



COURSE DATA

Data Subject

Code	43042
Name	Quality of care
Cycle	Master's degree
ECTS Credits	7.0
Academic year	2021 - 2022

Study (s)

Degree	Center	Acad. year	Period
2138 - M.D. in Research in and Rational Use of Medicines	Faculty of Pharmacy and Food Sciences	1	Annual
3103 - Biomedicine and Pharmacy	Doctoral School	0	First term

Subject-matter

Degree	Subject-matter	Character
2138 - M.D. in Research in and Rational Use of Medicines	18 - Quality of care	Optional
3103 - Biomedicine and Pharmacy	1 - Complementos Formación	Optional

Coordination

Name	Department
CLIMENTE MARTÍ, MONICA	134 - Pharmacy and Pharmaceutical Technology
MERINO SANJUAN, MATILDE	134 - Pharmacy and Pharmaceutical Technology

SUMMARY

In the healthcare system, one single patient frequently receives attention by numerous professionals from the care circuit, which includes community physicians and specialists, nurses, community and specialist pharmacists, psychologists, among others. In any of these episodes, or the practices, processes and/or structures that supports them, the **pharmaceutical quality and patient safety is not always guarantee**.

The main objective of the course is **to design integrated processes that improve the quality pharmacotherapeutic and patient safety**. Particularly, to show its application in higher risk environments, as it is the case of acute patients. And **under a triple perspective**: 1) **individual** (centered on a single patient), 2) **population cluster** (centered on groups of patients at risk) and 3) **system of use of drugs**.



PREVIOUS KNOWLEDGE

Relationship to other subjects of the same degree

There are no specified enrollment restrictions with other subjects of the curriculum.

Other requirements

General knowledge in pharmacotherapy, pharmacokinetics, physiology and physiopathology.

OUTCOMES

2138 - M.D. in Research in and Rational Use of Medicines

- Manejar adecuadamente las fuentes de información biomédica y poseer la habilidad de hacer una valoración crítica de las mismas integrando la información para aportar conocimientos a grupos asistenciales multidisciplinares
- Students should apply acquired knowledge to solve problems in unfamiliar contexts within their field of study, including multidisciplinary scenarios.
- Students should be able to integrate knowledge and address the complexity of making informed judgments based on incomplete or limited information, including reflections on the social and ethical responsibilities associated with the application of their knowledge and judgments.
- Students should communicate conclusions and underlying knowledge clearly and unambiguously to both specialized and non-specialized audiences.
- Students should demonstrate self-directed learning skills for continued academic growth.
- To acquire basic skills to develop laboratory work in biomedical research.
- Be able to make quick and effective decisions in professional or research practice.
- Be able to access the information required (databases, scientific articles, etc.) and to interpret and use it sensibly.
- Students should possess and understand foundational knowledge that enables original thinking and research in the field.
- Be able to integrate new technologies in their professional and/or research work.
- Know how to write and prepare presentations to present and defend them later.
- Ser capaces de analizar de forma crítica tanto su trabajo como el de su compañeros.
- Be able to access to information tools in other areas of knowledge and use them properly.
- To be able to assess the need to complete the scientific, historical, language, informatics, literature, ethics, social and human background in general, attending conferences, courses or doing complementary activities, self-assessing the contribution of these activities towards a comprehensive development.



- Be able to apply the research experience acquired to professional practice both in private companies and in public organisations.
- Dominar la comunicació científica. Poseer habilidades sociales y comunicativas en la práctica asistencial.
- Analizar la utilización de medicamentos para la buena práctica asistencial. Capacidad para evaluar resultados farmacoterapéuticos.
- Capacidad para desarrollar y proponer procedimientos que contribuyan al uso racional del medicamento.

LEARNING OUTCOMES

- To be able to design integrated processes that lead to improve the clinical activities, within the framework defined by the pharmaceutical quality and patient safety, in higher risk environments and at critical moments of the episodes related to pharmacotherapy.
- To be able to identify situations that can be improved, to make proposals to prevent of pharmacotherapeutic morbidity, to apply and evaluate them and to pose improvements.
- To be able to identify opportunities for improvement in the treatment of the patients.
- To be able to validate methods, scales, algorithms and predetermined questionnaires for measuring pharmacotherapeutic and clinical results in patients.

DESCRIPTION OF CONTENTS

1. Methodological basis

1. Introduction to the quality in pharmacotherapy and patient safety: methodological basis.
2. Morbidity related with medications: approach to its causes and consequences.
3. Tools for improving the quality in pharmacotherapy and patient safety: analysis cause-root (ACR) and failure mode effects analysis (FMEA).
4. Design of research studies in quality in pharmacotherapy and patient safety.

2. Improvement systems

1. Management of pharmacotherapy: evaluation and selection of drugs, therapeutic protocols, and clinical pathways.
2. Systems of pharmacoterapeutical morbidity prevention: integrated processes into the pharmaceutical chain.
3. Rational use of drugs: strategies for the improvement of the Health Service.

**3. Pharmacotherapeutic conciliation and integration between health care levels**

1. Health care transition and pharmacotherapeutic continuity on the hospitalized patient.

4. IASER method for the improvement of the quality of pharmacotherapy and safety of patients

1. Detection and prioritization of pharmacotherapy needs of the patients.
2. Identification of patients with opportunities for improvement of pharmacotherapy.
3. Pharmaceutical intervention to prevent and solve morbidity due to pharmacotherapy.
4. Pharmacotherapeutic monitoring of the patient.
5. Evaluation of the pharmacotherapeutic, clinical, pharmacoeconomical, and humanistic results.
6. Validation of quality pharmacotherapeutic programmes. Diffusion of results, indicators and incorporation of improvements.

5. Practical work of pharmacotherapeutic morbidity prevention in high risk patients groups.

1. Practical work in groups of patients selected with the aim of preventing morbidity due to pharmacotherapy

WORKLOAD

ACTIVITY	Hours	% To be attended
Theory classes	35,00	100
Seminars	20,00	100
Group work	15,00	100
Development of group work	15,00	0
Development of individual work	25,00	0
Study and independent work	25,00	0
Readings supplementary material	15,00	0
Preparing lectures	20,00	0
Resolution of case studies	5,00	0
TOTAL	175,00	

TEACHING METHODOLOGY

During the activities, both theoretical and practical, the applications of the subject contents in relation to the Sustainable Development Goals (SDG) will be indicated. This is intended to provide knowledge, skills and motivation to understand and address these SDGs, while promoting reflection and criticism.



Master classes (25 h). They are aimed at obtaining basic knowledge. The presentation of fundamental concepts and relevant contents of the course will be done combining the dogmatic and heuristic methodologies and using suitable audiovisual means. Health professionals, experts in the corresponding topic, will be invited.

Seminars on resolution of cases (25 h). Different problems are proposed to the students who should solve them and discuss the solution during classroom sessions under the supervision of the professor, entailing an active participation of the student.

Workgroup (20 h). 6-8 students, organized in a group, will explore the use of drugs, analyze and evaluate the pharmacotherapy in conflictive situations. At the end of the course each group will do an oral presentation of its resulting paper.

To complete the non-contact hours of **Theory**, the materials provided for face-to-face teaching will be adapted, incorporating explanatory notes and locutions so that the student can access them at any time. Synchronous or asynchronous videoconferences by the BBC will also be used. Use of the virtual classroom forum to answer questions. For the **practical sessions** of the theoretical content, the use of video conferences by BbC, the visualization of the "demos" carried out by the teacher through videoconference sessions and the completion of the exercises proposed through the "Task" option of the virtual classroom, in the established schedule.

The tasks derived from the **work carried out individually and in groups** must be delivered using the "Task" option in the virtual classroom.

For **Tutorials**, which will be held at the student's request, email may be used when they cannot be resolved in person.

EVALUATION

Evaluation of theoretical teaching. Will be performed through continuous assessment and represents 40% of the overall mark.

The assistance of at least 80% of the theoretical classes is required to obtain the minimum in the continuous evaluation.

If the student's attendance at lectures is less than 80%, and his or her absence is justified, the student will be assessed through a written prove on the matter imparted during the theoretical classes.

Individual and group papers. It represents 40% of the overall mark.

Oral exposition of practical work. It represents the 20% of the overall mark.



REFERENCES

Basic

- A. Lee. Adverse Drug Reactions. Pharmaceutical Press. London 2001.
- W. A. Zellmer. The conscience of a Pharmacist. Essays on vision and leadership for a profession. American Society of Health-System Pharmacists. Bethesda. MD 2002.
- Ch. Bond. Evidence-based Pharmacy. Pharmaceutical Press. London 2002.
- J. E. Fincham. Advancing Prescription Medicine Compliance. New Paradigms, New Practices. Pharmaceutical Products Press. New York 1997.
- N. V. Jiménez; I. Font y M. Climente. Problemas Farmacoterapéuticos. Guía para su prevención y resolución. Ivadis. Valencia 2003
- Anónimo. To err is human. Building a Safer Health System. Institute of Medicine. National academy Press. Washington D.C. 1999
- Cipolle R, Strand L and Morley P. El Ejercicio de la Atención Farmacéutica. McGRAW-HILL. Interamericana.Madrid 1999
- Escovitz A, Pathak D and Schneider P Improving the Quality of the Medication Use Process. Pharmaceutical Products Press New York 1998
- M.Climente y NV Jiménez Torres. Manual para Atención Farmacéutica. Ivadis 2005. 3ª edición.
- Manasse H and Thompson K. Medication Safety. American Society of Health-System Pharmacists.Bethesda.2005
- Cuéllar LM and Ginsburg DB. Preceptors Handbook for Pharmacist Tutor. American Society of Health-System Pharmacists.Bethesda.2005

Additional

- Artículos y revisiones en revistas especializadas en el tema

ADDENDUM COVID-19

This addendum will only be activated if the health situation requires so and with the prior agreement of the Governing Council

1. Contents

The contents initially collected in the teaching guide are maintained

2. Workload

Maintenance of the weight of the different activities that add up to the hours of dedication in ECTS credits marked in the original teaching guide. The schedules are not kept, the student has freedom to carry out the scheduled activities according to their own schedule



- Others: sessions scheduled on the same dates and times with shorter duration

3. Teaching methodology

Teaching will be taught in a hybrid way, 70% in person and 30% NOT in person. In case that the health emergency forces it, the dedication NOT in person would be increased. For the non-face-to-face Theory classes, the materials provided in the original guide for face-to-face teaching will be adapted, incorporating annotations and explanatory phrases so that the student can access them at any time. Synchronous or asynchronous video conferencing by BBC would also be used. Use of the virtual classroom forum to answer questions. For the practical sessions of the theoretical content, the use of videoconferences by BBC would be combined with the visualization of the "demos" made by the teacher through videoconference sessions and the completion of the exercises proposed through the option "Task" of the virtual classroom, in the established schedule. The tasks derived from the work carried out individually and in groups must be delivered through the "Task" option of the virtual classroom. If the oral presentation of the works is required not in person, it will be carried out by BBC videoconference, at the time established for the seminar sessions. For the Tutorials that will be carried out at the request of the student, email will be used and, if necessary, by videoconference.

4. Evaluation

The relative weight of each block is maintained as indicated in the Teaching Guide for the subject, adapting the activities to the use of the Virtual Classroom platform if necessary.

5. References

The recommended bibliography is kept as it is accessible.