

## 26770 - Surgical Specialties (Ophthalmology and Otolaryngology)

### Información del Plan Docente

<b>Academic Year</b>	2016/17
<b>Academic center</b>	104 - Facultad de Medicina
<b>Degree</b>	304 - Degree in Medicine
<b>ECTS</b>	6.0
<b>Course</b>	3
<b>Period</b>	First semester
<b>Subject Type</b>	Compulsory
<b>Module</b>	---

### **1.Basic info**

#### **1.1.Recommendations to take this course**

It is recommended to have passed the following subjects: Human Anatomy, Biology, Human Biochemistry, Physiology General Morphology Structure and Function I, II and III, Semiotics and Fundamentals of Pathophysiology, diagnostic and therapeutic procedures microbiological and physical diagnostic and therapeutic procedures

#### **1.2.Activities and key dates for the course**

Classroom Teaching: 2,70 ECTS (67.5 hours). This type of teaching will be distributed so that the teaching of large groups will be a 45% (1.22 ECTS, ie 30.4 hours) and small group teaching, another 45% (1.22 ECTS, is mean 30.4 hours)

Out of classroom teaching: 55% will involve training activities with 3.30 ECTS (82,5 hours)

The key dates of this matter will be organized according to the academic calendar of the Center.

### **2.Initiation**

#### **2.1.Learning outcomes that define the subject**

To be competent on this subject, the student, should demonstrate the following results ...

In the course of Ophthalmology, the student, after passing this specialty, should demonstrate the following results:

Perform correctly the anamnesis of patients and be able to properly assess the basic eye semiotics of the most prevalent eye diseases.

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Explain the overall functioning of Ophthalmology and to value the kind of relations that should exist in these services among doctors, nurses, patients and families.

Learning to behave properly in the operating room, knowing the techniques of asepsis and antisepsis. Recognize and understand the fundamentals of surgical techniques used in the field.

Be able to solve clinical problems related to ophthalmology, elementary clinical practice, making visual acuity eye chart, basic care and emergency care and referral criteria.

Students will be able to establish the diagnosis, prognosis and treatment of the most prevalent eye diseases.

In the course of Otolaryngology, the student, after passing this specialty, should demonstrate the following results:

Perform a complete anamnestic of pathological processes of the nasal passages, sinuses, pharynx, larynx and head and neck region.

Perform an elementary exploration of these regions, interpreting the meaning of the findings.

Guide the diagnosis of the most important pathological problems of the ear, nasal passages, sinuses, pharynx, larynx and head and neck region.

Establish, in each of the studied pathological processes, the criteria for referral to a specialty care. Indicate the most appropriate therapeutic elemental of the most common pathological processes.

### **2.2.Introduction**

Brief presentation of the subject

This matter belongs to the "Human Clinic" module comprise 6 ECTS credits and is divided into two distinct parts or subjects with a teaching load of 3 ECTS each. It is taught in the 5th semester (1st semester of 3rd year Degree).

The educational organization falls under the Department of Surgery

### **3.Context and competences**

#### **3.1.Goals**

The subject and its expected results meet the following approaches and objectives: The subject of Ophthalmology has the following objectives:

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Acquire basic knowledge in the field of ophthalmology, to train and encourage for further specialization performing tasks.

Contribute to early diagnosis and treatment of the most common eye diseases, also developing possible preventive measures.

Collaborate in health education of the population with regard to early diagnosis of pathological processes that can compromise the territories of our specialty.

Develop a capacity for analysis and synthesis of data from the clinical history and examination of patients, to start a working hypothesis founded that will lead to a diagnosis judgment through an appropriate methodology.

Establish appropriate criteria for the application of specialized medical care in the diagnosis and treatment of pathological processes comprising Ophthalmology.

Learn the basics of the therapeutic indications, developing their ability to critically discern the most

appropriate for each patient therapeutic alternatives.

Develop their ability to use information sources in Ophthalmology, also learning to value ratios outpatient and hospital care quality and management of available resources.

Finally, with these objectives, the aim is to get a comprehensive education of students who should form

the basis of the formation of the current general practitioner and future, putting him in a position to evaluate new diagnostic and therapeutic procedures that arise in the future developments in the field. The subject of Otolaryngology has the following general objectives

Contribute to the prevention of diseases that can affect the ear, nasal passages and sinuses, pharynx, larynx and head and neck region.

Collaborate in health education of the population with regard to early diagnosis of pathological processes that can compromise the territories of our specialty.

Perform tasks care of the most important disease entities ear, nasal passages and sinuses, pharynx, larynx and head and neck region.

Establish appropriate criteria for the application of specialized medical care in the diagnosis and treatment

of pathological processes comprising Otolaryngology.

Acquire basic knowledge in the field of Otolaryngology, which enable and encourage for further specialization performing tasks.

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Report the most important aspects of the investigation of pathological processes of the ear, nasal passages and sinuses, pharynx, larynx and head and neck region.

### **3.2.Context and meaning of the subject in the degree**

The teaching of Ophthalmology must favor the acquisition of professional values, and appropriate behaviors that allow them to deal with eye problems in the general population.

Ophthalmology is a medical-surgical specialty characterized by having within its scope with very high incidence diseases and chronic diseases with high prevalence, especially in elderly patients. Because of these characteristics, an important part of the eye disease is diagnosed and treated by general practitioners. Otolaryngology is one of the specialties most prevalent pathological processes in the usual

medical-surgical practice, both adult and child.

Thus, an important part of the otorhinolaryngology pathology is treated by general practitioners. In fact, family doctors and pediatricians admit that 40% of his practice is related to problems of ear, nose and throat.

Therefore, the teaching of Otolaryngology must favor the acquisition of knowledge and behaviors that

allow the healthcare professional, solve problems Otorhinolaryngologic the general population. Moreover, Otolaryngology is of great importance since it refers to three of the five organs of the senses: smell, taste and hearing and sensory skills as important as the equilibration.

In addition, Otolaryngology should be considered the specialty of communication studies since the ear and larynx, which are two key components of it.

Moreover, Otolaryngology should be considered as a specialty of extraordinary importance, to engage the attention of the sphincter of the respiratory system: larynx.

### **3.3.Competences**

#### **BASIC**

Students can apply their basic knowledge to a specific knowledge area, as is the area of surgical specialties.

Students have the ability to gather and interpret relevant data to draw conclusions applicable in the scientific field.

Students can transmit information on scientific problems and technical solutions to both specialist and non-specialist public.

Students develop skills to undertake further studies with a high degree of autonomy.

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### **CROSSCUTTING**

Students master the pathologies that can affect the apparatus of vision and the respiratory system, mainly with regard to tumor pathology, to the way lacrimo-nasal, and those pathological situations that may compromise the relationship between the orbit and the sinuses.

### **SPECIFIC**

Students can recognize, diagnose and guide treatment of the main pathologies of Ophthalmology and Otolaryngology.

Students how to perform and interpret basic tests of both specialties.

### **3.4.Importance of learning outcomes**

With the above objectives it is to get the student's training in specific knowledge of the matter. This specific training must, in turn, integrate general education of current medical and train future physician to assess and incorporate new diagnostic and therapeutic procedures that arise in the evolution of the various areas of medical knowledge.

### **4.Evaluation**

The student must demonstrate that it has achieved the intended learning outcomes through the following evaluation activities

The evaluation may contain aspects of partial evaluation.

In this regard, Professor of each of the two subjects may propose, during each of the sessions Teaching large groups, different questions to different students who appear on the list of registered: the student responses may be taken into account at the time of the final evaluation, or the award of honors. Professor may also perform during school hours, surveys concerning the level of student achievement. Likewise, these surveys may be taken into account at the time of the final evaluation, or the award of honors.

Moreover, although the rating of this subject is global, the assessment will be made individually on each of the materials that make it up.

Thus, the student must demonstrate that it has achieved the intended learning outcomes through the following evaluation activities:

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In the field of Ophthalmology

### 1. Assessment of the level of achievement of the activity of teaching large groups:

The examination will include questions of theoretical program. It will consist of 40 multiple choice questions (4 diversionary responses, and one valid response) to be qualified 0-8 and will account for 80% of the final grade of the subject.

To pass the subject, it is essential to obtain at least a score of 4 points (40% of matter) in the above theory test.

### 2. Assessment of the level of use of activity teaching to small groups

The assessment will be made by the responsible teacher through evaluation system with short questions and voluntary interventions, based on specific documents for each of the sessions, arranged in the ADD, and that the student will have studied in advance the realization of the mentioned activities.

They will be graded from 0 to 2 points and therefore account for 20% of the final grade of the grade of matter.

To pass the subject, it is essential to attend 90% of them and obtain at least a score of 1 point (10% of the subject).

In the matter of Otolaryngology

### 1. Valoración the level of use of activity teaching large groups:

The evaluation exercise will consist of 8 questions to be answered succinctly and students can respond over 60 minutes.

The assessment of responses will be from 0 to 1 point per question. The total score for the year is obtained from the sum of the points of each of the questions and will involve 80% of the total evaluation. To overcome this matter, it is required to obtain, in this section, at least 50% of the maximum grade, that is April 1.

### 2. Assessment of the level of use of activity teaching to small groups

After conducting sessions teaching small groups, discussion sessions will be convened, in which teachers raised and discussed with each of the students, various practical problems or aspects of any of the sessions of teaching small groups imparted.

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During these discussion sessions, teachers appreciate the degree of utilization of practical teaching of each of the students, who deserve a rating that will contribute 20% of the total score. To overcome this matter,

it is required to obtain, in this section, at least 50% of the maximum score, ie 1 January.

The sum of both scores will form the total score, so that to pass the subject is necessary to obtain half the possible score in each of the tests. Thus, to overcome Otolaryngology, it is necessary that students get at least 4 points out of 8 possible points in the evaluation sessions teaching large groups; and 1 point from 2 points in the evaluation of teaching sessions to small groups (10% of the subject).

Both in the field of Ophthalmology and Otolaryngology matter, the final grade of seminars, workshops and practices will remain for the second call.

### Overall assessment of Surgical Specialties

As already it noted, to pass the subject of Surgical Specialties is necessary to obtain half the possible score in each of the tests, both in Ophthalmology and Otolaryngology.

The student who attends the course of Surgical Specialties receive, after their training period, and corresponding assessments for each of the materials that comprise an overall rating of that subject. This mark will be the average of the respective marks obtained in the two different materials that make up the subject. The results obtained by the student will be graded according to numerical scale with one decimal and corresponding qualitative rating (Article 5 of the RD 1125/2003.), So that:

0 ----- 4.9 Suspense (S.S)

----- 5.0 6.9 Approved (AP) Notable ----- 7.0 8.9 (NT)

----- 10 9.0 Outstanding (SB)

It should be noted, however, that to achieve the passing mark of the subject, are required to have approved each and every one of the subjects comprising the same, so that, otherwise, not the overall rating will be finalized. In the latter case, ie if the student has suspended one of the materials that make up the subject, you must re-testing of assessment for that matter, to overcome it, keeping scores on tests evaluation of other stuff that had already been approved. This reserve of qualifications obtained in

different subjects expires after exhausting the teaching period to which the student had done right for tuition. Thus, if the

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student does not obtain at least the passing grade in all subjects, and the period corresponding to the registration made in the course teaching is exhausted, you must re-take completely the process of teaching all and each of the materials and resubmitted to the evaluation processes of each and every one of them. Registrations of honor (MH) will be awarded to students who have achieved the highest scores. When deemed necessary by all teachers of different subjects, you may be called a specific test for this purpose between students selected by their better grades.

Finally, as they indicated the statutes of the University of Zaragoza, where artículo 166, and paragraph f,

there is the possibility that the subject can be overcome through a process of continuous assessment. In the latter case, the student must inform the teacher, in the early going, you want to pursue this option evaluation, so that the teacher perform the actions mentioned own system of continuous assessment.

### **5. Activities and resources**

#### **5.1. General methodological presentation**

The learning process that is designed for this subject is based on the following:

Matter is it structured in 30 sessions of teaching large groups of 1 hour and 32 teaching sessions to small groups of 1 hour.

In addition, it will have 10 hours of curricular external Practices

Also teaching the subject should include 66 hours of classroom instruction no.

The content of theoretical teaching sessions will be supported by the literature previously recommended.

#### **5.2. Learning activities**

The program that the student is offered to help you achieve the expected results includes the following activities.

Subject Ophthalmology Lecture (15 hours). Laboratory Practice (8 hours)

Troubleshooting and cases (8 hours). curricular external practices (5 hours). Tutorials (2 hours).

Study (33 hours).

Subject of Otolaryngology Master Class (15 hours). Troubleshooting and cases (16 hours). Clinical practices (5 hours).



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Tutorials (2 hours) Study (33 hours).

### 5.3.Program

Subject: Ophthalmology

Master Topic (15 hours).

Topic 1: Eyelids: abnormalities, inflammation and tumors

Topic 2: Pathology Lacrimal Apparatus

Topic 3: conjunctiva: inflammations and tumors

Topic 4: Cornea: inflammations, ulcers. Pathology of the sclera

Topic 5: Refraction defects. Pathology of the lens.

Topic 6: Glaucoma: Clinical forms, diagnosis and treatment Topic 7: Pathology of the uvea: uveitis. Uveo-retinal tumors  
Topic 9: Diabetic and hypertensive retinopathy

Topic 10: Macular Degeneration Age. other maculopathies

Topic 11: vitreoretinal pathology. Retinal detachment Topic 12: Orbital Pathology

Topic 13: visual and pupillary routes. Optic nerve pathology.

Topic 14: Pediatric Ophthalmology: Amblyopia and Strabismus. leukocoria

Topic 15: Traumatology ocular anterior segment and posterior segment

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Laboratory Practice (8 hours)

Seminar 1: Emergency / red eye

Seminar 2: Decrease AV / Fundoscopy

Seminar 3: Exploration in Ophthalmology

Seminar 4: Epidemiology / Quality of life / Pharmacology

Troubleshooting and cases (8 hours). External practices (5 hours).

Practice 1: systematic ophthalmological anamnesis. Ophthalmology medical history. Practice 2: External Exploration and visual acuity

Practice 3: Exploration slit lamp Practice 4: direct ophthalmoscopy Practice 5: Assistance to surgery

In this sense, all students perform practical activities in which personal or medical history patient data is handled, it is obliged to keep the confidentiality thereof.

Tutorials (2 hours).

Personal tutorials will be attending Topics, requesting day and time with the chosen professor, developed during the teaching / care business hours (8 to 15 hours).

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Its main objective is to achieve adequate academic orientation of the student.

At the beginning of the academic year students among the available teachers according to the teaching load will be distributed.

Study (33 hours).

It is the independent student work devoted to the study of the theoretical program and the preparation of seminars and workshops before and after delivery.

Ophthalmology is granted in a large teaching Digital Teaching Ring weight that has been organized to complement theoretical teaching.

It consists of: Course information stating the program, objectives and evaluation criteria. Prepare documents that allow Seminars and Practices. These documents will allow the evaluation of them during such training activities. Preparation and presentation of an individual work tutored Library Podcasts: clinical surgical procedures and practical clinical cases that complement the theoretical teaching. The questionnaire possible test questions to provide students with their preparation.

Subject: Otolaryngology

Master Topic (15 hours).

Topic 1: The nasal ventilatory insufficiency: The deviated septum. Hypertrophic nose turbinates. Topic 2: Respiratory infection: its pathophysiology. Infection of the respiratory tract: rhinitis and

laryngitis.

Topic 3: Chronic inflammation of the airways: Respiratory hyperreactivity. The sinonasal polyposis. Topic 4: Chronic inflammation of the airways: chronic laryngitis. Pseudo-tumor of the larynx.

Topic 5: The infection of the respiratory cavities: sinusitis and otitis. Topic 6 6: Chronic inflammation of the respiratory

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cavities: serous otitis.

Topic 7: Chronic inflammation of the respiratory cavities: chronic suppurative otitis media. Topic 8: Other pathological ear: some diseases of the external ear.

Topic 9: Gastrointestinal infection: its pathophysiology. Acute infection of the pharynx and tonsils. Topic 10: Chronic gastrointestinal infection: chronic infection of the tonsils.

Topic 11: Chronic inflammation of the pharynx. Obstructive sleep apnea. Topic 12: Some neuro-muscular disorders in Otolaryngology.

Topic 13: Malignant neoplasms in Otolaryngology. Topic 14: Vertigo: some pathophysiological models.

Topic 15: Hearing loss in adults: some pathophysiological models.

Troubleshooting and cases (16 hours).

1: Epistaxis.

2: Naso-facial trauma.

3: Tracheotomy and tracheostomy.

4: Exploring the vestibular function assessment of spontaneous manifestations of posterior labyrinth.

5: Acumetry

6: Audiometry.

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7: Impedanciometry.

8: The palliative treatment of hearing loss.

Clinical practices (5 hours).

Practice 1: General. The clinical history in Otolaryngology. The lighting in Otolaryngology. Practice 2: Clinical examination of the nose and sinuses: normal and pathological aspects. Practice 3: Clinical examination of the pharynx and larynx: normal and pathological aspects. Practice 4: Exploring ear: normal and pathological aspects.

Practice 5: Scanning neck: normal and pathological aspects.

In this sense, all students perform practical activities in which personal or medical history patient data is handled, it is obliged to keep the confidentiality thereof.

Tutorials (2 hours)

Personal tutorials will be attending Topics, requesting day and time with the chosen professor, developed during the teaching / care business hours (11 to 14 hours).

Off classroom teaching (33 hours).

It is the independent work devoted to the study of the theoretical program and the preparation of seminars and workshops

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before and after delivery.

### 5.4.Planning and scheduling

Schedule sessions and presentation of works

Lectures: 1 lecture / school group during the appropriate period, in each subject.

Teaching small groups: 30 hours, approximately, in each subject, spread throughout the school period appropriate to the number of students and the objectives of the sessions subgroups.

### 5.5.Bibliography and recommended resources

Ophthalmology:

Manual ophthalmology / Julian Garcia-Feijoo, Luis E. Pablo; [Collaborators Abecia Emilio

Martínez ... et al.]. Barcelona: Elsevier, D.L. 2012

Ophthalmology Clinic / Jack J. Kanski, Brad Bowling; with the collaboration of Ken Nischal, Andrew Pearson; [Scientific review, Juan Antonio Duran Hill]. 7th ed. Amsterdam; Barcelona; Madrid [etc.]: Elsevier, D. L. 2012

Illustrated Manual / Walter Becker, Hans Heinz Naumann, Carl Rodolf Pfaltz. Barcelona: Doyma, 1986

Ophthalmology [electronic resource] / editors, William Tasman, Edward A. Jaeger. 12th ed. Otolaryngology:

Otolaryngology / Hector Valles et al. 1st ed. Zaragoza: Presses of the University of Zaragoza, 2016

Treaty of otolaryngology and cervicofacial / Jorge Basterra Joy pathology. Barcelona [etc.]: Elsevier

Masson, cop. 2009

Otolaryngology and pathology cervicofacial / Ignacio Cobeta Marco. Barcelona: Ars Medica, D.L.2003

Manual otolaryngology / Rafael Ramirez Camacho ... [et al.]. 2nd ed. Madrid [etc.]: Mcgraw-Hill.Interamericana. D.L. 2007

Otolaryngology and pathology cervicofacial/ [Director] Joaquin Poch Broto; M. Perez Carretero ... [et al.]. Madrid [etc.]: Editorial Medica Panamericana. cop. 2006

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