# Teaching guide

## IDENTIFICATION DETAILS

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|---|---|
| Degree: | Pharmacy |
| Scope | Pharmacy |
| Faculty/School: | Experimental Sciences |
| Course: | TUTORED WORK PLACEMENTS |
| Type: | Curricular Internships |
| ECTS credits: | 30 |
| Year: | 5 |
| Code: | 2555 |
| Teaching period: | Tenth semester |
| Subject: | Tutored Practices |
| Module: | Tutored Practices and Final Degree Project |
| Teaching type: | Classroom-based |
| Language: | Spanish |
| Total number of student study hours: | 750 |

## SUBJECT DESCRIPTION

In this course, students are prepared in all those facets related to the practice of pharmaceutical care, from a community pharmacy or from a hospital pharmacy service. The student, under the supervision of a professional-tutor from the receiving center, will be integrated into the reality of clinical-care pharmaceutical activity.

It is intended that future pharmacists be prepared to carry out the specific activities of their profession related to the development, control, dispensing and counseling of medicines in order to achieve results in the prevention of disease and in the restoration of health, which improve the quality of life of patients.
As this is a practical-care training period, the student will apply the scientific and technical knowledge acquired during their academic training, while developing the necessary skills to transmit to the patient the information on the medications they require for their safe and effective use, promoting the rational use of medications.

This subject, in addition to its teaching content, becomes a 'professional' experience complementary to the comprehensive training of the future pharmacist, completing the student's preparation for the different functions that are envisaged as objectives of qualification, pharmaceutical care, public health, health education, rational use of medicines, pharmacovigilance, etc.

## GOAL

Complete the academic training and personal development of the student through integration into the professional activity carried out in community pharmacy and/or hospital pharmacy, which will allow them to acquire the knowledge, skills and attitudes required in these professional fields, as well as to get in touch with the real problems of professional practice.

## PRIOR KNOWLEDGE

Prior knowledge of Pharmacognosy, Pharmacology and Pharmacotherapy, Clinical Pharmacy, Pharmaceutical Technology, Pharmaceutical Care, Legislation and Deontology is recommended. Basic computer skills to use word processors, spreadsheets, presentations and access Internet databases. Sufficient knowledge of English to read articles and books in this language.
Requirements to take the course: you must have passed the first three courses of the degree. It is not possible in any subject in the first enrollment that is located in the same semester as the completion of the Tutored Practices. It will be allowed to be enrolled at most in the 2nd enrollment of two subjects in the 4th or 5th year of the Degree that coincide in the semester of carrying out Tutored Practices.

## COURSE SYLLABUS

BLOCK I: LEGISLATION, ORGANIZATION AND MANAGEMENT

I.1. Legislation related to community pharmacy/hospital pharmacy. Code of Deontology.
I.2 Functions of the community pharmacy and/or hospital pharmacy service. Human and material resources of community and hospital pharmacies.
I.3 Quality Management. What is meant by quality? Quality manual in the pharmacy office and in the hospital pharmacy service.

BLOCK II: DRUG-ORIENTED ACTIVITIES OF COMMUNITY PHARMACIES AND HOSPITAL PHARMACY SERVICES: DEFINITIONS, LOGISTICAL ACTIVITIES AND DRUG DEVELOPMENT.

II. 1 Definitions: drugs, types of drugs and medical devices.
II. 2. Medicine-oriented logistics activities in community pharmacies.

II. 2. 1 Purchase of medicines, order management and stocks.
II. 2. 2 Storage and preservation of medicines.
II. 2. 3 Administrative activities of professional and business management: management of medicines under special medical control and labor and fiscal obligations of the company.

II. 3. Drug-oriented logistics activities in hospital pharmacies.

II. 3. 1 Purchase of medicines, order management and stocks. I
I. 3. 2 Storage and preservation of medicines.
II. 3. 3 Administrative management activities.

II. 4. Development of medicines.

II. 4. 1 Masterful formulas and official preparations.
II. 4. 2 Parenteral nutrition.
II. 4. 3 Cytostatics.

BLOCK III: PATIENT-ORIENTED ACTIVITIES IN COMMUNITY PHARMACY AND HOSPITAL PHARMACY SERVICE: PHARMACEUTICAL DISPENSING AND CARE.

III. 1 Drug dispensing in a community pharmacy.

III.1.1 Active dispensing.
III.1.2 Customized dosing systems.

III. 2 Drug dispensing in a hospital pharmacy.

III.2.1 Unit-dose drug dispensing systems.
III.2.2 Plant kits
III.2.3 Dispensing automation.
III.2.4 Outpatient dispensing in hospital.

III. 3. Pharmaceutical care from the community pharmacy.

III. 3. 1 Personalized pharmacotherapeutic monitoring.
III. 3. 2 Preventive screening programs: against obesity, hypertension, diabetes...
III. 3. 3 Health promotion and health education.

III. 4. Pharmaceutical care from the hospital pharmacy.

III. 4. 1 Medication Reconciliation Program.
III. 4. 2 Pharmaceutical care for patients with HIV.

III. 4. 3 Pharmaceutical care in patients with viral liver diseases.
III. 4. 4 Pharmaceutical care for cancer patients.

BLOCK IV: OTHER ACTIVITIES RELATED TO THE PHARMACEUTICAL PROFESSION.

IV. 1. Activities related to health and quality of life.

IV. 1. 1 Dietetics and nutrition.
IV. 1. 2 Dermopharmacy.
IV. 1. 3 Medicinal plants.
IV. 1. 4 Homeopathy.
IV.1. 5 Medical devices.
IV. 1. 6 Clinical analysis.

IV. 2. Drug safety: pharmacovigilance, adverse reactions and medication errors.
IV. 3. Marketing in the pharmacy office.
IV. 4. Training and professional development activities: congresses, clinical sessions.

**EDUCATION ACTIVITIES**

1.- STAYS (AFP2): The Internships will last approximately 820 hours to be carried out in Community Pharmacies and Hospital Pharmacies (3 months in each one or 6 months in one of them, depending on the chosen modality), on a continuous basis in accordance with the provisions of Directive of the Council of European Communities No. 58/342 of September 16, 1985 in its article 2.3. The student will have a pharmacist tutor (external tutor) in each receiving center and an academic tutor at the university. Only changes to the vacancy assigned due to force majeure will be accepted and the request will always be made through the Responsible for Tutored Practices, who will or will not approve the change.
2- SEMINARS AND/OR EXHIBITION OF WORKS (AFP4): Throughout the internship, there will be several seminars or practical reinforcement workshops for students, with content focused on community and hospital care and medication management.
3- TUTORING (AFP5) The team of teachers involved in the subject will monitor the students through a system of individual and/or group tutoring that will allow them to accompany the students throughout their practical stay and keep track of it.
4.- PRACTICE REPORT (AFNP3): Students must submit a practice report that reflects, among other content, the activity they have carried out in each of the schools as well as a reflective assessment of their experience.
5.- EXAM (AFP6): They will take an exam to demonstrate that they have assimilated the knowledge acquired based on the theoretical contents provided through the virtual classroom, and an ECOE (Structured Objective

Clinical Evaluation) type exam where students' clinical skills and competencies will be evaluated in a practical way through simulated clinical situations.

## DISTRIBUTION OF WORK TIME

| TEACHER-LED TRAINING ACTIVITIES | INDIVIDUAL WORK |
|---|---|
| 820 Horas | 50 Horas |

## LEARNING RESULTS

Organize and manage the operation of a pharmacy office

Manage medications.

Conservation, custody, dispensing and rational distribution of drugs and other pharmaceutical products.

Provide pharmaceutical care to patients

Perform pharmacovigilance.

Perform the billing of a Pharmacy Office, if applicable.

Know the operation and management of a hospital or primary care pharmacy service, including the personnel attached to them.

Know how to use some of the computer programs for the management of the community and hospital pharmacy office.

Develop masterful formulas and official preparations.

## SPECIFIC LEARNING RESULTS

He has discipline and responsibility at the autonomous level and has the capacity to participate in teamwork

He has an ethical sense at work and recognizes, corrects his own mistakes and respects the opinions and decisions of others.

It develops master formulas and official preparations

Organizes and manages the operation of a pharmacy office

It develops the corresponding standard working procedures (PNT) for the development of the different activities to

be carried out at the hospital level or in the Pharmacy Office. (Manufacture or development, operation of equipment, cleaning, maintenance, etc.)

It manages drug purchases

It develops protocols for the storage, custody and dispensing of medicines and other pharmaceutical products, more appropriate to each situation.

Implement a pharmaceutical patient care program

Implement a pharmacovigilance program

## LEARNING APPRAISAL SYSTEM

ORDINARY CALL:
The weighting of the grade is done as follows:
55%: Attendance and participation in internships (SE5). It is essential to obtain a 5.0 in this section to measure with the rest of the evaluation sections. According to the modality studied, it is established:

If you stay for 6 months, the grade obtained is considered:

15%. Cross-cutting Competencies Rubric. Evaluate the external tutor.
40%. Specific Competencies Rubric. Evaluate the external tutor

If you study the 3+3 modality: Each three-month period has a score of 27.5%. This note is subdivided as follows:

7.5%. Cross-cutting Competencies Rubric. Evaluate the external tutor.
20%. Specific Competencies Rubric. Evaluate the external tutor.

15%: Practice Report (SE6). Evaluate academic tutor. It is essential to obtain a 5.0 in this section to measure with the rest of the evaluation sections.
20%: Content Examination (SE1). Evaluate the academic tutor. It is essential to obtain a 4.0 in this section to measure with the rest of the evaluation sections.
10% Conducting an ECOE evaluation test (SE1). Its completion will be mandatory to pass the course.
Attendance at seminars and workshops: Attendance at workshops will be mandatory for all students studying the subject.
PASSING THE SUBJECT: A grade of 5.0 or higher must be achieved in the average obtained with the weighted sections, reaching the minimum scores in each section in order to be able to weigh.

EXTRAORDINARY CALL:

If the passing grade (5.0) is not achieved in the attendance and participation evaluation, all Tutored Practices must be repeated in the next available internship period.
If the exam does not achieve a minimum score of 4, it must be repeated and re-examined in the extraordinary call.

If the approval grade (5.0) is not reached in the report, the document must be repeated and re-submitted in the extraordinary call.

*Due to the practical nature of the subject, it is not possible to consider an alternative evaluation system. 'Plagiarism, as well as the use of illegitimate means in evaluation tests, will be sanctioned in accordance with those established in the Evaluation Regulations and the University's Coexistence Regulations."

## ETHICAL AND RESPONSIBLE USE OF ARTIFICIAL INTELLIGENCE

1.- The use of any Artificial Intelligence (AI) system or service shall be determined by the lecturer, and may only be used in the manner and under the conditions indicated by them. In all cases, its use must comply with the following principles:
a) The use of AI systems or services must be accompanied by critical reflection on the part of the student regarding their impact and/or limitations in the development of the assigned task or project.
b) The selection of AI systems or services must be justified, explaining their advantages over other tools or methods of obtaining information. The chosen model and the version of AI used must be described in as much detail as possible.
c) The student must appropriately cite the use of AI systems or services, specifying the parts of the work where they were used and describing the creative process followed. The use of citation formats and usage examples may be consulted on the Library website(https://www.ufv.es/gestion-de-la-informacion_biblioteca/).
d) The results obtained through AI systems or services must always be verified. As the author, the student is responsible for their work and for the legitimacy of the sources used.
2.- In all cases, the use of AI systems or services must always respect the principles of responsible and ethical use upheld by the university, as outlined in the Guide for the Responsible Use of Artificial Intelligence in Studies at UFV. Additionally, the lecturer may request other types of individual commitments from the student when deemed necessary.
3.- Without prejudice to the above, in cases of doubt regarding the ethical and responsible use of any AI system or service, the lecturer may require an oral presentation of any assignment or partial submission. This oral evaluation shall take precedence over any other form of assessment outlined in the Teaching Guide. In this oral defense, the student must demonstrate knowledge of the subject, justify their decisions, and explain the development of their work.

## BIBLIOGRAPHY AND OTHER RESOURCES

### Basic

Not applicable