

# **COURSE DATA**

Data Subject	
Code	34303
Name	Geriatric optometry and health legislation
Cycle	Grade
ECTS Credits	7.5
Academic year	2023 - 2024

Stud	ly (	(s)
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Degree	Center	Acad. Period
		year

1207 - Degree in Optics and Optometry Faculty of Physics 4 First term

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

#### Coordination

Name	Department
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MONSALVEZ ROMIN, DANIEL 280 - Optics and Optometry and Vision Sciences

# SUMMARY

The aging population has been recognized by various international organizations like the UN, the World Health Organization or the European Union who have issued recommendations to individual partner countries on the need to encourage and promote the expertise of professionals for better care for the elderly. The elderly population is a population group with very particular characteristics in which both expectations, such as patient care and clinical examination procedures have distinct elements of clinical examination. This course has a first section dedicated to the study of these peculiarities, including the development of capacities for early detection and monitoring of disorders more prevalent in this group and with great visual impact and quality of life for these patients.

In a second block includes the legislation for the professional practice, ranging from the sphere of competence, ethics code and its development in recent decades to the current regulations in areas such as leadership and its comparison with existing regulations in other countries the European Union.



## **PREVIOUS KNOWLEDGE**

#### Relationship to other subjects of the same degree

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

### Other requirements

Is recommended that subjects previously passed Optometry I, III and practices Optometry Optometry I.

## **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 nonspecialized 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 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.
- To acquire skills in the instrumental tests for the evaluation of visual functions and eye health. To know how to take a complete anamnesis.
- 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 andto have the ability to perform the eye tests included in the pre and post-operative exam.



- To know, to apply and to interpret instrumental tests related to visual health problems.
- To apply the clinical procedures associated with the adaptation of contact lenses to different refractive and ocular dysfunctions.
- To know the modifications linked to aging in perceptual processes.
- To know the differences in treatment and refractive diagnosis of the pediatric patient.
- To acquire the ability to examine, to diagnose and to treat visual abnormalities with special emphasis on differential diagnosis.
- To acquire the clinical skills necessary for the examination and treatment of patients.
- 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.
- To know the legal and psychosocial aspects of the profession.
- To know the fundamentals and techniques of health education and the main generic health programs to which the optometrist must contribute from their scope of action.
- To identify and to analyze environmental and occupational risk factors that can cause visual problems.
- To know the applicable legislation in professional practice, with special attention to matters of gender equality between men and women, human rights, solidarity, protection of the environment and promotion of the culture of peace.

## **LEARNING OUTCOMES**

Knowing the changes associated with aging in perceptual processes.

Acquiring the ability to examine, diagnose and treat visual abnormalities with emphasis on differential diagnosis

To acquire the necessary clinical skills examination and treatment of geriatric patients.

Acquire the skills for interpretation and clinical trial results of visual tests to establish diagnosis and appropriate treatment

Acquiring skills in evaluation exhibits of visual functions and ocular health.

Know the legal and psychosocial aspects of the profession

## **DESCRIPTION OF CONTENTS**



#### 1. AGING AND CHARACTERISTICS OF THE ELDERLY POPULATION

## 2. OCULAR CHANGES AND DISEASES REALTED TO AGING

#### 3. SYSTEMIC DISEASES OF THE ELDERLY AND OPHTHALMIC MANIFESTATIONS

#### 4. DIAGNOSTIC AND TREATMENT EQUIPMENT

### 5. OPTOMETRIC EXAMINATION OF THE ELDERLY PATIENT

## 6. PROFESSIONAL, ETHICAL AND LEGAL ASPECTS IN OPTICS AND OPTOMETRY

### 7. Regulations of European communities and the individual and social optical company

# WORKLOAD

ACTIVITY	Hours	% To be attended
Theory classes	60,00	100
Tutorials	7,50	100
Laboratory practices	7,50	100
Development of group work	12,00	0
Development of individual work	15,00	0
Study and independent work	25,00	0
Readings supplementary material	15,00	0
Preparation of evaluation activities	15,00	0
Preparing lectures	15,00	0
Resolution of case studies	15,50	0
	TOTAL 187,50	



## **TEACHING METHODOLOGY**

The methodology of the course is based on the one hand, in the other classes and not classroom teaching through the Virtual Classroom, enhancing self-learning. The course consists of four types of classes with different methodology:(i) Theoretical and practical classes(ii) Practical classes slate(iii) Work supervised(iv) Lessons labs

In classes of type (i) will be taught the basic theoretical course and practical examples that better illustrate. To increase the ratio presentation / assimilation may use graphical tools content presentation through slides, including graphs, pictures, videos and animations, combined with discussions / presentations on board. Also demonstrations can be presented simple examples especially relevant aplets, simulations, etc., allowing illustrate some of the concepts explained. It will encourage and guide the student in expanding the content received in each class through the recommended reading, and the possibility of broadening knowledge in future courses. In classes of type (ii) will include three types of activities: 1) discussion of clinical cases, 2) literature discussion sessions, previously assigned to different groups of students, and 3) conducting simulations-directed by Professor-. The supervised work (iii) involves the discussion of scientific articles of special importance, about the contents of the subject. This literature is preassigned to different groups of studies and the findings will be presented in class practice sessions slate (iii).

## **EVALUATION**

The evaluation of the subject will be carried out in the following terms:

## Written test: 7 points.

- It will consist of a series of multi-option answer questions and/or short questions to be developed and/or synoptic tables.
- This written test will consist of two different parts: Geriatric Optometry and Health Legislation. The part of Geriatric Optometry will score 75% in the final grade of the written test, and the part of Health Legislation 25%.

## Personal work of the student: 3 points.

- Clinical practices (assistance and use).
- Oral presentations of proposed works and clinical cases seen in clinical practices.
- Exercises, supervised work, class activities, etc.



To pass the subject, it will be a necessary condition:

- 1. Obtain a minimum overall score of 5 points out of 10.
- 2. Obtain a minimum score of 50% in each of the two parts of the written exam to average. (a)
- 3. Obtain a minimum grade of 50% in the overall grade of the student's work. (b)
- (a) In case of passing one of the parts of the written exam in the first call, it will be kept for the second.
- (b) Attendance at the practice sessions is considered mandatory to pass the subject, and they constitute a non-recoverable activity, so it will not be possible to evaluate them in the second call and may lead to the non-passing of the subject in the current course.

## **REFERENCES**

#### **Basic**

- Referencia b1:

Montes-Micó R. Optometría: Principios Básicos y Aplicación Clínica. Elsevier. 2011. ISBN: 978-84-8086-822-8

Referencia b2:

Montés-Micó R. Optometría: Aspectos Avanzados y Consideraciones Especiales. Elsevier. 2011. ISBN: 978-84-8086-890-7

Referencia b3:

Grosvenor T. Primary Care Optometry. Butterworth-Heinemann. 5th edition. (2006)

Referencia b4:

Rosenfield M, Logan N. Optometry. Science, Techniques and Clinical Management. 2nd Edition.

Butterworth-Heinemann-Elsevier. 2009

Referencia b5:

Melore, G. G. Treating vision problems in the older adult. St. Louis: Mosby, 1997. ISBN 0815157002 Referencia b6:

Rosenbloom, A. A.; Morgan, M. W. Vision and aging. 2nd ed. Boston: Butterworth- Heinemann, 1993. ISBN 0750693118

Referencia b7:

Colegio Nacional de Ópticos-Optometristas. Código deontológico y manual de buenas prácticas clínicas del Óptico-Optometrista. 2019

Referencia b8:

Glassé, J.G. (1989): "Legal Aspects of Optometry". (USA). Ed. Butterworth Publishers

Referencia b9:

Taylor, S. and Austen, D. (1986): "Law and Management in Optometric Practice". (USA). Ed. Butterworth Publishers



- Referencia b10:
  - Kanski. Oftalmología Clínica. 8ª ed. Brad Bowling, Editorial Elsevier, 2016. ISBN: 978-8491130031.
- Referencia b11:
  - Flórez J. Farmacología humana 6ª ed. Editorial Elsevier Masson, 2014. ISBN: 978-84-458-2316-3.
- Referencia b12:
  - Carolyne R. Baumal, Jay S. Duker. Manejo de la retinopatía diabética. Editorial Elsevier 2018. ISBN: 978-84-9113-373-5

#### Additional

- Referencia c1:

Directive 2006/126/ec of the European parliament and of the council of 20 December 2006 on driving licenses. Official Journal of the European Union 12/2006 Referencia c2:

ECOO Blue Book. European Council of Optics and Optometry. 2008

Referencia c3:

Agencia Española de Medicamentos y Productos Sanitarios AEMPS https://www.aemps.gob.es/

