

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

Code	34300
Name	Optometry practicum II
Cycle	Grade
ECTS Credits	7.5
Academic year	2022 - 2023

Study (s)

Degree	Center	Acad. Period
1207 - Degree in Optics and Optometry	Faculty of Physics	3 Annual

Subject-matter

Degree	Subject-matter	Character
1207 - Degree in Optics and Optometry	12 - Optometry	Obligatory

Coordination

Name	Department
PORCAR IZQUIERDO, ESTEBAN	280 - Optics and Optometry and Vision Sciences

SUMMARY

The contents of this course are related to knowledge-oriented professional finalists. As clinical application provide students with the knowledge necessary for understanding the changes of accommodation, binocular vision, with the adaptation of vision to different environments.

The binocular visual system is based on the proper maintenance of various structures and the optimal interaction of various components involved in vision such as accommodation and convergence.

The aim being to provide students with the knowledge of optometric analysis of binocular vision with no strabismic binocular anomalies and accommodating and their solutions, are provided the skills necessary to manage patients who suffer these disorders, including ocular examination techniques and visual and reasoning skills and clinical trial that permit the realization of diagnosis and appropriate treatment planning by means of lenses in eyeglasses, contact lenses, vision therapy and / or visual ergonomics tips.



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.

OUTCOMES

1207 - Degree in Optics and Optometry

- To have and to understand the fundamentals of Optometry for its correct clinical and healthcare application.
- Knowing how to apply the knowledge acquired to professional activity, knowing how to solve problems and develop and defend arguments.
- 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.
- To develop communication skills, data recording and medical record making.
- To acquire the skills for the interpretation and clinical judgment of the results of visual tests, to establish the most appropriate diagnosis and treatment.
- Ability to measure, interpret and treat refractive and binocular errors.
- To know the sensory and oculomotor mechanisms of binocular vision.
- To know the principles and to have the skills to measure, interpret, and treat accommodative and binocular vision abnormalities.
- Ability to prescribe, control and monitor optical corrections.
- 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 acquire the ability to examine, to diagnose and to treat visual abnormalities with special emphasis on differential diagnosis.
- To know the nature and organization of the different types of clinical care.
- To know the different protocols applied to patients.



- To know and to apply visual screening techniques applied to different populations.
- To know and to apply new technologies in the field of optometric clinic.
- Ability to act as a primary visual care agent.

LEARNING OUTCOMES

Learning outcomes can be summarized as the student is able to:

- Measure, interpret and deal with technical optometric accommodative anomalies and binocular vision.
- Use clinical protocols and instrumental in the exploration partner.
- Examine, diagnose and treat visual abnormalities with emphasis on differential diagnosis.
- Apply new technologies in the field of optometric clinic.
- Demonstrated ability to work as a team, knowing the terminology of the profession and develop a convincing job.

DESCRIPTION OF CONTENTS

1. Specficial Evaluation or review

Refractive Analysis.

Sensory state practices.

Practices accommodation.

Vergencial state practices.

Practices interaction convergence accommodation.

Practices oculomotor and motility.

2. DIAGNOSIS AND ANALYSIS

Case Analysis: procedures.

Presentation and discussion of clinical cases

**WORKLOAD**

ACTIVITY	Hours	% To be attended
Other activities	75,00	100
Attendance at events and external activities	5,00	0
Development of group work	25,00	0
Development of individual work	1,00	0
Study and independent work	13,50	0
Readings supplementary material	5,00	0
Preparation of evaluation activities	10,00	0
Preparation of practical classes and problem	31,00	0
Resolution of case studies	20,00	0
Resolution of online questionnaires	2,00	0
TOTAL	187,50	

TEACHING METHODOLOGY

The methodology of teaching this subject using the practice activities to teach the skills necessary to achieve the competencies described in Optometry II course.

Student participation is encouraged in seminars and supervised work, serving as a complement to the knowledge imparted in the practice.

The distribution of the activities described are those that enable the student acquire the skills set. The training activities include:

Clinical cases.

Seminars and supervised work in this activity are analyzed and discussed specific issues in the field, actively participating students, both individually and in groups.

Tutorials, thus allowing the student-teacher and provides support and advice in the various activities they have to develop the student.

Training activities include both group activities and activities Individualized.

This methodology ensures that students acquire the competencies identified.



EVALUATION

The evaluation will be continuous throughout the course, where the student's participatory attitude will also be valued during the practice sessions and in the proposed activities. The structure of the evaluation of the subject is as follows:

1) Practical Evaluation (80%; 8 points out of 10).

It corresponds to the individual evaluation of the abilities to carry out the different procedures addressed in the subject. This evaluation can be carried out in the form of follow-up exams throughout the course (up to 2 points) and/or a final exam during the last practical session (up to 6 points).

It will be necessary to obtain at least 50% in this part (that is, 4 out of 8 points) in order to pass the subject.

2) Other Activities (20%; 2 points out of 10).

Throughout the course, the teaching staff may request additional activities that can be evaluated in groups. This evaluation will complement the results obtained in the practical evaluation.

These evaluable activities may consist of (but are not limited to): analysis and presentation of clinical cases, complementary work on clinical procedures...

In the second call, the follow-up exams throughout the course and the part of other activities are not recovered. Then, only the practical final exam will be done on 6 points and the note of the rest of non-recoverable activities will be saved.

REFERENCES

Basic

- Referencia b1: BORRAS MR et al. Visión binocular Diagnóstico y tratamiento. Barcelona: UPC. 1996
- Referencia b2: SCHEIMAN, M. WICK, B. Tratamiento clínico de la visión binocular: Disfunciones heterofóricas, acomodativas y oculomotoras. Ciagami 1996
- Referencia b3: EVANS, B. Visión Binocular. Masson. 2006

10.2 Referencias Complementarias

- Referencia c1: GRIFFIN, JR. GRISHAM, JD. Binocular anomalies. Diagnosis and vision therapy. 4th



Elsevier. 2002

Referencia c2: GROSVENOR, T. Optometría de atención primaria. Elsevier-Masson. 2005

Referencia c3: PICKWELL, D. Anomalías de la visión binocular: Investigación y tratamiento. Jims 1996.

