MINISTRY OF HEALTH OF UKRAINE

ODESA NATIONAL MEDICAL UNIVERSITY

Department of Otorhinolaryngology

APPROVE Vice-rector for scientific and pedagogical work Eduard Buryachkivskyi September 02, 2024

WORK PROGRAM OF THE ELECTIVE DISCIPLINE

"INFLAMMATORY AND NON-INFLAMMATORY DISEASES OF THE LARYNX, STENOSIS OF THE LARYNX".

Level of higher education: second (master's)

Field of knowledge: 22 "Health care"

Specialty: 222 "Medicine"

Educational and professional program: Medicine

2024

The work program is compiled on the basis of the educational and professional program "Medicine" for the training of specialists of the second (master's) level of higher education in the specialty 222 "Medicine" of the field of knowledge 22 "Health care", approved by the Scientific Council of ONMedU (protocol No. 10 of June 27, 2024).

Developers: Head of the Department, PhD in Otorhinolaryngology, Professor Sergiy Pukhlik Associate Professor of the Department, PhD in Otorhinolaryngology, Olga Titarenko Assistant of the Department, PhD in Otorhinolaryngology, Kolesnichenko V.V.

The work program was approved at the meeting of the Department of Otorhinolaryngology Protocol No. _1 __ dated August 28, 2024.

Head of the Department

Serhii Pukhlik

Agreed with the Guarantor of the EPP

Valery MARICHEREDA

Approved by the Subject-cycle Methodical Commission for Surgical Disciplines of ONMedU Protocol No. _1_ dated August 30, 2024.

Head of the Subject-cycle Methodical Commission for Surgical Disciplines of ONMedU

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Vasyl Mishchenko

Reviewed and Approved at a Meeting of the Department Protocol No.

Head of the Department (Signature)

(First Name Surname)

Reviewed and Approved at a Meeting of the Department

Protocol No.

Head of the Department

(Signature)

(First Name Surname)

1. Description of the discipline:

Name of indicators	Field of study, specialty, specialization, level of higher education	Characteristics of the discipline
Total number:	Field of expertise 22 "Health care"	Full-time form of study Elective discipline
Credits: 3 Hours: 90	Specialty. 222 "Medicine"	Year of preparation: 5 Semesters IX - X
Content.	Level of higher education	Lectures (0 hours) Seminar (0 hours)
modules: 1	second (master's) degree	Practical (30 hours) Laboratory (0 hours)
		Independent work (60 hours) including individual assignments (0 hours)
		The form of final control is offset

2. Purpose and objectives of the discipline, competencies, program learning outcomes.

Objective: Mastering of knowledge and formation of elements of professional competencies in the field of modern methods of laryngeal examination and improvement of skills and competencies acquired in the study of previous disciplines.

Objectives:

- 1. Formation of skills: differential diagnosis, the most common disorders of the larynx.
- 2. Improvement of skills in substantiating clinical diagnosis, drawing up a plan of laboratory and instrumental studies,
- 3. Mastering the ability to determine the tactics of emergency care, treatment and rehabilitation of the most common diseases of the larynx.

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

Integral competence (level 7) according to the requirements of the NRC. The ability to solve typical and complex problems, including those of a research and innovation nature in the field of medicine. Ability to continue learning with a high degree of autonomy.

General competences according to the requirements of the NRK

- GC1. Ability to abstract thinking, analysis and synthesis
- GC3. Ability to apply knowledge in practical situations
- GC4. Knowledge and understanding of the subject area and understanding of professional activity
- GC5. Ability to adapt and act in a new situation
- GC6. Ability to make informed decisions
- GC7. Ability to work in a team
- GC10. Ability to use information and communication technologies

Special (professional, subject) competences

- SC1. Ability to collect medical information about the patient and analyze clinical data
- SC2. Ability to determine the necessary list of laboratory and instrumental studies and evaluate their results
- SC3. Ability to establish a preliminary and clinical diagnosis of the disease
- SC4. The ability to determine the necessary regime of work and rest in the treatment and prevention of diseases
- SC5. The ability to determine the nature of nutrition in the treatment and prevention of diseases

- SC6. Ability to determine the principles and nature of treatment and prevention of diseases
- SC7. Ability to diagnose emergency conditions
- SC8. Ability to determine tactics and provide emergency medical care help
- SC9. Ability to carry out medical evacuation measures
- SC11. Ability to solve medical problems in new or unfamiliar environments in the presence of incomplete or limited information, taking into account aspects of social and ethical responsibility, including early intervention systems
- SC17. The ability to assess the impact of the environment, socio-economic and biological determinants on the state of health of an individual, family, population
- SC25. Adherence to professional and academic integrity, to be responsible for the reliability of the obtained scientific results
- SC26. The ability to determine the management tactics of persons subject to dispensary supervision
- SC27. The ability to diagnose and determine the management tactics of patients with extrapulmonary and widespread forms of tuberculosis, including co-infection of TB/HIV with a chemoresistant course

Program learning outcomes (PLO):

- PLO1. Have thorough knowledge of the structure of professional activity. To be able to carry out professional activities that require updating and integration of knowledge. To be responsible for professional development, the ability for further professional training with a high level of autonomy.
- PLO2. Understanding and knowledge of fundamental and clinical biomedical sciences, at a level sufficient for solving professional tasks in the field of health care.
- PLO3. Specialized conceptual knowledge that includes scientific achievements in the field of health care and is the basis for conducting research, critical understanding of problems in the field of medicine and related interdisciplinary problems, including the system of early intervention.
- PLO4. Identify and identify leading clinical symptoms and syndromes (according to list 1); according to standard methods, using preliminary data of the patient's history, data of the patient's examination, knowledge about the person, his organs and systems, establish a preliminary clinical diagnosis of the disease (according to list 2).
- PLO5. Collect complaints, anamnesis of life and diseases, assess the psychomotor and physical development of the patient, the state of organs and systems of the body, based on the results of laboratory and instrumental studies, evaluate information regarding the diagnosis (according to list 4), taking into account the age of the patient.
- PLO6. To establish the final clinical diagnosis by making a reasoned decision and analyzing the received subjective and objective data of clinical, additional examination, carrying out differential diagnosis, observing the relevant ethical and legal norms, under the control of the head physician in the conditions of the health care institution (according to the list 2).
- PLO7. Assign and analyze additional (mandatory and optional) examination methods (laboratory, functional and/or instrumental) (according to list 4), patients with diseases of organs and body systems for differential diagnosis of diseases (according to list 2).
- PLO8. Determine the main clinical syndrome or symptom that determines the severity of the condition of the victim/injured person (according to list 3) by making a reasoned decision about the person's condition under any circumstances (in the conditions of a health care facility, outside its borders), including in conditions of emergency and hostilities, in field conditions, in conditions of lack of information and limited time.
- PLO9. Determine the nature and principles of treatment (conservative, operative) of patients with diseases (according to list 2), taking into account the age of the patient, in the conditions of a health care institution, outside its borders and at the stages of medical evacuation, including in field conditions, on the basis of a preliminary clinical diagnosis, observing the relevant ethical

and legal norms, by making a reasoned decision according to existing algorithms and standard schemes, in case of the need to expand the standard scheme, be able to substantiate personalized recommendations under the control of the head physician in the conditions of a medical institution.

PLO10. Determine the necessary mode of work, rest and nutrition on the basis of the final clinical diagnosis, observing the relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes.

PLO14. Determine tactics and provide emergency medical care in emergency situations (according to list 3) in limited time conditions according to existing clinical protocols and standards of treatment.

PLO17. Perform medical manipulations (according to list 5) in the conditions of a medical institution, at home or at work based on a previous clinical diagnosis and/or indicators of the patient's condition by making a reasoned decision, observing the relevant ethical and legal norms.

PLO18. To determine the state of functioning and limitations of a person's vital activities and the duration of incapacity for work with the preparation of relevant documents, in the conditions of a health care institution, based on data about the disease and its course, peculiarities of a person's professional activity, etc. Maintain medical documentation regarding the patient and the contingent of the population on the basis of regulatory documents.

PLO21. Search for the necessary information in the professional literature and databases of other sources, analyze, evaluate and apply this information.

PLO32. The ability to diagnose and determine the management tactics of patients with extrapulmonary and common forms of tuberculosis, including co-infection of TB/HIV with a chemoresistant course.

As a result of studying the discipline, a higher education student must:

To know: Clinical anatomy of the larynx, etiology, clinic of the most common diseases of the larynx, modern methods of diagnosing voice disorders, basics of voice restoration.

To be able to:

- Communicate with patients, collect complaints, life history, and medical history.
- Assess the condition of ENT organs in normal and various types of pathology.
- Conduct clinical examination of ENT patients according to standard methods.
- Conduct differential diagnosis and justify clinical diagnosis.
- Determine the nature and principles of patient care based on a preliminary clinical diagnosis, in compliance with relevant ethical and legal standards, by making an informed decision based on existing algorithms and standardized schemes.
- Maintain medical records in case of hearing impairment.

3. Content of the discipline

No	Class topic
1.	Anatomy, physiology of the larynx.
2.	Voice in human life. Phoniatrics.
3.	Functional diseases of the larynx. Hypotonic dysphonia and phonasthenia.
	Psychogenic aphonia. Hypertensive and spastic dysphonia. Mutational dysphonia.
4.	Occupational diseases of the vocal apparatus.
5.	Acute laryngitis.
6.	Chronic laryngitis.
7.	Specific laryngitis 1
8.	Specific laryngitis 2
9.	Paresis and paralysis of the larynx. Classification, causes, diagnosis, treatment
10.	Tumor-like formations of the larynx.
11.	Benign tumors of the larynx.
12.	Malignant tumors of the larynx

13.	Injuries, burns of the larynx.
14.	Acute and chronic stenosis of the larynx
15.	Rehabilitation of patients after surgical treatment for laryngeal cancer (after
	extirpation and resection of the larynx).

Credit. It is graded on a two-point scale: the grade "passed" is given to a higher education student who has completed the curriculum of the discipline, has no academic debt; the level of competence is high (creative); the grade "failed" is given to a higher education student who has not completed the curriculum of the discipline, has academic debt (grade point average below 3.0 and/or absences); the level of competence is low (receptive and productive).

4. Structure of the discipline

	Number of hours					
Topics to be covered	including					
	Total	lectur es	seminars	practical	laboratory	SRS
Topic 1: Anatomy and physiology of the larynx.	6	0	0	2	0	4
Topic 2. Voice in human life. Phoniatrics.	6	0	0	2	0	4
Topic 3. Functional diseases of the larynx. Hypotonic dysphonia and phonasthenia. Psychogenic aphonia. Hypertensive and spastic dysphonia. Mutational dysphonia.	6	0	0	2	0	4
Topic 4. Occupational diseases of the vocal apparatus.	6	0	0	2	0	4
Topic 5. Acute laryngitis.	6	0	0	2	0	4
Topic 6 Chronic laryngitis.	6	0	0	2	0	4
Specific laryngitis 1	6	0	0	2	0	4
Topic 8: Specific laryngitis 2	6	0	0	2	0	4
Topic. 9. Paresis and paralysis of the larynx. Classification, causes, diagnosis, treatment	6	0	0	2	0	4
Topic 10. Tumor-like formations of the larynx.	6	0	0	2	0	4
Topic 11. Benign tumors of the larynx.	6	0	0	2	0	4
Topic 12: Malignant tumors of the larynx	6	0	0	2	0	4
Topic 13: Injuries and burns of the larynx.	6	0	0	2	0	4
Topic 14: Acute and chronic laryngeal stenosis	6	0	0	2	0	4

Topic 15. Rehabilitation of patients after surgical treatment for laryngeal cancer (after extirpation and resection of the larynx).	6	0	0	2	0	4
Credit	0	0	0	0	0	0
Individual tasks	0	0	0	0	0	0
Total hours	6	0	0	30	0	60

5. Topics of lectures / seminars / practical / laboratory classes

5.1. Topics of lecture classes - lecture classes are not provided.

5.2. Topics of seminar sessions

Seminar classes are not provided.

5.3. Topics of practical classes

No		Numb
. of	TOPIC	er of
s.p.		hours
1	Topic 1: Anatomy, physiology of the larynx.	2
2	Topic 2. Voice in human life. Phoniatrics.	2
3	Topic 3. Functional diseases of the larynx. Hypotonic dysphonia and phonasthenia. Psychogenic aphonia. Hypertensive and spastic dysphonia. Mutational dysphonia.	2
4	Topic 4. Occupational diseases of the vocal apparatus.	2
5	Topic 5. Acute laryngitis.	2
6	Topic 6: Chronic laryngitis.	2
7	Topic 7. Specific laryngitis 1	2
8	Topic 8: Specific laryngitis 2	2
9	Topic 9: Paresis and paralysis of the larynx. Classification, causes, diagnosis, treatment	2
10	Topic 10. Tumor-like formations of the larynx.	2
11	Topic 11. Benign tumors of the larynx.	2
12	Topic 12: Malignant tumors of the larynx	2
13	Topic 13: Injuries and burns of the larynx.	2
14	Topic 14: Acute and chronic laryngeal stenosis	2
15	Topic 15. Rehabilitation of patients after surgical treatment for laryngeal cancer (after extirpation and resection of the larynx).	2
	Credit	
	Total	30

6. Independent work of a higher education student

N₂	Name of the topic / types of tasks	Numb er of
		hours
1.	Topic 1-15. Preparing for the practical exercises	4
	Together	60

7. Teaching methods

Practical classes: conversation, solving clinical situational tasks, practicing patient examination skills, practicing skills, instruction and practicing skills on simulation models, training exercises on differential diagnosis of the most common hearing impairments.

Independent work: independent work with the recommended basic and supplementary

literature, with electronic information resources, independent mastering of algorithms for communicating with ENT patients.

8. Forms of control and evaluation methods (including criteria for assessing learning outcomes)

Ongoing control: oral questioning, testing, evaluation of activity in the classroom.

Final control: The grade is assessed on a two-point scale: the grade "passed" is given to a higher education student who has completed the curriculum of the discipline, has no academic debt; the level of competence is high (creative); the grade "failed" is given to a higher education student who has not completed the curriculum of the discipline, has academic debt (grade point average below 3.0 and/or absences); the level of competence is low (receptive-productive).

Assessment of current learning activities in a practical class:

- 1. Assessment of theoretical knowledge on the topic of the class:
- Methods: survey, solving a situational clinical problem
- maximum grade 5, minimum grade 3, unsatisfactory grade 2.

The grade for one practical lesson is the arithmetic mean of all components and can only have an integer value (5, 4, 3, 2), which is rounded according to the statistical method.

Criteria for the current assessment in the practical class

Assess	Evaluation criteria
ment.	
"5"	The applicant is fluent in the material, takes an active part in the discussion and solution of a situational clinical problem, confidently demonstrates practical skills during the examination of the patient and interpretation of clinical, laboratory and instrumental research data, expresses his/her opinion on the topic of the class, demonstrates clinical thinking.
"4"	The applicant has a good command of the material, participates in the discussion and solution of a situational clinical problem, demonstrates practical skills during the examination of the patient and interpretation of clinical, laboratory and instrumental research data with some errors, expresses his/her opinion on the topic of the class, demonstrates clinical thinking.
"3"	The applicant has insufficient knowledge of the material, is not confident in discussing and solving a situational clinical problem, demonstrates practical skills in examining a patient and interpreting clinical, laboratory and instrumental research data with significant errors.
"2"	The applicant does not know the material, does not participate in the discussion and solution of a situational clinical problem, does not demonstrate practical skills during the examination of the patient and the interpretation of clinical, laboratory and instrumental research data.

An applicant is admitted to the test if he or she fulfills the requirements of the curriculum and if he or she has received at least 3.00 points for the current academic activity.

9. Distribution of points received by higher education students

The grade for the discipline is 50% of the grade for the current one.

The average grade for a discipline is translated into a national grade and converted into points on a multi-point scale (200-point scale).

The conversion of a traditional grade into a 200-point grade is performed by the University's Information Technology Department using the Contingent program according to the formula:

GPA (current academic performance in the discipline) x 40

Table for converting a traditional grade into a multi-point grade

National grade for the discipline	Sum of points for the discipline
Excellent ("5")	185 - 200
Good ("4")	151 - 184

Satisfactory ("3")	120 - 150
Unsatisfactory ("2")	Below 120

The *ECTS rating scale* assesses the achievements of higher education students in the educational component who study in one course of one specialty, according to the points they receive, by ranking, namely:

Conversion of traditional grade in the discipline and the sum of points to the ECTS scale

Evaluation on the ECTS scale	Statistical indicator
A	Top 10% of applicants
В	The next 25% of applicants
С	The next 30% of applicants
D	The next 25% of applicants
E	The next 10% of applicants

10. Methodological support

- Work program of the elective discipline
- Silabus
- Methodological developments for practical classes
- Guidelines for independent work of higher education students
- Multimedia presentations
 Situational clinical tasks

Educational and methodological literature:

Brad A. Stach, Virginia Ramachandran. Clinical Audiology: An Introduction: Plural Publishing, 3rd Edition. 2021. Pp. 1-645.

11. Questions for preparation for the final control

- 1. Clinical anatomy of the larynx. Features in children...
- 2. Clinical anatomy of laryngeal cartilage.
- 3. Clinical anatomy of the laryngeal muscles.
- 4. Clinical anatomy of the laryngeal joints and ligaments.
- 5. Clinical anatomy of the laryngeal cavity.
- 6. Physiology of the larynx.
- 7. Functions of the larynx.
- 8. Mechanisms of voice formation.
- 9. Theories of voice formation.
- 10. The emergence of sounds, their main characteristics.
- 11. What is phoniatrics.
- 12. Classification of voice disorders.
- 13. Methods of laryngeal examination.
- 14. Causes of voice disorders.
- 15. Methods of voice research.
- 16. Functional voice disorders.
- 17. Athos.
- 18. Dysphonia is hypotonic.
- 19. Hypertensive dysphonia.
- 20. Spastic dysphonia.
- 21. Mutational dysphonia.
- 22. Acute laryngitis, types.
- 23. Chronic laryngitis, classification.
- 24. Types of focal form of chronic laryngitis.
- 25. Relating to specific diseases of the larynx.
- 26. Types of paresis and paralysis of the larynx
- 27. Tumor-like diseases of the larynx.
- 28. Benign tumors of the larynx

- 29. Malignant tumors of the larynx
- 30. Treatment of benign laryngeal tumors
- 31. Treatment of malignant tumors of the larynx
- 32. Stenosis of the larynx.

12. Recommended reading

Main:

- 1. Laiko A.A., Zabolotnyi D.I., Havrylenko Y.V., [et al] Acute nonspecific diseases of the larynx.
- 2. Popovych V.I. Modern standards of treatment of acute inflammatory diseases of ENT organs (Recommendations). Kyiv, 2019. 80 p.
- 3. Babinets LS, Bezditko PA, Pukhlik SM et al. Family medicine: in 3 books: a textbook. Book 3. Special part. Polyprofile of general medical practice. Kyiv, 2017. 680 p.
- 4. Zabolotnyi D.I., Mitin Y.V., Bezshapochnyi S.B., Dieva Y.V. Otorhinolaryngology K.: VSV "Medicine", 2017. 460 p.
- 5. BradA.Stach, <u>VirginiaRamachandran</u>. ClinicalAudiology: An Introduction: PluralPublishing, 3rd Edition. 2021. Pp. 1-645.
- 6. JackKatz. Handbook of Clinical Audiology Seventh, North American Edition. 2014.Pp. 1-992.
- 7. GeoffreyCooling. TheLittleBookofHearingAids. 2020. Pp. 1-256.

Additional:

- 8. Shidlovskaya T.A., Kosakovsky A.L. Topical issues of phoniatrics: Study guide. K.: Shupyk NMAPE, 2007. 232 p.
- 9. R.Corbridge, N.Steventon. Oxford Handbook of ENT and Head and Neck Surgery//Paperback, 2020. 496 p.
- 10. Y. Mitin, Y. Deyeva, Y. Gomza, V. Didkovskyi et al. Otorhinolaryngology// Medicine, 2018. 264p.
- 11. R.Probst, G.Grevers, H.Iro. Basic Otorhinolaryngology. A Step-by-Step Learning Guide//Thieme, 2017. 430p.
- 12. P.W.Flint, B.H.Haughey, V.J.Lund, K.T.Robbins, <u>J.R.Thomas</u>, <u>M.M.Lesperance</u>, <u>H.W.Francis</u>. CummingsOtolaryngology: Head and Neck Surgery, 3-Volume Set// Hardback Format, 2020. 3568 p.
- 13. Z.Mu, <u>J.Fang</u>. PracticalOtorhinolaryngology, HeadandNeckSurgery: Diagnosis and Treatment// Hardback, 2020. 314 p.

13.Information resources

- 1. http://moz.gov.ua- Ministry of Health of Ukraine
- 2. www.ama-assn.org American Medical Association / American Medical Association
- 3. www.who.int World Health Organization
- 4. www.dec.gov.ua/mtd/home/ State Expert Center of the Ministry of Health of Ukraine
- 5. http://bma.org.uk- British Medical Association
- 6. www.gmc-uk.org- General Medical Council (GMC)
- 7. www.bundesaerztekammer.de German Medical Association