COURSE DATA

DATA SUBJECT

Code: 34300
Name: Optometry practicum II
Cycle: Undergraduate Studies
ECTS Credits: 7.5
Academic year: 2026-27

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

PORCAR IZQUIERDO ESTEBAN

SUMMARY

Binocularity of the visual system is based on the proper maintenance of the different structures and on the optimal interaction of the 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 general non-strabismic binocular anomalies. Students will acquire the skills required to manage patients with these conditions, including ocular and visual examination techniques, as well as the clinical reasoning and judgement needed to make diagnoses and plan appropriate treatments.

PREVIOUS KNOWLEDGE

RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE

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

OTHER REQUIREMENTS

To take this course, students are recommended to have previously acquired the theoretical knowledge of Optometry I and Optometry II, as well as the practical knowledge of Optometry I.

COMPETENCES / LEARNING OUTCOMES

1207 - Degree in Optics and Optometry

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 andto 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 examination of normal binocular vision has been completed, case resolution sessions will be conducted according to the diagnosis and the treatment to be applied. Among the possible treatment options is vision therapy, for which an introductory practical session will be included. The following practical sessions are included:

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 the knowledge acquired in the theoretical course Optometry II. Sessions will be carried out in practical groups with a maximum of 8 students per instructor.

The training activities include:

• Practical sessions, in which the fundamental knowledge of the subject will be applied. In each consulting room, 2 or 3 students will perform the different tests of the optometric examination on each other.

• Clinical case sessions, in which specific problems related to the subject will be discussed and solved, both individually and in groups.

• Supervised assignments, in which specific topics of the subject will be analysed and discussed, with active participation both individually and in groups.

EVALUATION

The assessment structure of the course is as follows:

1. Practical assessment: 60% of the final mark, equivalent to 6 points out of 10.

This corresponds to the individual assessment of the student's ability to carry out the different procedures covered in the course. It will be assessed by means of a final examination during the last practical session. A minimum mark of 3 points out of 6 will be required for this part to be considered passed.

2. Continuous assessment: 40% of the final mark, equivalent to 4 points out of 10.

The work carried out by students during the practical sessions will be assessed, including active participation, completion of follow-up exercises, analysis and presentation of clinical cases, complementary assignments on clinical procedures, or other activities related to the practical contents of the course.

A minimum mark of 2 points out of 4 will be required for this part to be considered passed.

Attendance at practical sessions will be compulsory. Absence from more than two sessions, except for duly justified reasons accepted by the lecturer responsible for the course, will result in failing the continuous assessment.

The final mark will be the sum of the practical assessment and the continuous assessment. In order to pass the course, students must obtain at least 5 points out of 10, having achieved the minimum requirements established for each of the two parts.

In the second examination period:

a) The mark obtained in the parts passed in the first examination period will be retained.

b) If the practical assessment has not been passed, it will be retaken by means of a practical examination marked out of 6 points.

c) If the continuous assessment has not been passed, it will be retaken by means of a specific practical or theoretical-practical test, marked out of 4 points, aimed at assessing the competences and learning outcomes covered in the activities carried out during the course.

d) The face-to-face activities carried out during the course cannot be repeated in the second examination period due to their practical and continuous nature. However, the mark corresponding to the continuous assessment may be recovered by means of the test indicated in the previous section.

In order to pass the course in the second examination period, students must obtain at least 5 points out of 10, having achieved at least 3 points out of 6 in the practical assessment and at least 2 points out of 4 in the continuous assessment.

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