

**COURSE DATA****Data Subject**

<b>Code</b>	43873
<b>Name</b>	Update on ocular pathology and pharmacology
<b>Cycle</b>	Master's degree
<b>ECTS Credits</b>	4.5
<b>Academic year</b>	2022 - 2023

**Study (s)**

<b>Degree</b>	<b>Center</b>	<b>Acad. Period</b>	<b>year</b>
2175 - M.U. en Optometría Avanzada y Ciencias de la Visión 13-V.2	Faculty of Physics	1	First term

**Subject-matter**

<b>Degree</b>	<b>Subject-matter</b>	<b>Character</b>
2175 - M.U. en Optometría Avanzada y Ciencias de la Visión 13-V.2	9 - Update on ocular pathology and pharmacology	Obligatory

**Coordination**

<b>Name</b>	<b>Department</b>
FURLAN, WALTER DANIEL	280 - Optics and Optometry and Vision Sciences

**SUMMARY**

Update on Ocular Pathology and Pharmacology aims to expand and update the knowledge gained in undergraduate and graduate courses for optometrists interested in the field of clinical and collaboration with ophthalmologists. During the development of the course, students will travel through major eye diseases learning to recognize them and receiving information of current treatments of eye disease. All supported by a major visual support.

**PREVIOUS KNOWLEDGE**



### Relationship to other subjects of the same degree

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

### Other requirements

Relationship to other subjects of the same degree:

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

Other requirements:

Basic knowledge of eye disease acquired in undergraduate studies in Optometry through the course Pathology and Ocular Pharmacology.

Basic knowledge of eye disease acquired in studies of Degree in Optics and Optometry through the Principles of Pathology and Ocular Pharmacology course.

## OUTCOMES

### 2175 - M.U. en Optimetría Avanzada y Ciencias de la Visión 13-V.2

- 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.
- Students should possess and understand foundational knowledge that enables original thinking and research in the field.
- Know how to work in multidisciplinary teams reproducing real contexts and contributing and coordinating their own knowledge with that of other branches and participants.
- Participate in, lead and coordinate debates and discussions, be able to summarize them and extract the most relevant conclusions accepted by the majority.
- Use different presentation formats (oral, written, slide presentations, boards, etc.) to communicate knowledge, proposals and positions.
- Proyectar sobre problemas concretos sus conocimientos y saber resumir y extractar los argumentos y las conclusiones más relevantes para su resolución.
- Tener capacidad de análisis crítico de la información especializada en los ámbitos propios del máster.
- Tener un compromiso ético y responsabilidad social, tanto en lo que compete a la componente asistencial ligada a la profesión de óptico-optometrista como a lo que respecta a la investigación clínica.



- Tener capacidad de trabajo en equipos multidisciplinares en el área de las ciencias de la salud.
- Conocer la legislación aplicable en el ejercicio profesional, con especial atención a las materias de de igualdad de género entre hombre y mujeres, derechos humanos, solidaridad, protección del medio ambiente y fomento de la cultura de la paz.

## LEARNING OUTCOMES

- Relate ophthalmic manifestations, systemic, neurologic and endocrine diseases with the most prevalent visual disturbances.
- Know the effect and action of the drugs used for the different ocular diseases
- Analyze the last advances in ocular pathology and pharmacology.

## DESCRIPTION OF CONTENTS

### 1. Clinical Pathology of the Ocular Surface and ocular adnexa

Pathology of the eyelids, lacrimal apparatus, conjunctiva and cornea. Dry Eye Syndrome.

### 2. Differential Diagnosis of Red Eye

Conjunctivitis, Keratitis, Anterior Uveitis, Acute Glaucoma, Scleritis and Episcleritis

### 3. Ocular pathologies that cause vision alterations

Pathology of the lens and cataracts; Glaucoma; Posterior Uveitis; Retinal Vascular Pathology; Degenerative Pathology of the retina; Vitreous and retinal detachment.

### 4. Therapeutic Pharmacology

Treatment of pathologies of the ocular surface and adnexa; Dry eye treatment; Glaucoma treatment; Treatment of uveal and retinal pathologies.

### 5. Toxicology and Iatrogenics

Systemic adverse effects of drugs administered by topical ocular route; Ocular adverse effects of drugs administered by systemic routes.

**WORKLOAD**

ACTIVITY	Hours	% To be attended
Seminars	28,00	100
Theory classes	8,00	100
Preparation of evaluation activities	15,50	0
Preparing lectures	40,00	0
Preparation of practical classes and problem	12,00	0
<b>TOTAL</b>	<b>103,50</b>	

**TEACHING METHODOLOGY**

Classes will be taught with theoretical content modality, semi-face or online with audiovisual support.

Theoretical small group sessions (seminars) are devoted to work sessions in group / student with real case proposals to be analyzed and studied by the group. Group interactivity search through oral presentations and classroom examples and accounted in continuous assessment. In the semi-face or online mode pupils perform these sessions through the mechanisms provided by the virtual classroom for interconnection to several bands.

Practical sessions are faced classes where theoretical concepts will be developed in practical use in the clinical practice of optometry. These classes, reduced to a maximum of ten students group, are carried out first with simulated patients for later developing on real patients.

Individualized tutoring both in person or/and on-line will be conducted by the mechanisms which offers the Virtual Classroom of the University of València.

**EVALUATION**

Theoretical: Written exam with three questions to develop (8 points).

Practice: Two clinical cases to be developed as a practical activity during the course (2 points).

**REFERENCES****Basic**



- Jack J. Kanski. Oftalmología Clínica. Elsevier España SA. Sexta ed.
- Jack J. Kanski, Ken K. Nischal. Atlas de Oftalmología. Elsevier España SA
- Menezo JL, España E. Técnicas exploratorias en Oftalmología. Espaxs SA. Barcelona 2006.

