

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

<b>Code</b>	34300
<b>Name</b>	Optometry practicum II
<b>Cycle</b>	Grade
<b>ECTS Credits</b>	7.5
<b>Academic year</b>	2019 - 2020

**Study (s)**

<b>Degree</b>	<b>Center</b>	<b>Acad. year</b>	<b>Period</b>
1207 - Degree in Optics and Optometry	Faculty of Physics	3	Annual

**Subject-matter**

<b>Degree</b>	<b>Subject-matter</b>	<b>Character</b>
1207 - Degree in Optics and Optometry	12 - Optometry	Obligatory

**Coordination**

<b>Name</b>	<b>Department</b>
GENE SAMPEDRO, ANDRES	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
<b>TOTAL</b>	<b>187,50</b>	

**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 with respect to the activities carried out and the participatory attitude of the student in the various field activities proposed, and during the practice sessions.

Structure Exam: The note will be divided into three blocks

- 1) Theoretical Exam: 3.00 points (minimum grade to be able to do the practical: 1.50 points)

This written test is done at the end of the course and will be of test-type questions, whose response must be noted in the template; A poorly answered question subtracts points by the average correct question value. The contents are related to the topics developed in class; To be able to perform the practical test will be necessary to exceed a minimum of 50% in this test.

- 2) Practical Exam: 5.00 points (minimum grade to correct other activities 2.50 points)

Breakdown:

2.1.- Cover test 1.00 point.

2.2.- Test related to the practices, to be determined: 2.00 points

2.3.- Proof related to the practices to be determined: 2.00 points

To be able to add the score obtained in other activities, it will be necessary to surpass a minimum of 50% in this test.

3) Other Activities: 2.00 points (these points will be counted in case of taking the minimum mark in the exams, that is 50%). It is mandatory for all students to complete it. In case of not fulfilling any of the requirements previously established in the activities, will be penalized with 50% of the maximum qualification obtained in said activity.

3.1.- Presentation Video External Cases: 1.00 point (activity breakdown: 0.50 exposure and public justification of the case; 0.25 recorded cases and quality recording / editing; 0.25 case report with consent signed by the patient ).

3.2.- Presentation Case of the Clinical Sessions 1.00 point.

(\*) The notes obtained in the section of other activities will be saved for the second call of the same course. No student can deliver outside the assigned period of said activities, being obligatory its realization for examination.

## 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.

### ADDENDUM COVID-19

**This addendum will only be activated if the health situation requires so and with the prior agreement of the Governing Council**

**English version is not available**