

Academic Year/course: 2022/23

## 25440 - Drug therapy and diet therapy

### Syllabus Information

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**Academic Year:** 2022/23

**Subject:** 25440 - Drug therapy and diet therapy

**Faculty / School:** 127 - Facultad de Ciencias de la Salud

275 - Escuela Universitaria de Enfermería de Huesca

375 - Escuela Universitaria de Enfermería de Teruel

**Degree:** 559 - Degree in Nursing

560 - Degree in Nursing

561 - Degree in Nursing

**ECTS:** 6.0

**Year:** 3

**Semester:** Annual

**Subject Type:** Compulsory

**Module:**

## 1. General information

### 1.1. Aims of the course

This subject is included in the Basic Sciences and must be the basis for the safe use of drugs and other therapies, including diet therapy.

Its general objectives are:

1. To know the behaviour of drugs in the body from Pharmacokinetics and Pharmacodynamics.
2. To know the drug forms, routes and administration guidelines.
3. To correctly interpret medication prescriptions.
4. To identify the patient and inform him about the treatment and techniques to be used.
5. To carry out adequate monitoring of therapeutic effects, adverse and toxic effects, and pharmacological interactions.
6. To educate the patient and family on the proper use of medications.
7. To properly record incidents related to medication administration.
8. To describe the characteristics of nutritional needs in different pathological situations.
9. To be able to promote and recover health through food, adapting to the needs and demands of different groups or communities.
10. To take control of feeding as basic patient care.
11. To properly use the different External Nutritional Supports.

These approaches and objectives are aligned with the following Sustainable Development Goals (SDGs) of the United Nations 2030 Agenda (<https://www.un.org/sustainabledevelopment/es/>), in such a way that the acquisition of the results of Subject learning provides training and competence to contribute to some extent to its achievement.

Specifically, this subject works deeply on objective 3: Health and well-being. However, throughout the syllabus of the subject, emphasis is also placed on other SDGs, especially those related to differences in diagnosis and therapeutic prescription according to sex (Objective 5: Gender inequality), differences in accessibility to pharmacotherapy and healthy eating according to socioeconomic levels (Goal 10: Reduction of inequalities), as well as the impact of the production, excretion and disposal of drugs, both from an economic point of view (Goal 12: Responsible production and consumption) and environmental (Goal 14: Life under water and Goal 15: Life in terrestrial ecosystems). Objective 4: Quality education and Objective 17: Alliances for the objectives related to the test of transversal competencies.

### 1.2. Context and importance of this course in the degree

Nursing graduates are the health professionals who are most often in charge of administering the pharmacological therapy prescribed to hospitalized patients, so it is considered important for these professionals to be able to carry out these actions adequately and autonomously. Likewise, these professionals are the ones who accumulate the most hours together with hospitalized people. Therefore, they must be able to assess the changes in the health of these people and be able to discern whether these changes are due to the patients' pathology or are derived from the treatments administered, to be able to take the action decisions appropriate to each situation.

In the primary health care environment, nursing professionals are in charge of monitoring patients with chronic pathologies, sometimes with multiple pathologies and frequent polypharmacy to address these situations. In this context, recognition of changes in the health and individual needs of patients is important.

Likewise, both in primary care and in specialized care, the nutritional needs of people can be altered or compromised. Thus, professionals who graduated in Nursing, through knowledge of these needs, can carry out an early approach to these situations, adapting the diet to the different pathological situations that generate nutritional needs, also taking into account the different social and cultural contexts of the people.

### 1.3. Recommendations to take this course

It is advisable to have completed basic training in Human Physiology as well as in the Physiological Bases of Nutrition and Drugs.

As a general rule, the use of mobile phones will be forbidden if it is not for educational purposes.

The approach, methodology and evaluation of this guide are prepared to be the same in any teaching scenario. They will be adjusted to the socio-sanitary conditions of each moment, as well as to the indications given by the competent authorities.

## 2. Learning goals

### 2.1. Competences

1. Base nursing interventions on scientific evidence and available means.
2. Establish evaluation mechanisms, considering scientific-technical and quality aspects.
3. Apply critical reasoning.
4. Capacity for analysis and synthesis.
5. Proper use of information technology and new technologies.
6. Capacity for criticism and self-criticism.
7. Know the different groups of drugs, the principles of their authorization, use and indication, and their mechanisms of action.
8. Know the use of medications, and assess the expected benefits and associated risks and/or effects derived from their administration and consumption.
9. Know and assess the nutritional needs of healthy people and people with health problems throughout the life cycle, to promote and reinforce patterns of healthy eating behaviour.
10. Identify the most prevalent nutritional problems and select the appropriate dietary recommendations.
11. Analyze the therapeutic needs of people with health problems throughout the life cycle, with the rest of the care team members, to plan their integration into the most appropriate care plan for each person.
12. Learn about palliative care and pain control to provide care that alleviates the situation of advanced and terminal patients.

### 2.2. Learning goals

1. Being capable of promoting, supporting and encouraging health through food, adapting to the needs and demands of different groups or communities.
2. Being capable of individualising the individual's diet, taking into account the social, cultural, psychological, spiritual and environmental factors that may influence its monitoring.
3. Being capable of taking control of feeding as basic patient care.
4. Being capable of adequately monitoring therapeutic effects, adverse and toxic effects, and drug interactions.
5. Being capable of educating the patient and family on the proper use of medications.
6. Being capable of adequately recording incidents related to medication administration.

### 2.3. Importance of learning goals

The learning outcomes of this subject are considered to be of interest to Nursing Graduates in all areas of activity in this profession. In the healthcare field, it is considered especially relevant that the professional is capable of detecting adverse drug reactions to establish the appropriate guidelines for action. Likewise, in the different care environments, the professional must try to maintain and promote basic care, among which is the adequate feeding of the patient for each pathology.

In the teaching field, the professional must be able to educate patients and family members on the correct use of different medications and their derived effects, or on the need to make dietary modifications, individually adapted to each pathology. In addition, the possibility of having students of the degree in the different services implies that the professional must act as a teacher of the same, including all clinical activities, including the administration of drugs and subsequent surveillance.

In the research field, the professional must be able to ask research questions arising from their own clinical experience and be able to answer them through the best scientific evidence, and in the case of not finding it, be able to propose investigations of a and multidisciplinary interest, without losing the framework of care in which the nursing discipline is

framed.

Lastly, in the management field, the nursing professional must maintain a critical sense of the economic, social and cultural context, both of the institution in which they carry out their management work, as well as of the care staff and users, being capable of performing global analyzes that include all perspectives, to be able to make decisions with the greatest possible reliability at all times.

### 3. Assessment (1st and 2nd call)

#### 3.1. Assessment tasks (description of tasks, marking system and assessment criteria)

The student must demonstrate that they have achieved the intended learning outcomes through the following assessment activities:

**1- The evaluation of theoretical contents** of the subject will be assessed through written tests, each one of them divided into two parts, one part of multiple choice questions and another part of development question, being necessary to pass both parts to pass each test.

The first part consists of 50 multiple choice questions, with 4 answer options of which only 1 is valid. Each correct answer adds 1 point and each wrong answer subtracts 1/3, adjusting the subtraction to the whole number (that is, 1 and 2 wrong answers do not subtract; 3, 4 or 5 wrong answers subtract 1; 6, 7 or 8 wrong answers 2 remain, 9, 10 or 11 wrong answers remain 3, and so on). This first part of the exam is passed with 30 points. If not passed, the second part will not be corrected, in this case, the final grade of the test will correspond to the grade obtained in this first part.

The second part consists of developing a topic to choose from among the three proposals. In this section, knowledge, synthesis capacity and adequacy of written expression to professional language will be assessed, assessing both the appropriate use of technical terminology and spelling and grammatical correction. In terms of qualification, and always in case of approval, this second part has the exclusive purpose of qualifying the score obtained in the first part of the test. Therefore, this part does not generate a numerical grade by itself, but will be graded as a ?pass? or ?fail?. Since it is mandatory to pass both parts to pass each test, a grade of "fail" in this section inevitably leads to not passing the test, regardless of the grade obtained in the first part of it. For the same reason, in no case can the qualification of "apt" be used in this section to pass a fail of the first part.

The first part will be held in the January/February call, with the thematic content of the first semester. If this first part is passed in this call, your grade will be kept throughout the academic year (both official calls). If it is not passed, it must be re-examined together with the second part (corresponding to the theoretical content of the second semester), in the first and second official calls. If only the first part is passed in the first call, only the second part must be passed in the second call. In other words, the qualification of a first approved partial is maintained during the corresponding academic year. Only the grades of a first passing part (final grade of 5) onwards will be maintained. The grades that failed in the first part (less than 5) will not be maintained between different calls in any case. Nor will the qualifications of the second approved partial be maintained between calls in the case of a failed first partial. To pass the subject, the average of both partials must be equal to or greater than 5, averaging between them only from a grade of 4.5. This section of the evaluation will suppose a **maximum of 6 points** on the final summative qualification of the subject **out of 10**.

**2- For the evaluation of specific assessment skills and nutritional recommendations**, a weekly feeding plan will be prepared for a proposed case, before the official calls, with the following assessment: correct calculation of the caloric value (1), adequate use of the table of units and correct adjustment of the FCA (1), elaboration of a weekly feeding plan (7), adequate distribution of fats (1). This exercise will be carried out in groups of between 4 and 6 people (preferably with the same composition as the group composed for the elaboration of the essay that is determined below). There will be a single delivery of the exercise through the Moodle platform subject. This exercise is passed by obtaining a minimum of 5 points in your grade. The note of this exercise will suppose a **maximum of 2.5 points** of the total summative qualification of the subject **out of 10**.

**3- For the evaluation of transversal and specific competencies related to the integration of the Sustainable Development Goals in the nursing discipline**, an essay will be prepared on a topic related to the contents of the participating subjects (in principle Community Nursing II, Maternal- Children, Pharmacotherapy and Diet Therapy, without prejudice to other incorporations of the same course). This work will be done in groups of 4 to 6 people. An approximate length between 1,500 and 3,000 words is proposed (not including the section on references, tables, graphs or annexes that may be included in the count). To carry out the work, the students will have available on the Moodle platform a guide with the main aspects of its realization, as well as the contacts of the teachers responsible for it in each subject. Each group will carry out a single piece of work, the final grade of which will form part of the summative evaluation in each of the subjects that comprise it. All assignments must have the approval of the teaching staff responsible for the subjects before completion. The theme of the work will change each year of the theoretical contents of the different subjects that make up the work. The work proposals must be sent during the first semester.

Each group will submit a single final report document for evaluation, which must contain at least the following sections:

- **Introduction and justification:** this section must adequately justify the importance and relevance of the work to be carried out. It should end with the clear establishment of the main objective of the work. This section will be valued with a maximum of 2 points out of 10.
- **Methodology:** in this section, the bibliographic search carried out must be described, indicating the databases used, keywords (with Boolean operators or truncations if used) and applied limitations (both temporary and of any other nature). Likewise, the document selection criteria must be included, both for inclusion and exclusion concerning the documentation found in the databases, as well as the justification for the inclusion of other documentary sources (books, videos, press releases, web pages or other online content?). This section will be valued with a maximum of 2 points out of 10.
- **Development:** This section will describe the main findings and their implications for professional nursing activity. In this section, a subsection must be included for each of the subjects involved in the preparation of the work,

reflecting in said subsections, the most relevant aspects of the content of each of them. This section will be valued with a maximum of 4 points out of 10.

- **Conclusions and recommendations:** This section should summarize, in a synthetic way, the conclusions drawn from carrying out the work, as well as recommendations for clinical nursing practice and the development of future research in the field approached from a nursing point of view. This section will be valued with a maximum of 1 point out of 10.
- **References:** this section will indicate all the bibliographic references consulted for the preparation of the work, both those recovered in the searches and those used to write its introduction and justification. All references that appear in this section must have been previously mentioned in the document. Both the text references and the list of them will be made according to the standards of the American Psychological Association (APA 7th edition). This section will be valued with a maximum of 1 point out of 10.

The delivery of the work will be done through a task enabled for this purpose on the Moodle platform. It is recommended to follow the style manual that will be found on the platform for the preparation of the work. The delivery format will be in PDF format, and must be titled as follows: surnames and name of the person making the delivery, preferably the first by alphabetizing the surnames of all the members of the group, followed by a low bar and the expression ?essayODS? (for example UrcolaPardoFernando\_essayODS.pdf).

This essay is approved with 5 points and will mean up to a **maximum of 1.5 points** of the final grade out of **10**.

4- Participation in the Seminars will be evaluated, if any, and may involve up to a 5% increase in the final grade of each student.

It is a mandatory condition to pass all the evaluation sections to pass the subject. In no case may the subject be passed with a grade lower than 5 in any of its parts (both in the theoretical evaluation and in the practice). In the evaluation and activities, the characteristics of the centre where the degree is taught will be taken into account for Huesca and Teruel, always ensuring the acquisition of skills.

*Transparency in the evaluation process:*

By the Agreement of December 22, 2010, of the Governing Council of the University, which approves the Regulation of Learning Assessment Standards, and about the transparency of the assessment processes, the following are the success rates of the subject in the three immediately preceding academic years that are accessible at the date of writing and publication of this teaching guide in the three centres where the subject is taught:

Year	EUE Huesca	EUE Teruel	FCS Zaragoza
2020-2021	96%	90,6%	86,9%
2019-2020	97.83%	100%	99%
2018-2019	93.48%	100%	90.41%

## 4. Methodology, learning tasks, syllabus and resources

### 4.1. Methodological overview

Most of the contents of this subject are essential in the work of professionals who Graduated in Nursing. For this reason, most of the proposed activities focus on understanding the fundamentals of dietary and pharmacological therapy, and on the knowledge of the different drugs and their applicability in a clinical context, therefore, most of the sessions are master classes, in which the participation of the students will be encouraged. The knowledge acquired will be complemented with the practical application in the subjects of Clinical Nursing, and later in the clinical stays that the students will carry out throughout the degree. On the other hand, the acquisition of this knowledge by the students is also aimed at the elaboration of feeding plans according to the specific requirements of the patients and their pathological situations, whether acute or chronic. For this reason, the subject contemplates the realization of practical seminars in which the students can understand and work on the realization of food plans. Seminars will also be held to learn about and manage apps related to both drugs and food.

### 4.2. Learning tasks

The following activities have been planned to help the student achieve the intended results:

- **Masterclasses (45 h):** Explanations of the content of each topic will be carried out in a full group, guiding the theoretical contents of the subject for the subsequent study and individual work of the students. These sessions will have the necessary audiovisual support, encouraging student participation, especially after passing through the subject corresponding to Clinical Stays and Clinical Nursing.
- **Problems and resolution of cases/Seminars (15 h):** the practical sessions will be carried out in divided groups (half of each group). In these sessions, they will work practically on assumptions related to the content of the theoretical sessions. Thus, in this time slot, the students will address, among other activities, the development of personalized feeding plans according to specific pathological situations, the different existing digital resources on

drugs and nutrition, the professional implications in nursing research related to drugs, the impact of changes in habits on biological processes that can interfere with pharmacological molecular targets or the handling of drugs and other common health products in professional nursing practice.

- Individual student work.

### 4.3. Syllabus

**Main Theme I:** Diet therapy of the different pathologies. External Nutritional Support.

- Diet therapy in metabolic endocrine pathologies
- Diet therapy in renal pathologies
- Diet therapy in digestive system pathologies
- Diet therapy in cardiovascular pathologies
- Diet therapy in respiratory system pathologies
- Diet therapy in Eating Disorders
- Supplements and External Nutritional Support
- Seminar: Nutrition applications available
- Seminar: Diets for exploratory purposes

**Main Theme II:** Pharmacotherapy of the different organs and systems.

- Pharmacology of the digestive system
- Pharmacology of infectious diseases
- Pharmacology of the central nervous system
- Pharmacology of the endocrine system
- Antineoplastic pharmacology
- Cardiovascular pharmacology
- Pharmacology of the hematopoietic system
- Pharmacology of the respiratory system
- Seminar: Pharmacology applications available
- Seminar: Rational use of medication and therapeutic compliance

### 4.4. Course planning and calendar

The dates of the main activities will be informed at the beginning of the course and will be also posted on the digital teaching platform.

### 4.5. Bibliography and recommended resources

<http://psfunizar10.unizar.es/br13/egAsignaturas.php?codigo=25440>