

MODELO

PED.015.03

Course	Nursing - 1st cy	Nursing - 1st cycle					
Subject	Information Systems and Data Analysis in Nursing						
Academic year	2023/2024	Curricular year	1st	Study period	2nd semester		
Type of subject	Compulsory	Student workload (H)	Total: 135	Contact: T:35 TP: 45; PL: 9	ECTS	5	
Professor(s)	Luís António Videira  Manuel do Nascimento Silva Paulino  Maria da Graça Lopes da Cunha						
☐ Area/Group Coordinator ☑ Head of Department		Manuel do Nascimento Silva Paulino					

#### PLANNED SUBJECT DESCRIPTION

#### 1. LEARNING OBJECTIVES

During this course the student should be able to:

- Acquire basic knowledge about the process of nursing as a tool/methodology of thinking and action organization in the personalized and quality nursing care.
- Identify the specific components of the nursing documentation in the electronic records in Health.
- Construct diagnostics, interventions and nursing results using the taxonomies of NANDA, NIC,
   NOC and ICNP.
- Develop skills for the registration of data related to nursing care using ICNP language.
- Demonstrate the ability to use the information technology available, effectively, and appropriately.
- Conduct ongoing research in technical and specialty books and evidence-based online nursing databases.

### 2. PROGRAMME

- 1 The Nursing process
  - 1.1. Definition and framework
  - 1.2. Initial evaluation
  - 1.3 Diagnosis
  - 1.4. Planning
  - 1.5. Implementation
  - 1.6. Final evaluation



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### 2 - Information systems

- 2.1 Hospital information systems
- 2.2 Primary health care information systems
- 2.3 Nursing information systems
- 2.4 The information and its relevance to the decision-making
- 2.5 Data protection
- 3 International Classification of Nursing Practice (ICNP)
  - 3.1 ICNP as language referential on a nursing information system
  - 3.2 Guidelines for construction of diagnostics, interventions, and results.
  - 3.3 Relevance of ICNP to the results sensitive to nursing care
- 4 The use of the computer in research in nursing and health care
  - 4.1 Scientific databases of national and international Open Access projects.
  - 4.2 Platforms of databases signed by the Institution.

### 3. COHERENCE BETWEEN PROGRAMME AND OBJECTIVES

The syllabus that integrates this curricular unit is fundamental for the knowledge and understanding of the nursing process (NP), its organization, and the articulation between the different phases. Through an integrative approach to the nursing process, information systems and CIPE, students are expected to be able to construct diagnoses, interventions and results using the taxonomies NANDA, NIC, NOC and ICNP, and understand the potential of data recording in information systems for the promotion of research and the continuity of nursing care. The student's initiation into research activities in scientific databases allows them to access updated, accurate and reliable information to carry out his academic work.

### 4. MAIN BIBLIOGRAPHY

Alfaro-Lefevre, R. (2014). Aplicação do Processo de Enfermagem (8ª Edição). Artmed Editora.

- Conselho Internacional de Enfermeiros (2016). CIPE Versão 2015. Classificação Internacional para a Prática de Enfermagem. Edição portuguesa Ordem dos Enfermeiros. Lisboa: Lusodidata.
- Doenges, M. E. e Moorhouse, M. F. (2010). Aplicação do processo de enfermagem e do diagnóstico de enfermagem: um texto interactivo para o raciocínio diagnóstico (5º Edição). Lisboa: Lusodidacta.
- Ordem dos Enfermeiros (2007). Sistema de Informação em Enfermagem: Princípios básicos da arquitetura e principais requisitos técnico-funcionais. Lisboa.
- Haux R. (2022). Health Information Systems: Past, Present, Future Revisited. *Studies in health technology and informatics*, 300, 108–134.



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Teixeira L., Cardoso I., Oliveira e Sá J. & Madeira F. (2023). Are Health Information Systems Ready for the Digital Transformation in Portugal? Challenges and Future Perspectives. *Healthcare* 11(5): 712.

Pereira, D., Nascimento, J. & Gomes, R. (2011) - Sistemas de Informação na Saúde - Perspetivas e desafios em Portugal (1ª Ed.). Edições Sílabo.

Potter, A. & Perry, A. (2006) – Fundamentos de Enfermagem: Conceitos e procedimentos (5ª ed.). Loures: Lusociência.

## 5. TEACHING METHODOLOGIES (INCLUDING EVALUATION)

The teaching methodologies are active, using audiovisual media, problem solving exercises and discussion of clinical cases, based on the NP. In PL classes, initiation activities to research in scientific databases and exercises for the application of the NP are developed.

The evaluation is continuous. The final classification is obtained by the sum of the classification of two worksheets (5 values), a written test (12 values), a database research exercise (2 values), and 80% assiduity in the theoretical classes (1 value). For the students with special attendance status or with the curricular unit behind schedule, who do not have 80% attendance in the lecture classes, the assiduity value is pondered in function of the written test.

The approval is conditioned to the compulsory realization of all the moments of evaluation. The classification obtained in the practical exercise of research, provided that equal or higher than 10 values, is valid for a period of 2 academic years, in the same weighting, for the purposes of examination or continuous evaluation.

### 6. COHERENCE BETWEEN TEACHING METHODOLOGIES AND OBJECTIVES

Lectures with a more expositive and dialogued methodology, are the first approach to contents, in which students were encouraged to ask questions and make reasoning based on their prior knowledge and in the knowledge that they had been acquiring during the semester.

Problem-solving, discussion of clinical cases based on the nursing process and the taxonomies NANDA, NIC, NOC and ICNP, emphasizing the principles of evidence-based practice, allowed the ability to develop scientific reasoning, integration of knowledge, and stimulate the critical thinking. A gradual and sustained consolidation of the knowledge according to a model of continuous learning, improved the impact perception of the curricular unit in the acquisition of systemic skills.



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### 7. ATTENDANCE

Attendance in theoretical classes is optional and in theoretical-practical and practical-laboratory classes it is mandatory. Students are prevented from carrying out continuous assessment and by final exam if they miss more than 25% (14 hours), of classes with theoretical-practical and laboratory-practical typology. The students with special statute frequency are applied the Regulation nº 134/2011 of the IPG.

### 8. CONTACTS AND OFFICE HOURS

NAME	CONTACTS	OFFICE HOURS
Luís António Videira	lavideira@ipg.pt	Posted in the office door 5
Manuel do Nascimento Silva Paulino	mpaulino@ipg.pt	Posted in the office door 3
Maria da Graça Lopes da Cunha	glopescunha@ipg.pt	Wednesday, 7pm to 8pm

DATE

4 de março de 2024

### **SIGNATURES**

Hamel so Nowwents Al Pauls
Professor
Luis Antomo Videira (signature)
Professor
(signature)

**Head of Department**