



Sveučilište u Rijeci • Fakultet dentalne medicine
University of Rijeka • Faculty of Dental Medicine

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: 2022/2023

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. 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. Flint PW et al. Cummings otolaryngology: head and neck surgery. Philadelphia, Elsevier, 2021.

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 Introduction to ENT; ENT anatomy and physiology

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.

L 3, L 4 Emergencies in ENT

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, L 8 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 Rhinological allergology

Learning outcomes:

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

To identify hyperreactive rhinopathy and drug-induced rhinitis.

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 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.

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:

Grade	Attendance
75–84%	10
< 74%	5

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

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:

grade	grade points
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:

A – 90–100%

B – 75–89,9%

C – 60–74,9%

D – 50–59,9%

F – 0–49,9%

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

A = excellent (5)

B = very good (4)

C = good (3)

D = sufficient (2)

F = insufficient (1)

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

DATE	TIME	TOPIC/GROUPS	LOCATION	LECTURERS
21/11/2022 Monday	09,00-10,30	L1,L2,L3,L4	FoM Lecture room 2	Braut Tamara, PhD, MD, Professor
	11,00-12,30			
	13,30-15,00	L5, L6	on line	Neven Skitarelić, PhD, MD,Professor
22/11/2022 Tuesday	08,30-10,00	L 7, L 8	Large lecture room at the CHC	Dubravko Manestar, PhD, MD, Associate Professor
	10,00-10,45	L 9	Large lecture room at the CHC	Dubravko Manestar, PhD, MD, Associate Professor
	11,00-12,30	L 10, L11	Large lecture room at the CHC	Jelena Vukelić, PhD, MD, Assistant Professor
	13,00-14,30	L 12, L 13	FoM Lecture room 2	Tamara Braut, PhD, MD, Professor
23/11/2022 Wednesday	08,30-10,00	L 14, L 15	Large lecture room at the CHC	Jelena Vukelić, PhD, MD, Assistant Professor
	10,15-11,45	L16, L 17	Large lecture room at the CHC	Jelena Vukelić, PhD, MD, Assistant Professor
	12,15-13,45	L 18, L 19	Large lecture room at the CHC	Marko Velepich, PhD, MD, Associate Professor
24/11/2022 Thursday	08,30-10,45	L20, L21, L 22	Large lecture room at the CHC	Marko Velepich, PhD, MD, Associate Professor
	11,15-13,30	L23, L 24, L 25	FoM Lecture room 2	Tamara Braut, PhD, MD Professor
25/11/2022 Friday	09,00-09,45 09,45-11,15	L 26 L27,L 28	Large lecture room at the CHC	Diana Maržić, PhD, MD, Assistant Professor Marko Velepich, PhD, MD, Associate Professor
	11,45-13,15	L 29, L 30	Large lecture room at the CHC	Diana Maržić, PhD, MD, Assistant Professor
		P 1, 2,3		Goran Malvić, MD, Assistant

28/11/2022. Monday	09,00-11,15 11,45-13,15	/1,2/ P 4,5 /1,2/	ENT clinic	Blažen Marijić, PhD, MD, Assistant
29/11/2022 Tuesday	09,00-11,15 11,45-13,15	P 6, 7,8 /1,2/ P 9,10 /1,2/	ENT clinic	Goran Malvić, MD, Assistant Blažen Marijić, PhD, MD, Assistant
30/11/2022 Wednesday	09,00-11,15 11,45-13,15	P 11, 12,13 /1,2/ P 14,15 /1,2	ENT clinic	Goran Malvić, MD, Assistant Blažen Marijić, PhD, MD, Assistant

	FINAL EXAM DATES
1.	1.12.2022.
2.	15.12.2022.
3.	2.02.2023.

List of lectures, seminars, and practicals:

	LECTURES (topics)	Teaching hours	Place
L1–2	Introduction to ENT ENT anatomy and physiology	2	Faculty of Medicine
L3–4	Emergencies in ENT	2	Faculty of Medicine
L5–6	Infections in ENT	2	On line Skitarelić
L 7-8	Aesthetic surgery Sleep apnea	2	Large lecture room at the CHC
L 9	Non-surgical aesthetic medicine	1	Large lecture room at the CHC
L 10-11	Benign and malignant laryngeal disorders	2	Large lecture room at the CHC
L 12-13	Rhinological allergology	2	Faculty of Medicine
L 14-15	Metastatic neck disease, Laryngeal surgery	2	Large lecture room at the CHC
L 16-17	Pharyngeal tissue; Tonsillar disorders; Pharyngeal neoplasms	2	Large lecture room at the CHC
L 18-19	Outer and middle ear disorders	2	Large lecture room at the CHC
L 20-22	Otogenic complications, Causes and diagnosis of deafness and vertigo, Anatomical anomalies and other selected chapters on pediatric ENT	3	Large lecture room at the CHC
L23-24	Rhinological disorders in everyday practice Epistaxis	2	Faculty of Medicine
L 25	Functional endoscopic sinus surgery	1	Faculty of Medicine
L 26	Voice and speech rehabilitation	1	Large lecture room at the CHC
L 27-28	Modern otosurgery; Cochlear implants; Selected chapters on the inner ear; Implantable hearing aids	2	Large lecture room at the CHC
L 29-30	Thyroid gland tumors	2	Large lecture room at the CHC
	Total number of lecture hours	30	

	PRACTICALS (topics)	Teaching hours	Location
P1–2	<p>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.</p> <p>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.</p>	15	Clinical hospital center Rijeka
	Total number of practicals	15	