

**COURSE DATA****DATA SUBJECT****Code:** 34300**Name:** Optometry practicum II**Cycle:** Undergraduate Studies**ECTS Credits:** 7.5**Academic year:** 2025-26**STUDY (S)**

Degree	Center	Acad. year	Period
1207 - Degree in Optics and Optometry	Facultat de Física	3	First quarter

SUBJECT-MATTER

Degree	Subject-matter	Character
1207 - Degree in Optics and Optometry	Optometry	COMPULSORY

COORDINATION

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SUMMARY

Binocularity of the visual system is based on the proper maintenance of various anatomical structures and the optimal interaction of components involved in vision, such as accommodation, vergence, and the oculomotor system.

The aim of this course is to provide students with practical knowledge and optometric analysis of binocular vision in cases of non-strabismic general binocular anomalies. The course equips students with the necessary skills to manage patients affected by such conditions, including ocular and visual examination techniques, as well as the clinical reasoning and judgment required for accurate diagnosis and appropriate treatment planning.

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

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

OTHER REQUIREMENTS



Students who pursue this course is recommended to have acquired prior knowledge of Optometry I, and Optometry II.

COMPETENCES / LEARNING OUTCOMES

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Ability to act as a primary visual care agent.

Ability to measure, interpret and treat refractive and binocular errors.

Ability to prescribe, control and monitor optical corrections.

Being able to gather and interpret relevant data to make judgments.

Being able to transmit information, ideas, problems and solutions to both a specialized and non-specialized audience.

Development of learning skills necessary to undertake further studies with a high degree of autonomy.

Knowing how to apply the knowledge acquired to professional activity, knowing how to solve problems and develop and defend arguments.

To acquire the ability to examine, to diagnose and to treat visual abnormalities with special emphasis on differential diagnosis.

To acquire the skills for the interpretation and clinical judgment of the results of visual tests, to establish the most appropriate diagnosis and treatment.

To design, to apply and to control visual therapy programs. To know the current techniques of eye surgery and to have the ability to perform the eye tests included in the pre and post-operative exam.

To develop communication skills, data recording and medical record making.

To have and to understand the fundamentals of Optometry for its correct clinical and healthcare application.

To know and to apply new technologies in the field of optometric clinic.

To know and to apply visual screening techniques applied to different populations.

To know the different protocols applied to patients.

To know the nature and organization of the different types of clinical care.

To know the principles and to have the skills to measure, interpret, and treat accommodative and binocular vision abnormalities.

To know the sensory and oculomotor mechanisms of binocular vision.



DESCRIPTION OF CONTENTS

1 - Specific assessment

This thematic unit includes all the practical optometric tests required to perform a full examination of normal binocular vision. It comprises the following practical sessions:

- Practice 1: Introduction
- Practice 2: Case history, preliminary tests and refraction
- Practice 3: Sensory status evaluation
- Practice 4: Vergence evaluation
- Practice 5: Accommodation evaluation
- Practice 6: Ocular motility evaluation

2 - Diagnosis, analysis and case management

Once the full binocular vision examination has been completed, case resolution sessions will be conducted based on the diagnosis and appropriate treatment. Among the possible treatment options is vision therapy, for which an introductory session will be included. The following practices are part of this unit:

- Practice 7: Case analysis. Diagnosis and treatment
- Practice 8: Introduction to vision therapy

WORKLOAD

PRESENCIAL ACTIVITIES

Activity	Hours
Other activities	75,00
Total hours	75,00

NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	5,00
Individual or group project	26,00
Independent study and work	18,50
Preparation of lessons	31,00
Preparation for assessment activities	12,00
Resolution of case studies	20,00
Total hours	112,50



TEACHING METHODOLOGY

The teaching methodology of this course is based on the practical application of what has been learned in the theoretical course Optometry II. Practical sessions will be conducted in groups with a maximum of 8 students per instructor.

The training activities include:

- Practical sessions, where the fundamental knowledge of the subject will be applied.
- Clinical case sessions, where specific problems related to the subject are discussed and solved, both individually and in groups.
- Supervised assignments, in which specific topics of the subject are analysed and discussed, with active participation either individually or in groups.

EVALUATION

The structure of the course assessment is as follows:



1. Practical assessment (60%; 6 points out of 10).
This corresponds to the individual evaluation of the student's ability to perform the various procedures covered in the course. A final practical exam will be conducted during the last practical session. Students must score at least 50% in this section (i.e., 3 out of 6 points) in order to pass the course. Once this requirement is met, the continuous assessment score will be added, and the course will be passed with a minimum total score of 5 points.
2. Continuous assessment throughout the course (40%; 4 points out of 10).
Student participation during practical sessions and proposed activities will be evaluated. 85% attendance will be required, with the remaining 15% needing to be justified. This assessment may include follow-up tests with short questions related to the practical sessions conducted during the course (up to 2 points).
Additional group activities will also be assessed. These may include (but are not limited to): analysis and presentation of clinical cases, supplementary assignments on clinical procedures... (up to 2 points).

In the second exam session, only the practical exam (Section 1) will be taken, and the score from the non-recoverable activities of the continuous assessment (Section 2) will be retained.

REFERENCES

Basic references:

- *Clinical Management of Binocular Vision: Heterophoric, Accommodative and Eye Movement Disorders*. Scheiman, M.; Wick, B. 5.^a ed. Wolters Kluwer, 2020. ISBN 978-1-4963-7758-6
- *Procedimientos clínicos en el examen visual*. Carlson, N. B.; Kurtz, D.; Heath, D. A.; Hines, C. Génova, 1990. ISBN 978-84-86300-05-1
- *Anomalías de la visión binocular: investigación y tratamiento*. Pickwell, D. 2.^a ed. Barcelona: JIMS, 1996. ISBN 978-84-86443-41-3