN TEACHING METHODOLOGIES AND OBJECTIVES

- 1. Lectures are consistent with the objectives due to the need to provide students with the theoretical contents.
- 2. Practical classes are consistent with the objectives due to the need to use SAP tools to apply the theoretical content covered throughout the classes.
- 3. Exercises are consistent with the objectives due to the need to assess knowledge.
- 4. Problem solving is consistent with the objectives as it helps consolidate the concepts, highlighting the student's expertise.

7. ATTENDANCE

The student is required to attend at least 1/2 of the classes to be evaluated in the continuous evaluation. Students with worker-student status are not required to attend.

8. CONTACTS AND OFFICE HOURS

Contacts: Maria Clara Silveira, Office 21 | e-mail: mclara@ipq.pt



MODELO

PED.013.03

Joana Ramos Quadrado, email: joana.ramos.quadrado@inetum.com; Paulo Saraiva, e-mail: Paulo.Saraiva@inetum.com.

Office hours: Tuesday from 9 am to 10 am: classroom 45 and Teams.

DATE: 19 de fevereiro de 2024

SIGNATURE