

## Faculty of Medicine in Rijeka

**Course: Otorhinolaryngology**

**Course Coordinator: Assistant Professor Dubravko Manestar, MD, PhD**

**Department: Department of Otorhinolaryngology**

**Study: Integrated undergraduate and graduate university study of Dental Medicine in English**

**Year of the study: third**

**Academic year: 2023/2024**

### COURSE SYLLABUS

**Course information (basic description, general information, teaching overview, required equipment, and preparation, etc.):**

**Otorhinolaryngology** is a mandatory course in the third year of the Integrated undergraduate and graduate university study of Dental Medicine in English. It consists of 30 hours of lecture classes, 15 hours practical classes, which is a total of 45 hours (**3 ECTS**). Classes are held at the Clinic for Otorhinolaryngology and Head and Neck Surgery of the Clinical Hospital Center in Rijeka.

**The aim** of the course is to acquire basic knowledge in the field of otorhinolaryngology and to familiarize the students with the ENT doctor's field of work; disease diagnostics, medicamentous and surgical treatment. Special emphasis is placed on training students to perform examinations of the patient's head and neck and solving the most common and urgent ENT pathologies. The objective is to familiarize the students with the organization in the operating room, wards, and the polyclinic.

#### **Course content**

An overview of the ENT and head and neck surgery field of work. Diagnostics and treatment of otological, rhinological, pharyngolaryngological disorders and pathology of the neck, with a special reference to emergencies in ENT.

#### **Class performance**

Classes are performed through lectures and practicals. The estimated duration of classes is two weeks. During practical classes, the teacher monitors student participation during their examination and treatment of patients. Teachers discuss with students the specific pathological conditions of individual patients at the clinic.

During classes, student active participation and acquired knowledge will be assessed through oral examinations during practicals, oral colloquium, and oral final exam.

## Required reading:

1. Braut T., Velepich M., Kujundžić M., Marijić B., Maržić D., Oštarijaš E.: Emergencies in ENT – e-teaching material. Sveučilište u Rijeci, Medicinski fakultet, Rijeka, 2021.
2. Cummings Otolaryngology: Head and Neck Surgery, e-teaching material available at *Clinical Key* base, enabled by the Faculty of Medicine's Library.

## Recommended for additional reading:

1. Johnson JT, Rosen CA, Bailey BJ. Bailey's head and neck surgery – otolaryngology. Wolters Kluwer Health/Lippincott Williams & Wilkins, Philadelphia, 2014.
2. Additional e-teaching material available at *Access Medicine* and *Clinical Key* bases (e.g. Cummings Pediatric Otolaryngology, ENT guidelines, etc.)

## Course teaching plan

### List of lectures (with titles and learning outcomes):

#### **L1, L2 ,L3,L4, Introduction to ENT; ENT anatomy and physiology Emergencies in ENT**

##### Learning outcomes:

To discover the ENT and head and neck surgery field of work.

To recall previous knowledge of anatomy and physiology of the ENT region.

To describe the connection between embryological, anatomical, and physiological units with possible pathological phenomena.

##### Learning outcomes:

To identify emergencies in ENT.

To describe the symptomatology of basic emergencies in ENT.

To define the basics of clinical examination for recognition and differential diagnostics of emergencies in ENT.

To identify the basic causes of inspiratory stridor and to describe treatment options for respiratory distress (conicotomy/tracheotomy).

To describe the management of other emergencies in the ENT region.

#### **L5,L6 Infections in ENT**

##### Learning outcomes:

To name inflammatory and infectious diseases in the field of otorhinolaryngology.

To describe the etiology, clinical manifestations, propagation of inflammatory processes, and complications in deep neck spaces and, consequently, to define diagnostic procedures and treatment options

#### **L7, L8 Aesthetic surgery; Sleep apnea**

##### Learning outcomes:

To describe aesthetic and reconstructive procedures of the head and neck.

To describe sleep apnea and its main symptoms.

To discuss diagnostic procedures and treatment options for sleep apnea

**L9 Non-surgical aesthetic medicine**Learning outcomes:

To recognize non-surgical aesthetic procedures like botulinum toxin and fillers.

**L10, L11 Benign and malignant tumors of the larynx**Learning outcomes:

To identify risk factors for the development of benign and malignant laryngeal disorders.

To classify laryngeal disorders, to describe their clinical presentation, TNM classification and basic diagnostic methods.

**L12, L13 Outer and middle ear disorders**Learning outcomes:

To describe the etiology of acute outer and middle ear inflammations, the connection of otitis media with upper respiratory tract disorders and pharyngeal obstruction (enlarged tonsils), Eustachian tube dysfunction (cleft palate), etc.

To list symptoms of acute outer and middle ear inflammations (anamnestic, otoscopic).

To describe prevention and treatment of acute outer and middle ear inflammations.

**L14 Metastatic neck disease;**Learning outcomes:

To describe the diagnosis of local and distant malignant neck metastases and their treatment.

**L 15 Laryngeal surgery**Learning outcomes:

To describe different types of laryngeal surgical procedures (sparing and radical).

**L16, L17 Pharyngeal tissue; Tonsillar disorders; Pharyngeal neoplasms**Learning outcomes:

To define tonsillar disorders and the Waldeyer's ring.

To define indications for tonsillectomy – history-taking, swabs, AST-O, peritonsillar abscess.

To define indications for adenotomy.

To list various causes of pharyngeal disorders and pharyngeal tumors and to describe diagnostic procedures and treatment options.

**L18, L19 Rhinological allergology**Learning outcomes:

To describe allergic rhinitis (medical history, clinical manifestations, diagnostic methods, and therapy).

To identify hyperreactive rhinopathy and drug-induced rhinitis.

**L 20 Otogenic complications**Learning outcomes:

To describe the complications of ear infections (intratemporal, intracranial, cervical, systemic).

To recognize their symptoms and signs and to describe treatment methods.

**L21 Causes and diagnosis of deafness and vertigo**Learning outcomes:

To identify different causes and types of hearing impairment and dizziness.

To describe their diagnosis and pharmacological and surgical therapy.

**L22 Anatomical anomalies and other selected chapters on pediatric ENT**Learning outcomes:

To describe the basic anomalies of the ENT region and their treatment options.

To differentiate clinical features of relevant ENT pathological conditions between children and adults, as well as the specific pathology of the ENT region depending on the developmental age.

**L23, L24 Rhinological disorders in everyday practice; Epistaxis**Learning outcomes:

To list symptoms of rhinological disorders and to explain the range of diagnostic procedures (anterior and posterior rhinoscopy, endoscopy of the nose and sinuses, rhinomanometry, olfactometry) and basic treatment methods.

To name the basic causes of epistaxis and methods of stopping nosebleeds.

To describe the treatment of patients with epistaxis.

**L25 Functional endoscopic sinus surgery**Learning outcomes:

To define modern sinus surgery.

To list types of endoscopic procedures and to describe postoperative patient monitoring.

To recognize indications for functional endoscopic surgery.

**L26 Voice and speech rehabilitation**Learning outcomes:

To identify laryngectomy club.

To describe voice rehabilitation and laryngectomy.

To describe prostheses and speech cannulas.

**L27 Modern otosurgery; Implantable hearing aids; Cochlear implants;**Learning outcomes:

To list types of otoscopic procedures.

To define modern otosurgery.

To describe postoperative patient monitoring.

To name implantable hearing aids and to define the indications for prescribing them.

To recognize indications for cochlear implantation.

**L28 Selected chapters on the inner ear**Learning outcomes:

To list symptoms of inner ear disorders and the basics of their treatment.

**L29, L30 Thyroid gland tumors**Learning outcomes:

To describe the course of the disease and the prognosis in different histological types of benign and malignant thyroid tumors.

To describe the surgical treatment of thyroid glands.

**List of practicals (with titles and learning outcomes):**

Practical classes from the course Otorhinolaryngology are held at the Clinic for Otorhinolaryngology and Head and Neck Surgery of the Clinical Hospital Center in Rijeka. Students get acquainted with ENT pathology and basic patient examination in the presence of an assistant, using a headlight, otomicroscope, and endoscope. Students discuss differential diagnostics and treatment options for patients in the outpatient department, patients at the clinic scheduled for surgical treatment, and patients treated at the Department of Audiology and Phoniatrics. Students follow their mentors on a hospital round and participate in the patient treatment at the clinic and postoperative follow-up. They are introduced to the organization at the polyclinic, subspecialist clinics, and at the Department of Audiology and Phoniatrics, where they will learn about the daily work of an ENT doctor, especially in solving urgent and more frequent pathologies.

**Student obligations:**

Students are obligated to regularly attend and actively participate in all forms of classes.

**Exam (exam taking, detailed exam description of the oral/written/practical part, point distribution, grading criteria):**

Student grading is conducted according to the current **Ordinance on Studies of the University of Rijeka**.

Student work will be assessed and evaluated during course classes and on the final exam.

Students can obtain **50 grade points** during classes and **50 grade points** on the final exam, which totals **100 grade points**. Students are evaluated according to the ECTS (A–F) and numerical systems (1–5). Evaluation according to the ECTS system is conducted according to the absolute redistribution.

Out of the maximum of 50 grade points possible to obtain during classes, the student must obtain at least 25 grade points to access the final exam. Students who obtain less than 25 grade points during classes (F grade), must re-enroll the course.

Grade points can be obtained by active participation during classes and by performing the assignments as follows:

**I. Evaluation during classes (maximum of 50 grade points):**

- a) class attendance (up to 25 grade points)
- b) participation in practicals (up to 25 grade points)

**a) Class attendance (up to 25 grade points)**

Students can be absent from 30% of classes provided they have a justifiable cause, i.e., a doctor's note. Attending lectures, seminars, and practicals is mandatory. Compensation of practicals is possible with a prior agreement with the course coordinator. If a student is absent from more than 30% of classes, whether it is justifiable or not, they cannot continue to participate in the course and cannot access the final exam. In that case, the student is graded with 0 ECTS credits and an F grade.

Grading **class attendance at practicals** will be performed as follows:

% of attendance	grade points
85–100%	15
75–84%	10
< 74%	5

Grading **class attendance at seminars** will be performed as follows:

% of attendance	grade points
94–100%	5
87–93%	4
80–86%	3
< 80%	2

Grading **class attendance at lectures** will be performed as follows:

% of attendance	grade points
90–100%	5
< 90%	3

**b) Participation in practicals (up to 25 grade points)**

Practical knowledge of all students will be evaluated during classes, for which they can obtain a maximum of 25 grade points (13–25). The examination is performed during practicals.

During the examination, **the course coordinator evaluates each student's acquired knowledge and skills during their ENT patient examination**. Grades are assigned as follows:

grade	grade points
excellent	25
very good	21

good	17
sufficient	15

## II. Final exam (maximum of 50 grade points):

### Who can access the final exam

Students who **obtained at least 25 grade points** during classes are obligated to access the final exam on which they can obtain a maximum of 50 grade points.

### Who cannot access the final exam

Students who **obtained less than 25 grade points and/or were absent from more than 30% of classes** cannot access the final exam and have to re-enroll the course next year.

The final exam consists of an oral examination. A maximum of 50 grade points can be obtained at the final exam (25–50).

**Success at the final exam** is converted into grade points as follows:

<b>grade</b>	<b>grade points</b>
excellent	50
very good	42
good	33
sufficient	25
insufficient	0

In order to pass the final exam and final evaluation (including the previously obtained grade points during classes), the student must be positively evaluated and obtain at least 25 grade points on the final exam.

Grading in the ECTS system is performed according to the absolute grading system, i.e., based on the final success:

<b>A – 90–100%</b>
<b>B – 75–89,9%</b>
<b>C – 60–74,9%</b>
<b>D – 50–59,9%</b>
<b>F – 0–49,9%</b>

**Grades in the ECTS system** are converted into numerical grades as follows:

<b>A = excellent (5)</b>
<b>B = very good (4)</b>
<b>C = good (3)</b>
<b>D = sufficient (2)</b>
<b>F = insufficient (1)</b>

**Other information important for students regarding the course:**

Teaching content, exam dates, and all information regarding the course can be found on the website of the Department of Otorhinolaryngology.



**SCHEDULE for the academic year 2022/2023**  
**(21 November 2022–30 November 2022)**

DATE	TIME	TOPIC/GROUPS	LOCATION	LECTURERS
<b>21/11/2023</b>	09,00-10,30 10,30-12.00	<b>L1,L2,L3,L4</b>	<b>ENT Clinic</b>	Braut
	13,00-14,30	<b>L5,L6</b>	<b>on line</b>	Skitarelić
<b>22/11/2023</b>	08,30-10,00	<b>L 7,8</b>	<b>ENT Clinic</b>	Manestar
	10,00-10,45	<b>L 9</b>	<b>ENT Clinic</b>	Manestar
	11,00-12,30	<b>L 10, L11</b>	<b>ENT Clinic</b>	Vukelić
	13,00-14,30	<b>L 12, L 13</b>	<b>ENT Clinic</b>	Velepič
<b>23/11/2023</b>	08,30-10,00	<b>L 14, L 15</b>	<b>ENT Clinic</b>	Vukelić
	10,15-11,45	<b>L16, L 17</b>	<b>ENT Clinic</b>	Vukelić
	12,15-13,45	<b>L 18, L 19</b>	<b>ENT Clinic</b>	Braut
<b>24/11/2023</b>	08,30-10,45	<b>L20, L21, L 22</b>	<b>ENT Clinic</b>	Velepič
	11,15-13,30	<b>L23, L 24, L25</b>	<b>ENT Clinic</b>	Braut
<b>27/11/2023</b>	09,00-09,45 09,45-11,15	<b>L 26 L27, L 28</b>	<b>ENT Clinic</b>	Maržić Velepič
	11,45-13,15	<b>L 29, L 30</b>	<b>ENT Clinic</b>	Maržić
<b>28/11/2023.</b>	09,00-11,15	<b>P 1, 2,3 /1,2,3,4/</b>	<b>ENT clinic</b>	four assistants

	11,45-13,15	<b>P 4,5</b> <b>/1,2,3,4/</b>		
<b>29/11/2023</b>	09,00-11,15 11,45-13,15	<b>P 6, 7,8</b> <b>/1,2,3,4/</b> <b>P 9,10</b> <b>/1,2,3,4/</b>	<b>ENT clinic</b>	four assistants
<b>30/11/2023</b>	09,00-11,15 11,45-13,15	<b>P 11, 12,13</b> <b>/1,2,3,4/</b> <b>P 14,15</b> <b>/1,2,3,4/</b>	<b>ENT clinic</b>	four assistants

**List of lectures, seminars, and practicals:**

	<b>LECTURES (topics)</b>	<b>Teaching hours</b>	<b>Place</b>
L1–4	<b>Introduction to ENT ENT anatomy and physiology Emergencies in ENT</b>	4	<b>ENT Clinic Braut</b>
L5-6	<b>Infections in ENT</b>	2	<b>On line Skitarelić</b>
		2	
L 7-8	<b>Aesthetic surgery Sleep apnea</b>	2	<b>ENT Clinic Manestar</b>
L 9	<b>Non-surgical aesthetic medicine</b>	1	<b>ENT Clinic Manestar</b>
L 10-11	<b>Benign and malignant laryngeal disorders</b>	2	<b>ENT Clinic Vukelić</b>
L 12-13	<b>Outer and middle ear disorders</b>	2	<b>ENT Clinic Velepič</b>
L 14-15	<b>Metastatic neck disease, Laryngeal surgery</b>	2	<b>ENT Clinic Vukelić</b>
L 16-17	<b>Pharyngeal tissue; Tonsillar disorders; Pharyngeal neoplasms</b>	2	<b>ENT Clinic Vukelić</b>
L 18-19	<b>Rhinological allergology</b>	2	<b>ENT Clinic Braut</b>
L 20-22	<b>Otogenic complications, Causes and diagnosis of deafness and vertigo, Anatomical anomalies and other selected chapters on pediatric ENT</b>	3	<b>ENT Clinic Velepič</b>
L23-24	<b>Rhinological disorders in everyday practice Epistaxis</b>	2	<b>ENT Clinic Braut</b>
L 25	<b>Functional endoscopic sinus surgery</b>	1	<b>ENT Clinic Braut</b>
L 26	<b>Voice and speech rehabilitation</b>	1	<b>ENT Clinic Maržić</b>
L 27-28	<b>Modern otosurgery; Cochlear implants; Selected chapters o the inner ear; Implantable hearing aids</b>	2	<b>ENT Clinic Velepič</b>
L 29-30	<b>Thyroid gland tumors</b>	2	<b>ENT Clinic Maržić</b>
	<b>Total number of lecture hours</b>	30	
	<b>PRACTICALS (topics)</b>	<b>Teaching hours</b>	<b>Location</b>
P1–30	ENT practicals are performed at the Clinic for Otorhinolaryngology and Head and Neck Surgery and the Department of Audiology and Phoniatrics of the Clinical Hospital Center Rijeka. Students get acquainted with ENT pathology and basic patient examination in the presence of an assistant, using a headlight, otomicroscope, and endoscope.	30	ENT clinic

	<p>Students discuss differential diagnostics and treatment options for patients in the outpatient department, patients at the clinic scheduled for surgical treatment, and patients treated at the Department of Audiology and Phoniatrics. Students follow their mentors on a hospital round and participate in the patient treatment at the clinic and postoperative follow-up. They are introduced to the organization at the polyclinic, subspecialist clinics, and at the Department of Audiology and Phoniatrics, where they will learn about the daily work of an ENT doctor, especially in solving urgent and more frequent pathologies.</p>		
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