

**PRIVATE HIGHER EDUCATIONAL INSTITUTION
"INTERNATIONAL ACADEMY OF ECOLOGY AND MEDICINE"
Department of Surgery**

WORKING PROGRAM OF EDUCATIONAL DISCIPLINE

" Otorhinolaryngology "

LEVEL OF HIGHER EDUCATION Second (master's) level
DEGREE OF HIGHER EDUCATION Master's degree
BRANCH OF KNOWLEDGE 22 Healthcare
SPECIALTY 222 Medicine

Reviewed and approved
at the meeting of the Academic Council
Protocol No. 1, dated August 31, 2018

Kiev 2018

Working program of education discipline Otorhinolaryngology for the preparation of students of higher education of the second (master's) level of higher education in specialty 222 Medicine.

1. DESCRIPTION OF THE EDUCATIONAL DISCIPLINE

Name indicators	Field of knowledge, specialty, level higher education	Characteristics of the educational disciplines
		daytime form teaching
Number credits – 3	Branch of knowledge 22 Health Care (code and name)	Normative
	Specialty: 222 "Medicine"	Year preparation 4th
General number hours 90		Semester the 7th
	Level of higher education: Master's degree	Lectures 10 hours
Practical 52 hours		
Independent work 28 hours		
Final control: Differential credit		

2. COMPETENCES AND SOFTWARE RESULTS TEACHING

According to the requirements of the standard of higher education of Ukraine in specialty 222 "Medicine" branch of knowledge 22 "Otorhinolaryngology" for the second (master's) equal higher education, discipline provides acquisition by students such *competencies*:

General competences (CG)	
GC-1	Ability to abstract thinking, analysis and synthesis.
GC-2	Ability to learn and master modern knowledge.
GC-3	Ability to apply knowledge in practical situations
GC-4	Knowledge and understanding of the subject area and understanding of professional activity
GC-5	Ability to adapt and act in a new situation
GC-6	Ability to make informed decisions.
GC-7	Ability to work in a team.
GC-8	Ability to interpersonal interaction.
GC-10	Ability to use information and communication technologies.
GC-11	Ability to search, process and analyze information from various sources.
GC-12	Determination and persistence in relation to assigned tasks and assumed responsibilities.
Professional competences (PC)	
PC-1	Ability to collect medical information about the patient and analyze clinical data.
PC-2	Ability to determine the necessary list of laboratory and instrumental studies and evaluate their results.

PC-3	Ability to establish a preliminary and clinical diagnosis of the disease.
PC-4	The ability to determine the necessary regime of work and rest in the treatment and prevention of diseases
PC-5	The ability to determine the nature of nutrition in the treatment and prevention of diseases.
PC-6	Ability to determine the principles and nature of treatment and prevention of diseases.
PC-7	Ability to diagnose emergency conditions.
PC-8	Ability to determine tactics and provide emergency medical care.
PC-10	Ability to perform medical manipulations.
PC-11	Ability to solve medical problems in new or unfamiliar environments in the presence of incomplete or limited information, taking into account aspects of social and ethical responsibility.
PC-16	Ability to maintain medical documentation, including electronic forms.
PC-20	Ability to conduct epidemiological and medical-statistical studies of the health of the population; processing of social, economic and medical information.
PC-21	It is clear and unambiguous to convey one's own knowledge, conclusions and arguments on health care problems and related issues to specialists and non-specialists, in particular to people who are studying.
PC-24	Adherence to ethical principles when working with patients and laboratory animals.
PC-25	Adherence to professional and academic integrity, to be responsible for the reliability of the obtained scientific results.
Program Learning Outcomes (PLO)	
PLO-1	Have thorough knowledge of the structure of professional activity. To be able to carry out professional activities that require updating and integration of knowledge. To be responsible for professional development, the ability for further professional training with a high level of autonomy.
PLO-3	Specialized conceptual knowledge, which includes scientific achievements in the field of health care and is the basis for conducting research, critical understanding of problems in the field of medicine and related interdisciplinary problems.
PLO-4	Identify and identify leading clinical symptoms and syndromes (according to list 1); according to standard methods, using preliminary data of the patient's history, data of the patient's examination, knowledge about the person, his organs and systems, establish a preliminary clinical diagnosis of the disease (according to list 2).
PLO-5	Collect complaints, history of life and diseases, evaluate psychomotor and physical development of the patient, state of organs and systems of the body, based on the results of laboratory and instrumental studies, evaluate information regarding the diagnosis (according to list 4), taking into account the age of the patient.
PLO-6	Establish the final clinical diagnosis by making a reasoned decision and analyzing the received subjective and objective data of clinical, additional examination, differential diagnosis, observing the relevant ethical and legal norms, under the supervision of the head physician in the conditions of the health care institution (according to list 2).
PLO-7	Assign and analyze additional (mandatory and optional) examination methods (laboratory, functional and/or instrumental) (according to list 4) of patients with diseases of organs and body systems for differential diagnosis of diseases (according to list 2).
PLO-8	Determine the main clinical syndrome or what causes the severity of the condition of the victim/injured (according to list 3) by making a reasoned decision and assessing the person's condition under any circumstances (in the conditions of a health care institution, outside its borders), including in conditions of emergency and hostilities, in field conditions, in conditions of lack of information and limited time.
PLO-9	Determine the nature and principles of treatment (conservative, operative) of patients with diseases (according to list 2), taking into account the patient's age, in the conditions of a health care institution, outside its borders and at the stages of medical evacuation, including

	in field conditions, on the basis of a preliminary clinical diagnosis, observing the relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes, in case of the need to expand the standard scheme, be able to justify personalized recommendations under the control of the head physician in the conditions of a medical institution.
PLO-10	Determine the necessary mode of work, rest and nutrition on the basis of the final clinical diagnosis, observing the relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes.
PLO-14	Determine tactics and provide emergency medical care in emergency situations (according to list 3) in limited time in accordance with existing clinical protocols and treatment standards.
PLO-17	Perform medical manipulations (according to list 5) in the conditions of a medical institution, at home or at work based on a previous clinical diagnosis and/or indicators of the patient's condition by making a reasoned decision, observing the relevant ethical and legal norms.
PLO-18	To determine the state of functioning and limitations of a person's vital activities and the duration of incapacity for work with the preparation of relevant documents, in the conditions of a health care institution, based on data about the disease and its course, peculiarities of the person's professional activity, etc. Maintain medical documentation regarding the patient and the contingent of the population on the basis of regulatory documents.
PLO-21	Search for the necessary information in the professional literature and databases of other sources, analyze, evaluate and apply this information.
PLO-22	Apply modern digital technologies, specialized software, and statistical methods of data analysis to solve complex healthcare problems.
PLO-24	To organize the required level of individual safety (own and the persons he cares for) in case of typical dangerous situations in the individual field of activity.
PLO-25	It is clear and unambiguous to convey one's own knowledge, conclusions and arguments on health care problems and related issues to specialists and non-specialists.
PLO-27	Communicate freely in the national and English languages, both orally and in writing to discuss professional activities, research and projects.

Expected detailed learning outcomes. As a result of studying the academic discipline, the student must:
Know:

- symptoms and course of diseases
- basic mechanisms of cell and tissue damage
- micro-organisms, including pathogenic and present in the physiological flora
- basics of microbiological and parasitological diagnostics basics of disinfection, sterilization and aseptic management
- symptoms and course of diseases
- methods of diagnostic and therapeutic procedures appropriate for specific disease states
- ethical, social and legal conditions for practicing the medical profession and the principles of health promotion, based on scientific evidence and accepted standards
- the causes, symptoms, diagnostic and therapeutic management principles for the most common diseases requiring surgical intervention, taking into account the distinctness of childhood age, including in particular acute and chronic abdominal diseases,
- the causes, symptoms, diagnostic and therapeutic management principles for the most common diseases requiring surgical intervention, taking into account the distinctness of childhood age, including in particular thoracic diseases,
- the causes, symptoms, diagnostic and therapeutic management principles for the most common diseases requiring surgical intervention, taking into account the distinctness of childhood age, including in particular diseases of extremities and head,
- the causes, symptoms, diagnostic and therapeutic management principles for the most common

- diseases requiring surgical intervention, taking into account the distinctness of childhood age, including in particular fractures of bones and injuries to organs
- selected issues in the field of pediatric surgery, including traumatology and otorhinolaryngology, as well as acquired defects and diseases being indications for surgical treatment in children
- rules of qualification for basic surgical procedures and invasive diagnostic and therapeutic procedures, rules of their performance and the most frequent complications
- principles of perioperative safety, patient preparation for surgery, general and local anesthesia and controlled sedation
- the most common complications of the otorhinolaryngology procedures
- postoperative treatment with analgesic therapy and postoperative monitoring
- indications and rules for the use of intensive care
- problems of modern imaging examinations, in particular: 1) radiological symptomatology of major diseases, 2) instrumental methods and imaging techniques used to perform therapeutic procedures, 3) the indications, contraindications and preparation of the patient for particular types of imaging examination and contraindications for the use of contrast agents
- issues related to laryngology, phoniatrics and audiology, including causes, clinical course, methods of treatment, complications and prognosis of diseases of the ear, nose, paranasal sinuses, oral cavity, pharynx and larynx,
- issues related to laryngology, phoniatrics and audiology, facial nerve disease and selected cervical structures,
- issues related to laryngology, phoniatrics and audiology, rules for diagnostic and therapeutic management of mechanical injuries to the ear, nose, larynx and esophagus,
- issues related to laryngology, phoniatrics and audiology, rules for emergency management in otorhinolaryngology, in particular in laryngeal dyspnea,
- issues related to laryngology, phoniatrics and audiology, principles of diagnostic and therapeutic management of hearing, voice and speech impairments,
- issues related to laryngology, phoniatrics and audiology, principles of diagnostic and therapeutic management of head and neck neoplastic diseases
- the most common complications associated with anesthesia, sedation and perioperative period

Be able:

- identify medical problems and prioritize medical management
- identify life-threatening conditions that require immediate medical intervention
- plan the diagnostic procedure and interpret its results
- implement appropriate and safe therapeutic treatment and predict its effects
- plan own learning activities and constantly learn in order to update own knowledge
- inspire the learning process of others
- communicate with the patient and his family in an atmosphere of trust, taking into account the needs of the patient
- communicate and share knowledge with colleagues in a team
- critically evaluate the results of scientific research and adequately justify the position
- assist in a typical surgical procedure, prepare the surgical field and apply local anesthesia to the operated area
- use basic surgical instruments
- conduct an approximate hearing and field of vision examination, and an otoscopic examination
- conduct an approximate hearing test
- adhere to the principles of asepsis and antisepsis
- manage a simple wound, put on and change a sterile surgical dressing
- examine breasts, lymph nodes, thyroid gland and abdominal cavity in terms of acute abdomen and perform digital rectal examination
- evaluate the result of a radiological examination in the most common types of fractures, particularly long bone fractures

- manage external bleeding
- monitor the patient's condition in the post-operative period based on basic vital parameters
- evaluate the condition of the unconscious patient according to international scoring scales
- recognize the symptoms of increasing intracranial pressure
- can tie a single and surgical knot
- identify and indicate methods of management of traumatic peripheral nerve damage
- perform basic laryngological examination of the ear, nose, pharynx and larynx
- conduct an approximate hearing test

Is ready to:

- to be guided by the well-being of a patient
- to establish and maintain deep and respectful contact with patients and to show understanding for differences in world views and cultures
- respect medical confidentiality and patients' rights
- take actions towards the patient on the basis of ethical norms and principles, with an awareness of the social determinants and limitations of the diseases
- perceive and recognize own limitations and self-assessing educational deficits and needs
- promote health-promoting behaviors
- use objective sources of information
- formulate conclusions from own measurements or observations
- implement the principles of professional camaraderie and cooperation in a team of specialists, including representatives of other medical professions, also in a multicultural and multinational environment
- formulate opinions on the various aspects of the professional activity
- assume responsibility for decisions taken in the course of their professional activities, including in terms of the safety of oneself and others

3. EXPLANATORY NOTE

Otorhinolaryngology (ENT) — clinical discipline, which is studying anatomy, physiology and pathology of the ear, upper respiratory tract and areas adjacent to them. The importance and necessity of its teaching at the final stage of the doctor's training due to the fact that diseases of the upper respiratory tract are on one of the the first places among illness a person and constitute near 15% everyone appeals to medical institutions. In addition, timely treatment of ENT diseases is preventive diverse pathologies internal bodies helps prevention such heavy chronic diseases, as rheumatism, polyarthritis, pyelonephritis, cholecystitis, pathologies of blood vessels, the nervous system, and the organ of vision, and thereby causes preservation working capacity and longevity.

The program is built taking into account the integration of the educational process in higher education school and provides knowledge students basic theoretical and clinical discipline

The discipline program consists of one module, which includes blocks of content modules. The volume of students' educational workload is described in ECTS credits - credit credits that are credited to students upon successful completion assimilated them corresponding module (credit ECTS)

4. Structure of discipline" Otorhinolaryngology "

The subject of the lesson	Lectur es	Practical	Independent work
1. Definition initial equal of knowledge Method and machinery endoscopic research ENT organs. Clinical anatomy and physiology auditory analyzer. Methods research auditory analyzer.	2	4	1
2. Ear diseases: sulfur plug, otitis externa (furuncle external auditory canal, diffuse otitis), acute purulent otitis media, mastoiditis	2	4	5
3. Ear diseases: chronic purulent inflammation of the middle ear (mesotympanitis, epitympanitis), labyrinthitis. Healing operations ears, tympanoplasty. Autogenic intracranial complication and otogenic sepsis.	2	4	3
4. Non-purulent disease ears: Qatar average ears, sensorineural deafness otosclerosis, disease Meniere's.	-	4	1
5. Clinical anatomy, physiology and research methods of the pharynx, larynx, trachea, bronchi and esophagus Virus the flu A (H1N1).	-	4	3
6. Diseases of the larynx, trachea and bronchi. Acute laryngitis. Foreign bodies of the larynx, trachea and bronchi. Methods of diagnosis and treatment.	-	4	3
7. Clinical anatomy, physiology and methods research nose, profitable sinus, pharynx, larynx, trachea, bronchi and esophagus Diseases of the nose: curvature of the nasal septum, boils of the nose, acute and chronic rhinitis.	2	4	4
8. Diseases of the paranasal sinuses: acute and chronic sinusitis _ orbital and intracranial complication rhinogenic origin. Curation patients	-	4	2
9. Diseases pharynx: sharp and chronic pharyngitis, leptotrichosis, classification of tonsillitis, primary and secondary tonsillitis, complications sore throat nasopharyngeal abscess, diphtheria pharynx	2	4	1
10. Diseases pharynx: chronic tonsillitis, hypertrophy palatal and pharyngeal tonsils	-	4	1
11. Acute laryngotracheitis in children, diphtheria of the larynx, chronic laryngitis, precancerous diseases of the larynx. Tracheotomy Conicotomy .	-	4	1
12. Tumors and infectious granulomas upper respiratory ways injuries, outsiders' bodies, bleeding with ENT organs. Urgent help at ENT diseases	-	4	3
Differential credit	-	4	-
Total	10	52	28

5. PURPOSE OF THE TASK AND DISCIPLINE

The goal of studying otorhinolaryngology is to master diagnostic methods, treatment and prevention diseases ears, throat nose and profitable sinus and, first of all, those from them; which have most wide dissemination. For achievement this one educational goals student should know: clinical anatomy and physiology ENT organs and modern methods their research; etiology, pathogenesis, clinic, methods of treatment and prevention of diseases of the nose, paranasal sinuses, pharynx, larynx, outer, middle and inner ear, as well as those caused by them complications

Student should be able: evaluate the results examination ENT organs; identify the most common ENT diseases and their complication; appoint treatment these diseases

Student should master: typical endoscopic methods research ENT organs; the most used practical skills; methods granting urgent help sick with injuries, outsiders bodies bleeding from ENT organs and stenoses upper respiratory ways

The study of the discipline involves the supervision of patients, solving situational problems, conducting test, computer and eye control while assessing the initial, current and final level of knowledge.

6. PROGRAM CONTENT

Ear.

Clinical anatomy. External ear, him departments, walls external auditory move Average ear, system him cavities, floors and walls drum cavity, her contents, structure drum membranes, auditory tube, mastoid process. Blood supply and innervation of the outer and middle ears. The inner ear, leg sections, the structure of the curl, hair, semicircular canals. Value topographical, anatomical and aged features external, average and internal ears in development illness ears and their complications

Receptor apparatus, conductive paths and centers of the auditory analyzer. Building of the receptor apparatus of the pricinia and ampoules of the semicircular canals. Vestibular nuclei analyzer and their connections with by others departments central nervous systems.

Physiology. Characteristics of an adequate auditory analyzer stimulus. Zone of auditory perception, sensitivity to sounds of different frequencies, adaptation, fatigue, binaural hearing. Sound conduction and sound perception. Value drum membranes, auditory bone, muscles drum cavities and secondary drum membranes in mechanisms carrying out sound Functions auditory pipes Bone sound conduction, him types Theories of hearing

Adequate stimuli of the ampullary and otolith apparatuses. Nystagmus, his characteristic and patterns, three groups vestibular re threshold, suprathreshold and language audiometry Objective methods research hearing acoustic impedance measurement, registration auditory caused potentials, otoacoustic emission. Using unconditional and conditional reflexes Playful audiometry Differential diagnosis lesions sound-conducting and sound-receptive devices

Research vestibular functions. Research spontaneous vestibular reactions Experimental samples — caloric, rotary and pneumatic stimulation, cupulometry. Vestibular illusion anti-rotation .

Research function otolith device: otolith reaction, cumulative sample. Sensitivity studies to Coriolis acceleration .

Diseases external ears. Outsiders bodies external auditory move

Sulfur stopper. External otitis (limited and diffuse).

Acute purulent medium otitis _ Etiology, pathogenesis, clinic. About sobriety course of acute otitis in infants and infectious diseases. Treatment, tympanopuncture and paracentesis. Mastoiditis, atypical forms, treatment of mastoiditis, anthritis _ Antro-mastoidotomy .

Chronic purulent average otitis. Mandatory signs Mesotympanitis and epitympanitis _ Cholesteatoma. Conservative treatment. Healing operations Tympanoplasty .

Labyrinthitis. Etiology, pathogenesis, clinic. Acute, diffuse, serous and purulent labyrinthitis, chronic limited labyrinthitis.

Autogenic intracranial complication and otogenic sepsis. Etiology. Ways and stages of the spread of infection from the ear to the skull cavity; Meningitis, thrombosis sigmoid sinus and otogenic sepsis, abscesses large hemispheres main brain and cerebellum. Methods of diagnosis and principles of treatment. Consequences of influence the flu AND (H1N1) on systems ENT organs.

Non-purulent diseases of the ear. Acute and chronic catarrh of the middle ear, exudative otitis. Sensorineural deafness Otosclerosis. Disease Meniere's. Hearing aids.

Nose and profitable the sinuses

Clinical anatomy nose External nose: bony and cartilaginous skeleton external nose, blood supply features venous departure blood innervation, lymphatic system. Cavity nose: walls, neighborhood with by others organs and skull cavity, turbinates and nasal passages, choanae, structure mucous membrane of the

nose (respiratory and olfactory zones), arterial blood supply and venous ebb, features venous formations cavities nose: cavernous fabric, venous plexuses, their role, bleeding nose, innervation of the mucous membrane shells cavities nose Reflexes with cavities nose

Physiology nose Functions nose: respiratory, protective, olfactory, resonator, lachrymatory, mimic Nasal breath, him influence on functional state organism, on the child's physical and mental development, language development, emergence diseases others bodies and systems Olfactory parser.

Clinical anatomy and physiology profitable sinus building, topography, individual and aged features. Functions profitable sinus

Methods research. External review and palpation. Front and back rhinoscopy Video endoscopy of the nasal cavity and paranasal sinuses, radiography, magnetic resonance and computer tomography. Puncture, trepanopuncture and sounding Research respiratory and olfactory functions of the nose.

Diseases of nose Congenital anomalies injuries, outsiders bodies Deformationexternal nose and nasal septum. Bleeding from the nose: the most frequent localization, general and local reasons; principles treatment, granting urgent help, front and back tamponade, surgical methods stops Hematoma and abscess partitions nose Freezing, burns Erysipelas, sycosis, eczema, rhinophyma, furuncle ha carbuncle, are possible complication.

Acute rhinitis, features of its course depending on age. 1 Chronic rhinitis, foot forms: catarrhal, hypertrophic, atrophic (simple and ozena), vasomotor (allergic, neurovegetative).

Diseases of the sinuses. Injuries Classification of sinuses. Sharp and chronic sinusitis, ethmoiditis, frontitis, sphenoiditis. Hemisinuit and paisinuit _ Polyps nose Odontogenic sinusitis, features clinics and treatment.

Orbital and intracranial complication at inflammatory diseases nose and profitable sinus

Benign (angiofibroma, osteoma, papilloma) and malignant (cancer, sarcoma, neuroesthesioblastoma, melanoma) tumors nose and bring sinus

Pharynx

Clinical anatomy and physiology. Topography of the pharynx. Three sections of the pharynx. Pharynx. Walls pharynx Oropharyngeal space. Muscles pharynx blood supply, lymph drainage and innervation pharynx Functions pharynx

Lymphadenoid ring of the pharynx. The structure of the palatine tonsil. Functions lymphadenoid pharyngeal rings; immune, hematopoietic, reflex .

Methods research. Palpation regional lymphatic nodes Oropharyngoscopy, back rhinoscopy, indirect laryngoscopy, finger examination of the nasopharynx. Assessment of the condition of the palatine tonsils — tonsillorotation, definition character content a lacuna

Diseases Injuries and outsiders bodies and urgent help at. them Acute pharyngitis. Chronic pharyngitis and him forms Leptotrichosis .

Tonsillitis. Classification. Primary angina: catarrhal, follicular, lacunar, ulcerative - membranous angina, differential diagnosis, general principles examination and treatment. Secondary tonsillitis Complication sore throat: quinsy and paratonsillar abscess, lateropharyngeal abscess, intratonsillar abscess, adenophlegmon neck, spilled phlegmon neck, tonsillogenic mediastinitis, tonsillogenic sepsis. Abscestonsylectomy. Oropharyngeal abscess Diphtheria of the pharynx.

Chronic tonsillitis. Etiology, pathogenesis, pathological anatomy. Classification. Local signs. Types of decompensation. Forming a diagnosis. Methods conservative treatment. Indications to surgical treatment and him varieties

Hypertrophy palatal tonsils adenoids, adenoids

Tumors Juvenile angiofibroma of the nasopharynx. Cancer of the pharynx. Tonsillar tumors: lymphoepithelioma, reticulosarcoma.

Larynx, trachea, bronchi

Clinical anatomy and physiology. Topography of the larynx, trachea and bronchi. Age features, level Location, value him for tracheostomy. cartilage, joints and ligaments, clinical significance for

conicotomy. External and internal muscles of the larynx. Functional classification muscles larynx Cavity larynx, structure mucous and the submucosal layer, its importance for the development of laryngeal edema and its occurrence laryngeal tonsillitis Blood supply and innervation. Features lymphatic systems larynx respiratory, protective, vocal and language functions larynx

Methods research. External review, palpation, indirect and direct laryngoscopy, microlaryngoscopy, laryngostroboscopy, tracheobronchoscopy, respiratory bronchoscopy, fibrolaryngotracheo-bronchoscopy. X-ray and tomographic examination, computer and magnetic resonance imaging of the larynx, trachea and bronchi

Diseases larynx Injuries larynx and trachea, urgent help. Stenosis larynx: definition concept, reasons sharp and chronic stenosis larynx, stage, principles treatment. Tracheotomy and tracheostomy: indication, her options machinery operations Conicotomy. Acute catarrhal laryngitis. Laryngeal angina, phlegmonous laryngitis, abscess epiglottis, chondroperichondritis larynx Acute laryngotracheitis in children: etiology, pathogenesis, clinical classification, clinic, principles treatment, extended nasotracheal intubation. Diphtheria larynx Chronic laryngitis: catarrhal, hypertrophic, atrophic Precancerous diseases larynx

Tumors of the larynx. Benign: fibroma, papilloma (papillomatosis). Malignant — cancer of the larynx: stages of the disease, clinic, diagnosis, including principles of early-stage diagnostics. Microlaryngoscopy in diagnostics and treatment cancer larynx Surgical and radial treatment. Chemotherapy. Reconstructive operations on larynx Value preventive reviews and dispensation in diagnostics and prevention malignant neoplasms larynx

Foreign bodies of the larynx, trachea and bronchi. Age aspects. Features of the clinic with foreign bodies of the larynx and trachea, methods of their removal. Clinic of foreign bodies bronchi: period sharp respiratory violations, latent period, period complications Varieties stenosis bronchi: full, partial, valve X-ray examination of the patient. The HoltGCnecht -Jacobson phenomenon. Their methods removal

Esophagus

Clinical anatomy. Topography of the esophagus. Wall structure, blood supply, lymph drainage, innervation. Physiological narrowing esophagus, their clinical value.

Research methods. X-ray examination. Esophagoscopy: methods anesthesia, tools and machinery manipulation

Outsiders bodies Clinic. Stages examination of the patient with suspicion of extraneous body of the esophagus. The role of fibroesophagoscopy in the diagnosis and treatment of foreign bodies esophagus Indications to esophagoscopy. Complication.

Esophageal burns. Reasons. Clinic. First aid. Treatment. Boogie esophagus

Infectious granulomas

Scleroma. Epidemiology. Endemic zones of disease spread. Syphilis. Tuberculosis

7. Thematic plan of lectures

No	The topic of the lecture
1	Introduction to the specialty. Research methods of auditory and vestibular analyzers.
2	Acute purulent otitis media. Mastoiditis
3	Chronic purulent otitis media. Tympanoplasty Otogenic intracranial complications.
4	Chronic rhinitis. Acute and chronic sinusitis. Rhinogenic complications.
5	Morphology and physiology of the lymphadenoid ring of the pharynx. Classification of tonsillitis. Angina. Chronic tonsillitis. Stenosis of the larynx, intubation, tracheostomy. Acute diseases of the larynx. Chronic diseases of the larynx.

8. Thematic plan practical classes

No	The topic of the lecture
1	Determination of the initial level of knowledge. Methodology and technique of endoscopic examination of ENT organs. Clinical anatomy and physiology of auditory analyzer. Methods of hearing analyzer research. Clinical anatomy, physiology and research methods of the vestibular analyzer.
2	Ear diseases: sulfur plug, otitis externa (furuncle external auditory canal, diffuse otitis), acute purulent otitis media, mastoiditis.
3	Ear diseases: chronic purulent inflammation of the middle ear (mesotympanitis, epitympanitis), labyrinthitis. Healing operations ears, tympanoplasty. Autogenic intracranial complication and otogenic sepsis.
4	Non-purulent disease ears: Qatar average ears, sensorineural deafness otosclerosis, disease Meniere's .
5	Clinical anatomy, physiology and research methods of the pharynx, larynx, trachea, bronchi and esophagus Virus the flu A (H1N1).
6	Diseases of the larynx, trachea and bronchi. Acute laryngitis. Foreign bodies of the larynx, trachea and bronchi. Methods of diagnosis and treatment.
7	Clinical anatomy, physiology and methods research nose, profitable sinus, pharynx, larynx, trachea, bronchi and esophagus Diseases of the nose: curvature of the nasal septum, boils of the nose, acute and chronic rhinitis.
8	Diseases of the paranasal sinuses: acute and chronic sinusitis _ orbital and intracranial complication rhinogenic origin. Curation patients
9	Diseases pharynx: sharp and chronic pharyngitis, leptotrichosis, classification of tonsillitis, primary and secondary tonsillitis, complications sore throat nasopharyngeal abscess, diphtheria pharynx
10	Diseases pharynx: chronic tonsillitis, hypertrophy palatal and pharyngeal tonsils
11	Acute laryngotracheitis in children, diphtheria of the larynx, chronic laryngitis, precancerous diseases of the larynx. Tracheotomy. Conicotomy .
12	Tumors and infectious granulomas upper respiratory ways injuries, outsiders bodies, bleeding with ENT organs. Urgenthelp at ENT diseases
13	Differentiated credit

9. Thematic plan independent work students

No	Topic
1	Impedance measurement
2	Differential diagnosis violations sound-conducting and sound-receptive devices
3	Merciful sanitizing operations ears
4	Tympanoplasty
5	Exudative otitis
6	Deformation external nose Rhinoplasty
7	Functions lymphadenoid pharyngeal rings
8	Tonsillar (radiosensitive) tumors

9	Precancerous disease larynx
10	Outsiders bodies bronchi
11	Functional disease vocal device
12	Mycoses ENT organs
13	Helping patients with lesions of the ENT organs in stages evacuation

10. Individual tasks.

Individual tasks are one of the forms of organization of training, which aims to deepen, generalize and consolidate the knowledge that students receive in the learning process, as well as the application of this knowledge in practice. Individual tasks are performed by students independently under the guidance of the teacher.

Individual tasks include: writing abstracts and creating multimedia presentations with reports at meetings of the department's scientific student circle, participation in the department's scientific and research work, participation in writing theses and articles for reports at student scientific conferences.

The list of tasks for the student's individual work: participation in the work of the student scientific circle and speeches at scientific forums; participation in the student Olympiad in discipline; selection of video and audio materials from sections of the academic discipline; selection of materials and creation of a presentation on a relevant topic or section of the discipline.

11. Teaching methods

According to the sources of knowledge, teaching methods are used: verbal - story, explanation, lecture, instruction; visual - demonstration, illustration; practical - practical work, problem solving. According to the nature of the logic of knowledge, methods are used: analytical, synthetic, analytical-synthetic, inductive, deductive. According to the level of independent mental activity, the following methods are used: problem-based, searching, research.

1. Verbal methods: lecture, conversation;
2. Visual methods: illustration, demonstration
3. Practical methods: performing practical work and solving situational tasks to develop skills and abilities;
4. Students' independent work on understanding and assimilation of new material
5. Use of control and educational computer programs
6. Innovative teaching methods: Case - based learning (Learning through the analysis of a clinical case, situation); brainstorming; educational discussion; educational debate; role play; Team-based learning; Think-pair-share.

The types of training according to the curriculum are: lectures; practical training; independent work of students.

12. Control methods

Current control is carried out on the basis of control theoretical knowledge, practical skills and abilities.

Forms of current control are: *in the dream survey* (frontal, individual, combined), interview; **practical verification of the formed professional skills** (carried out based on the results of solving clinical cases, working with medical documentation, performing practical skills, working at the patient's bedside); **test control** ("open" and "closed" test tasks).

Current control is mandatory. During the evaluation of mastering of each topic from all disciplines of the curriculum for the current educational activity, the student is given grades on a 4-point (traditional scale) taking into account the approved evaluation criteria for the discipline. All types of work provided by the curriculum are taken into account. The student must receive a grade in each topic. The teacher conducts a survey of each student in the group at each lesson and assigns a grade in the journal of attendance and student performance according to the traditional scale ("5", "4", "3", "2").

When evaluating the student's current educational activity, 20% of the grade is the student's independent work, which takes into account the knowledge of the topic of independent study and the performance of work in the notebook.

The final (summary) control is carried out:

- in the form of a written test, which includes test tasks, theoretical questions
- control of practical skills (solving clinical cases, defense of medical history, assessment of the correctness of practical skills - practical-oriented exam).

According to the specifics of professional training, preference is given to test and practically oriented control.

Differential assessment is a form of final control of the student's assimilation of theoretical and practical material from the academic discipline.

13. Scheme of accrual and distribution of points received by students

The maximum number of points for a discipline is 200 points. The ratio between the results of the evaluation of the current educational activity and the final control of knowledge is 60% and 40%.

The study of the discipline ends with a final control in the form of a differential assessment.

Only those students who do not have academic debt (all missed classes have been completed) and whose average score for the current educational activity in the academic discipline is at least "3" are admitted to the differential credit.

The maximum number of points that a student can score for the current educational activity for admission to the diff.credit is 120 points and is defined as the sum of the arithmetic average of all grades received in the semester.

The minimum number of points that a student must score for the current educational activity is 72 points. Recalculation of the average grade for the current academic performance (on a 120-point scale) in the table. 1.

Table 1.

Recalculation of the average grade for the current academic performance in a multi-point scale for disciplines ending with a differential credit

4-point scale	200-point scale	4-point scale	200-point scale	4-point scale	200-point scale
5	120	4.29	103	3.58	86
4.96	119	4.25	102	3.54	85
4.92	118	4.21	101	3.50	84
4.87	117	4.17	100	3.46	83
4.83	116	4.12	99	3.42	82
4.79	115	4.08	98	3.37	81
4.75	114	4.04	97	3.33	80
4.71	113	4.00	96	3.29	79
4.67	112	3.96	95	3.25	78
4.62	111	3.92	94	3.21	77
4.58	110	3.87	93	3.17	76
4.54	109	3.83	92	3.12	75
4.50	108	3.79	91	3.08	74
4.46	107	3.75	90	3.04	73
4.42	106	3.71	89	3	72
4.37	105	3.67	88	Less than 3	Not enough
4.33	104	3.62	87		

The maximum number of points that a student can score when taking a differential assessment is 80 (the minimum number is at least 50).

Discipline assessment is defined comprehensively as the sum of points for the current educational

activity and points for differential assessment.

From the allocated 120 points for the current educational activity, 4 to 12 additional points are allocated for the assessment of individual independent work of higher education applicants, according to the work curriculum. Encouragement points are added to the final grade for the discipline at the end of its study.

Points with disciplines for students, which successfully completed the program are converted into the national scale and ECTS system (Table 2).

Table 2

Scale assessment: national and ECTS

Total points for all types educational activity	Rating ECTS	Rating by national scale	
		for exam, diff.offset	for offset
180-200	A	perfectly	counted
160-179	B	fine	
150-159	C	satisfactorily	
130-149	D		
120-129	E		
50-119	FX	unsatisfactorily with the possibility of refolding	not counted with possibility rearrangement
0-49	F	unsatisfactorily with mandatory repeated studying the discipline	not counted with mandatory repeated studying the discipline

1 4. Methodological support

1. Work program of the academic discipline;
2. Plans of lectures, practical classes and independent work of students;
3. Abstracts of lectures on the discipline;
4. Methodical instructions for practical classes for students;
5. Methodical materials that ensure independent work of students;
6. Test and control tasks for practical classes;
7. List of exam questions

15. List educational and methodical literature

The main one

1. Probst R., Grevers G., Iro G. Otorhinolaryngology in clinical practice practice _/M.: " Practical medicine", -2012 - 243.
2. Emergency care in otorhinolaryngology: Training.help _ for honey University post-graduate diploma.education Recommended by the Ministry of Health / O.M. Naumenko, V.M. Vasiliev, Yu.V. Deeva, S.B. Hatless.— K., 2017. — 144 p., tv.pal., (art. 20 pr.).
3. Otorhinolaryngology. D.I. Zabolotnyi, Yu.V. Mitin, S.B. Bezshapochnyi, Yu.V. Deeva.- K.: VSV "Medicine", 2010. - 472 p. + 32 p. color _ incl .

Auxiliary

1. Probst, R., Grevers, G., & Iro, H. (2005). Basic otorhinolaryngology: a step-by-step learning guide. Thiem .
2. Andrew Leblanc. Atlas of hearing and balance organs. Springer – Verlag France, 1999.–58p.
3. Atlas of human anatomy by Frank H. Netter, MD Sharon Colacino, Ph.D Consulting Editor.– Summit, New Jersey.- 1992. - 514 p.
4. Charles M. Myer III, Robin T. Cotton. A practical approach that pediatric otolaryngology.– Chicago – London – Boca Raton. Year Book Medical Publishers Inc., 1988. - 247 p.

5. Marshall G. D. Therapeutic options in allergic disease _ Antihistamines as systemic antiallergic agents. J. Allergy Clin. Immunol ., 2000, 106:S303–9.

6. Otorhinolaryngology. Y. Mitin, Y. Deyeva, M. Zavaliy, Y. Gomza, V. Didkovskiy, L. Krynychko, O. Motaylo, Z. Tereshchenko, Y. Shevchuk. Editor by Professor Y. Mitin, Y. Deyeva. Associate Professor Y. Deyeva. Second edition, revised and expanded. Kyiv, AUS Medicine Publishing, 2011.

Information resources:

[American Academy of Audiology](#) (link is external)

[American Academy of Otolaryngology - Head and Neck Surgery](#) (link is external)

[American Cancer Society](#) (link is external)

[American Medical Association](#) (link is external)

[American Physical Therapy Association](#) (link is external)

[American Speech-Language-Hearing Association](#) (link is external)

[American Tinnitus Association](#) (link is external)

[National Cancer Institute](#) (link is external)

[National Institute of Neurological Disorders and Stroke](#) (link is external)

[National Institute on Deafness and Other Communication Disorders](#) (link is external)

[Vestibular Disorders Association](#)

"APPROVED"



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