

Course guide

370806 - PATER - (Ang) Patologia i Terapèutica Oculars

Last modified: 10/10/2024

Unit in charge: Terrassa School of Optics and Optometry
Teaching unit: 731 - OO - Department of Optics and Optometry.

Degree: MASTER'S DEGREE IN OPTOMETRY AND VISION SCIENCES (Syllabus 2022). (Compulsory subject).

Academic year: 2024 **ECTS Credits:** 3.5 **Languages:** Catalan, Spanish, English

LECTURER

Coordinating lecturer: Ventura Abreu, Nestor. <https://futur.upc.edu/NestorVenturaAbreu>
Ondategui Parra, Juan Carlos <https://futur.upc.edu/JuanCarlosOndateguiParra>

Others: Ventura Abreu, Nestor. <https://futur.upc.edu/NestorVenturaAbreu>

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:

M-CE5. (ENG) Demostrar conocimientos de farmacología ocular en la práctica clínica. Identificar signos y síntomas de las patologías oculares más comunes que afectan a la sociedad, para informar y remitir el paciente al oftalmólogo; entre ellas: ojo seco, ojo rojo y/o doloroso, degeneración macular asociada a la edad, retinopatía diabética, glaucoma y miopía magna. Adquirir conocimientos sobre las técnicas de cirugía refractiva y ocular y los efectos de los distintos tipos láseres en las estructuras oculares. Aplicar los conocimientos ópticos de las lentes intraoculares, efectos fóticos, diseños en la práctica clínica, tanto para la selección de la lente más adecuada a cada paciente, como en el examen y seguimiento del paciente pseudofáquico.

Transversal:

M-CT4. (ENG) Uso solvente de los recursos de información. Gestionar la adquisición, la estructuración, el análisis y la visualización de datos e información en el ámbito de especialidad y valorar de forma crítica los resultados de dicha gestión.

Basic:

CB10. (ENG) Que los estudiantes posean las habilidades de aprendizaje que les permitan continuar estudiando de un modo que habrá de ser en gran medida autodirigido o autónomo.

TEACHING METHODOLOGY

- . Reading of didactic material, texts and articles related to the contents of the subject.
- . Carrying out deliverables.
- . Resolution of doubts through the Atenea virtual campus and email.

LEARNING OBJECTIVES OF THE SUBJECT

1. Identify the signs and symptoms of the most common ophthalmologic pathologies, in order to inform and refer the patient to the ophthalmologist.
2. Know the techniques of refractive and ocular surgery and the effects of different types of lasers on ocular structures.
3. Acquire and know how to apply knowledge of ocular pharmacology in clinical practice.
4. To interpret the basic aspects of ophthalmologic examinations and complementary tests.



STUDY LOAD

Type	Hours	Percentage
Hours medium group	28,0	32.00
Self study	59,5	68.00

Total learning time: 87.5 h

CONTENTS

OCULAR SURFACE AND CORNEAL PATHOLOGIES

Description:

1. Differential diagnosis of red and/or painful eye.
2. Blepharitis and dry eye syndrome. Superficial keratopathy. Treatment
3. Infectious corneal pathology. Treatment
4. Non-infectious corneal pathology. Principles of treatment
5. Anterior uveitis. Most frequent manifestations.

Full-or-part-time: 10h

Practical classes: 5h

Self study : 5h

title english

Description:

content english

Full-or-part-time: 9h

Practical classes: 4h 30m

Self study : 4h 30m

title english

Description:

content english

Full-or-part-time: 12h

Practical classes: 6h

Self study : 6h



title english

Description:

1. Vitreous detachment. Retinal rhegmatogenous detachment. Pathology of the vitreoretinal interface. Clinical findings and treatment.
2. Age-related macular degeneration (AMD I): description of the disease. Clinical findings.
3. AMD II: Evaluation and complementary tests.
4. AMD III. Treatment. AMD and lifestyle.

Specific objectives:

1. To know the most frequent symptoms of vitreous and retinal detachment. Referral guidelines
2. To identify the most frequent symptoms in patients with debut or follow-up of AMD.
3. To recognize the retinal alterations typical of AMD both with retinography and OCT.

Full-or-part-time: 14h 40m

Practical classes: 6h

Self study : 8h 40m

PATHOLOGY OF THE EYELIDS AND EYE APPENDAGES

Description:

1. Anatomy of the eyelids. Pathology of the glands and tumor pathology.
2. Alterations of the palpebral position
3. Lacrimal duct. Obstructive pathology and infections
4. Orbit. Infectious pathology, tumors and trauma.

Specific objectives:

1. To know the basic principles of palpebral, lacrimal and orbital anatomy.
2. To identify the cardinal features of severity of orbital pathology.
3. To know the most frequent palpebral pathologies.

Full-or-part-time: 12h

Practical classes: 6h

Self study : 6h

title english

Description:

content english

Full-or-part-time: 15h 40m

Practical classes: 7h

Self study : 8h 40m

ACTIVITIES

name english

Full-or-part-time: 12h 40m

Self study: 12h 40m

CRITICAL READING OF A SCIENTIFIC PAPER

Description:

1. Types of scientific articles, level of scientific evidence. Design and objectives
2. Basic principles of statistical interpretation
3. Critical reading of an article. Parts of an article. Identification of key messages.

Material:

1. Identify and interpret the most important parts of a scientific article.
2. Know the main messages, recognize biases and limitations of a scientific article.

Full-or-part-time: 4h

Practical classes: 2h

Self study: 2h

GRADING SYSTEM

1. Writing a "review article" on a current ophthalmologic topic (20%).
2. Reading, presentation and critical analysis of a scientific article (15%).
3. Final exam (45%)
4. Presentation of block VI: delivery of a document-summary of the content, elaboration of a presentation and presentation of the assigned topic (20%).

In the event of suspending the subject, you will have the option to recover it through a reevaluation exam that will be carried out according to the general conditions established for each course by the UPC's Academic Regulations for Undergraduate and Master's Studies (NAGRAMA) and the particulars established by the FOOT with the following conditions:

1. You can only submit to the reevaluation if the overall grade obtained for the subject is equal to or higher than 3
2. Students with the grade Not Presented (NP) cannot take advantage of the reevaluation option.
3. The reevaluation will consist of a written exam (100%)

If the reevaluation exam is passed (with a score equal to or higher than 5) the final grade of the subject will always be 5. Otherwise, the highest grade between the previous evaluation and the reevaluation will be maintained.

EXAMINATION RULES.

Attendance to this course is compulsory and to pass the course it is mandatory to attend at least 80% of on-line sessions and contribute to the debate and discussion.

Irregular actions that may lead to a significant variation of the grade of one or more students constitute a fraudulent performance of an act of evaluation. This action entails the descriptive grade of failure and a numerical grade of 0 for the evaluation act and the subject, without prejudice to the disciplinary process that may arise as a result of the acts performed.

If the student considers the decision to be incorrect, they can make a complaint through a request to the director or director or the dean of the teaching center and, if the answer does not satisfy them, they can file an appeal with the rector or rector.

The total or partial reproduction of academic or research papers, or their use for any other purpose, must have the explicit authorization of the authors.

It corresponds to the director or director or the dean of the teaching center to resolve the allegations on aspects not included in the regulations.



BIBLIOGRAPHY

Basic:

- Kanski, Jack J; Bowling, Brad. Kanski, oftalmología clínica: un enfoque sistemático. 8a ed. Barcelona: Elsevier, cop. 2016. ISBN 9788491130031.
- Spalton, David J. [et al.]. Atlas de oftalmología clínica. 3ª ed. Madrid: Elsevier, 2006. ISBN 8481748749.
- Yanoff, Myron; Duker, Jay S. Ophthalmology. 3rd ed. [S.l.]: Mosby, cop. 2009. ISBN 9780323043328.

RESOURCES

Other resources:

Practice Guidelines - American Academy of Ophthalmology (aao.org)