
		UNIVERSITY OF EAST SARAJEVO Faculty of Medicine in					
		Study program:medicine					
		Integrated academic studies		VI study year			
Full subject title		OTORHINOLARYNGOLOGY WITH MAXILLOFACIAL SURGERY					
Department		Surgery department, Faculty of Medicine in Foca					
Subject code			Subject status		Semester		ECTS
ME-02-1-059-11			compulsory		XI		3
Professor/-s		Full professor Nenad Arsović, MD, PhD; assistant professor Boban Aničić, MD, PhD, Assistant professor Siniša Šolaja MD PhD					
Associate/-s		assistant Ljiljana Krsmanović MD, senior assistant Miroslav Obrenović, MD					
Number of lectures/ teaching workload (per week)			Individual student workload (in hours per semester)			Coefficient of student workload S₀¹	
L	E	SP	L	E	SP	S₀	
2	2	0	2*15*0,5	2*15*0,5	0*15*0,5	0,5	
total teaching workload (in hours, per semester) 2*15 + 2*15 + 0*15 = 60				total student workload (in hours, per semester) 2*15*0,5 + 2*15*0,5 + 0*15*0,5 = 30			
Total subject workload (teaching + student): 60 + 30 =90 hours per semester							
Learning outcomes		Mastering the subject, the student will be able to: 1. develop the technique of ear, nose and throat examination 2. recognise and handle emergencies in ORL					
General competences		They possess broad fundamentals of theoretical knowledge and practical skills, preparing them for any type of postgraduate education as well as for collaboration with other medical professionals. They are prepared for further development and advances within the field of medicine. They have acquired a systemic thinking approach as well as a structured approach to medical problems during their education. They are acquainted with a specific diagnostic algorithm. They are eager to dedicate themselves to the field of medicine and accept responsibility for the physical, mental and social well-being of their patients. They are respectful to the patients regardless of their gender, age, race, social and economic status, education, culture or religion. They advocate for the patient's right to participate fully in medical treatment decisions, including the right to the refusal of care or participation in the process of education and scientific research. They are capable of expressing themselves and communicating in a manner that is both understandable and acceptable to the patient. They are prepared for accepting responsibility and appropriate medical decision-making. They are acquainted with health improvement and disease prevention and are eager to make medical professionals adopt more positive attitude towards it. They are eager to collaborate with other medical professionals. They are conscious of the necessity for continuous learning and improvement process to maintain a high level of medical competence. They are eager to react constructively to the outcomes of assessment- criticism and praise.					
Preconditions		Precondition for taking the exam: all year 5 exams passed					
Teaching methods		Oral lectures and exercises					

¹The coefficient of student workload S₀ is calculated as it follows:

- a) for the study programs not going through the licensing process: S₀ = (total workload in semester for all of the subjects 900 hrs – total teaching workload L+E in semester for all of the subjects 870 hrs)/ total teaching workload L+E in semester for all of the subjects ____ hrs = _____. Consult form content and its explanation.
b) for the study programs going through the licensing process, it is necessary to use form content and its explanation.

<p>Subject content per week</p>	<p>Lectures</p> <ol style="list-style-type: none"> Otolaryngology and Audiology: Congenital ear malformations and external ear injuries, temporal bone fractures. Acute inflammation of the middle ear and complications. Otitic complications. Facial nerve disorders and labyrinth diseases. Tumors of the external, middle, and inner ear. Fundamentals of audiology and audiological rehabilitation. Rhinology: Congenital and acquired nasal malformations. Facial and nasal injuries and injuries to the frontobasal region. Inflammatory processes of the nasal cavity and paranasal sinuses. Allergic processes of the nasal cavity and paranasal sinuses. Tumors of the nose and paranasal sinuses. Pharyngology: Tonsillar problems. Acute and chronic inflammatory processes. Malignant and benign tumors of the pharynx. Laryngology, Tracheobronchology, and Phoniatics: Congenital laryngeal malformations. Acute and chronic inflammatory processes. Benign tumors of the larynx. Malignant tumors of the larynx. Injuries to the neck and larynx. Foreign bodies of the laryngotracheal tree and esophagus. Basics of phoniatics. Maxillofacial surgery: Congenital and acquired facial malformations. Inflammatory processes of the oral cavity and tongue. Inflammatory processes of the salivary glands. Injuries. Benign and malignant tumors of the salivary glands of the oral cavity. <p>Exercises</p> <ol style="list-style-type: none"> Introduction to practical teaching of otorhinolaryngology. ENT anamnesis. Workplace equipment, lighting, instruments. Ear examination: otoscopy, inspection, palpation, and percussion. Special local ENT examinations of the ear: otomicroscopy. Irrigating and cleaning the ear in chronic otitis. Local therapy in the external auditory canal and middle ear. Cleaning and irrigating the external auditory canal. Removal of foreign bodies from the external auditory canal. Politzerization of the tube. Paracentesis. Examination of the mouth and pharynx. Oropharyngoscopy. Inspection and palpation. Palpation of the lymph nodes of the neck. Examination of the nose and paranasal sinuses. Anterior rhinoscopy. Inspection and palpation. Examination of the larynx and hypopharynx. Indirect laryngoscopy and hypopharyngoscopy. Posterior rhinoscopy. Inspection and palpation of the neck and larynx. Quantitative examination of hearing by whispering and loud speech. Qualitative examination of hearing by tuning fork. Examination of hearing by tuning fork for differential diagnostic purposes (Weber test, Rinne test, Schwabach test, and Gelle test). Examination of the vestibular apparatus: caloric, rotational. Basics of balance examination. Audiometric examination of hearing. Reading an audiogram. Hearing aids in audiological rehabilitation. Medicinal and surgical treatment of patients with inflammatory diseases of the middle and inner ear, otosclerosis, and peripheral facial paralysis. Injuries in ORL. Interpretation of X-rays, computed tomography, magnetic resonance imaging of the facial massif, salivary glands, oral cavity, and neck. Radiography of the jaw (orthopantomography), sialography, and ultrasound imaging of the salivary glands and neck. Case presentation. Treatment of facial wounds, oral cavity care, postoperative care. Stopping a nosebleed. Blood vessel cauterization. Anterior nasal tamponade. Posterior nasal tamponade according to Bellocq. Medicinal treatment of inflammatory processes in the sinuses. Aspiration of sinus secretions by the Proetz method. Removal of foreign bodies from the nose. Repositioning of the nasal bones. Working with patients in the ORL department and specialist outpatient clinics. Working with patients in outpatient polyclinical departments (anamnesis, status, medical history, and referral for additional examinations). Clinical analysis of patients, anamnesis, status, preoperative preparation. Oncological consultations. Instructions on documentation when referring patients for otorhinolaryngological examinations. Malignant and benign tumors in ORL. Examination and treatment of patients with laryngeal and hypopharyngeal carcinoma. Endoscopic examination methods. Examination and preparation of patients for endoscopic examinations. Directoscopic and microlaryngoscopic status. Biopsy from the larynx and pharynx. Laryngomicroscopy and biopsy. Analysis of pathohistological diagnosis. Anesthesia in otorhinolaryngological procedures. Tracheotomy. Intubation. Use of the tracheal cannula. Dressing the wounds of patients who have undergone neck and laryngeal surgery. Tracheobronchial aspiration through a tracheostomy. Feeding patients via nasogastric tube. Decannulation. Practical work with patients in the ORL department and specialist outpatient clinics.
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	12. Observation of surgeries in the operating rooms. Basics of phoniatic rehabilitation. Voice rehabilitation in patients. Voice rehabilitation in laryngectomy patients. Voice rehabilitation in laryngectomy patients using an electrolarynx.			
	13. Specifics of otorhinolaryngological examination in children. Surgical treatment of peritonsillar abscess. Preparation of the patient for tonsillectomy. Observation of tonsil and adenoid vegetation surgeries. Follow-up examinations of tonsillectomy patients. Therapy and nutrition for tonsillectomy patients.			
	14. Oncological consultations. Clinical analysis of patients with malignant diseases of the ORL region, anamnesis, status, preoperative preparation. Instructions on documentation when referring patients for otorhinolaryngological examination. Analysis of patients in outpatient polyclinical departments (anamnesis, status, outpatient therapy, angina, acute otitis, acute rhinitis). Working with patients in the dressing station.			
	15. Foreign bodies in the ORL region. Procedure for foreign bodies in the lower respiratory tract. Corrosive injuries. Esophagoscopy. Bronchoscopy.			
Compulsory literature				
Author/s	Publication title, Publisher	Year	Pages (from-to)	
Behrbohm H et al.	Ear, Nose and Throat Diseases. With Head and Neck Surgery 3 rd ed. Thieme	2009.		
Additional literature				
Author/s	Publication title, Publisher	Year	Pages (from-to)	
Student responsibilities, types of student assessment and grading	Grading policy		Points	Percentage
	Pre-exam activities			
	lecture/exercise attendance		30	30%
	seminar paper		20	20%
	Final exam			
	practical		10	10%
	Written test		40	40%
TOTAL		100	100 %	
Certification date	June 17th 2024			

* the number of necessary rows is added by using *insert mode*