

SYLLABUS OF THE EDUCATIONAL DISCIPLINE

Ophthalmology

Level of higher education second (master's)

Educational program of the field of knowledge 22 "Health care " specialty
222 "Medicine"

1. Course summary:

Semester(s): 7, 8

Volume of the module: total number of hours – 90, of which practical classes – 40 hours, independent work – 50 hours; number of ECTS credits – 3.

The purpose of the course is to acquire competencies:

- *integral*: the ability to solve complex problems, including those of a research and innovation nature in the field of medicine. The ability to continue learning with a high degree of autonomy.

- *general*:

GC1. The ability to abstract thinking, analysis and synthesis.

GC2. The ability to learn and master modern knowledge.

GC3. The ability to apply knowledge in practical situations.

GC4. Knowledge and understanding of the subject area and understanding of professional activity.

GC5. The ability to adapt and act in a new situation.

GC6. The ability to make informed decisions.

GC7. The ability to work in a team.

GC8. The ability for interpersonal interaction.

GC10. The ability to use information and communication technologies.

GC11. The ability to search, process and analyze information from various sources

GC12. Determination and persistence in relation to assigned tasks and assumed responsibilities.

GC13. Awareness of equal opportunities and gender issue.

GC14. Ability to exercise one's rights and responsibilities as a member of society, to be aware of the values of civil (free democratic) society and the need for

its sustainable development, the rule of law, rights and human and civil freedoms in Ukraine.

GC15. The ability to preserve and multiply moral, cultural, scientific values and achievements of society based on an understanding of history and patterns of development of the subject area, its place in the general system knowledge about nature and society and in the development of society, technology and technologies, use different types and forms of motor activity for active recreation and leading a healthy lifestyle.

- *special (professional, subject) competencies:*

SC1. The ability to collect medical information about the patient and analyze clinical data.

SC2. The ability to determine the necessary list of laboratory and instrumental studies and evaluate their results.

SC3. The 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 of diseases.

SC5. The ability to determine the nature of nutrition in the treatment of diseases.

SC6. The ability to determine the principles and nature of treatment of diseases.

SC7. The ability to diagnose emergency conditions.

SC8. The ability to determine the tactics of providing emergency medical care.

SC10. Skills in providing emergency medical care.

SC11. Ability to solve medical problems in new or strangers environments by availability incomplete or limited taking into account information with aspects of social and ethical responsibility.

SC16. Ability to maintain medical records, including electronic ones forms.

SC21. Of course – definitely inform own knowledge, conclusions and arguments on health care issues and related issues to specialists and non-specialists, in particular to persons who are studying.

SC23. The ability to elaborate – to implement scientific and applied projects in the field of healthcare.

SC24. Compliance ethical principles at work – patients, laboratory animals.

SC25. Compliance professional and academic integrity, carry responsibility by certainty scientific results obtained.

Learning outcomes of the discipline:

to know:

- general issues of organizing ophthalmological care;
- etiology, pathogenesis and classification of eye diseases;
- clinical manifestations of eye diseases;
- various clinical variants and complications of eye diseases;
- modern standards of diagnosis of diseases of the organ of vision;
- diagnostic value of laboratory and instrumental methods of research of diseases of the organ of vision;
- criteria for diagnosing diseases of the organ of vision;
- differential diagnosis of diseases of the organ of vision;
- medical and surgical treatment, including prognosis-modifying treatment, for diseases of the organ of vision;
- standards of emergency care in ophthalmology; standards for providing emergency care for damage to the organ of vision;
- the method of performing medical manipulations;
- risk stratification in diseases of the organ of vision;
- primary and secondary prevention of eye diseases;
- prognosis and performance in diseases of the organ of vision;

to be able:

- conduct surveys and ophthalmological examinations of patients with diseases of the organ of vision and analyze their results ;
- determine the etiological and pathogenetic factors of diseases of the organ of vision;
- analyze a typical clinical picture of diseases of the organ of vision;
- identify various clinical options and complications of diseases of the organ

of vision;

- formulate a preliminary diagnosis of diseases of the organ of vision;
- draw up a patient examination plan, analyze the data of ophthalmological, laboratory and instrumental examinations for diseases of the organ of vision ;
- carry out a differential diagnosis, justify and formulate a clinical diagnosis of diseases of the organ of vision;
- determine the management tactics (recommendations regarding the regime, diet, treatment, rehabilitation measures) of the patient and prescribe medical and surgical treatment, including prognosis-modifying, of diseases of the organ of vision;
- evaluate the prognosis and working capacity of patients with diseases of the organ of vision;
- to diagnose and provide emergency medical aid in emergency situations, in case of damage to the organ of vision;
- carry out primary and secondary preventive care of eye diseases;
- perform medical manipulations;
- demonstrate mastery of the moral and deontological principles of a medical specialist and the principles of professional subordination;

to able to demonstrate: the ability to work with a patient with diseases of the organ of vision;

to have skills: collect data on patient complaints, medical history, life history, conduct and evaluate the results of an ophthalmological examination, identify the leading clinical symptom or syndrome, establish the most likely or syndromic diagnosis of the disease; prescribe laboratory and instrumental examination of the patient, interpret its results, carry out differential diagnosis, establish a preliminary and clinical diagnosis; prescribe principles of treatment (conservative, surgical); performing medical manipulations, providing emergency medical aid in case of emergency conditions, damage to the organ of vision; maintaining medical records;

to decide independently: typical tasks of a doctor in the field of health care, the scope of which is provided by defined lists of syndromes and symptoms of diseases, emergency conditions and diseases.

Necessary educational components (prerequisites, corequisites and postrequisites):

- prerequisites: human anatomy, history of medicine, medical biology, histology, cytology and embryology, physiology, pathomorphology, pathophysiology, medical and biological physics, medical chemistry, bioorganic and biological chemistry, Ukrainian language (for professional direction), foreign language, life safety, basics bioethics and biosafety, microbiology, virology, pharmacology, Latin language and medical terminology, clinical anatomy and operative surgery, medical informatics, patient care, propaedeutic and internal medicine, general surgery, radiology, medical psychology;

- corequisites: phthisiology, pediatrics, surgery, obstetrics and gynecology, social medicine, public health, urology, otorhinolaryngology, internal medicine, neurology, dermatology, venereology, forensic medicine, psychiatry, narcology, medical law;

- postrequisites: internal medicine, infectious diseases, epidemiology, occupational diseases, oncology, clinical pharmacology, pediatrics, pediatric infectious diseases, medical genetics, health care organization, surgery, traumatology and orthopedics, clinical immunology and allergology, anesthesiology and intensive care, emergency and urgent medical care, radiation medicine, neurosurgery.

Content of the discipline:

№	Lesson topic	Practice
1.	Anatomy and physiology of eye. Visual functions	4,0
2.	Refraction and accommodation. Strabismus.	4,0
3.	Pathology of eyelids. Pathology of conjunctiva	4,0
4.	Pathology of lacrimal system. Pathology of orbit.	4,0
5.	Pathology of cornea. Pathology of lens.	4,0
6.	Pathology of uvea. Examination of patients. Medical report	4,0

7.	Glaucoma	4,0
8.	Retinal and optic nerve diseases. Eye and common diseases.	4,0
9.	Trauma. Emergency care.	4,0
10.	Medical emergencies in ophthalmology. Defend of medical report. Final control	4,0
	Total	40

Topics for independent work: The history of ophthalmology in 17-20th centuries. Pathology of sclera. Pathology of vitreous body . Medical expertise in ophthalmology

Types of training sessions: practical session, consultation.

Forms of education: full-time.

Teaching methods: verbal, explanatory and demonstrative, problem-based teaching method, reproductive, research, etc.

Control methods: oral, written, practical, test, etc.

Forms of final control: final control (7, 8 semester).

Means of diagnosing of learning success: individual tasks, presentations, questions for current control, cases, test questions, test tasks, situational problems, results of laboratory and instrumental research, questions for final control.

Language of instruction: Ukrainian.

2. Evaluation:

Evaluation of current educational activity

Traditional scale	Conversion into points
"5"	8
"4"	7
"3"	5
"2"	0

Writing and defense of the medical history is credited (it is mandatory for admission to the final examination).

Current assessment	Traditional scale	Conversion into points	Medical history	The maximum amount of points for the current educational activity	The maximum amount of points for the final control
T1-T10	"5"	8	-	80	120
	"4"	7			
	"3"	5			
	"2"	0			

The final score for the current activity is defined as the arithmetic sum of the points for each session. **The maximum amount of points for the current educational activity** is 80 points. Assessment of independent work of students, which is provided in a practical lesson along with the classroom work, is carried out during the current control of the topic at the appropriate classroom lesson. Evaluating topics that are assigned for independent processing and are not included in the topic of classroom training sessions, is controlled during the final inspection.

The maximum amount of points for the final control is 120 points.

The final control consists of answering 3 theoretical questions, writing tests on emergency conditions, performing practical skills and solving clinical case.

Traditional assessment	3 theoretical issues
"5"	24
"4"	18
"3"	13
"2"	0

**Writing tests on ocular emergencies (or oral answer) -
12 questions (2 points for each correct answer)**

Implementation of practical skills by students

12 points	The student performs the manipulation without the teacher's remarks.
6 points	The student can perform manipulations with difficulties that can be eliminated with the help of the teacher.

0 points	The student cannot perform the manipulation.
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Assessment for a situational task

12 points	The complete answer
6 points	Incomplete answer
0 points	Wrong answer

When assigning a grade for a discipline, the accumulated student's number of points for current studies and the result of the final control in points. **The maximum number of points that can be obtained by a student while studying the discipline is 200 points.** The student's performance assessment in the discipline is rated and is given on a multi-point scale and has a definition according to the ECTS system and traditional scale adopted in Ukraine. For the admission of the discipline the total number of points received by the student must be at least the minimum, which is determined by the working curriculum for the discipline, and corresponds to the minimum value of the E score, and therefore is 111 points

Assessment of knowledge in the discipline is carried out according to the appropriate scale:

Score in points	Rating by national scale	Evaluation on the ECTS scale	
		Rating	Explanation
170-200	Perfect	A	Perfect (excellent performance with only minor errors)
155-169	Good	B	Very good (above average with a few errors)
140-154		C	Good (generally correct performance with a certain number of significant errors)
125-139	Satisfactory	D	Satisfactory (not bad, but with a significant number of errors)
111-124		E	Enough (performance meets minimum criteria)
60-110	Unsatisfactory	FX	Unsatisfactory (with the possibility of reassembly)

1-59		F	Unsatisfactory (with mandatory repeated study of the discipline)
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3. Course policy:

- compulsory observance of academic integrity by students, namely:
- independent performance of all types of work, tasks, forms of control provided for by the work program of this educational discipline;
- references to sources of information in the case of using ideas, developments, statements, information;
- compliance with the legislation on copyright and related rights;
- provision of reliable information about the results of one's own educational (scientific and creative) activities, used research methods and sources of information.

Discussed and recommended at the meeting of the department of ophthalmology

Protocol from "29" _August_ 2024 year No. __1__

Head of the department	_____	<u>D.G. Zhaboiedov</u>
	(signature)	(initials and surname)
Teacher	_____	<u>N.K. Greben</u>
	(signature)	(initials and surname)
Teacher	_____	<u>I.D. Skrypnychenko</u>
	(signature)	(initials and surname)
Teacher	_____	<u>P.M.Salata</u>
	(signature)	(initials and surname)
Teacher	_____	<u>T.M. Komarova</u>
	(signature)	(initials and surname)