

MEDICAL UNIVERSITY – PLOVDIV
FACULTY OF MEDICINE

SYLLABUS
IN
OTORHINOLARYNGOLOGY

Approved by the Department Council on 06.06.2022

Confirmed by the Faculty Council - Protocol №6/15.06.2022

Otorhinolaryngology
Syllabus

Discipline	Final exam/ semester	Auditorium classes				ECTS non-auditorium classes	ECTS total	Academic hours in years and semesters	
		Total	Lectures	Practices	ECTS			4 th year	
Otorhinolaryngology	VII/VIII								VIII
		90	45	45	3.0	1.5	4.5		3/3

DISCIPLINE: Otorhinolaryngology / Ear Nose and Throat diseases

TYPE OF DISCIPLINE ACCORDING TO THE UNIFORM STATE REQUIREMENTS:

Compulsory

LEVEL OF QUALIFICATION: Master degree

FORMS OF TRAINING: Lectures and practice

YEAR OF TRAINING: 4th

DURATION OF TRAINING: one semester

ACADEMIC HOURS: 45 hours of lectures and 45 hours of practice

TECHNICAL EQUIPMENT APPLIED IN THE TRAINING: Multimedia; All ENT instruments and equipment (microscopes, endoscopes, audiometers, tympanometers)

FORMS OF EVALUATION: at least two tests during the semester, final exam consisting of practical exam, test and essay

EVALUATION CRITERIA: practical skills and theoretical knowledge

ASPECTS OF EVALUATION CRITERIA: clinical thinking, examination skills, differential diagnosis, diagnostic options, handling of emergency cases, treatment options and decision making.

SEMESTER EXAM: YES

STATE EXAM: YES (practice and theory)

LECTURER: prof. Vicheva; assoc prof Pazardzhikliev

DEPARTMENT: ENT department

ANNOTATION

Otolaryngology/ otolaryngology-head and neck surgery or Ears, Nose, and Throat (ENT) diseases is a medical specialty which focuses on the conditions affecting the ear, upper aerodigestive tract and the neck.

BASIC AIMS OF THE DISCIPLINE

Training in ear, nose and throat diseases aims to provide basic knowledge and practical skills in graduates of medicine and dental medicine with a master's degree and prepare them for work in an outpatient setting.

EXPECTED RESULTS

After completion of the course students must have acquired knowledge of:

1. Anatomy and Physiology of the Ears, Nose and Throat
2. Pathophysiology and clinical manifestation of diseases of these organs.
3. Performing a basic ENT examination.
4. Theoretical knowledge and practical skills in the treatment of the most common ENT diseases.
5. Theoretical knowledge and practical skills about the most common ENT emergencies.
6. To recognize the early manifestations of malignant diseases in ENT.

LECTURES

1. Conditions of the external ear. Developmental anomalies of the external ear. Impetigo of the external ear. Seborrheic dermatitis. Eczema of the ear. Thermal injury of the external ear – frostbite, burns. Erysipelas. Othematoma. Perichondritis. Foreign bodies in the external ear canal. Earwax. Otomycosis. Exostosis of the external auditory canal. Traumatic rupture of the tympanic membrane. Tumors of the external ear.	3h.
2. Conditions of the middle ear. Acute otitis media. Acute otitis and infectious diseases. Acute otitis media in infants Otitis media with effusion – acute and chronic. Streptococcus pneumoniae otitis. Ear barotrauma. Facial nerve palsy. Acute mastoiditis.	3h.
3. Chronic otitis media and specific infectious diseases of the middle ear. Chronic otitis: Mesotympanitis and Epitympanitis, Cholesteatoma. Tuberculosis of the middle ear. Syphilitic otitis media. HIV-associated otitis. Tumors of the middle ear.	3h.
4. Conditions of the inner ear. Inflammatory diseases of the inner ear. Labyrinthitis. Vestibular neuritis, Cochlear neuritis. Sudden hearing loss. Tinnitus. Presbycusis. Deafness. Herpes zoster oticus. Non-inflammatory diseases of the inner ear. Meniere's disease. Otosclerosis. Tumors of the internal auditory meatus /Statoacoustic neuroma/	
5. Otogenic intracranial complications. Extradural abscess. Subdural abscess. Otogenic purulent meningitis. Otogenic arachnoiditis. Thrombophlebitis of the sigmoid sinus and otogenic sepsis,. Thrombophlebitis of the cavernous sinus. Otogenic brain abscess. Abscess of the cerebellum. Ageing and the auditory and vestibular system.	3h.
6. Conditions of the nose and paranasal sinuses. Deformities of the external nose. Deformities of the paranasal sinuses. Deviation of the nasal septum - septoplasty. Rhinophyma. Foreign bodies in the nose. Rhinitis sicca anterior. Epistaxis. Nasal bone fractures. Hematoma and abscess of the nasal septum. Tumors of the external nose.	3h.
7. Inflammatory diseases of the nose. Acute rhinitis in infants and young children. Furuncle of the nasal vestibule. Gonococcal rhinitis. Dyphteria of the nose. Foreign body in the nose. Chronic rhinitis. Chronic atrophic rhinitis (Ozena). Olfactory disorders.	3h.
8. Conditions of the paranasal sinuses. Inflammatory diseases of the paranasal sinuses. Acute sinusitis. Acute maxillary sinusitis. Acute ethmoiditis. Acute frontal sinusitis. Acute sphenoid sinusitis. Aerosinusitis Chronic sinusitis with and without polyposis. Nasal polyposis. Surgical treatment of sinus diseases. Allergic rhinitis. Vasomotor rhinitis.	3h.
9 Complications of the paranasal sinus diseases. Tumors of the paranasal sinuses. Orbital complications of sinusitis. Palpebral edema. Palpebral abscess. Orbital periostitis. Apex orbitae syndrome. Orbital cellulitis. Orbital abscess and phlegmon. Optic neuritis. Neoplasms of the nasal cavity and paranasal sinuses – benign and malignant.	3h.
10 Conditions of the oral cavity and tongue. Congenital anomalies /anomalies of the lips, mouth and palate clefts/. Inflammatory diseases of the lips and oral cavity - cheilitis, stomatitis. Necrotising ulcerative stomatitis (Noma, cancrum oris). Mycotic stomatitis. Chemical stomatitis. Oral manifestation of systemic and hematological diseases. Abscesses of the floor of the mouth and tongue.	3h.

Submandibular phlegmon. Glossitis. Tumors of the oral cavity and tongue – benign and malignant.	
11 Conditions of the salivary glands. Salivary secretion disorders. Ranula. Trauma of the salivary glands. Sialadenitis - acute and chronic. Sialolithiasis. Sialosis. Sjogren's and Miculicz disease. Tumors of the salivary glands – benign and malignant	3h.
12 Conditions of the pharynx. Inflammatory diseases – acute nasopharyngitis, acute nonspecific pharyngitis, chronic non-specific pharyngitis, herpetic lesions of the pharynx. Tonsillitis – Acute tonsillitis, Acute adenoiditis, Vincent's angina. Chronic tonsillitis. Adenoid hypertrophy. Tonsillar hypertrophy. Obstructive sleep apnea.	3h.
13 Conditions of the pharynx Complications of the inflammatory diseases of the pharynx – peritonsillary abscess, retropharyngeal abscess, parapharyngeal abscess. Pharyngeal trauma. Tumors of the pharynx – benign and malignant.	3h.
14 Conditions of the larynx, trachea and bronchi. Acute laryngitis. Croup. Acute epiglottitis. Laryngeal edema. Laryngeal abscess. Acute stenosing laryngotracheitis. Chronic laryngitis. Foreign bodies in the larynx. Laryngeal trauma. Acute laryngeal stenosis. Laryngeal dyspnea. Chronic laryngeal stenosis. Laryngeal paralysis. Acute and chronic tracheal stenosis. Foreign bodies in the trachea and bronchi	3h.
15 Conditions of the larynx and esophagus. Benign and malignant neoplasms of the larynx. Cervical metastasis. Chronic infectious and specific diseases of the upper respiratory tract – Respiratory scleroma, Tuberculosis, Syphilis. Professional diseases of the ENT. Conditions of the esophagus – Diverticulum, Spasm, Varices, Esophagitis and Reflux disease. Chemical trauma of the esophagus. Esophageal stricture. Foreign bodies in the esophagus	3h.

PRACTICES

1. Examination of the external ear Introductory speech. Anamnesis, Inspection, Palpation. Otoscopy. Position of the physician and the patient. Setup and instruments. Methods of examination in the ENT practice	3h.
2. Otoscopic examination of the healthy tympanic membrane Anatomy of the middle ear. Anatomical details of the tympanic membrane, mobility, position, color. Central v marginal perforation of the TM. Examination of the eustachian tube /Poltzer balloon test, Valsalva maneuver/.	3h.
3. Otoscopic examination of tympanic membrane pathology Demonstration of patients with acute and chronic infection of the middle ear – aural toilet, suctioning, syringing. 3h. Earwax removal. Clinical anatomy of the middle ear	3h.
4. Functional examination of hearing Physiology of hearing. Speech test, Tuning fork tests. Audiometry. Frequency spectrum of perception. Conductive v sensorineural hearing loss. Weber, Rinne, Schwabach and Gelle tests	3h.
5. Functional examination of the vestibular system Physiology of balance. Caloric reflex test, Barany rotation test. Pressure test. Fistula test. Demonstration of patients with balance disorders.	3h.
6. Examination of the nose Clinical anatomy of the nose. Respiratory and olfactory functions of the nose. Anterior, middle and posterior rhinoscopy. Nasal packing. Demonstration of patients with diseases of the nose.	3h.
7. Examination of the paranasal sinuses Clinical anatomy of paranasal sinuses. Anamnesis, Inspection, Palpation. Maxillary sinus puncture. Radiological	3h.

examination of paranasal sinuses. Demonstration of patients with paranasal sinus pathology.	
8. Examination of oral cavity and pharynx Clinical anatomy and physiology of the oral cavity and the pharynx. Anamnesis, Inspection, Palpation. Examination of the pharynx and tonsils. Demonstration of patients with pathology of the mouth and pharynx.	3h.
9. Examination of the larynx Clinical anatomy and physiology of the larynx. Anamnesis, Inspection, Palpation. Indirect and direct laryngoscopy. Demonstration of patients with diseases of the larynx.	3h.
10. Examination of patients Bronchoscopy, Esophagoscopy, Foreign bodies in the esophagus and esophageal dilatation.	3h.
11. – 14. Examination of ENT patients Examination of patients in the ENT practice Methods of treatment in the ENT practice. Emergency ENT.	

BIBLIOGRAPHY

1. Rudolf Probst, Gerhard Grevers, Heinrich Iro Basic Otorhinolaryngology A Step-by-Step Learning Guide 2006
2. Tony R Bull Color Atlas of ENT diagnosis 2009
3. Essential Otolaryngology: Head and Neck Surgery, Tenth Edition by K. J. Lee
4. Otorhinolaryngology, Head and Neck Surgery (European Manual of Medicine) by Matti Anniko and Manuel Bernal-Sprekelsen
5. Color Atlas of ENT diagnosis by Bull T
6. Oxford Handbook of ENT and Head and Neck Surgery (Oxford Medical Handbooks)
7. Oxford American Handbook of Otolaryngology (Oxford American Handbooks of Med

CONSPECTUS

Conspectus for ENT Exam 4th Year Medicine

1. Anatomy and physiology of the external ear. Non-inflammatory diseases and inflammatory diseases. Otitis externa.
2. Anatomy and physiology of the middle ear. Methods of examination. Acute Otitis media in adults and infants. Otitis media with effusion, Mastoiditis, Facial nerve paralysis. Clinical complications.
3. Chronic Otitis media - types. Clinical complications. Traumatic rupture of the tympanic membrane.
4. Anatomy and physiology of the inner ear. Methods of examination. Otosclerosis. Clinical complications.
5. Vestibular disorders. Examination of the Vestibular System. Meniere's Disease, Labyrinthitis. Vestibular Neuritis.
6. Otogenic complications – extracranial and intracranial. Diagnosis and treatment.
7. Anatomy and physiology of the nose. Clinical Examination of the Nose. Nasal pyramid fracture. Epistaxis.
8. Anatomy and physiology of the paranasal sinuses. Clinical Examination of the. Acute and Chronic Rhinosinuitis.
9. Pediatric Rhinosinuitis. Orbital complications in diseases of the nose and paranasal sinuses. Cerebrospinal Fluid Rhinorrhea
10. Allergic Rhinitis. Nasal polyposis. Neoplasms of the Nose and Paranasal Sinuses.

11. Basic Anatomy and Physiology of the Lips and Oral Cavity. Inflammatory diseases of the Lips and Oral Cavity. Oral Floor Abscess. Angioedema. Anatomy, Physiology and Immunology of the Pharynx. Methods of Examination of the Pharynx.
12. Diseases of the Pharynx. Diseases of the Nasopharynx – adenoids, juvenile angiofibroma. Acute and Chronic Tonsillitis, Scarlet Fever, Plaut-Vincent Angina, Diphtheria, Infectious Mononucleosis. Tonsillogenic complications: Peritonsillar abscess. Retropharyngeal and parapharyngeal abscess. Diseases of the hypopharynx.
13. Diseases of the Salivary glands. Anatomy, Clinical Examination, Imaging Studies, and Biopsy of the Salivary Glands. Noninflammatory and Inflammatory Diseases. Sjogren Syndrome. Tumors of the Salivary Glands.
14. Adult and Pediatric Obstructive Sleep Apnea. Diagnosis, Physical Examination and Treatment.
15. Anatomy and physiology of the larynx. Methods of Examination. Stridor. Malformations of the larynx. Diphtheria. Acute Subglottic Laryngitis. Acute Epiglottitis. Acute laryngitis. Angioneurotic Laryngeal Edema. Chronic Nonspecific Laryngitis. Reinke's Edema. Tuberculous Laryngitis
16. Tumors of the Larynx. Vocal Cord Polyps. Vocal Cord Nodules. Laryngeal Papilloma. Laryngeal Squamous Cell Carcinoma. Spindle Cell Carcinoma. Neuroendocrine Carcinoma. Surgical treatment options for laryngeal carcinoma. Laryngectomy Effects and Voice Rehabilitation. Tracheotomy and Cricothyrotomy
17. Laryngeal Trauma. Recurrent Laryngeal Nerve Paralysis. Basic Principles of Speech. Dysphonia. Vocal Cord Paralysis. Stridor. Cough.
18. Emergencies and Primary Measures in the ear, nose and throat. Foreign Bodies. Anatomy and physiology of the Esophagus. Corrosive Esophagitis. Treatment.