Academic Year/course: 2024/25

26826 - Expansion of Geriatric Optometry

Syllabus Information

Academic year: 2024/25 Subject: 26826 - Expansion of Geriatric Optometry Faculty / School: 100 - Facultad de Ciencias Degree: 297 - Degree in Optics and Optometry ECTS: 6.0 Year: Semester: First semester Subject type: Optional Module:

1. General information

The main objective of this subject is to train students to perform examinations and analysis of the visual function in elderly patients, as well as to treat refractive and functional problems and the knowledge of therapeutic options for the pathology prevalent in the geriatric population.

It is recommended to have taken Optometry I and II, Optometry Laboratory, Visual Optics II and Clinical Optometry.

2. Learning results

Examine, diagnose and treat visual anomalies in the geriatric population with special emphasis on differential diagnosis

Measure, interpret and treat refractive defects in the elderly.

Know the principles and have the skills to interpret diagnostic tests to be performed on the geriatric patient, including campimetry, fluorescein angiography and optical coherence tomography.

Acquire the skills for clinical judgment of the results of complementary tests to establish the diagnosis and the most appropriate treatment.

Be able to orient the patient towards the therapeutic options of the most prevalent pathologies, including cataracts, Age-Related Macular Degeneration, Primary Open Angle Glaucoma, Diabetic Retinopathy and other retinal vascular pathologies.

Know the modifications linked to aging in perceptual processes.

Know and apply new technologies in the field of geriatric optometry.

Know the physiological changes that occur in the visual apparatus in relation to age

Know symptoms and signs of the different types of anomalies affecting monocular and binocular vision in geriatric patients.

Determine the characteristic visual aspects of the geriatric population.

Describe the fundamentals of methods and techniques necessary to assess the vision status of geriatric patients

Know the prevalent pathology in the geriatric age, as well as the diagnostic tests and differential diagnosis.

Know how to interpret the results of diagnostic tests on visual health problems.

Know how to determine and specify appropriate treatments for the correction of anomalies in the geriatric population.

3. Syllabus

- Topic 1. Importance of geriatric optometry
- Topic 2. Ophthalmology examinations
- Topic 3. Corneal pathology
- Topic 4 Pathology of the crystalline lens

Topic 5. Glaucoma

Topic 6. Retinal vascular pathology

4. Academic activities

Training Activity I (3 ECTS): Presentation and acquisition of basic knowledge about the subject's syllabus.

The methodology is fundamentally based on master classes directed to the entire group of students. It will be complemented by individualized or small group tutoring.

Training Activity II (1,5 ECTS): External curricular internships: the student will attend internships at health centres in the different units where pathologies prevalent in the elderly are diagnosed and treated. The corresponding teacher will evaluate the internships. Practical seminars may be replaced by internships.

In case the internship cannot be completed, the student may perform a clinical case on an individual basis

Learning activity III (1,5 ECTS): laboratory practices: the student will learn to perform diagnostic techniques in relation to the pathology studied

5. Assessment system

1. Global evaluation by means of a single final theoretical-practical test, at the end of the teaching activities of the subject. The test will consist of an exam with questions with 4 answer options and only one correct answer including theoretical and practical questions on the whole syllabus (60% of the final grade).

2. Elaboration and presentation of monographic works on topics of the subject in small groups with the knowledge acquired in the clinical practices and in the theory of the subject (40% of the final grade).

3. Short tests will be conducted during theoretical classes to assess student learning, contributing up to a maximum of 0.5/10 to the final evaluation. Additionally, students will be required to ask questions about the topics covered, which will also be evaluated with a score of 0.5/10.

6. Sustainable Development Goals

3 - Good Health & Well-Being