FEDERAL STATE BUDGETARY
EDUCATIONAL INSTITUTION OF HIGHER EDUCATION
"AMUR STATE MEDICAL ACADEMY"
MINISTRY OF HEALTH OF THE RUSSIAN FEDERATION

AGREED
Vice-Rector for Academic Affairs,

_____N.V. Loskutova

April 17, 2025

Decision of the CCMC
April 17, 2025

Protocol No. 7

APPROVED
by the decision of the Academic Council of the FSBEI HE Amur SMA of the Ministry of Health of the Russian Federation
April 22, 2025

Protocol No. 15

Acting Rector of the FSBEI HE Amur SMA of the Ministry of Health of the Russian Federation

_____ I.V. Zhukovets

April 22, 2025

ДОКУМЕНТ ПОДПИСАН ЭЛЕКТРОННОЙ ПОДПИСЬЮ

Сертификат: 50AB2242604E6452085261 4FA420034A
Владелец: Жукович Ирина Валентиновна
Действителен: с 15.04.2025 до 09.07.2026

EDUCATIONAL PROGRAM
discipline "Otolaryngology"

Specialty: 31.05.01 Medical practice
Course: 5
Semester: 9
Total hours: 108 hrs.
Total credits: 3 credits units
Form of control – credit, 9th semester

Blagoveshchensk 2025

2

The educational program of the discipline is designed in accordanse with the requirements of the Federal State Educational Standard of Higher Education - specialist in specialty 31.05.01 General Medicine, approved by the order of the Ministry of Education and Science of Russia dated 08.12.2020 № 988 (registered with the Ministry of Justice of Russia on 08.26.2020 № 59493, BPEP HE (2021).

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APPROVED at a meeting of the Department of Otolaryngology and Ophthalmology,
Protocol No. 13 dated April 10, 2025
Head of Department, Doctor of Medical Sciences, Professor _____ A.A. Blotskiy

Conclusion of the Expert Commission for Review of Work Programs:
Protocol No. 2 dated April 10, 2025
Expert of the Expert Commission
Doctor of Medical Sciences, Professor _____ A.A. Blotskiy

APPROVED at the meeting of the Cycle Methodical Committee No. 4: Protocol No. 2 dated April 5, 2025.
Chairman of the CMC No. 4
Doctor of Medical Sciences, Professor _____ I.V. Borozda

AGREED: Dean of the Faculty of Medicine,
Ph.D. of Medical Sciences _____ N.G. Brush

April 17, 2025

CONTENT

1 . EXPLANATORY NOTE

1.1. Characteristics of the discipline

Otolaryngology is a field of clinical medicine that studies the etiology, pathogenesis, and clinical course of diseases of the ear, nose, paranasal sinuses, pharynx, and larynx, as well as developing methods for diagnosing, treating, and preventing these diseases.

1.2. Purpose and objectives of the discipline.

The purpose of teaching the discipline: to develop in students systematic theoretical knowledge and practical skills, logical thinking based on the natural scientific nature of the material studied, and professional medical qualities.

Objectives of the discipline:

1. To familiarize students with the specific weight of the specialty in general pathology, with the importance of timely detection and elimination of diseases of the ear, nose and throat in the prevention of general morbidity and in improving the health of the population (this especially concerns such diseases as purulent otitis media and chronic tonsillitis), with the principles and methods of dispensary work.
2. To familiarize students with the features of the study of ENT organs: endoscopy and functional study of hearing, vestibular function , smell, taste; an indicator of the significance of the results of this examination in the general clinical examination of the patient, in identifying pathology of the central nervous system.
3. To familiarize students with the etiology, pathogenesis, clinical picture, diagnosis, prevention and treatment of ENT diseases that are common, have social significance, require emergency care, and cause concomitant diseases in the body or complications.
4. To train students in endoscopic and practically necessary functional methods of examining the nose, pharynx, larynx and ear, providing emergency care for bleeding, injuries, foreign bodies and other acute diseases of the ENT organs.

1.3. The place of the discipline in the structure of the main professional educational program of higher education.

In accordance with the Federal State Educational Standard of Higher Education - a specialist in the specialty 31.05.01 General Medicine (2020), the discipline "Otolaryngology" refers to the disciplines of the basic part, Block 1. The total workload is 3 credits (108 hours), taught in the 9th semester in the 5th year. The form of control is a credit with a grade.

Main sections of the discipline studied

1. Anatomy, physiology, methods of examination of ENT organs.
2. Inflammatory diseases and traumatic injuries of the nose, paranasal sinuses, pharynx, larynx, esophagus, ear.
3. Infectious granulomas and neoplasms of ENT organs.

1.4 Requirements for students

Initial level of the student - when starting to study the discipline " Otolaryngology ", the student must have a basic level of knowledge, skills and abilities in the following disciplines:

Anatomy :

Knowledge : normal anatomy of the nose, paranasal sinuses, pharynx, larynx, trachea, esophagus, ear.
Skills: be able to analyze age-related features of the anatomy of the nose, paranasal sinuses, pharynx, larynx, trachea, esophagus, and ear.
Skills: work with methodological and scientific literature examining the issues being studied .
Normal Physiology
Knowledge: normal physiology of the nose, paranasal sinuses, pharynx, larynx, trachea, esophagus, ear.
Skills **:** be able to analyze age-related features of the physiology of the nose, paranasal sinuses, pharynx, larynx, trachea, esophagus, and ear.
Skills ***:*** work with methodological and scientific literature examining the issues being studied .
Histology, embryology, cytology
Knowledge: embryogenesis of tissues of ENT organs, structure, function and structural features of the mucous membrane of the upper respiratory tract and ear .
Skills **:** be able to determine age-related patterns of development of ENT organs, analyze the results of histophysiological research.
Skills ***:*** work with a light and electron microscope, taking into account safety regulations.
Pathological anatomy, clinical pathological anatomy
Knowledge: anatomy of the nose, paranasal sinuses, pharynx, larynx, trachea, esophagus, ear in various pathological processes.
Skills *:* be able to analyze age-related features of the anatomy of the nose, paranasal sinuses, pharynx, larynx, trachea, esophagus, ear in various pathological processes.
Skills ***:*** work with a light and electron microscope, taking into account safety regulations.
Pathophysiology, clinical pathophysiology
Knowledge: physiology of the nose, paranasal sinuses, pharynx, larynx, trachea, esophagus, ear in various pathological processes.
Skills: be able to analyze age-related features of the physiology of the nose, paranasal sinuses, pharynx, larynx, trachea, esophagus, ear in various pathological processes.
Skills ***:*** work with a light and electron microscope, taking into account safety regulations.
Topographic anatomy and operative surgery
Knowledge: topographic-anatomical interaction of the nose, paranasal sinuses, pharynx, larynx, trachea, esophagus, ear with each other, as well as with other organs and systems. (II - III level).
Skills: be able to analyze the topographic-anatomical interaction of the nose, paranasal sinuses, pharynx, larynx, trachea, esophagus, ear with each other, as well as with other organs and systems in different age groups.
Skills ***:*** Separation of different types of tissue (skin, subcutaneous fat, muscles, flat bones of the skull). Application of different types of sutures to different types of tissue.

1. 5 Interdisciplinary links with subsequent disciplines

Knowledge, skills and abilities necessary for studying subsequent disciplines:

No.	Name of subsequent disciplines	Section numbers of this disciplines required for the study of subsequent disciplines		
		1	**2**	**3**
1	Epidemiology	+	+	+
2	Medical rehabilitation	+	+	+
3	Neurology, medical genetics, neurosurgery	+	+	+
4	Ophthalmology	+	+	+
5	Dermatovenereology	+	+	+
6	Forensic medicine	+	+	
7	Obstetrics and gynecology	+	+	
8	Occupational diseases	+	+	+
9	Phthisiology	+	+	+
10	Hospital surgery	+	+	+
11	Dentistry	+	+	+
12	Hospital therapy	+	+	+
13	Outpatient and emergency pediatrics	+	+	
14	Anesthesiology, resuscitation, intensive care	+	+	
15	Oncology, radiation therapy	+	+	+
16	Traumatology, orthopedics	+	+	
17	Hospital therapy	+	+	+
18	Infectious diseases	+	+	+

1. 6 Requirements for the results of mastering the discipline

The process of studying the discipline is aimed at developing the following competencies:

No. p/p	Code and name of competence	Code and the name of the indicator of achievement of competence	As a result of studying the academic discipline, the student must:		
			Know	Be able to	To own
Universal competencies					
1	**UC-1** Capable realize critical analysis of problematic situations based on a systems approach, to develop strategy of action	**AI UC-1.1.** Analyzes a problem situation as a system, identifying its components and the connections between them. **AI UC-1.2.** Identifies gaps in information needed to solve problem situations and designs processes to eliminate them . **AI UC-1.3.** Applies systems analysis to resolve problematic situations in the professional sphere.	Concepts, principles and methods of self-development, self-realization, self-education, use of creative potential	Use the principles and methods of self-development, self-realization, self-education, and use of creative potential	Methods of self-development, self-realization, self-education, use of creative potential
2	**UC-6** Capable to define and implement priorities for one's own activities and ways to improve them based on self-assessment and lifelong learning	**AI UC-6.1.** Assesses his personal, situational and temporary resources and uses them optimally to complete the assigned task. **AI UC-6.3.** Carries out critical self-analysis of the results of one's own activities.	Principles of using information, bibliographic resources, information and communication technologies, taking into account the basic requirements of information security, medical and biological terminology .	Use information, bibliographic resources, information and communication technologies taking into account the basic requirements of information security	Methods for solving standard tasks of professional activity using information, bibliographic resources, medical and biological terminology, information and communication technologies and taking into account the basic requirements of information security
General professional competencies					

3	**OPC-1.** Able to implement moral and legal norms, ethical and deontological principles in professional activities	**AI OPC-1.1.** Provides professional services activities in accordance with ethical standards and moral principles. **AI OPC-1.2.** Organizes professional activities guided by legislation in the field of health care, knowledge of medical ethics and deontology. **AI OPC-1.3.** Has presentation skills independent point of view, analysis and logical thinking, public speaking, moral and ethical argumentation, conducting discussions and round tables, principles of medical deontology and medical ethics.	Principles of using information, bibliographic resources, information and communication technologies, taking into account the basic requirements of information security, medical and biological terminology.	Use information, bibliographic resources, information and communication technologies taking into account the basic requirements of information security	Methods for solving standard tasks of professional activity using information, bibliographic resources, medical and biological terminology, information and communication technologies and taking into account the basic requirements of information security
4	**OPK-5.** Capable of assessing morphofunctional, physiological states and pathological processes in the human body to solve professional problems	**AI OPC-5.1.** Knows the functional systems of the human body, their regulation and self-regulation when interacting with the external environment under normal conditions and during pathological processes. **AI OPC-5.2.** Knows the etiology, pathogenesis, morphogenesis, pathomorphosis of disease development, and the basic concepts of nosology. **AI OPC-5.3.** Knows the indicators morphofunctional, physiological state of a healthy person and is able to measure/determine them.	Methods of analyzing the results of one's own activities. Concept and types professional mistakes.	Analyze the results of your own activities to prevent professional mistakes	Methods of analyzing the results of one's own activities to prevent professional mistakes

		AI OPC-5.4. Applies indicators morphofunctional, physiological state and pathological process for examination of the human body for the purpose of establishing a diagnosis, appointment treatment and monitoring its effectiveness and security. **AI OPC-5.5.** Analyzes and interprets macroscopic and microscopic changes in normal and pathologically altered tissues and organs. **AI OPC-5.6.** Interprets the results of biopsy and surgical material studies to solve professional problems and formulate a diagnosis in accordance with the ICD.			
5	**OPC-8.** Capable of implementing and monitoring the effectiveness of medical rehabilitation of the patient, including the implementation of individual rehabilitation and habilitation programs for disabled people, and assessing the patient's ability to perform work activities	**AI OPC-8.1.** Assesses functional reserves and adaptive abilities of a person, reduced in the process adverse effects of environmental factors and activities or as a result of illness. **AI OPC-8.2.** Identifies risk groups with the aim of recovery and determination of rehabilitation potential for subsequent restorative treatment and rehabilitation of patients. **AI OPC-8.3.** Develops and organizes a plan medical events	Nomenclature of medicinal products, pharmacodynamics , pharmacokinetics, indications and contraindications for use, main mechanisms of action, clinical effects. Treatment regimens.	Use medicinal preparations and other substances and their combinations when solving professional problems	Methods of using medicinal preparations and other substances and their combinations in solving professional problems

		rehabilitation of patients, including non-drug methods treatment (natural healing factors, physiotherapy and reflexology, therapeutic exercise). **AI OPC-8.4.** Interprets the results clinical, laboratory and instrumental diagnostic methods to monitor the effectiveness of medical rehabilitation programs and assess the patient's ability to perform work activities.			
6	**OPC-11** Capable prepare and apply scientific, scientific-production, design, organizational-managerial and regulatory documentation in the healthcare system	**AI OPC 11.1.** Apply modern methods of collecting and processing information, conduct statistical analysis of the obtained data in a professional manner areas and interprets results for solving professional problems. **AI OPC-11.2.** Identifies and analyzes problem situations, carries out search and selection of scientific, regulatory and legal organizational and administrative documentation in accordance with given goals. **AI OPC-11.4.** Conducts scientific and practical research, analyzes information using the historical method and prepares publications based on the research results. **AI OPC-11.5.**	Types and methods of application of medical devices provided for by the procedures for providing medical care in otolaryngology	Use medical products provided for by the procedures for providing medical care	Methods of using medical products provided for by the procedures for providing medical care

		Analyzes and compiles accounting and reporting medical documentation and calculates qualitative and quantitative indicators used in professional activities.			
Professional competencies					
8	**PC-1** Able to provide medical care in urgent and emergency situations	**PC AI - 1.1.** Identifies clinical signs of conditions requiring emergency medical care **PC AI -1.2.** Provides emergency medical care to patients with sudden acute illnesses, conditions, exacerbation of chronic diseases without obvious signs of a threat to the patient's life **PC AI -1.3.** Identifies conditions that require provision of medical care in an emergency form **PC AI - 1.4.** Provides emergency medical care to patients conditions that pose a threat to the patient's life **PC AI -1.5.** Reveals signs sudden termination circulation and respiration **PC AI - 1.6.** Carries out basic activities cardiopulmonary resuscitation in in combination with electropulse	Principles and methods of preserving and strengthening children's health, including the formation of a healthy lifestyle, prevention of the occurrence and (or) spread of diseases, their early diagnosis, identification of the causes and conditions of their occurrence and development, as well as aimed at eliminating the harmful effects of environmental factors on children's health	To implement a set of measures aimed at preserving and strengthening the health of children and including the formation of a healthy lifestyle, prevention of the occurrence and (or) spread of diseases, their early diagnosis, identification of the causes and conditions of their occurrence and development, as well as aimed at eliminating the harmful effects of environmental factors on children's health	A set of measures aimed at maintaining and strengthening the health of children and including the formation of a healthy lifestyle, prevention of the occurrence and (or) spread of diseases, their early diagnosis, identification of the causes and conditions of their occurrence and development, as well as aimed at eliminating the harmful effects of environmental factors on the health of children

		therapy (defibrillation) in case of clinical death of the patient (in case of sudden cessation of circulation and/or respiration) .			
9	**PC-2.** Capable of collecting and analyzing complaints, anamnesis of life and anamnesis diseases patient for the purpose establishments diagnosis	**AI PC-2.1 .** Establishes rapport with the patient. **AI PC- 2.2.** Collects complaints, specifies them, highlighting the main and secondary ones. **AI PC-2 .3.** Collects and analyzes information about the onset of the disease, the presence of risk factors, the dynamics of the development of symptoms and the course of the disease. **AI PC-2 .4.** Analyzes the timing of the first and repeated requests for medical care, the volume of therapy provided, and its effectiveness. **PC AI -2.5 .** Collects and evaluates information about the patient's medical history, including data on past illnesses, injuries and surgeries, hereditary, professional and epidemiological history.	Methods of collecting and analyzing patient complaints, anamnesis data, examination results, laboratory, instrumental, pathological and other studies for the purpose of recognizing a condition or establishing the presence or absence of a disease	Collect and analyze patient complaints, medical history data, examination results, laboratory, instrumental, pathological and other studies in order to recognize the condition or establish the presence or absence of a disease	Methods of collecting and analyzing patient complaints, anamnesis data, examination results, laboratory, instrumental, pathological and other studies in order to recognize the condition or establish the presence or absence of a disease
1 0	**PC-4.** Capable determine indications for hospitalization, indications for providing emergency, including emergency specialized, medical care	**AI PC-4.1.** Determines medical indications for emergency care, including emergency specialized medical care **AI PC-4.2.** Refer the patient for specialized medical care in an inpatient setting or in a day	The procedure and principles of providing primary health care to children with sudden, acute eye diseases, conditions, exacerbation of chronic eye diseases that are	Provide primary health care to children with sudden, acute eye diseases, conditions, exacerbation of chronic eye diseases that are not accompanied by a threat to the patient's	Methods of providing primary health care to children with sudden, acute eye diseases, conditions, exacerbation of chronic eye diseases

		hospital setting if there are medical indications in accordance with the current procedures for providing medical care, clinical guidelines (treatment protocols) on issues of providing medical care, taking into account the standards of medical care **AI PC-4.3.** Uses medical products in accordance with current procedures for the provision of medical care, clinical guidelines (treatment protocols) on issues of providing medical care, care taking into account the standards of medical care	not accompanied by a threat to the patient's life and do not require emergency medical care	life and do not require emergency medical care	that are not accompanied by a threat to the patient's life and do not require emergency medical care
11	**PC-5.** Able to prescribe treatment to patients	**AI PC-5. 1.** Draws up a treatment plan for the patient taking into account the diagnosis, age of the patient, clinical picture of the disease, presence of complications, concomitant pathology, in accordance with the current procedures for the provision of medical care, clinical recommendations (treatment protocols) on issues of providing medical care, taking into account the standards of medical care **AI PC-5. 2.** Prescribes medications, medical devices and therapeutic nutrition taking into account the diagnosis, age and clinical picture of the disease in accordance with the current procedures for the provision of medical care, clinical guidelines,	Methods of collecting and analyzing patient complaints, anamnesis data, examination results, laboratory, instrumental , pathological and other studies for the purpose of recognizing a condition or establishing the presence or absence of a disease	Collect and analyze patient complaints, medical history data, examination results, laboratory, instrumental , pathological and other studies in order to recognize the condition or establish the presence or absence of a disease	Methods of collecting and analyzing patient complaints, data from his anamnesis, results of examination, laboratory, instrumental , pathological and other studies in order to recognize the condition, or establish the fact of the presence or absence of a disease

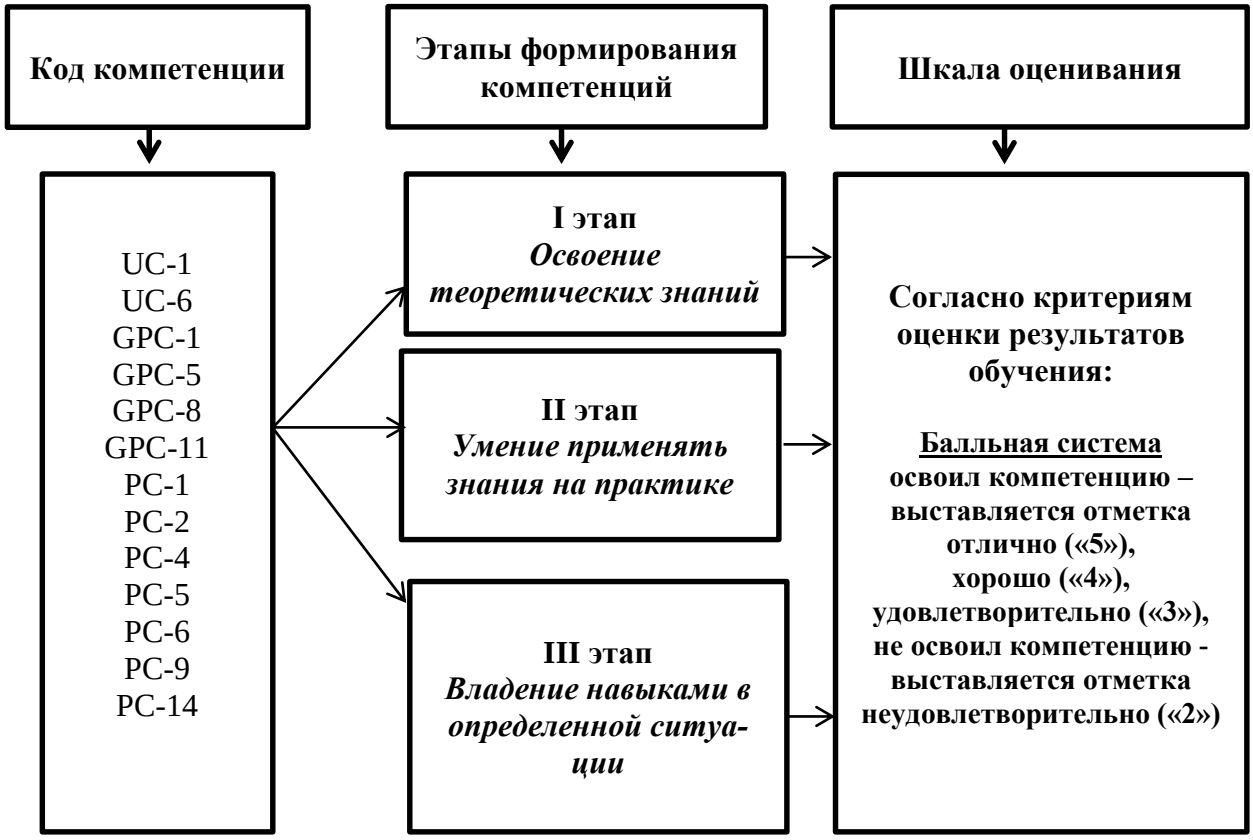
		taking into account the standards of medical care **AI PC-5. 3.** Prescribes non-drug treatment treatment taking into account the diagnosis, age and clinical picture of the disease in accordance with the current procedures for the provision of medical care, clinical recommendations, taking into account medical standards help **AI PC-5. 4.** Provides palliative care in collaboration with specialist doctors and other health care workers **AI PC-5. 5.** Organizes personalized treatment for patients, including pregnant women, elderly and senile patients			
12	**PC-6.** Capable of monitoring the effectiveness and safety of the therapy being administered	**AI PC-6.1.** Assesses the effectiveness and safety of the use of drugs, medical devices and therapeutic nutrition and other treatment methods **AI PC-6.2.** Takes into account the pharmacodynamics and pharmacokinetics of the main groups of drugs, prevents the development of adverse drug reactions, and corrects them if they occur.	The main pathological conditions, symptoms, syndromes of diseases of the ENT organs, nosological forms in accordance with the International Statistical Classification of Diseases and Related Health Problems – 10th revision, adopted by the 43rd World Health Assembly, Geneva, 1989.	Diagnose the main pathological conditions, symptoms, syndromes of diseases of the ENT organs, nosological forms in accordance with the International Statistical Classification of Diseases and Related Health Problems - X revision, adopted by the 43rd World Health Assembly, Geneva, 1989	Methods of diagnosing the main pathological conditions, symptoms, disease syndromes, nosological forms in accordance with the International Statistical Classification of Diseases and Related Health Problems – 10th revision, adopted by the 43rd World Health Assembly, Geneva, 1989.

13	**PC-9.** C a p o n To carrying out preventive medical examinations , dispensary and implementation of dispa nsernogo observations for patients with chronic diseases	**PC AI 9.1.** Organizes and conducts medical examinations taking into account age, health status, profession in accordance with current regulatory legal acts and other documents **PC AI 9.2.** Conducts medical examination of the adult population for the purpose of early detection of chronic non-communicable diseases, the main factors risk of their development	Principles of management and treatment of patients with various nosological forms in outpatient and day hospital settings	Treat patients with various nosological forms in outpatient and day hospital settings	Methods of management and treatment of patients with various nosological forms in outpatient and day hospital settings
14	**PC-14.** Capable of participating in research activities	**AI PC-14. 1.** Participates in scientific research research **AI PC-14. 2.** Analyzes medical information based on evidence-based medicine **AI PC- 14.3** Implements into practice health care new methods and techniques aimed at protecting the health of the adult population	Principles of Analysis and Public Presentation of Medical Information. Fundamentals of Evidence-Based Medicine	Analyze and publicly present medical information based on evidence-based medicine	Methods of analysis and public presentation of medical information. Fundamentals of evidence-based medicine

Modules of the discipline and the code of the competence being formed

Item No.	Section name	Code of the competence being formed
1	Anatomy, physiology, methods of examination of ENT organs.	UC-1; UC-6; OPC-1; OPC-5; OPC-8; OPC-11; PC-1; PC-2; PC-4; PC-5; PC-6; PC-9; PC-14
2	Inflammatory diseases and traumatic injuries of the nose, paranasal sinuses, pharynx, larynx, esophagus, ear.	UC-1; UC-6; OPC-1; OPC-5; OPC-8; OPC-11; PC-1; PC-2; PC-4; PC-5; PC-6; PC-9; PC-14
3	Infectious granulomas and neoplasms of ENT organs.	UC-1; UC-6; OPC-1; OPC-5; OPC-8; OPC-11; PC-1; PC-2; PC-4; PC-5; PC-6; PC-9; PC-14

1.7 Stages of competencies development and description of assessment scales



1. 8 Forms of training organization and types of control

Form of organization of students' training	**Brief characteristic**
Lectures	Lecture material contains Key And most problematic questions disciplines , most significant V preparation specialist .
Practical classes	Intended For analysis (consolidation) of theoretical provisions And control over their assimilation With subsequent application received knowledge V in the course study of the topic.
Interactive forms of education	- solution situational tasks and exercises followed by discussion , - interactive survey; - execution creative tasks , - small group method, - discussions, - online course of the discipline in the Moodle system , - testing in the Moodle system .
Participation in the department's research work, student circle and conferences	- Preparation oral messages and poster presentations for speeches at a student club or scientific conference; - writing theses and abstracts on the chosen scientific field; - preparation of a literature review using educational, scientific, reference literature and Internet sources .
Types of control	**Brief description**
Incoming inspection	Testing theoretical knowledge and practical skills. The entrance knowledge control includes: - testing in the Moodle system (test of incoming knowledge control), - solving clinical and situational problems and exercises. The results of the incoming inspection are systematized, analyzed and used by the teaching staff of the department to develop measures to improve and update the teaching methods of the discipline.
Current control	Current knowledge control includes: - checking the solution of clinical and situational problems and exercises completed independently (extracurricular independent work); - assessment of the assimilation of theoretical material (oral survey and computer testing); - control over the technique of performing the experiment during practical classes and drawing up the protocol; - testing in the Moodle system on all topics of the discipline (tests include questions of a theoretical and practical nature); - individual assignments (practical and theoretical) for each topic of the discipline being studied.
Intermediate certification	The midterm assessment is presented as a test with a grade , which students are handed in at the end of the cycle. The test includes the following stages: - assessment of knowledge of theoretical material (oral survey and interview); - testing in the Moodle system (interim assessment test); - check of assimilation practical skills And skills ;

	- solving clinical and situational problems and exercises on each topic of the discipline studied.

2. STRUCTURE AND CONTENT OF THE DISCIPLINE

2.1 Scope of the discipline and types of educational activities

No. p/p	Types of educational work	Total hours	Semester 9
1	Lectures	20	20
2	Practical classes	52	52
3	Independent work of students	36	36
	Total labor intensity in hours	**108**	**108**
	Total workload in credit units	**3**	**3**

2.2 Thematic plan of lectures and their brief content

Item No.	Topics and content of lectures	Codes being formed competencies	Labor intensity (hours)
1	**Introduction to otolaryngology, its content, objectives and place among other branches of medicine.** History of otolaryngology. Influence of the greatest representatives of medicine on development of otolaryngology (S.P.Botkin, G.A.Zakharyin). Beginning of teaching otolaryngology in St. Petersburg and Moscow. First specialized clinics. Founders of Russian otolaryngology (D.I.Koshlakov, A.F.Prussak, N.P.Simanovsky, S.F.Shtein, N.M.Volkovich and others), Soviet schools (V.I.Voyachek, A.F.Ivanov, B.S.Preobrazhensky, L.T.Levin, S.M.Kompanets, A.I.Kolometschenko, V.F.Undrits, I.B. Soldatov and others). Successes of Soviet otolaryngology, growth of scientific and pedagogical institutions, treatment and preventive network and personnel. Influence of ENT diseases on the whole organism. Scientific works of the department, its problems. The importance of medical examination.	UC - 1, 6 OPC – 1, 5, 8, 11 PC – 1, 2, 4, 5, 6, 9, 14	2
2	**Auditory analyzer.** Anatomy of the outer, middle and inner ear. Types of structure of the mastoid process, auditory tube. Topographic and anatomical age-related features of the outer, middle and inner ear in the development of ear diseases and their complications. Structure of the receptor apparatus of the spiral organ of the cochlea. Conducting pathways and centers of the auditory analyzer. Characteristics of an adequate stimulus of the auditory analyzer. Sound conduction and sound perception. Theories of hearing. Methods of hearing research: speech, tuning fork tests, audiographic.	UC - 1, 6 OPC – 1, 5, 8, 11 PC – 1, 2, 4, 5, 6, 9, 14	2
3	**Vestibular analyzer.** The structure of the receptor analyzer of the saccules of the vestibule, ampullae of the semicircular canals. Nuclei of the vestibular analyzer. Their connections with other parts of the central nervous system. Adequate stimuli of the ampullar apparatus of the semicircular canals and the otolith apparatus of the vestibule. Spontaneous nystagmus, its characteristics, its main characteristics. Study of vestibular function: study of balance at rest (Romberg's pose) and during movement, detection of spontaneous nystagmus. Caloric, rotational and pneumatic tests, study of the function of the otolith apparatus.	UC - 1, 6 OPC – 1, 5, 8, 11 PC – 1, 2, 4, 5, 6, 9, 14	2

4	**Acute purulent inflammation of the middle ear. Mastoiditis. Antrotomy. Chronic purulent inflammation of the middle ear. Radical ear surgery. Tympanoplasty. Otogenic intracranial complications and otogenic sepsis.** External otitis, its types, clinical presentation, diagnostics and treatment. Acute purulent inflammation of the middle ear, pathogenesis, stages of development, features of the course in children and in infectious diseases. Clinic. Diagnostics and treatment. Indications for paracentesis. Outcomes of the disease. Anthritis. Mastoiditis, its atypical forms (Orleans, Bezold. Mure, Chitelli, Levin, petrositis, apecitis, squamitis, zygomatitis). Indications for anthropuncture, operations on the mastoid process - anthromy, mastoidectomy, antromastoidectomy. Etiology and pathogenesis of chronic purulent otitis media. Statistical data. The role of the upper respiratory tract and the body's reactivity during the inflammatory process in the middle ear. Forms of chronic purulent otitis media: meso- and epitympanitis. Cholesteotoma, theories of its origin and conditions of formation. Features of the clinical course, otoscopic manifestations, ear dysfunctions depending on the localization of the process. Complications of chronic purulent otitis media, clinical examination of patients. Conservative methods of treatment. Indications for radical surgery. Hearing restoration operations on the middle ear in chronic purulent otitis media, tympanoplasty. The role of the ENT department of the ASMA in the development of plastic surgeries (allobrephomastoidoplasty and allobrephotympanoplasty). Otogenic intracranial complications and otogenic sepsis. Extradural and perisinusoidal abscess, thrombophlebitis of the sigmoid sinus, otogenic sepsis. Leptomeningitis, otogenic abscess of the brain and cerebellum. Routes of infection spread, clinical manifestations and diagnostics. Basic principles of treatment of otogenic intracranial complications and sepsis. Emergency surgical intervention to remove purulent foci from the middle ear, venous sinuses, brain and cerebellum. Antibacterial, dehydration, detoxification, hyposensitizing therapy.	UC - 1, 6 OPC – 1, 5, 8, 11 PC – 1, 2, 4, 5, 6, 9, 14	2
5	**Non-purulent ear diseases: acute and chronic catarrh of the middle ear, cochlear neuritis, otosclerosis, Meniere's disease.** Diseases of the vestibulocochlear nerve. Cochlear neuritis - infectious, toxic, traumatic professional. Diagnostics, treatment and prevention. Vestibular neuritis. Etiology, clinical picture, diagnostics, treatment. Otosclerosis. Clinic, diagnostics, treatment methods. Indications for hearing restoration operations, types of surgical interventions. Meniere's disease. Clinic, diagnostics. Conservative and surgical methods of treatment.	UC - 1, 6 OPC – 1, 5, 8, 11 PC – 1, 2, 4, 5, 6, 9, 14	2
6	**Morphological and physiological features of the nose and its paranasal sinuses. Defects and deformations of the external nose. Furuncle. Nosebleed. Acute rhinitis.** Clinical anatomy and physiology of the nose and its paranasal sinuses. External nose, its bone		2

	and cartilaginous base. Blood supply. Innervation, lymphatic pathways. Internal nose or nasal cavity in children. Development in congenital defects of the upper lip and palate. Structure of the mucous membrane, nasal membrane, distribution of the arterial and venous network. Bleeding zone. Reflexogenic zones, their functional connections with the central system and clinical significance. Functions of the nose - respiratory, olfactory, protective, speech, lacrimal, facial, gustatory. Olfactory analyzer in light of the teachings of I.P. Pavlov. The role of nasal breathing in the physical development of the body, in the formation of the dental system in children. The importance of nasal breathing in the prevention of occupational and other diseases. Structure and topography of the paranasal sinuses. Clinical studies of N.I. Pirogov. Age-related features, their importance in ENT pathology in children. Relationship of the maxillary sinus with the development of the dental system. Topography of the trigeminal nerve, importance in the pathology of the paranasal sinuses. Injuries and foreign bodies of the nose and its paranasal sinuses Fracture of the nasal bones (open, closed), the possibility of a fracture of the base of the skull, emergency care. Nosebleed, methods of stopping: medication, cauterization, galvanoacoustics, laser coagulation, anterior and posterior tanponade of the nose, general measures. The feasibility of ligation of the external carotid artery. Injuries to the paranasal sinuses, emergency surgical interventions to prevent complications (intracranial, orbital and sepsis).	UC - 1, 6 OPC – 1, 5, 8, 11 PC – 1, 2, 4, 5, 6, 9, 14	
7	**Chronic forms of rhinitis. Ozena. Inflammatory diseases of the paranasal sinuses. Rhinogenic complications.** Diseases of the nose. Furuncle, vestibule abscess, eczema. The importance of carbohydrate metabolism disorders in the genesis of furuncle. Burn, frostbite, erysipelas. Curvature of the nasal septum. Indications for surgical treatment. Hematoma and abscess of the nose. Acute rhinitis as an independent nasological form and as a symptom of other diseases. Acute rhinitis in infants. Nasal diphtheria, clinical signs and treatment. Chronic rhinitis: catarrhal, hypertrophic, atrophic. Ozena or foul runny nose. Pathogenesis, clinical picture and treatment. A sharp decrease in the incidence of ozena in the Russian Federation as a result of an increase in the material condition and cultural development of the population. Vasomotor rhinitis (neurovegetative and allergic form). The role of foci of chronic infection (chronic otitis, sinusitis, cholecystitis, etc.) in the genesis of the disease. The importance of an allergic anamnesis (personal, family) in the diagnosis of allergic rhinitis, rhinosinusitis. Specific tests for differential diagnostics of allergic and neurovegetative forms - intradermal tests with allergens (bacterial and non-bacterial), provocative endonasal tests with allergens, general and local eosinophilia, local, etc. Principles of treatment of vasomotor rhinitis, sinusitis. Nasal polyps. Diseases of the	UC - 1, 6 OPC – 1, 5, 8, 11 PC – 1, 2, 4, 5, 6, 9, 14	2

	paranasal sinuses. Acute sinusitis. The role of odontogenic infection in the pathology of the maxillary sinus. Features of clinical manifestations of sinusitis in children - osteomyelitis of the upper jaw, predominant lesion of the ethmoid labyrinth in infants. Cyst of the maxillary sinus. Chronic sinusitis, clinical forms: catarrhal, purulent, polypous-purulent. The importance of trauma in the occurrence of purulent frontal sinusitis, pyocele, mucocele, osteomylitis of the frontal sinus. Chronic sphenoiditis. The importance of radiography in the semi-axial projection in its diagnostics. Orbital intracranial complications, inflammatory diseases of the nose and its paranasal sinuses. Pathogenesis, clinical picture, diagnostics. Treatment principles.		
8	**Morphological and physiological characteristics of the lymphadenoid pharyngeal ring. Classification of tonsillitis. Sore throats. Tonsil lesions in acute infectious diseases of the blood system.** Lymphoid pharyngeal ring, its main components: palatine, pharyngeal, lingual, tubal tonsils. Validity of the term lymphoid ring: reflects the nature of the main components of the tonsil parenchyma - true lymphatic tissue (follicles), lymphoid tissue (diffuse accumulations of lymphocytes) and adenoid reticular connective tissue. Connection with the lymphoid tissue of the nose and larynx: features of the tonsils in children and their age-related changes. Structure of the palatine tonsils and their functions: protective, hematopoietic, receptor (neural-reflex connections with the heart - tonsillocardial reflex, other organs and systems). Vessels and nerves of the pharynx. Function of the pharynx: swallowing, sucking.	UC - 1, 6 OPC – 1, 5, 8, 11 PC – 1, 2, 4, 5, 6, 9, 14	2
9	**Neoplasm and infectious granulomas of the upper respiratory tract.** Brief description of tumor types affecting the upper respiratory tract and the main manifestations of precancerous conditions of ENT organs. Introduction to symptoms, main detection methods that ensure early diagnostics. Modern treatment methods: surgical, radiation and combined.	UC - 1, 6 OPC – 1, 5, 8, 11 PC – 1, 2, 4, 5, 6, 9, 14	2
10	**Professional selection and expertise of otolaryngology. Medical care at the stages of medical evacuation.** The essence of professional selection. The importance of professional consultations. Professional selection by auditory function, by vestibular function, its importance for various types of aviation. Military medical examination. Methods of identifying aggravation, simulation and dissimilation. Medical and labor examination. Determining the degree and nature of loss of working capacity due to ENT disease.	UC - 1, 6 OPK – 1, 5, 8 , 11 PC – 1, 2, 4, 5, 6, 9, 14	2
Total hours			**20**

2.3 Thematic plan of practical classes and their content.

Clinical practical classes in the discipline " Otorhinolaryngology " are a mandatory section and represent a type of educational activity directly focused on the professional training of students. During practical classes, students acquire knowledge of clinical anatomy, physiology and methods of examination of ENT organs, master the principles of diagnosis and treatment of various pathological conditions and diseases of ENT organs, master the skills of assessing the results of oto-laryngological examination, making a diagnosis, drawing up a plan for examination and treatment of patients with ENT pathology, improve the ability to draw up an educational medical history and acquire skills in working in an examination room, dressing room and operating room.

No. p/p	Name of practical topics classes	Contents of practical classes	Codes being formed competencies and indicators their achievements	Types control	Labor intensity (hours)
1	Introduction to the clinic. Endoscopic examination of ENT organs.	Entrance control (checking theoretical knowledge formed by the teaching program in previous departments **Theoretical part:** Basic concepts of methods of examination of ENT organs, methods of endoscopic examination of ENT organs. **Practical part:** Endoscopic examination of ENT organs.	UK-1: ID 1.1., 1.2., 1.3 UK-6: ID 6.1., 6.3. OPK-1: ID 1.1, 1.2, 1.3 OPK-5: ID 5.1, 5.2, 5.3, 5.4, 5.5, 5.6 OPK-8: ID 8.1, 8.2, 8.3, 8.4 OPK-11: ID 11.1., 11.2., 11.4, 11.5. PC-1: ID 1.1, 1.2, 1.3, 1.4, 1.5, 1.6 PC-2: ID 2.1, 2.2, 2.3, 2.4, 2.5 PC-4: ID 4.1, 4.2, 4.3 PC-5: ID 5.1, 5.2, 5.3, 5.4, 5.5 PC-6: ID 6.1, 6.2 PC -9: ID 9.1, 9.2 PC-14: ID 11.1, 11.2, 14.3	Solution clinical and situational tasks and exercises, testing in the Moodle system.	5.2
2	Anatomy, physiology and methods of examination of the nose and paranasal sinuses.	**Theoretical part:** Study of the features of clinical anatomy, physiology and methods of examination of the nose and paranasal sinuses. **Practical part:** Endoscopic examination of ENT organs.	UK-1: ID 1.1., 1.2., 1.3 UK-6: ID 6.1., 6.3. OPK-1: ID 1.1, 1.2, 1.3 OPK-5: ID 5.1, 5.2, 5.3, 5.4, 5.5, 5.6 OPK-8: ID 8.1, 8.2, 8.3, 8.4 OPK-11: ID 11.1., 11.2., 11.4, 11.5. PC-1: ID 1.1, 1.2, 1.3, 1.4, 1.5, 1.6	Frontal survey, solution clinical and situational tasks and exercises.	5.2

			PC-2: ID 2.1, 2.2, 2.3, 2.4, 2.5 PC-4: ID 4.1, 4.2, 4.3 PC-5: ID 5.1, 5.2, 5.3, 5.4, 5.5 PC-6: ID 6.1, 6.2 PC-9: ID 9.1, 9.2 PC-14: ID 11.1, 11.2, 14.3		
3	Anatomy, physiology and methods of examination of the pharynx, larynx, trachea and esophagus.	**Theoretical part:** Study of the features of clinical anatomy, physiology and methods of examination of the pharynx, larynx, trachea and esophagus. **Practical part:** Endoscopic examination of ENT organs.	UK-1: ID 1.1., 1.2., 1.3 UK-6: ID 6.1., 6.3. OPK-1: ID 1.1, 1.2, 1.3 OPK-5: ID 5.1, 5.2, 5.3, 5.4, 5.5, 5.6 OPK-8: ID 8.1, 8.2, 8.3, 8.4 OPK-11: ID 11.1., 11.2., 11.4, 11.5. PC-1: ID 1.1, 1.2, 1.3, 1.4, 1.5, 1.6 PC-2: ID 2.1, 2.2, 2.3, 2.4, 2.5 PC-4: ID 4.1, 4.2, 4.3 PC-5: ID 5.1, 5.2, 5.3, 5.4, 5.5 PC-6: ID 6.1, 6.2 PC-9: ID 9.1, 9.2 PC-14: ID 11.1, 11.2, 14.3	Frontal survey, solution clinical and situational problems.	5.2
4	Anatomy, physiology and methods of examination of the outer, middle and inner ear. Auditory and vestibular analyzer.	**Theoretical part:** Study of the features of clinical anatomy, physiology and methods of examination of the outer, middle and inner ear. Auditory and vestibular analysis . **Practical part:** Endoscopic examination of ENT organs.	UK-1: ID 1.1., 1.2., 1.3 UK-6: ID 6.1., 6.3. OPK-1: ID 1.1, 1.2, 1.3 OPK-5: ID 5.1, 5.2, 5.3, 5.4, 5.5, 5.6 OPK-8: ID 8.1, 8.2, 8.3, 8.4 OPK-11: ID 11.1., 11.2., 11.4, 11.5. PC -1: ID 1.1, 1.2, 1.3, 1.4, 1.5, 1.6 PC-2: ID 2.1, 2.2, 2.3, 2.4, 2.5 PC-4: ID 4.1, 4.2, 4.3 PC-5: ID 5.1, 5.2, 5.3, 5.4, 5.5 PC-6: ID 6.1, 6.2 PC-9: ID 9.1, 9.2 PC-14: ID 11.1, 11.2, 14.3	Frontal survey, solution clinical and situational problems.	5.2

5	Acute and chronic inflammatory diseases of the nose and paranasal sinuses: acute and chronic rhinitis, acute and chronic sinusitis, intraorbital and intracranial rhinogenic complications. Restoration of nasal breathing and olfaction. Nosebleeds.	**Theoretical part:** Acute and chronic inflammatory diseases of the nose and paranasal sinuses: acute and chronic rhinitis, acute and chronic sinusitis, intraorbital and intracranial rhinogenic complications. Restoration of nasal breathing and olfaction. Nosebleeds. **Practical part:** Study of X-rays, CT and MRI on the topic of the lesson, practicing practical skills in stopping nosebleeds on a model.	UC-1: AI 1.1., 1.2., 1.3 U-6: AI 6.1., 6.3. OP-1: AI 1.1, 1.2, 1.3 OP-5: AI 5.1, 5.2, 5.3, 5.4, 5.5, 5.6 OP-8: AI 8.1, 8.2, 8.3, 8.4 OP-11: AI 11.1., 11.2., 11.4, 11.5. PC-1: AI 1.1, 1.2, 1.3, 1.4, 1.5, 1.6 PC-2: AI 2.1, 2.2, 2.3, 2.4, 2.5 PC-4: AI 4.1, 4.2, 4.3 PC-5: AI 5.1, 5.2, 5.3, 5.4, 5.5 PC-6: AI 6.1, 6.2 PC-9: AI 9.1, 9.2 PC-14: AI 11.1, 11.2, 14.3	Frontal survey, Completing an individual task.	5.2
6	Acute and chronic inflammatory diseases of the pharynx and larynx: acute and chronic tonsillitis, acute and chronic adenoiditis, hypertrophy of the palatine tonsils, acute and chronic pharyngitis, paratonsillitis, peripharyngeal abscess, retropharyngeal abscess, acute subglottic laryngotracheitis in children, acute laryngitis in adults, chronic laryngitis, precancerous conditions of the larynx. Restoration of swallowing and voice. Foreign	**Theoretical part:** Acute and chronic inflammatory diseases of the pharynx and larynx: acute and chronic tonsillitis, acute and chronic adenoiditis, hypertrophy of the palatine tonsils, acute and chronic pharyngitis, paratonsillitis, peripharyngeal abscess, retropharyngeal abscess, acute subglottic laryngotracheitis in children, acute laryngitis in adults, chronic laryngitis , precancerous conditions of the larynx. Restoration of swallowing and voice. Foreign bodies of the upper respiratory tract. Esophageal burns. **Practical part:** Study of X-rays, CT and MRI on the topic of the lesson, development of practical skills.	UC-1: AI 1.1., 1.2., 1.3 U-6: AI 6.1., 6.3. OP-1: AI 1.1, 1.2, 1.3 OP-5: AI 5.1, 5.2, 5.3, 5.4, 5.5, 5.6 OP-8: AI 8.1, 8.2, 8.3, 8.4 OP-11: AI 11.1., 11.2., 11.4, 11.5. PC-1: AI 1.1, 1.2, 1.3, 1.4, 1.5, 1.6 PC-2: AI 2.1, 2.2, 2.3, 2.4, 2.5 PC-4: AI 4.1, 4.2, 4.3 PC-5: AI 5.1, 5.2, 5.3, 5.4, 5.5 PC-6: AI 6.1, 6.2 PC-9: AI 9.1, 9.2 PC-14: AI 11.1, 11.2, 14.3	Frontal survey, clinical and situational problems.	5.2

	bodies of the upper respiratory tract. Esophageal burns.				
7	Acute and chronic inflammatory diseases of the outer and middle ear: acute and chronic catarrh of the auditory tube, serous otitis media, acute catarrhal otitis, acute purulent otitis media, chronic meso- and epitympanitis, acute classical mastoiditis, chronic mastoiditis, atypical forms of mastoiditis, intracranial otogenic complications. Foreign bodies of the ear.	**Theoretical part:** Acute and chronic inflammatory diseases of the outer and middle ear: acute and chronic catarrh of the auditory tube, serous otitis media, acute catarrhal otitis, acute purulent otitis media, chronic meso- and epitympanitis, acute classical mastoiditis, chronic mastoiditis, atypical forms of mastoiditis, intracranial otogenic complications. Foreign bodies of the ear. **Practical part:** Study of X-rays, CT and MRI on the topic of the lesson, development of practical skills, methods and features of removing foreign bodies, study of audiograms	UC-1: AI 1.1., 1.2., 1.3 U-6: AI 6.1., 6.3. OP-1: AI 1.1, 1.2, 1.3 OP-5: AI 5.1, 5.2, 5.3, 5.4, 5.5, 5.6 OP-8: AI 8.1, 8.2, 8.3, 8.4 OP-11: AI 11.1., 11.2., 11.4, 11.5. PC-1: AI 1.1, 1.2, 1.3, 1.4, 1.5, 1.6 PC-2: AI 2.1, 2.2, 2.3, 2.4, 2.5 PC-4: AI 4.1, 4.2, 4.3 PC-5: AI 5.1, 5.2, 5.3, 5.4, 5.5 PC-6: AI 6.1, 6.2 PC-9: AI 9.1, 9.2 PC-14: AI 11.1, 11.2, 14.3	Frontal survey of clinical and situational tasks.	5.2
8	Non-purulent diseases of the middle and inner ear: otosclerosis, Meniere's disease, labyrinthitis, adhesive otitis media, sensorineural hearing loss, tympanosclerosis. Surgical and hardware methods of hearing restoration.	**Theoretical part:** Non-purulent diseases of the middle and inner ear: otosclerosis, Meniere's disease, labyrinthitis, adhesive otitis media, sensorineural hearing loss, tympanosclerosis. Surgical and hardware methods of hearing restoration. **Practical part:** Study of X-rays, CT and MRI on the topic of the lesson, development of practical skills, study of audiograms.	UC-1: AI 1.1., 1.2., 1.3 U-6: AI 6.1., 6.3. OP-1: AI 1.1, 1.2, 1.3 OP-5: AI 5.1, 5.2, 5.3, 5.4, 5.5, 5.6 OP-8: AI 8.1, 8.2, 8.3, 8.4 OP-11: AI 11.1., 11.2., 11.4, 11.5. PC-1: AI 1.1, 1.2, 1.3, 1.4, 1.5, 1.6 PC-2: AI 2.1, 2.2, 2.3, 2.4, 2.5 PC-4: AI 4.1, 4.2, 4.3 PC-5: AI 5.1, 5.2, 5.3, 5.4, 5.5 PC-6: AI 6.1, 6.2 PC-9: AI 9.1, 9.2 PC-14: AI 11.1, 11.2, 14.3	Frontal survey, solving clinical and situational problems.	5.2

9	Tumors and infectious granulomas of the upper respiratory tract and ear: benign and malignant tumors of the nose, paranasal sinuses, pharynx and larynx, tuberculosis, syphilis, scleroma, leprosy.	**Theoretical part:** Tumors and infectious granulomas of the upper respiratory tract and ear: benign and malignant tumors of the nose, paranasal sinuses, pharynx and larynx, tuberculosis, syphilis, scleroma, leprosy. **Practical part:** Study of X-rays, CT and MRI on the topic of the lesson, development of practical skills.	UC-1: AI 1.1., 1.2., 1.3 U-6: AI 6.1., 6.3. OP-1: AI 1.1, 1.2, 1.3 OP-5: AI 5.1, 5.2, 5.3, 5.4, 5.5, 5.6 OP-8: AI 8.1, 8.2, 8.3, 8.4 OP-11: AI 11.1., 11.2., 11.4, 11.5. PC-1: AI 1.1, 1.2, 1.3, 1.4, 1.5, 1.6 PC-2: AI 2.1, 2.2, 2.3, 2.4, 2.5 PC-4: AI 4.1, 4.2, 4.3 PC-5: AI 5.1, 5.2, 5.3, 5.4, 5.5 PC-6: AI 6.1, 6.2 PC-9: AI 9.1, 9.2 PC-14: AI 11.1, 11.2, 14.3	Frontal survey of clinical and situational tasks.	5.2
10	Operating room of the hospital. Rounds - assessment of written case histories, theoretical and practical knowledge. Credit lesson.	**Theoretical part:** Indications and techniques of the most frequently performed surgical interventions in otolaryngological practice. **Practical part:** Verification of the acquisition of competencies (testing, interviews on theoretical issues of the discipline, situational tasks, defense of the educational medical history, acceptance of practical skills and abilities). The interim assessment includes: - assessment of acquisition of practical skills; - assessment of knowledge of theoretical material;	UC-1: AI 1.1., 1.2., 1.3 U-6: AI 6.1., 6.3. OP-1: AI 1.1, 1.2, 1.3 OP-5: AI 5.1, 5.2, 5.3, 5.4, 5.5, 5.6 OP-8: AI 8.1, 8.2, 8.3, 8.4 OP-11: AI 11.1., 11.2., 11.4, 11.5. PC-1: AI 1.1, 1.2, 1.3, 1.4, 1.5, 1.6 PC-2: AI 2.1, 2.2, 2.3, 2.4, 2.5 PC-4: AI 4.1, 4.2, 4.3 PC-5: AI 5.1, 5.2, 5.3, 5.4, 5.5 PC-6: AI 6.1, 6.2 PC-9: AI 9.1, 9.2 PC-14: AI 11.1, 11.2, 14.3	Interview (assessment of knowledge of theoretical material), testing in the Moodle system.	5.2
Total hours					**52**

2. 4 Interactive forms of learning

interactive methods are widely used in practical classes. training (interactive survey, work in small groups, computer testing, etc.), participation in educational and research and scientific research work.

No.	Clinical Topic practical classes	Labor intensity in hours	Interactive form of learning	Labor intensity in hours in % from the lesson
1	Introduction to the clinic. Endoscopic examination of ENT organs	3.8	Interactive survey	30 min (0.5 hours) 13.2%
2	Anatomy, physiology and methods of examination of the nose and paranasal sinuses	3.8	Computer 3D simulation system refractions"	30 min (0.5 hours) 13.2%
3	Anatomy, physiology, methods of examination of the pharynx, larynx, trachea, esophagus.	3.8	Interactive survey	30 min (0.5 hours) 13.2%
4	Anatomy, physiology and methods of examination of the outer, middle and inner ear. Auditory and vestibular analyzer.	3.8	Computer simulation "3 D Anatomy eyes"	30 min (0.5 hours) 13.2%
5	Acute and chronic inflammatory diseases of the nose and paranasal sinuses. Rhinogenic complications. Nosebleeds.	3.8	Role play	30 min (0.5 hours) 13.2%
6	Acute and chronic inflammatory diseases of the pharynx and larynx. Restoration of swallowing and voice. Foreign bodies. Esophagus burns.	3.8	Role play	30 min (0.5 hours) 13.2%
7	Acute and chronic inflammatory diseases of the outer and middle ear. Otogenic complications. Foreign bodies of the ear.	3.8	Role play	30 min (0.5 hours) 13.2%
8	Non-purulent diseases of the middle and inner ear. Surgical and hardware methods of hearing restoration.	3.8	Role play	30 min (0.5 hours) 13.2%
9	Tumors and infectious granulomas of the upper respiratory tract and ear.	3.8	Role play	30 min (0.5 hours) 13.2%
10	Operating room of the hospital. Rounds. Evaluation of written case histories. Credit	3.8	Computer simulation "Radical operation on the eye "apple"	30 min (0.5 hours) 13.2%

2.5 Criteria for assessing students' knowledge

The assessment of learning outcomes is carried out in accordance with the “Regulations on the system for assessing the learning outcomes of students of the Federal State Budgetary Educational Institution of Higher Education Amur State Medical Academy of the Ministry of Health of Russia.

The basis for determining the level of knowledge, skills, and abilities are the assessment criteria - completeness and correctness:

- correct, precise answer;
- correct but incomplete or imprecise answer;
- incorrect answer; no answer.

When assigning marks, the classification of errors and their quality are taken into account:

- gross errors;
- similar errors;
- minor errors; shortcomings.

The success of students in mastering the topics of the discipline "Otolaryngology" is determined by the quality of mastering knowledge, skills and practical abilities, the assessment is given on a five-point scale: "5" - excellent, "4" - good, "3" - satisfactory, "2" - unsatisfactory.

Evaluation criteria

Quality of development	Mark on a 5-point scale
90 - 100%	"5"
80 - 89%	"4"
70 - 79%	"3"
less than 70%	"2"

Incoming inspection

Conducted at the first lesson, includes: solving problems and exercises; testing in the Moodle system https://educ-amursma.ru/local/crw/course.php?id=291 . Test control includes questions on the otolaryngology course.

Current control

Current control includes initial and final control of knowledge.

Initial control **is** carried out by the teacher at the beginning of each lesson in the form of a frontal survey, solving problems and exercises.

Final control – includes control over the technique of performing the experiment and drawing up the protocol , written work on options, testing in the Moodle system (https://educ-amursma.ru/local/crw/course.php?id=291.).

The final grade during the current knowledge assessment is given on the day of the lesson, as the arithmetic mean result for all types of activities provided for in the given lesson of the discipline’s work program.

Criteria for assessing the oral response

- **“5” (excellent)** – the student demonstrates deep and complete knowledge of the educational material, does not allow inaccuracies or distortions of facts when presenting, presents the material in a logical sequence, is well oriented in the presented material, and can provide justification for the judgments expressed.
- **“4” (good)** - the student has mastered the educational material in full, is well oriented in the educational material, presents the material in a logical sequence, but makes inaccuracies when answering.
- **“3” (satisfactory)** – the student has mastered the basic principles of the topic of the practical lesson, but when presenting the educational material, he/she makes inaccuracies, presents it incompletely and inconsistently, requires leading questions from the teacher to present it, and has difficulty substantiating the judgments expressed.

- **“2” (unsatisfactory)** – the student has fragmented and unsystematic knowledge of the educational material, is unable to distinguish between the main and the secondary, makes mistakes in defining basic concepts, distorts their meaning, and cannot independently present the material.

Assessment criteria for the practical part

- **“5” (excellent)** – the student has fully mastered the practical skills and abilities provided for by the course work program.
- **“4” (good)** – the student has fully mastered the practical skills and abilities provided for in the course program, but makes some inaccuracies.
- **“3” (satisfactory)** – the student has only some practical skills and abilities.
- **“2” (unsatisfactory)** – the student demonstrates the performance of practical skills and abilities with gross errors.

Criteria for assessing independent extracurricular work:

- the level of student mastery of the educational material;
- the completeness and depth of general educational concepts, knowledge and skills on the topic being studied, to which this independent work relates;
- development of universal, general professional and professional competencies (ability to apply theoretical knowledge in practice).
- the problems were solved correctly, the exercises were completed, and the test assignments were answered accurately – “passed”.
- Problems were not solved correctly, exercises were not completed correctly, test questions were not answered accurately – “failed”.

Criteria for evaluation of educational medical history:

- “5” – preparation of the educational medical history in accordance with the requirements.
- “4” - in the educational medical history, the student makes inaccuracies in the description of the status, formulation of the clinical diagnosis, conducting a differential diagnosis, prescribing examination and treatment.
- “3” - the medical history is filled with errors, written in illegible handwriting, is uninformative, there are inaccuracies in the formulation of the clinical diagnosis, its justification and differential diagnosis, and in the preparation of the examination and treatment plan.
- “2” - the medical history is filled with gross errors, written in illegible handwriting, is uninformative, and gross errors have been made in all main sections.

Essay evaluation criteria:

- **“5” (excellent) –** awarded to a student if he has prepared a complete, detailed, and formatted according to requirements, abstract on the chosen topic, presented his work in the form of a report with a computer presentation, and answered questions on the topic of the report;
- **“4” (good) –** awarded to a student for a complete, detailed essay that is formatted according to requirements, but poorly presented;
- **“3” (satisfactory) –** the abstract does not contain information on the issue being studied in full, is formatted with errors, and is poorly presented;
- **“2” (unsatisfactory)** – given to a student if the abstract is not written, or is written with gross errors, the report and computer presentation are not prepared, or their content does not correspond to the topic of the abstract.

Working off disciplinary debts.

1. If a student misses a class for a valid reason, he/she has the right to make it up and receive the maximum grade provided for by the course work program for that class. A valid reason must be documented.
2. If a student misses a class for an unjustified reason or receives a "2" mark for all activities in the class, he/she is required to make it up. In this case, the mark received for all activities is multiplied by 0.8.

3. If a student is excused from a class at the request of the dean's office (participation in sports, cultural and other events), then he is given a grade of "5" for this class, provided that he submits a report on the completion of mandatory extracurricular independent work on the topic of the missed class.

Criteria for assessing midterm assessment.

Midterm assessment (credit) is designed to assess the degree of achievement of planned learning outcomes upon completion of the study of a discipline and allows for an assessment of the level and quality of its mastery by students.

The students' success in mastering the discipline is assessed on a 5-point scale: "5" – excellent, "4" – good, "3" – satisfactory, "2" – unsatisfactory.

"Excellent" - for the depth and completeness of mastery of the content of the educational material, in which the student easily navigates, for the ability to connect theoretical questions with practical ones, express and justify their judgments, correctly and logically present the answer; when testing, allows up to 10% of erroneous answers. Practical skills and abilities provided for by the working program of the discipline are fully mastered.

"Good" - the student has fully mastered the educational material, is oriented in it, correctly states the answer, but the content and form have some inaccuracies; during testing allows up to 20% of erroneous answers. Completely practical skills and abilities provided by the working program of the discipline, but allows some inaccuracies.

"Satisfactory" - the student has mastered the knowledge and understanding of the main provisions of the educational material, but presents it incompletely, inconsistently, does not know how to express and justify his/her judgments; during testing, allows up to 30% of erroneous answers. Has only some practical skills and abilities.

"Unsatisfactory" - the student has fragmented and unsystematic knowledge of the educational material, is unable to distinguish between the main and secondary, makes mistakes in defining concepts, distorts their meaning, presents the material in a disorderly and uncertain manner, and makes more than 30% of erroneous answers during testing. Performs practical skills and abilities with gross errors.

A student can claim to receive an "excellent" grade automatically if he/she has won a prize in disciplinary or interdisciplinary Olympiads (university, regional) and has an average grade for the current academic performance of at least 4.8 points **.** A student can refuse the "automatic" grade and take the test together with the group on a general basis.

Interim assessment is carried out through a system of passing a test in 3 stages:

1. Testing in the Moodle system Access mode: https://educ-amursma.ru/local/crw/course.php?id=291
2. Completion of the practical part of the discipline in full: involves attending all practical classes, performing experiments with the execution of a protocol. Based on the assessments of the current control of knowledge, skills, and abilities in practical classes, the average score of current academic performance is calculated, which is recorded in the educational (electronic) journal. The average score of the current knowledge control is taken into account during the midterm assessment.
3. Delivery of practical skills (control of the level of development of competencies) . Includes 10 options, containing 10 practical questions each.

Assessment criteria for midterm assessment

Stages	**Mark out of 5 point scale**	**Binary scale**
Test control in the Moodle system	3-5	**5 – "excellent"** **4 - "good"** **3 – "satisfactory"**
Complete completion of the practical part of the course	3-5	
Delivery of practical skills (control of the formation of competencies)	3-5	

Test control in the Moodle system	2	**2 – "unsatisfactory"**
Complete completion of the practical part of the course	2	
Delivery of practical skills (control of the formation of competencies)	2	

2.6 Independent work of students: in-class and out-of-class.

The organization of independent classroom work of students is carried out with the help of methodological instructions for students, which contain educational goals, a list of the main theoretical questions for study, a list of practical work and the methodology for conducting it, instructions for the presentation of the results obtained, their discussion and conclusions, assignments for self-control with standard answers, a list of recommended literature.

From 1/4 to 1/2 of the practical lesson time is allocated for independent work of students: conducting research, recording results, discussing them, formulating conclusions, completing individual assignments. The preparatory stage, or the formation of an approximate basis for actions, begins for students outside of class time when preparing for the practical lesson, and ends in class.

All subsequent stages are carried out in class. The stage of materialized actions (solving situational and clinical problems using an algorithm or without an algorithm, with an unknown answer in advance) is carried out independently. The teacher, if necessary, provides consultation, provides assistance and simultaneously monitors the quality of students' knowledge and their ability to apply existing knowledge to solve assigned problems.

No. p/p	**Topic practical lesson**	**Time on preparing a student for a lesson**	**Forms of extracurricular activities independent work**	
			Mandatory and identical for all students	**At the student's choice (abstract on topics)**
1	Introduction to the clinic. Endoscopic examination of ENT organs.	3.6 hours	Practicing skills of endoscopic examination of the nose, pharynx, larynx, ear	Abstract on the topic, stand design, making a model on the topic.
2	Anatomy, physiology and methods of examination of the nose and paranasal sinuses.	3.6 hours	Practicing skills of endoscopic examination of the nose, pharynx, larynx, ear	Abstract on the topic, creation of a computer presentation, design of a stand, production of a dummy on the topic.
3	Anatomy, physiology and methods of examination of the pharynx, larynx, trachea and esophagus.	3.6 hours	Practicing skills of endoscopic examination of the nose, pharynx, larynx, ear	Abstract on the topic, creation of a computer presentation, design of a stand, production of a dummy on the topic.
4	Anatomy, physiology and methods of examination of the outer, middle and inner ear. Auditory and vestibular analyzer.	3.6 hours	Review of periodicals or internet sources on this issue	Abstract on the topic, stand design, making a model on the topic.
5	Acute and chronic inflammatory diseases of the	3.6 hours	Preparation of educational medical history.	An abstract on the topic, creating a computer presentation, designing a

	nose and paranasal sinuses: acute and chronic rhinitis, acute and chronic sinusitis, intraorbital and intracranial rhinogenic complications. Restoration of nasal breathing and olfaction. Nosebleeds.			stand, an abstract on a narrower problem, preparing a report for the Student Scientific Society, reviewing periodicals or Internet sources on this problem, making a dummy on the topic.
6	Acute and chronic inflammatory diseases of the pharynx and larynx: acute and chronic tonsillitis, acute and chronic adenoiditis, hypertrophy of the palatine tonsils, acute and chronic pharyngitis, paratonsillitis, peripharyngeal abscess, retropharyngeal abscess, acute subglottic laryngotracheitis in children, acute laryngitis in adults, chronic laryngitis, precancerous conditions of the larynx. Restoration of swallowing and voice. Foreign bodies of the upper respiratory tract. Esophageal burns.	3.6 hours	Preparation of educational medical history.	An abstract on the topic, creating a computer presentation, designing a stand, an abstract on a narrower problem, preparing a report for the Student Scientific Society, reviewing periodicals or Internet sources on this problem, making a dummy on the topic.
7	Acute and chronic inflammatory diseases of the outer and middle ear: acute and chronic catarrh of the auditory tube, serous otitis media, acute catarrhal otitis, acute purulent otitis media, chronic meso- and epitympanitis, acute classical mastoiditis, chronic mastoiditis, atypical forms of mastoiditis, intracranial otogenic complications. Foreign bodies of the ear.	3.6 hours	Preparation of educational medical history.	An abstract on the topic, creating a computer presentation, designing a stand, an abstract on a narrower problem, preparing a report for the Student Scientific Society, reviewing periodicals or Internet sources on this problem, making a dummy on the topic.
8	Non-purulent diseases of the middle and inner ear: otosclerosis, Meniere's disease, labyrinthitis, adhesive otitis media, sensorineural hearing loss, tympanosclerosis. Surgical and hardware methods of	3.6 hours	Preparation of educational medical history.	An abstract on the topic, creating a computer presentation, designing a stand, an abstract on a narrower problem, preparing a report for the Student Scientific Soci-

	hearing restoration.			ety, reviewing periodicals or Internet sources on this problem, making a dummy on the topic.
9	Tumors and infectious granulomas of the upper respiratory tract and ear: benign and malignant tumors of the nose, paranasal sinuses, pharynx and larynx, tuberculosis, syphilis, scleroma, leprosy.	3.6 hours	Preparation of educational medical history.	An abstract on the topic, creating a computer presentation, designing a stand, an abstract on a narrower problem, preparing a report for the Student Scientific Society, reviewing periodicals or Internet sources on this problem, making a dummy on the topic.
10	Operating room of the hospital. Rounds. Test (exam).	3.6 hours	-	An abstract on the topic, creating a computer presentation, designing a stand, an abstract on a narrower problem, preparing a report for the Student Scientific Society, reviewing periodicals or Internet sources on this problem, making a dummy on the topic.
Labor intensity in hours			**24 hours**	**12 hours**
Total labor intensity in hours			**36 hours**	

2.7 Research (project) work

Research (project) work of students is a mandatory section of the discipline and is aimed at the comprehensive formation of universal, general professional and professional competencies of students. Research (project) work involves the study of specialized literature and other scientific and technical information on the achievements of domestic and foreign science and technology in the relevant field of knowledge, participation in scientific research, etc. The topics are determined by students independently or in consultation with the teacher.

Students' research (project) work includes:

1. Independent study of additional literature on the chosen topic.
2. Compiling reviews of literature and Internet resources on selected topics.
3. Reports and presentations on the history of the study of the issue.
4. Mastering paraclinical examination methods: ultrasound, X-ray, magnetic resonance imaging, endoscopic examination methods, etc. Examination of healthy people and patients with analysis of results.
5. Analysis of radiological and magnetic resonance examination methods for various pathologies.
6. Working with archival documents, analysis of the clinic, examination results, etc.
7. Collection and analysis of clinical data for a specific pathology, analysis of treatment methods.
8. Preparation of thematic meetings of the student circle with abstract reports and results of independent work.

9. Preparing reports for the final student conference.

List of recommended topics for research (project) work:

1. Assessment of the immune status in patients with various forms of chronic rhinosinusitis.
2. Assessment of the immunological status in patients with chronic tonsillopharyngitis.
3. Options for drug and surgical correction of nasal obstruction syndrome in various pathologies of the nose and paranasal sinuses.
4. Epidemiology of allergic rhinitis in the Amur region. Possibilities and effectiveness of conservative and surgical treatment.

To evaluate research work, a binary assessment scale is adopted: “pass”, “fail”.

Criteria for assessing students’ research (project) work:

- the material on the results of the research in the report is presented in detail, the specialized literature is well-developed, scientific and technical information on the achievements of domestic and foreign science and technology in the relevant field of knowledge is studied - “passed”.
- the material on the results of the research in the report is not presented accurately enough, the special literature is poorly studied, the scientific and technical information on the achievements of domestic and foreign science and technology in the relevant field of knowledge is not studied - "failed".

3. EDUCATIONAL, METHODOLOGICAL, MATERIAL AND TECHNICAL INFORMATION SUPPORT OF DISCIPLINE

3.1 Main literature:

1. Palchun V.T., Magomedov M.M., Luchikhin L.A. Otorhinolaryngology: textbook. Ed. 3rd, revised and additional - M.: GEOTAR-Media, 2016. -584 p.: ill.
2. Blotskiy A.A., Karpishchenko S.A. Emergency conditions in otolaryngology: medical manual. - St. Petersburg: Dialog, 2016. - 208 p.: ill.
3. Portenko G.M. et al. Practical skills in otolaryngology. - St. Petersburg: Dialog, 2009. - 40 p.
4. Vishnyakov V.V. Otorhinolaryngology: textbook. - M.: GEOTAR - Media, 2014. -328 pp.: ill. Access mode: http://www.studmedlib.ru/ru/book/ISBN9785970430132.html

3.2 Further reading

1. Pluzhnikov M.S., Diskalenko V.V., Blotskiy A.A. Manual for studying otolaryngology in medical universities. - St. Petersburg: Dialog, 2006. - 392 p.
2. Diskalenko V.V., Lavrenova G.V. et al. Handbook of Otolaryngology. - St. Petersburg: "Dialog", 2009. - 476 p.
3. Bull T.R. Atlas of ENT diseases / trans. from English - M.: Publishing House: GEOTAR-Media, 2004. -266 p., 2007. -272 p.
4. Guide to Rhinology, /ed. Piskunova G.Z. Piskunov Z.S.-M.: Litterra, 2011. -960 s.
5. Palchun V.P. et al. Inflammatory diseases of the larynx and their complications. - M.: GEOTAR-Media, 2010. - 176 p.

3.3 Educational and methodological support for the discipline prepared by the department staff:

Educational aids (Educational Methodology):

1. Blotskiy A.A. Clinical anatomy of ENT organs 2005. Blagoveshchensk
2. Blotskiy. A.A. Guide to Otolaryngology. 2005. Blagoveshchensk
3. Blotskiy. A.A. Test tasks in otolaryngology. 2005. Blagoveshchensk
4. Blotsky. A.A. Situational tasks in otolaryngology. 2005. Blagoveshchensk
5. Blotskiy. A.A. X-ray diagnostics in otolaryngology. 2005. Blagoveshchensk
6. Pluzhnikov M.S. Blotsky A.A. Deniskin O.N. Bryzgalova S.V. X-ray diagnostics in otorhinolaryngology. 2007. St. Petersburg.
7. Pluzhnikov M.S., Diskalenko V.V., Blotskiy A.A. Manual for studying otolaryngology in medical universities. 2006. St. Petersburg.
8. Blotskiy A.A. Emergency conditions in otolaryngology. 2007. Blagoveshchensk.
9. Blotskiy A.A. Dyachenko E.Yu. Fundamentals of anatomy and physiology of the organs of voice formation. 2007. Blagoveshchensk.
10. Blotskiy A.A. Fungal diseases of ENT organs. 2008. Blagoveshchensk.
11. Blotskiy A.A. Karpishchenko S.A. Emergency conditions in otolaryngology. 2009. St. Petersburg.
12. Blotskiy A.A., Karpishchenko S.A., Katinas E.B. Fungal diseases of ENT organs. 2010. St. Petersburg.
13. Blotskiy A.A. Lesions of ENT organs in specific diseases 2010. Blagoveshchensk.
14. Blotskiy A.A. Syndromes and symptoms in otolaryngology. 2009. Blagoveshchensk.
15. Blotskiy A.A., Karpishchenko S.A., Katinas E.B. Fungal diseases of ENT organs. 2010. St. Petersburg.
16. Blotskiy A.A. Karpishchenko S.A. Lesions of ENT organs in specific diseases 2012. St. Petersburg.

17. Blotskiy A.A., Tseplyaev M.Yu., Antipenko V.V. Inflammatory diseases of ENT organs. Part I. 2012. Blagoveshchensk.
18. Blotskiy A.A. Methods of hearing research. 2013. Blagoveshchensk
19. Blotskiy A.A., Antipenko V.V. Inflammatory diseases of ENT organs. Part III . Diseases of the pharynx. 2014. Blagoveshchensk.
20. Blotskiy A.A. Inflammatory diseases of ENT organs. Part II . 2014. Blagoveshchensk.
21. Blotskiy A.A. Karpishchenko S.A. Emergency conditions in otolaryngology. 2016. St. Petersburg.
22. Blotskiy A.A., Antipenko V.V. Inflammatory diseases of ENT organs. Part VI . Ear diseases. 2017. Blagoveshchensk.
23. Blotskiy A.A., Antipenko V.V. Injuries and foreign bodies of ENT organs. 2018. Blagoveshchensk.
24. Blotskiy A.A., Karpishchenko S.A., Antipenko V.V., Blotsky R.A. Injuries and foreign bodies of ENT organs. 2019. St. Petersburg.
25. Emergency conditions in otolaryngology. Blotskiy A.A., Karpishchenko S.A. 2019. St. Petersburg.
26. A course of lectures on otolaryngology for students of the 4th - 5th years, prepared at the Department of Otolaryngology of the Amur State Medical Academy.

Electronic and digital technologies:

1. **Online course on the subject** " Otorhinolaryngology " in the EIOS FGBOU VO Amur State Medical Academy (https://educ-amursma.ru/local/crw/course.php?id=291).
   Characteristics of modules in electronic information and educational course

Educational	Controlling
Theoretical (lecture) material, video experiments, scientific and educational films	Methodological recommendations for students on independent extracurricular work.
Methodological recommendations for students for practical classes. Methodological recommendations for solving problems and exercises on the topics of the discipline.	List of recommended topics for abstracts and guidelines for abstract design.
Reference material, tables of standard values.	Tests of entrance, current and final knowledge control.

2. **Multimedia presentations** (Microsoft Power Point 2016), to lecture-type classes in accordance with the thematic lecture plan.

3. **Video materials:**
   - Electronic training program "Anatomy of the head and neck"
   - Electronic training program "Radical ear surgery"

3.4 Equipment used for the educational process

Item No.	Name	Quantity
1	**Head of Department's Office**	
	Personal computer	1
	A set of electronic training programs	1
	Set of educational films	1
	A set of multimedia presentations of the course of lectures	1
	Archive of photo materials on various sections of otolaryngology	1
2	**Laboratory assistant**	
	Slide projector	1
	Kodascope	2
	The Lamb's Chair	1
	Operating microscope	1
	Tables	34
	A set of radiographs, tomograms, computed tomograms, magnetic resonance tomograms	14 1
	Set of tuning forks	1
3	**Examination room of the ENT department of the Regional Clinical Hospital**	20
	A set of instruments for examination of an otolaryngological patient and performing manipulations	1
	Dry heat oven	
4	**Dressing room of the ENT department of the AOKB**	
	Set of instruments for dressing an otolaryngological patient	10
5	**Otorhinolaryngology operating room of the Regional Clinical Hospital**	5
	Set of instruments for operations on ENT organs	1
	Endoscopic stand with a set of instruments for endoscopic interventions	
7	**Study room #1-2**	
	Negatoscope	1
	Stands	4
	Headlamp reflectors	6
	Set of instruments for otolaryngological examination	20
	Tables	84
	A set of radiographs, tomograms, computed tomograms, magnetic resonance tomograms	98
	Audiogram set	2
	Set of tuning forks	2
	Table	8
	Chairs	24
8	**Office of the Associate Professors of the Department**	
	Computer	2
	Laptop	1
	Multimedia video projector	1

	Rhinopneumometer Laser Flowmeter	1 1
9	**Corridor** Stands	6

3.5. Professional databases, information and reference systems, electronic educational resources.

Name resource	Resource Description	Access	Resource address
Electronic library systems			
"Student Consultant" Electronic library of the medical university.	For students and teachers of medical and pharmaceutical universities. Provides access to electronic versions of textbooks, teaching aids and periodicals.	library, individual access	http: //www .studmedlib.ru/
"Doctor's Consultant" Electronic Medical Library.	The materials posted in the library have been developed by leading Russian specialists based on modern scientific knowledge (evidence-based medicine). The information has been prepared taking into account the position of the scientific and practical medical society (world, European and Russian) in the relevant specialty. All materials have undergone mandatory independent review.	library, individual access	http://www.rosmedlib.ru/cgi-bin/mb4x
PubMed	Free search system in the largest medical bibliographic database MedLine. Documents medical and biological articles from specialized literature, and also provides links to full-text articles.	library, free access	http://www.ncbi.nlm.nih.gov/pubmed/
Oxford Medicine Online.	A collection of Oxford medical publications, bringing together over 350 titles into a single, cross-searchable resource. Publications include The Oxford Handbook of Clinical Medicine and The Oxford Textbook of Medicine , the electronic versions of which are constantly updated.	library, free access	http://www.oxfordmedicine.com
Human Biology Knowledge Base	Reference information on physiology , cell biology , genetics , biochemistry , immunology , pathology . (Resource of the Institute of Molecular Genetics of the Russian Academy of Sciences .)	library, free access	http://humbio.ru/
Medical online library	Free reference books, encyclopedias, books, monographs, abstracts, English-language literature, tests.	library, free access	http://med-lib.ru/
Information systems			

Russian Medical Association	Professional Internet resource. Objective: to facilitate the implementation of effective professional activities of medical personnel. Contains the charter, personalities, structure, rules of entry, information about the Russian Medical Union.	library, free access	http://www.rmass.ru/
Web-medicine	The site presents a catalog of professional medical resources, including links to the most authoritative subject sites, journals, societies, as well as useful documents and programs. The site is intended for doctors, students, employees of medical universities and scientific institutions.	library, free access	http: //webmed.irkutsk.ru/
Databases			
Worldwide health care organization	The site contains news, statistics on countries that are members of the World Health Organization, fact sheets, reports, WHO publications and much more.	library, free access	http://www.who.int/ru/
Ministry of Science and Higher Education of the Russian Federation	The website of the Ministry of Science and Higher Education of the Russian Federation contains news, newsletters, reports, publications and more.	library, free access	http://www.minobrnauki.gov.ru
Ministry of Education of the Russian Federation.	The website of the Ministry of Education of the Russian Federation contains news, newsletters, reports, publications and much more.	library, free access	https://edu.gov.ru/
Federal portal "Russian education"	A single window for access to educational resources. This portal provides access to textbooks on all areas of medicine and health care.	library, free access	http: //www .edu.ru/ http://window.edu.ru/catalog/?p rubr=2.2.81.1
Bibliographic databases			
BD "Russian Medicine"	It is created in the Central Scientific and Methodological Library and covers the entire collection, starting from 1988. The database contains bibliographic descriptions of articles from domestic journals and collections, dissertations and their abstracts, as well as domestic and foreign books, collections of institute proceedings, conference materials, etc. Thematically, the database covers all areas of medicine and related areas of biology, biophysics, biochemistry, psychology, etc.	library, free access	http://www.scsml.rssi.ru/
eLIBRARY.RU	Russian information portal in the field of science, technology, medicine and education, containing abstracts and full texts of more than 13 million scientific articles and publications. The	library, free access	http://elibrary.ru/defaultx.asp

	eLIBRARY.RU platform provides electronic versions of more than 2,000 Russian scientific and technical journals, including more than 1,000 open access journals.		
Portal Electronic library of dissertations	Currently, the Electronic Library of Dissertations of the Russian State Library contains more than 919,000 full texts of dissertations and abstracts.	library, free access	http://diss.rsl.ru/?menu=disscatalog/
Medline.ru	Medical and biological portal for specialists. Biomedical journal. Last updated February 7, 2021.	library, free access	http://www.medline.ru

3.6 . Licensed and freely distributed software used in the educational process.

I. Commercial software products		
1.	Operating system MS Windows 7 Pro	License number 48381779
2.	Operating system MS Windows 10 Pro, MS Office	AGREEMENT No. 142 A dated December 25, 2019
3.	MS Office	License number: 43234783, 67810502, 67580703, 64399692, 62795141, 61350919
4.	Kaspersky Endpoint Security for Business Advanced	Agreement No. 977/20 dated 12/24/2020
5.	1C: PROF University	LICENSE AGREEMENT No. 2191 dated 15.10.2020
6.	1C: PROF Library	LICENSE AGREEMENT No. 2281 dated 11.11.2020
II. Freely distributed software		
1.	Google Chrome	Freely distributed Distribution conditions: https://play.google.com/about/play-terms/index.html
2.	Yandex Browser	Freely distributed License agreement for the use of Yandex Browser programs https://yandex.ru/legal/browser_agreement/
3.	Dr.Web CureIt!	Freely distributed License Agreement: https://st.drweb.com/static/new-www/files/license_CureIt_ru.pdf
4.	OpenOffice	Freely distributed License: http://www.gnu.org/copyleft/lesser.html
5.	LibreOffice	Freely distributed License: https://ru.libreoffice.org/about-us/license/

3.7. Resources of the information and telecommunications network "Internet"

- Library of Amur State Medical Academy. Access mode: https://amursma.ru/obuchenie/biblioteki/biblioteka-amurskoy-gma/
- Electronic library system "Student consultant". Access mode: http://www.studmedlib.ru/cgi-bin/mb4x
- Electronic library of medical literature. Access mode: https://www.books-up.ru/ru/entrance/97977feab00ecfbf9e15ca660ec129c0/

4. ASSESSMENT TOOLS FUND

4.1. Current test control (input, initial, output), final.

4.1.1 Examples of entrance control test tasks (with standard answers)

Test assignments are located in the Moodle system. Access mode:
https://educ-amursma.ru/local/crw/course.php?id=291
Total number of tests – 100.

1. LIST WHICH PARANASAL SINUSES OPEN

1) middle nasal passage:
2) frontal
3) maxillary
4) wedge-shaped
5) ethmoidal
6) nasolacrimal duct

2. INDICATE INTO WHICH NASAL PASSAGE DOES THE NASLACRITAL CANAL OPEN?

1) upper
2) average
3) lower
4) general

3. LIST THE WAYS OF SPREAD OF INFECTION INTO THE MAXILLARY SINUSES:

1) rhinogenous
2) odontogenic
3) hematogenous
4) lymphogenous

Answer: 1-4.6; 2-1.2.4; 3-3.4

4.1.2 Examples of test tasks for initial control (with standard answers)

1. THE PHARYNX IS LOCATED:

1) between the base of the skull and the 2nd cervical vertebra
2) between the base of the skull and the IV cervical vertebra
3) between the base of the skull and the entrance to the esophagus
4) between the II and IV cervical vertebrae

2. WHAT IS LOCATED BEHIND THE NASAL CAVITY :

1) nasopharynx
2) oropharynx
3) laryngopharynx

3. THE PHARYNGEAL OPENING OF THE AUDITORY TUBE IS LOCATED :
   1) nasopharynx
   2) oropharynx
   3) laryngopharynx

Answer: 1-3; 2-1; 3-1.

4.1.3 Examples of test tasks for final control (with standard answers)

Test assignments are located in the Moodle system. Access mode:
https://educ-amursma.ru/local/crw/course.php?id=291
Total number of tests – 200.

1. THE PHARYNX IS LOCATED:
   1) between the base of the skull and the 2nd cervical vertebra
   2) between the base of the skull and the IV cervical vertebra
   3) between the base of the skull and the entrance to the esophagus
   4) between the II and IV cervical vertebrae

2. LIST THE PARTS OF THE PHARYNX:
   1) upper
   2) side
   3) average
   4) rear

3. INDICATE THE TONSILS LOCATED IN THE NASOPHARYNX:
   1) lingual
   2) palatine
   3) pharyngeal
   4) tubular

Answer: 1-1,3,4; 2-2,4; 3-1,2.

4. 1.4 Examples of test tasks for assessing practical skills (with standard answers)

Test assignments are located in the Moodle system. Access mode:
https://educ-amursma.ru/local/crw/course.php?id=291
Total number of tests – 200.

1. LIST THE FUNCTIONS OF THE LARYNX:
   1) respiratory
   2) olfactory
   3) voice-forming
   4) resonator

2. WHICH OF THE FOLLOWING ANATOMICAL ELEMENTS FORM THE MIDDLE EAR?
   1) tympanic cavity
   2) cave
   3) posterior cranial fossa
   4) sigmoid sinus

3. WHAT IS LOCATED BEHIND THE NASAL CAVITY :
   1) nasopharynx
   2) oropharynx
   3) laryngopharynx

Answer: 1-2,3; 2-3,4; 3-1.

4.1.5 Examples of test tasks for the final assessment (with standard answers)

Test assignments are located in the Moodle system. Access mode:
https://educ-amursma.ru/local/crw/course.php?id=291
Total number of tests – 200.

1. PERFORM POSTERIOR RHINOSCOPY USING THE INSTRUMENT:
   1) new mirror;
   2) spatula;
   3) nasopharyngeal mirror;
   4) nasopharyngeal mirror and spatula.

2. PERFORM MESOPHARYNGOSCOPY USING THE INSTRUMENT:
   1) spatula;
   2) nasal mirror;
   3) laryngeal mirror;
   4) nasopharyngeal mirror.

3. PERFORM OTOSCOPY USING THE INSTRUMENT:
   1) spatula;
   2) ear funnel;
   3) laryngeal mirror;
   4) nasopharyngeal mirror.

Sample answers: 1 – 4; 2 – 1; 3 – 2.

4.2 Clinical situational tasks

Situational task #1

A 12-year-old child, S., came to the clinic complaining of paroxysmal rhinitis accompanied by sneezing, copious watery discharge from the nasal cavity, difficulty breathing through the nose, itching in the nose and ears, lacrimation, and reddening of the skin of the face. The attack of rhinitis begins upon contact with a chamomile flower. In the absence of contact with a chamomile flower, the patient does not have these complaints.

Objectively: the child's general condition is satisfactory. Body temperature is 36.6°C. Anterior rhinoscopy reveals moderate swelling of the mucous membrane of the lower and middle nasal turbinates and a spotty, grayish-bluish color of the mucous membrane of the nasal turbinates and nasal septum , the general nasal passage is narrowed, there is a moderate amount of mucous discharge; cytological examination of prints from the mucous membrane of the lower nasal turbinates reveals a large number of eosinophils.

In the clinical blood test: hemoglobin - 120 g/l, erythrocytes - 4, $1x10^{12}$/l, leukocytes - $8.1x10^{9}$/l, eosinophils - 6, segmented - 62, lymphocytes - 27, monocytes - 5, ESR - 8 mm/hour.

Questions

1. Your preliminary diagnosis.
2. Justification of the diagnosis.
3. Differential diagnosis.
4. What explains the presence of patient complaints?
5. Course of the disease

6. Doctor's tactics
7. Prescribe treatment
8. Prognosis of the disease.

Answer

1. Chronic vasomotor rhinitis, allergic form.
2. The diagnosis is based on the patient's complaints that appear upon contact with the plant (chamomile flower), data from examination of the nasal cavity (spotted, gray-blue color of the mucous membrane of the nasal conchae), data from a clinical blood test (eosinophilia) and cytological examination of prints from the mucous membrane of the nasal conchae.
3. Differential diagnosis is carried out with acute catarrhal rhinitis, chronic vasomotor rhinitis, and neurovegetative form.
4. The presence of complaints in the patient is explained by his contact with the allergen and the development of an immediate and delayed allergic reaction with the appearance of corresponding complaints.
5. This chronic rhinitis refers to the persistent form of the disease.
6. Eliminate contact with the suspected allergen, see an allergist, and identify the allergen.
7. Conducting specific and non-specific desensitizing therapy at an allergist. Use of intranasal glucocorticosteroids, vasoconstrictors, physiotherapy , surgical treatment to restore nasal breathing.
8. The prognosis is favorable; without treatment, bronchial asthma may develop.

Situational task #2

A girl named D., 14, came to the ENT office complaining of periodically recurring bleeding from the right half of the nose and difficulty breathing through the nose on the right. She has been suffering from nosebleeds for a year. Bleeding usually reoccurs when sneezing, blowing her nose, overexerting herself, or during physical exertion.

Objectively: the child's general condition is satisfactory. The skin and visible mucous membranes are pink. Blood pressure is 100/75 mm Hg. There is moderate bleeding from the right half of the nose. After anemia of the mucous membrane of the nasal cavity and nasal septum, the bleeding stopped . Anterior rhinoscopy reveals a bright red neoplasm with a finely tuberculate surface, on a wide base, originating from the middle sections of the nasal septum, up to 5 mm in size. It bleeds easily when touched with a button probe .

Blood test: hemoglobin - 118 g/l, erythrocytes - 3.5 x10 ^{12} /l, leukocytes - 6.0 x10 ^{9} /l, eosinophils - 1, monocytes - 10, platelets - 300,000, segmented - 64, lymphocytes - 25.

Questions

1. Your preliminary diagnosis.
2. Justification of the diagnosis.
3. Differential diagnosis.
4. What explains the presence of patient complaints?
5. Course of the disease
6. Doctor's tactics
7. Prescribe treatment
8. Prognosis of the disease.

Answer

1. Bleeding nasal septum polyp.
2. The diagnosis is made on the basis of the patient's complaints (complaints appear when sneezing, blowing the nose, overexertion, physical exertion), data from an examination of the nasal cavity (a neoplasm on a wide base emanating from the middle sections of the nasal septum) .
3. Differential diagnosis is carried out with benign (single or multiple polyps of the nasal cavity), conditionally benign (single or multiple papillomas of the nasal cavity), malignant neoplasms and specific diseases (lupus, tuberculosis, scleroma).
4. The presence of complaints is explained by constant trauma to the surface of the formation.
5. The course of the disease is chronic.
6. Hospitalization of the patient in the children's ENT department.
7. Removal of a nasal septum polyp with the underlying mucous membrane, perichondrium and cartilage,

followed by histological examination of the removed neoplasm.
8. Favorable.

Situational task #3

Child S., 1 month old, was admitted to the ENT office with complaints of difficulty breathing through the nose, runny nose, high temperature , impaired sucking, and periodically occurring convulsions. He fell ill 2 days ago. Mother has acute respiratory viral infection and acute catarrhal rhinitis .

Objectively: the child's general condition is moderate. Body temperature is 39.2°C. During anterior rhinoscopy, the mucous membrane of the nasal cavity is hyperemic and edematous. The nasal passages are narrowed, nasal breathing is severely obstructed. There is moderate mucous discharge in the nasal cavity. The remaining ENT organs are without pathological changes.

Questions

1. Your preliminary diagnosis.
2. Justification of the diagnosis.
3. Differential diagnosis.
4. What explains the presence of patient complaints?
5. Course of the disease
6. Doctor's tactics
7. Prescribe treatment
8. Prognosis of the disease.

Answer

1. ARI. Acute catarrhal rhinitis.
2. The diagnosis is made on the basis of complaints (difficulty breathing through the nose, runny nose, high temperature , impaired sucking, periodically occurring convulsions), epidemiological history data (presence of acute respiratory viral infection and acute catarrhal rhinitis in the mother), and examination data of the nasal cavity.
3. Differential diagnosis should be carried out with acute bacterial sinusitis, acute bacterial pneumonia, acute infectious diseases (diphtheria, scarlet fever).
4. The presence of complaints is explained by swelling of the mucous membrane of the nasal cavity, severe intoxication caused by a viral infection.
5. The course of the disease is acute. With adequate timely therapy, recovery occurs in 5-7 days. Without adequate therapy, complications may develop.
6. Hospitalization in the infectious diseases department.
7. Careful suction of mucus from the nasal cavity using a rubber balloon. Before feeding, introduce sterile sweet almond oil, 0.1% solution of naphthyzine (nazol, nazivin) , mother's milk into the nasal cavity, 2 drops in each half of the nose. Anti-inflammatory, antiviral, detoxification therapy, symptomatic treatment.
8. With adequate therapy, the prognosis is favorable.

4.3 List of practical skills that a student should have after mastering the discipline.

Nose and paranasal sinuses:

1. Technique for performing palpation of the external nose, facial walls of the paranasal sinuses and exit points of the branches of n . trigemeni (assessment of their results).
2. Evaluation of computed tomography of the paranasal sinuses (frontal, axial, sagittal projections).
3. Technique for performing anterior rhinoscopy (position 1, position 2, evaluation of its results).
4. Evaluation of magnetic resonance imaging of the paranasal sinuses (frontal, axial, sagittal projections).
5. Technique for performing posterior rhinoscopy (assessment of its results).
6. Evaluation of the electroradiogram of the paranasal sinuses (frontal, sagittal projections).
7. Evaluation of skull radiograph in sagittal projection.
8. Evaluation of skull radiograph in nasomental projection.
9. Preparation of nasal cotton holders.

10. Technique for stopping nosebleeds from the anterior nasal cavity.
11. Technique for stopping nosebleeds from the posterior nasal cavity and nasopharynx.
12. Making and applying a sling bandage.
13. Technique of probing the mucous membrane of the nasal cavity (evaluation of research results).
14. Technique for studying the respiratory function of the nose (evaluation of study results).
15. Technique for extracting discharge from the nasal cavity and pharynx to determine microflora and its sensitivity to antibiotics.
16. Insufflation and instillation of medicinal substances into the nasal cavity.

Pharynx:

1. Technique of performing mesopharyngoscopy (assessment of its results).
2. Technique for preparing and using pharyngeal cotton holders.
3. Technique for washing the lacunae of the palatine tonsils.
4. External examination of the anterior and lateral surfaces of the neck, palpation of regional lymph nodes (assessment of the study results).
5. Warming compress on the neck (technique for its implementation).
6. Technique of examination of the nasopharynx (assessment of examination results).
7. Assessment of the condition of the palatine tonsil.
8. Insufflation and instillation of medicinal substances into the throat.

Larynx and trachea:

1. Technique of performing indirect laryngoscopy (evaluation of its results).
2. Evaluation of laryngeal tomography.
3. External examination, palpation of the larynx and regional lymph nodes (assessment of the study results).
4. List of instruments for tracheostomy.
5. List of instruments for conicotomy.

Ear:

1. Technique of performing otoscopy (assessment of its results).
2. Evaluation of radiographs according to Stenvers.
3. Evaluation of the radiograph of the temporal bone according to Schüller.
4. Technique for making cotton ear holders.
5. Evaluation of pure tone threshold audiogram results.
6. Technique for performing hearing research using the experiments of Federice, Jele, Bing, Klaus (evaluation of their results).
7. Technique for performing air conductivity research using tuning forks (evaluation of the results obtained).
8. Insertion of tampons containing medicinal preparations into the ear.
9. Technique for performing rinsing of the external auditory canal to remove earwax and foreign bodies.
10. Study of hearing in whispered and spoken language
11. Study of bone conduction using tuning forks.
12. Determination of the patency of the auditory tube (4 degrees).
13. Technique for performing a rotational test and evaluating its results.
14. Technique for performing a caloric test and evaluating its results.
15. Technique for performing Politzer's blowing of the auditory tubes.

16. Technique for performing tests - finger-nose, finger-index, diadochokinesis (assessment of research results).
17. Technique for conducting the otolith test according to Voyachek (evaluation of the research results).
18. Technique for identifying spontaneous vestibular disorders (evaluation of research results).
19. Carrying out an ear toilet, extracting discharge from the ear to determine the microflora and its sensitivity to antibiotics.
20. Applying a warming compress to the ear.
21. Insufflation and instillation of medicinal substances into the external auditory canal.

4.4.List of questions for the assessment test

1. Clinical anatomy of the outer ear, external auditory canal and tympanic membrane.
2. Acute subglottic laryngotracheitis in children (classification, stage-by-stage symptoms, treatment depending on the stage of the pathological process).
3. Ozena (etiology, pathogenesis, clinical features, diagnostics, treatment). Nasal injuries (classification, clinical features, diagnostics, treatment).
4. Cartilages and ligaments of the larynx.
5. Ulcerative membranous tonsillitis (etiology, pathogenesis, clinical features, diagnosis, treatment).
6. Tympanoplasty (types of tympanoplasty, indications and contraindications for its implementation).
7. Acute frontal sinusitis (etiology, pathogenesis, clinical features, diagnosis, treatment).
8. Anatomy and physiology of the pharynx.
9. Types and kinds of threshold tonal audiograms in the norm and in pathological processes of the middle and inner ear.
10. Chronic frontal sinusitis (etiology, pathogenesis, clinical features, diagnosis, treatment).
11. Acute laryngitis (etiology, pathogenesis, clinical features, diagnosis, treatment).
12. Anatomy and physiology of the lymphadenoid pharyngeal ring.
13. Acute sinusitis (etiology, pathogenesis, clinical features, diagnosis, treatment).
14. Adenoid vegetations (clinical presentation, diagnostics, treatment).
15. Chronic purulent inflammation of the middle ear (etiology, pathogenesis, clinical presentation, diagnostics, audiometric signs, indications for conservative and surgical treatment).
16. Clinical anatomy of the tympanic cavity.
17. Phlegmonous laryngitis (etiology, pathogenesis, clinical features, diagnosis, treatment).
18. Chronic sinusitis: exudative forms (etiology, pathogenesis, clinical features, diagnosis, treatment).
19. Complications of tracheostomy.
20. Anatomy of the bony and membranous labyrinth.
21. Hypertrophy of the palatine tonsils (clinical features, diagnostics, treatment).
22. Tuberculosis of the larynx (etiology, pathogenesis, clinical features, diagnosis, treatment).
23. Causes of persistent difficulty in nasal breathing.
24. Anatomy of the external nose.
25. Otohematoma and chondroperechondritis of the auricle (etiology, clinical presentation, diagnostics, treatment).
26. Diphtheria of the pharynx (etiology, pathogenesis, classification, clinical presentation, diagnosis, treatment).
27. Chronic laryngitis (etiology, pathogenesis, classification, clinical presentation, diagnosis, treatment).
28. Anatomy of the mastoid process (types of anatomical structure).
29. Chronic sinusitis: proliferative forms (etiology, pathogenesis, clinical features, diagnosis, treatment).

30. Classification of tonsillitis according to I.B. Soldatov.
31. Otogenic cerebellar abscess (etiology, pathogenesis, clinical features, diagnosis, treatment).
32. Anatomy of the nasal cavity (sections of the nasal cavity, structural features of the mucous membrane, functions of the nasal cavity).
33. Chronic pharyngitis (etiology, pathogenesis, classification, clinical presentation, diagnosis, treatment).
34. Foreign bodies of the trachea and bronchi (clinical presentation, diagnostics, treatment).
35. Otogenic subdural abscess (etiology, pathogenesis, clinical features, diagnosis, treatment).
36. External and internal muscles of the larynx (their function).
37. Acute catarrhal rhinitis (etiology, pathogenesis, stages of the inflammatory process, clinical features, treatment).
38. Foreign bodies in the external auditory canal (clinical presentation, diagnostics, methods of their removal).
39. Angina in blood diseases (clinical presentation, diagnostics, treatment).
40. Anatomy and physiology of the paranasal sinuses.
41. Acute purulent inflammation of the middle ear (etiology, pathogenesis, clinical features, diagnosis, treatment , indications for paracentesis of the eardrum).
42. Acute pharyngitis (etiology, pathogenesis, clinical picture, treatment).
43. Laryngeal cancer (international classification, clinical features, diagnostics, modern treatment methods).
44. Anatomy and topography of the esophagus.
45. Sensorineural hearing loss (general and intralabyrinthine causes of hair cell death, clinical features, diagnostics, treatment).
46. Catarrhal angina (etiology, pathogenesis, clinical features, differential diagnosis, treatment).
47. Acute ethmoiditis (etiology, pathogenesis, clinical features, diagnosis, treatment).
48. Functions of the larynx (features of the structure of the mucous membrane of the larynx, reflexogenic zones).
49. Labyrinthitis (etiology, pathogenesis, classification, clinical features, diagnostics, treatment).
50. Chronic ethmoiditis (etiology, pathogenesis, classification, clinical features, diagnosis, treatment).
51. Follicular tonsillitis (etiology, pathogenesis, clinical features, differential diagnosis, treatment).
52. Anatomy of the trachea and bronchi.
53. Otosclerosis (concept of otosclerotic lesion, pathogenesis, forms, clinical picture, occlusion tests of the hearing passport, audiometric data, methods of conservative and surgical treatment).
54. Nosebleeds (etiology, pathogenesis, clinical picture, methods of stopping).
55. Tonsillectomy (indications and contraindications for surgery, preparation for surgery, technique of its implementation, features of the postoperative period).
56. Anatomy of the auditory tube (features of the structure of the mucous membrane, functions).
57. Lacunar tonsillitis (etiology, pathogenesis, clinical features, differential diagnosis, treatment).
58. Acute and chronic sphenoiditis (etiology, pathogenesis, clinical features, diagnosis, treatment).
59. Esophageal burns (degrees of burn, stages of the pathological process, emergency medical care measures, treatment).
60. Anatomy of the cochlea.
61. Rhinogenic abscess of the frontal lobe of the brain (pathogenesis, clinical features, diagnosis, treatment).
62. Adhesive otitis media (etiology, pathogenesis, clinical picture, audiometric signs, treatment).
63. Peritonsillar abscess (etiology, pathogenesis, types, clinical picture, treatment).
64. Theories of hearing.

65. Perforation of the nasal septum (etiology, clinical picture, treatment methods).
66. Chronic hypertrophic laryngitis (pathogenesis, clinical features, treatment).
67. Retropharyngeal abscess (etiology, pathogenesis, clinical picture, treatment).
68. Sound-conducting apparatus of the auditory analyzer (function for comfortable and uncomfortable signals, frequency distribution).
69. Angiofibroma of the nasopharynx (pathogenesis, clinical features, diagnosis, treatment).
70. Local signs of chronic tonsillitis according to I.B. Soldatov.
71. Benign neoplasms of the larynx (clinical features, diagnostics, treatment).
72. Ewald's laws.
73. Curvature of the nasal septum (pathogenesis, clinical features, diagnostics, surgical treatment methods).
74. Methods of examining the larynx (types, advantages and disadvantages of invasive and non-invasive research methods, complications).
75. Syphilis of the pharynx (features of the course of the disease, diagnosis, treatment methods).
76. The structure of the palatine tonsils and their physiological role.
77. Rhinogenic intraorbital complications (types, etiology, pathogenesis, clinical presentation, diagnostics, treatment principles).
78. Meniere's disease (pathogenesis, clinical presentation, audiometric and vestibular signs, treatment methods).
79. Precancerous diseases of the larynx (laryngoscopic picture, treatment).
80. Theories of hearing (Helmholtz, Ruzenford, Ukhtomsky, Bekesy).
81. Chronic vasomotor rhinitis, neurovegetative form (pathogenesis, clinical features, diagnostics, treatment).
82. Scleroma of the upper respiratory tract.
83. Foreign bodies of the esophagus (clinical presentation, diagnostics, complications, treatment).
84. The founders of Russian otolaryngology (D.I. Koshlakov, A.F. Prussak, N.P. Simanovsky, S.F. Stein, N.M. Volkovich, B.V. Verkhovsky).
85. Chronic vasomotor rhinitis, allergic form (pathogenesis, clinical features, diagnostics, treatment methods).
86. Chronic epitympanitis, cholesteatoma of the tympanic cavity (etiology, pathogenesis, clinical features, diagnostics, treatment methods).
87. Chronic adenoiditis (etiology, pathogenesis, clinical features, diagnostics, treatment methods).
88. Physiology of the nasal cavity and paranasal sinuses.
89. Chronic mesotympanitis (etiology, pathogenesis, clinical features, diagnostics, treatment methods).
90. Phlegmonous laryngitis (etiology, pathogenesis, clinical features, diagnostics, complications, treatment methods).
91. Benign neoplasms of the pharynx and larynx (clinical features, diagnostics, treatment).
92. Characteristics of nystagmus.
93. Furuncle of the nose (etiology, pathogenesis, clinical picture, complications, treatment methods).
94. Paratonsillitis (etiology, pathogenesis, types, clinical picture, treatment).
95. Foreign bodies of the larynx, trachea and bronchi (clinical presentation, diagnostics, treatment).
96. Anatomy and physiology of the semicircular canals.
97. Ozena (etiology, pathogenesis, clinical picture, treatment methods).
98. Paralysis and paresis of the larynx (reasons for their development, laryngoscopic picture, treatment).
99. Chronic tonsillitis (classification, clinical picture, treatment).
100. Anatomy and physiology of the otolith apparatus.
101. Malignant neoplasms of the paranasal sinuses.

102. Classification of chronic tonsillitis according to I.B. Soldatov. Etiological and pathogenetic role of chronic tonsillitis in occurrence of common diseases.
103. Acute laryngeal stenosis (etiology, clinical features, treatment, prevention).
104. Methods for studying the functions of the hearing aid.
105. Rhinogenic meningitis.
106. Cicatricial stenosis of the esophagus (clinical features, diagnostics, treatment).
107. Malignant neoplasms of the larynx (clinical presentation, diagnostics, modern treatment methods).
108. Anatomical features of the ear, auditory tube in young children and their clinical significance.
109. Hematoma and abscess of the nasal septum (clinical presentation, diagnostics, treatment methods).
110. Chronic adenoiditis (etiology, pathogenesis, clinical picture, treatment).
111. Occupational diseases of ENT organs (definition of the term, types, medical tactics, professional selection).
112. Topography of the paranasal sinuses.
113. Acute mastoiditis (etiology, pathogenesis, clinical features, diagnosis, treatment).
114. Peripharyngeal abscess (etiology, pathogenesis, clinical picture, treatment).
115. Tracheotomy (indications, types, technique).
116. Cartilages and ligaments of the larynx.
117. Atypical forms of acute mastoiditis (etiology, pathogenesis, clinical features, diagnosis, treatment).
118. List intracranial and intraorbital rhinogenic complications of inflammatory diseases of the nose and paranasal sinuses. Basic principles of treatment.
119. New methods of treatment in otolaryngology (cryotherapy, surgical ultrasound, laser, UHF and microwave hyperthermia).
120. Anatomical features of the structure of the nasal cavity and paranasal sinuses in young children and their clinical significance.
121. Exudative otitis media (etiology, pathogenesis, clinical features, diagnosis, treatment).
122. Tonsillectomy (indications and contraindications for tonsillectomy, complications after surgery).
123. Methods of larynx examination (advantages and disadvantages of invasive and non-invasive methods).
124. Anatomy of the bony and membranous labyrinth.
125. Diseases of the nose, paranasal sinuses and nasopharynx that cause impaired nasal breathing.
126. Chronic pharyngitis, atrophic form (clinical presentation, diagnosis, treatment).
127. Outstanding Russian otolaryngologists (L.I. Sverzhevsky, V.I. Voyachek, V.F. Undrits, B.S. Preobrazhensky, I.B. Soldatov).
128. Anatomy and physiology of the nasal cavity.
129. Furuncle of the external auditory canal (etiology, pathogenesis, clinical features, differential diagnosis, treatment).
130. Features of the larynx in childhood (its structure and function).
131. Voice restoration (methods, their effectiveness).
132. External and internal muscles of the larynx.
133. Methods for diagnosing diseases of the nose and paranasal sinuses (types, advantages and disadvantages of invasive and non-invasive methods).
134. Acute catarrh of the auditory tube (clinical presentation, diagnostics, treatment methods, outcomes).
135. Follicular tonsillitis (etiology, pathogenesis, clinical picture, treatment).
136. Ligaments and joints of the larynx.
137. Otomycosis (etiology, pathogenesis, diagnosis, treatment).
138. Syphilis of the nose (etiology, pathogenesis, clinical features, diagnostics, treatment, features of the course in newborns).

139. Lacunar tonsillitis (etiology, pathogenesis, clinical picture, treatment).
140. Physiology of the pharynx.
141. Tuberculosis of the middle ear (etiology, pathogenesis, clinical picture, otoscopic picture, diagnosis, treatment).
142. Chronic sinusitis (classification, etiology, pathogenesis, clinical picture, treatment methods).
143. Chronic atrophic laryngitis (etiology, pathogenesis, clinical picture, treatment).
144. Anatomy of the tympanic cavity and mastoid process.
145. Chronic hypertrophic rhinitis (etiology, pathogenesis, forms of hypertrophic rhinitis, clinical features, treatment methods).
146. Acute pharyngitis (etiology, pathogenesis, clinical picture, treatment methods).
147. Chronic laryngitis (classification, clinical picture, treatment methods).
148. Anatomy of the nasal cavity and paranasal sinuses.
149. Otogenic thrombosis of the sigmoid sinus (etiology, pathogenesis, clinical features, diagnostics, treatment methods).
150. Diphtheria of the pharynx (differential diagnosis of lacunar tonsillitis and diphtheria of the pharynx, treatment).
151. Acute laryngitis (etiology, pathogenesis, clinical picture, treatment).
152. Blood supply and innervation of the pharynx.
153. Tuning fork methods for studying the auditory analyzer (diagnostic value).
154. Diphtheria of the larynx (differential diagnosis of diphtheria of the larynx and subglottic laryngotracheitis).
155. Acute sinusitis (classification, etiology, pathogenesis, clinical presentation, diagnosis, treatment).
156. Physiology of the semicircular canals, mechanisms of occurrence of spontaneous and fistulous nystagmus, their clinical significance.
157. Nosebleed (etiology, pathogenesis, clinical picture, emergency care methods).
158. Hearing restoration (methods, their effectiveness, durability of results).
159. Hypertrophy of the nasopharyngeal tonsil (clinical features, diagnostics, treatment).
160. Cicatricial stenosis of the esophagus (clinic, diagnostics, treatment)