COURSE DATA

DATA SUBJECT

Code: 43036
Name: Update on the forms and systems of medicine use and administration
Cycle: Master's Degree / Doctorate
ECTS Credits: 4
Academic year: 2026-27

STUDY (S)

Degree	Center	Acad. year	Period
2138 - Master's Degree in Research in and Rational Use of Medicines	Facultat de Farmàcia i Ciències de l'alimentació	1	

SUBJECT-MATTER

Degree	Subject-matter	Character
2138 - Master's Degree in Research in and Rational Use of Medicines	Updates in the forms and systems of medicine use and administration	ELECTIVES

COORDINATION

TALENS VISCONTI RAQUEL

USACH PEREZ IRIS

SUMMARY

This course addresses the new forms and drug delivery systems, in order to provide additional training health professionals (recycling) for scientific advances that have been made in various areas of knowledge, in addition to driving, discovery of new molecules with therapeutic activity (biotechnology), enabling the development of new forms and drug delivery systems (nanotechnology, polymer materials with specific properties, programmable infusion systems, etc) that provide clear advantages over conventional forms.

"" role="\"presentation\"">conventional forms.

PREVIOUS KNOWLEDGE

RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE

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

OTHER REQUIREMENTS

There is no registration restriction

COMPETENCES / LEARNING OUTCOMES

2138 - Master's Degree in Research in and Rational Use of Medicines

Be able to access the information required (databases, scientific articles, etc.) and to interpret and use it sensibly.

Be able to access to information tools in other areas of knowledge and use them properly.

Be able to apply the research experience acquired to professional practice both in private companies and in public organisations.

Select and manage available resources (instrumental and human) to optimise research outcomes.

Students should apply acquired knowledge to solve problems in unfamiliar contexts within their field of study, including multidisciplinary scenarios.

Students should possess and understand foundational knowledge that enables original thinking and research in the field.

DESCRIPTION OF CONTENTS

1. New forms of parenteral administration, systems and implantable programmable infusion pumps.

2. New forms of ocular administration.

3. New forms of transpulmonary administration

4. New modified release forms for oral administration.

5. Preparation of micro and nanoparticles of drugs.

6. Medicaments d'origen biotecnològic.

7. Gene therapy.

WORKLOAD

PRESENCIAL ACTIVITIES

Activity	Hours
Total hours	0,00

NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	0,00
Individual or group project	0,00
Independent study and work	0,00
Preparation of lessons	0,00
Preparation for assessment activities	0,00
Resolution of case studies	0,00
Total hours	0,00

TEACHING METHODOLOGY

Lectures, participatory lecture
Discussion of items (readings)
Debate and directed discussion
To complete the classroom hours, the materials provided for face-to-face teaching will be adapted, so that the student can access them at any time. Use of the virtual classroom forum to answer questions.
For the practical sessions of the theoretical content, the use of videoconferences and / or the completion of the exercises proposed would be combined using the \"Task\" option in the virtual classroom.

During the activities, both theoretical and practical, the applications of the contents of the subject 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.

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EVALUATION

La información está en un formato que no se puede convertir

REFERENCES

- Bioadhesive Drug Delivery Systems: Fundamentals, Novel Approaches and Developmental (Drugs and the Pharmaceutical Sciences S.) Eds: Mathiowith, Chickering III, Lehr. Marcel Dekker 1999. - Banga A.K. Therapeutic Peptides and Proteins: Formulation, Processing and Delivery Systems. CRC press 2005 - Protein Formulation and Delivery (Drugs and the Pharmaceutical Sciences S.) Ed: J. McNally Marcel Dekker 1999 - Percutaneous Absorption: Drugs-Cosmetics-Mechanisms-Methodology. (Drugs and the Pharmaceutical Sciences S.) Eds: R. L. Bronaugh y H. I. Maibach. Marcel Dekker. 2005. - Choi SW, Kim J. Therapeutic Contact Lenses with Polymeric Vehicles for Ocular Drug Delivery: A Review. Materials (Basel). 2018;11(7):1125. - Rojas-Aguirre Y, Aguado-Castrejón K, González-Méndez I. La nanomedicina y los sistemas de liberación de fármacos:¿la (r)evolución de la terapia contra el cáncer?. Educación química. 2016;27(4):286-291. - European Medicines Agency (http://www.ema.europa.eu/ema/) - Agencia española del medicamento y Productos Sanitarios (http://www.aemps.es/)

- - Artículos y revisiones en revistas especializadas en el tema.