

**COURSE DATA****DATA SUBJECT**

Code: 34485
Name: Ophthalmology
Cycle: Undergraduate Studies
ECTS Credits: 4.5
Academic year: 2025-26

STUDY (S)

Degree	Center	Acad. year	Period
1204 - Degree in Medicine	Facultat de Medicina i Odontologia	3	First quarter

SUBJECT-MATTER

Degree	Subject-matter	Character
1204 - Degree in Medicine	Human clinical training IV	COMPULSORY

COORDINATION

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SUMMARY

The subject *Ophthalmology* tries to extend the student's knowledge about the different diseases that can affect the visual system, both the diseases of the eyeball and the visual pathway, including the systemic diseases with regard to the vision. A journey through the different structures of the eyeballs and the visual pathway insisting on the most frequent pathologies, such as the glaucoma, the cataract, the macular degeneration associated with age or the diabetic retinopathy. The student will learn notions of differential diagnosis of the different pathologies and how to perform their reference to the ophthalmologist.

The student will also learn the different existent therapeutic alternatives of the ocular diseases, insisting on the pharmacological and surgical treatment used, their efficiency and their secondary effects.

PREVIOUS KNOWLEDGE**RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE**

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

OTHER REQUIREMENTS



It is highly advisable to have knowledge about anatomy and physiology of the visual pathway, as well as knowledge about the general pathology to understand the impact on the visual system of the different systemic and neuro-ophthalmological diseases.

COMPETENCES / LEARNING OUTCOMES

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Acknowledge diversity and multiculturality.

Acquire properclinical experience in hospitals, health care centres and other health institutions, under supervision, as well as basic knowledge of clinical management focused on the patient and the correct use of tests, medicines and other resources available in the health care system.

Capacity for communicating with professional circles from other domains.

Consideration of ethics as a fundamental value in the professional practise.

Criticism and self-criticism skills.

Establish the diagnosis, prognosis and treatment, applying principles based on the bestinformation available and on conditions of clinical safety.

Have the capacity to make an initial diagnosis and establish a reasonable strategy of diagnosis.

Indicate the most accurate therapy in acute and chronic processes prevailing, as well as for terminally ill patients.

Know how to use IT in clinical, therapeutic and preventive activities, and those of research.

Know how to use the sources of clinical and biomedical information available, and value them critically in order to obtain, organise, interpret and communicate scientific and sanitary information.

Knows how to evaluate modifications in clinical parameters at different ages.

Knows how to perform a complete anamnesis, focused on the patient and orientated to various pathologies, interpreting its meaning.

Obtain and elaborate a clinical history withrelevant information.

Perform a physical examination and a mental health assessment.

Plan and propose appropriate preventive measures for each clinical situation.

Proper organisation and planning of the workload and timing in professional activities.

Recognises, diagnoses, and guides the management of the main ophthalmological pathologies.

Team-working skills and engaging with other people in the same line of work or different.

Understand the importance and the limitations of scientific thinking in the study, prevention and



management of diseases.

Working capacity to function in an international context.

DESCRIPTION OF CONTENTS

1. Refraction defects.

Hyperopia. Myopia. Astigmatism. Presbyopia. Treatment of the refraction defects.

2. Pathology of the lachrymal system.

Secretor part: dacryoadenitis, tumors and functional disorders: dry eye. Excretory part: epiphora by alterations in point, canaliculi and lachrymal sac. Dacryocystitis, types.

3. Pathology of eyelids.

Cutaneous affections. Inflammations. Position disorders. Tumors.

4. Pathology of the conjunctiva.

Subconjunctival bleeding. Inflammations: conjunctivitis. Degenerations. Tumors.

5. Pathology of the cornea.

Inflammations: Keratitis. Degenerations. Corneal manifestations of systematic diseases.

6. Pathology of the lens.

Disorder in transparency: cataract. Position disorder: lens subluxation and luxation.

7. Glaucoma.

Congenital. Acquired, primary: acute glaucoma/simple chronic glaucoma. Secondary glaucoma. Absolute glaucoma.



8. Pathology of the sclera.

Congenital disorders. Inflammations: episcleritis and scleritis. Degenerations.

9. Pathology of the uvea

Pathology of the uvea (1) Inflammations: anterior uveitis.

Pathology of the uvea (2) Immediate uveitis. Posterior uveitis and pan-uveitis. Uvea tumors: melanomas and metastasis.

10. Pathology of the vitreous.

Congenital disorders. Vitreous detachment. Deposits in vitreous. Bleedings in vitreous. Pathology of the retina (1) Retina Detachment.

11. Pathology of the retina (2)

Vascular pathology of the retina: arterial/venous occlusion. Hypertensive retinopathy. Diabetic retinopathy. Prematurity retinopathy.

12. Pathology of the retina (3)

Tumors: retinoblastoma. Retinal degenerations: Retinitis pigmentosa and ARMD (age-related macular degeneration).

13. Pathology of the optic nerve, optical path and pupil path.

Papilledema. Inflammations: papillitis, retrobulbar neuritis. Optic atrophy. Visual field defects by injuries in the different levels of the optical paths. Pupil disorders.

14. Ocular motility (1)

Anatomic-physiology. Visual development. Amblyopia. Concomitant strabismus.

15. Ocular motility (2)

Paralytic strabismus. Paralysis of the pair III, IV and VI.



16. Pathology of the orbital.

Exophthalmos: endocrine, inflammatory, vascular, tumor. Enophthalmos.

17. Traumatism of the visual system.

Contusions, injuries and foreign bodies. Physical traumatism. Chemical traumatism.

18. PRACTICES

SEMINARS

- 1.- Medical history in Ophthalmology. Anatomical and functional exploration of the visual system.
- 2.- Differential diagnosis of the red eye.
- 3.- Urgencies in ophthalmology (1).
- 4.- Urgencies in ophthalmology (2).
- 5.- Ophthalmology and systemic diseases.

CLINICAL CASES

- 1.- Clinical cases of the anterior segment.
- 2.- Clinical cases of the posterior segment.
- 3.- Clinical cases of pediatrics ophthalmology.
- 4.- Clinical cases by loss of progressive, bilateral and painless vision.
- 5.- Clinical cases of glaucoma.
- 6.- Clinical cases of neuro-ophthalmology.
- 7.- Systemic retinopathies.

WORKLOAD

PRESENCIAL ACTIVITIES

Activity	Hours
Theory	19,00
Seminars	17,00
Laboratory	0,00
In-class tutorials	0,00
Clinical practice	20,00
Total hours	56,00

NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	0,00
Individual or group project	2,00
Independent study and work	8,00



Preparation of lessons	39,25
Preparation for assessment activities	2,00
Resolution of case studies	5,00
Preparation of supplementary reports	0,00
Preparation of the internship report and evaluation of the internship	0,00
Total hours	56,25

TEACHING METHODOLOGY

The lessons will be taught with theoretical content on presence-based modality. The student will be provided with audiovisual support through Aula Virtual.

Practical sessions with reduced groups (Seminars): they are sessions focused on the students' group work, with proposals of real cases that must be analysed and studied by the group. The interaction will be encouraged through the oral presentations and examples in the classroom, being evaluated as continuous assessment.

Clinical practices lessons: they are lessons with presence-based modality where the theoretical concepts are developed practically in the clinical consultation of Ophthalmology. These practices, with reduced groups, will be carried out with real patients for the students to develop the skills needed in this specialty.

Individual tutorials: they will be made with presence-based modality or online through the mechanisms that the Aula Virtual provides.

The gender perspective, the respect for diversity, and the sustainable development goals (SDGs) will be incorporated into teaching, whenever possible.

EVALUATION

THEORETICAL EVALUATION:

It will be done through a written exam, with a maximum duration of 90 minutes, including 3 short development questions, scoring between 2 and 4 points each (depending on their importance in the program of classes taught during the academic year). This evaluation, which will account for 100% of the final qualification aims to evaluate the acquisition of knowledge in the theoretical classes as well as the practical part (since this exam can include clinical cases and content of the seminars among the development questions). The content of the exam is for all the groups of the subject. The exam is presented in the 3 languages of the University.

PRACTICE EVALUATION:

It will be done through continuous evaluation of the participation in the different activities (hospital practices in subsidized centers, clinical case sessions and surgical videos, seminars) by presenting the practice sheet signed by the professors, the face-to-face signature of the student in the seminars and



sessions of clinical cases and surgical videos, and/or also the completion of a survey/summary of practices/test, at the discretion of the teachers, with the aim of evaluating the acquisition of skills related to practical activities. These conditions are for all groups and subgroups of the subject. Those students that retake the subject will not have to do the practices again.

Attendance at practical activities is mandatory. The student is considered to meet this requirement if he or she has attended a minimum of 80% of these activities and has adequately justified the impossibility of attending the remaining sessions due to the occurrence of a cause of force majeure. It will be essential to comply with this requirement to pass the subject.

Students are reminded of the importance of carrying out evaluation surveys on all the teaching staff of the degree subjects.

REFERENCES

- KANSKI, J.J. Oftalmología Clínica. Barcelona. S.A. Elsevier España.2012.
- LANG G.K. Oftalmología. Texto y atlas en color. Ed. MASSON. Barcelona 2006
- KANSKI Y NISCHAL: Atlas de Oftalmología. A.A. Elsevier España. 1999.
- J.C. PASTOR GIMENO: Guiones de Oftalmología. Editorial McGraw Hill-Interamericana.
- SERGIO Y ELENA BONAFONTE. Esquemas Clínico-visuales en Oftalmología, Ed. Elsevier-Masson.
- JACK KANSKI. Diagnóstico Clínico en Oftalmología, S.A. Elsevier España. 2007.
- RECURSOS e-Salut: ClinicalKey Student Medicina, Odontologia y Enfermería [<https://uv-es.libguides.com/RecursosSalut>] Acces Medicina [https://uv-es.libguides.com/Access_Medicina] Médica Panamericana [https://uv-es.libguides.com/Medica_Panamericana]