

SUBJECT DESCRIPTION

MODELO

PED.015.03



Course	Pharmacy	Pharmacy							
Subject	Pharmacothe	Pharmacotherapy I							
Academic year	2023/2024	Curricular year	3rd	Study period	1st semester				
Type of subject	Compulsory	Student workload (H)	Total: 162	Contact: 75	ECTS	6			
Professors	Ana Raquel Au	Ana Raquel Augusto Lima and Sandra Cristina do Espirito Santo Ventura							
☑ Area/Group Coordinator☐ Head of Department		Sandra Cristina do Espirito Santo Ventura							

PLANNED SUBJECT DESCRIPTION

1. LEARNING OBJECTIVES

Students are expected to achieve the following goals:

- O1 Understand the fundamental principles of pharmacotherapy and rational use of medicines;
- O2 Know and interpret the rules of prescribing and dispensing medicines;
- O3 Inform and advise on the use of medication;
- O4 Recognize special populations and the main risks associated with the use of some drugs;
- O5 Integrate the knowledge of the effects of the medicines with the pathophysiology of the disease;
- O6 Apply pharmacological knowledge to different clinical situations;
- O7 Analyse clinical cases and discuss the advantages and disadvantages of different clinical options
- O8 Analyse and evaluate the benefit/risk ratio of different therapeutic approaches;
- 09 Understand the therapeutic guidelines for the different pathologies addressed;
- O10 Recognize the importance of the evolution of knowledge and the need to search current and scientific information.

2. PROGRAMME

- 1) General Principles of Pharmacotherapy.
- 2) Pharmacotherapy of special populations: geriatric, paediatrics, pregnancy and lactation.
- 3) Medical prescription and prescription medication legislation.
- 4) Pharmacovigilance. Notification of Adverse Reactions to medicines.
- 5) Pharmacotherapeutic groups and ATC classification.
- 6) Pharmacotherapy of mental processes.
- 7) Pharmacotherapy of movement disorders and neurodegenerative disorders.
- 8) Pharmacotherapy of inflammation, pain and fever
- 9) Pharmacotherapy of diseases of the osteoarticular system.
- 10) Pharmacotherapy of respiratory disorders.
- 11) Pharmacotherapy of allergic conditions.

Practical and Laboratory Classes

Interpretation and application of pharmacotherapeutic protocols in simulated clinical cases, related to the different clinical situations addressed in theoretical classes.

3. COHERENCE BETWEEN PROGRAMME AND OBJECTIVES

For students to be able to correctly advise, select and dispense medicines for human use and for their safe, effective and rational use (O1-O4, O8) it is fundamental that they know the principles of



SUBJECT DESCRIPTION

MODELO

PED.015.03

40 July

pharmacotherapy, the pharmacotherapeutic groups, the medicines marketed in Portugal, and be able to identify special populations of the population with risk of variability of response to medicines (points 1) to 5)). The study of the pharmacotherapy of clinical situations included in the program of the CU (points 6) to 11)), allowed them to integrate the knowledge about the medicines in the physiopathological context of the diseases and apply the knowledge to the different clinical situations evaluating the benefit/risk of the different therapeutic options (O6-O9). The approach of all the programmatic contents in the light of the most recent advances in the development of new drugs allowed the development of scientific culture competences (O10).

4. MAIN BIBLIOGRAPHY

Alldregge B., Corelli R., Ernst M., Guglielmo J., Jacobson P., Kradjan W., Williams B. Koda-Kimble and Young's. Applied Therapeutics: The Clinical Use of Drugs, Tenth Edition. Lippincott Williams & Wilkins. Wells B.G; DiPiro J. T., Schwinghammer T. L., Hamilton Ci.W., Pharmacotherapy Handbook, Sixth Edition.

Normas relativas à dispensa e prescrição de medicamentos e produtos de saúde.

Prontuário Terapêutico (http://app10.infarmed.pt/prontuario/index.php).

INFOMED (http://app7.infarmed.pt/infomed/).

Normas de Orientação Clínica da Direção Geral de Saúde (https://nocs.pt/).

5. TEACHING METHODOLOGIES (INCLUDING EVALUATION)

The teaching methodologies are adapted to the different types of teaching foreseen for the curricular unit, namely: (i) theoretical teaching, with masterly presentation of the contents and their systematization in an integrated way, (ii) theoretical-practical teaching, with the resolution of exercises with clinical cases and interpretation of treatment algorithms and therapeutic guidelines as well as analysis of technical and scientific documents, and, (iii) practical teaching, with the resolution and demonstration of practical cases. The assessment consists of theoretical and theoretical-practical evaluation with two written tests (70% weighting in the final mark). The practical assessment consists of continuous evaluation of the work developed in the different protocols of the practical classes and in the demonstration and simulation of clinical cases (weighting 30% in the final mark).

6. COHERENCE BETWEEN TEACHING METHODOLOGIES AND OBJECTIVES

The curricular unit is structured in theoretical classes (30h), theoretical-practical (30h) and practical and laboratory classes (15h). The theoretical classes consist of the masterly exposition of the curricular unit contents, systematizing the most relevant and current aspects, using audiovisual tools. These classes allow the achievement of objectives related to cognitive ability and knowledge (O1-O5). In the theoretical-practical classes, interactive discussion with the students is emphasized, based on technical documents and on the analysis of scientific papers, which allows the achievement of objectives related to the capacity of research, analysis and synthesis of information and argumentative capacity (O5-O9).

In practical classes, for integration and application of content, practical cases and protocols of clinical pharmacotherapy using prescription and non-prescription drugs are analyzed, where students have the opportunity to solve and demonstrate practical competences. These classes allow to achieve the objectives related to behavior, namely of the pharmacy technician in concrete situations (O7-O9). As active learning activities, questions are asked to integrate the contents presented, creating a space for debate and resolution of doubts. The recommended bibliography is complemented by suggestions for reading scientific articles adapted to each theme and programmatic content. This



SUBJECT DESCRIPTION

MODELO

PED.015.03

approach allows the development of a scientific culture, developing current and scientific information research skills (O10).

7. ATTENDANCE

The theoretical-practical (TP) and laboratory practices (PL) classes were mandatory, with the absence limit being 25% of the number of hours assigned to each class. Students with special status (student workers, association directors and others included in the regulation) were also subject to the same type of mandatory presence in classes.

8. CONTACTS AND OFFICE HOURS

Ana Raquel Augusto Lima; anaraquellima@ipg.pt; Office 5

Office hours: Tuesday: 08:30am-09:30am; 12:30pm-13:30pm

Thursday: 12:30pm-13:30pm; 16:00pm-17:00pm

Sandra Cristina Ventura; scventura@ipg.pt; Office 9

Office hours: Tuesday: 9-11am

Thursday: 9.30-11.30 am

DATE

12 de outubro de 2023

SIGNATURES

Professor

Assinado por: **Ana Raquel Augusto Lima** Num. de Identificação: 12843962 Data: 2023.10.13 21:22:11+01'00'

(Ana Raquel Augusto Lima)

CHAVE MÓVEI

Area/Group Coordinator

(Sandra Cristina do Espirito Santo Ventura)