

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

Code	34322
Name	Current optics and optometry-related issues
Cycle	Grade
ECTS Credits	4.5
Academic year	2019 - 2020

Study (s)

Degree	Center	Acad. year	Period
1207 - Degree in Optics and Optometry	Faculty of Physics	4	First term

Subject-matter

Degree	Subject-matter	Character
1207 - Degree in Optics and Optometry	16 - Optional subjects	Optional
1207 - Degree in Optics and Optometry	21 - Advanced optometry	Optional

Coordination

Name	Department
GARCIA MONREAL, FRANCISCO JAVIER	280 - Optics and Optometry and Vision Sciences
MONTES MICO, ROBERT	280 - Optics and Optometry and Vision Sciences

SUMMARY**English version is not available**

La asignatura Temas Actuales de Óptica y Optometría presenta un resumen de los principales avances en investigación que se desarrollan en estos dos campos, a través de conferencias especializadas y actividades divulgativas y de introducción a la investigación.

PREVIOUS KNOWLEDGE



Relationship to other subjects of the same degree

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

Other requirements

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 know the applicable legislation in professional practice, with special attention to matters of gender equality between men and women, human rights, solidarity, sustainability, protection of the environment and promotion of the culture of peace.
- To know the latest research in the fields of Optics, Optometry and Vision Sciences.

LEARNING OUTCOMES

English version is not available

DESCRIPTION OF CONTENTS

1.

2.

**3.****4. Optical Coherence Tomography**

Basics on OCT. Scanning types. Domains. Resolution and sensitivity. Image interpretation. Applications to retinal and anterior segment image

5.**6.****7. The laser**

Introduction to lasers. Types of lasers. Laser applications in ophthalmology. Introduction to laser safety: Eye damage, legislation and protection.

WORKLOAD

ACTIVITY	Hours	% To be attended
Theory classes	30,00	100
Tutorials	15,00	100
Attendance at events and external activities	7,50	0
Study and independent work	35,00	0
Readings supplementary material	10,00	0
Preparing lectures	10,00	0
Resolution of online questionnaires	5,00	0
TOTAL	112,50	

TEACHING METHODOLOGY

The course will consist of two types of activities with different methodology: (i) Lectures (ii) Demonstrations and visits to laboratories. In the classes of type (i) the basic theoretical contents of the course will be taught, with practical examples. In the classes of type (ii), research labs will be visited.



EVALUATION

90% of the final grade will be obtained through an online questionnaire available at the end of the theoretical presentations, 40 multiple choice questions.

The remaining 10% of the grade will be obtained through a review of development issues. This test is voluntary.

REFERENCES

Basic

- Artículos de investigación
Apuntes de clase
- Benjamín Alonso Fernández et al. (2010). El láser, la luz de nuestro tiempo. Universidad de Salamanca, Centro de Láseres Pulsados Ultracortos Ultraintensos (CLPU). Globalia Artes Gráficas

ADDENDUM COVID-19

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

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