

26716 - Diagnostic and Therapeutic Procedures: Pharmacology and Dietetic I

Syllabus Information

Academic year: 2023/24

Subject: 26716 - Diagnostic and Therapeutic Procedures: Pharmacology and Dietetic I

Faculty / School: 104 - Facultad de Medicina

Degree: 304 - Degree in Medicine

ECTS: 6.0

Year: 3

Semester: First semester

Subject type: Compulsory

Module:

1. General information

The general objective of this subject is that the student, from the knowledge of its content, understands the scientific bases that explain the effects of drugs and their behaviour in humans. The subject will go in depth into the transit of drugs in the organism, their pharmacological action and therapeutic usefulness in different diseases from the point of view of their diagnosis, prevention and treatment.

This approach is aligned with the following Sustainable Development Goals (SDGs) of the United Nations 2030 Agenda (<https://www.un.org/sustainabledevelopment/es/>), so that the acquisition of the learning results of the subject will contribute to the achievement of Goals 3, 4 and 12.

2. Learning results

1. Is able to infer, with the acquired pharmacokinetic knowledge, a dosage regimen.
2. Is able to analyse the types of interaction of drugs with their target molecules and the pharmacological actions that derive from them.
3. Is able to identify the main adverse reactions of drugs, as well as drug interactions.
4. Is able to identify the pharmacological groups useful in the diagnosis, prevention and treatment of the most common pathologies.

The achievement of these results will allow the student to know the main characteristics of the different pharmacological groups, so that they can rationally select the most appropriate drugs for each pathology and characteristics of each patient. They will also be able to search for the appropriate sources of information on drugs and to update their knowledge, given the constant evolution of this discipline.

3. Syllabus

THEMATIC BLOCK

1. General Principles
2. Vegetative and Peripheral Nervous System Pharmacology
3. Pharmacology of mediators, inflammation and pain
4. Pharmacology of immunity and neoplasms
5. Blood pharmacology
6. Central Nervous System Pharmacology
7. Pharmacology of Antimicrobial, Antiviral, Antifungal and Antiparasitic Agents

PRACTICAL PROGRAM

Module 1:

- . Workshops on routes of administration of drugs and pharmaceutical presentations I and II
- . Pharmacokinetics Problems
- . Dose-Response Curves

Module 2:

- . Problem-based learning and mini-cases
- . Advanced simulation (drugs in emergency situations)
- . Seminars.

4. Academic activities

Master class: 32 hours

Expository, explanatory and participative sessions on the contents of the subject

Problem solving and case studies: 10 hours

Problem-based learning exercises and mini-cases

Seminars

Laboratory practices: 12 hours

Workshops: routes of administration of drugs and pharmaceutical presentations

Simulation room: drugs in the emergency room

Computerized practices: 4 hours

Evaluation of Dose/Response curves and drug antagonism

Teaching and other activities: 2 hours

Personal study: 87 hours

Assessment tests: 3 hours

The student will be informed of the possible risks during the internship and will sign a commitment to comply with the safety regulations <http://uprl.unizar.es/estudiantes.html>

5. Assessment system

Continuous Evaluation of Practices

In **each module** there will be a multiple-choice test and/or rubric in the appropriate content and will represent **10%** of the final grade. If they are not passed or performed, they will have to take the practices evaluation included in the global test.

Multiple-choice tests: 10 questions, with 4 answers, only one valid and no negative points are considered. The grade of 5, required to pass the test, will be obtained with 70% of correct answers

Attendance to practices is mandatory.

Ordinary Global Test:

Theoretical contents: 40 multiple choice questions, with 4 answers, only one will be valid. No negative points are considered. The grade from 0 to 10, considering the grade of 5 required to pass the test, will be obtained with 70% of correct answers. It represents **80%** of the final grade.

Practical contents: multiple-choice exam of each corresponding module and/or evaluation with rubric with the characteristics and weighting mentioned above: **20%** of the final grade

- Final qualification: it is essential to pass the theoretical and practical exams

- Practices grade: saved until the extraordinary exam

Extraordinary Global Test:

The evaluation of the contents of theory and practical classes will be carried out with the criteria and weighting described in the ordinary global test