

# SYLLABUS OF THE EDUCATIONAL DISCIPLINE

## Ophthalmology

Level of higher education second (master's)

Educational program of the field of knowledge 22 "Health care" specialty  
221 "Dentistry"

### **1. Course summary:**

**Semester(s):** 7, 8

**Volume of the module:** total number of hours – 45, of which practical classes – 30 hours, independent work – 15 hours; the number of ECTS credits – 1,5.

**The purpose of the course is** to acquire competencies:

- *integral*: the ability to solve typical and complex specialized tasks and practical problems in professional activities in the field of health care, or in the learning process, which involves conducting research and/or implementing innovations and is characterized by the complexity and uncertainty of conditions and requirements.

- *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. The ability to communicate in the national language both orally and in writing.

GC5. The ability to communicate in English.

GC6. Skills using informational and communication technologies.

GC7. The ability to search, processing and analysis information with various sources.

GC8. The ability to adaptations and actions in new situations.

GC9. The ability to detect, put and solve problems.

GC10. The ability to be critical and self-critical.

GC11. The ability work in team.

GC13. The ability to act socially responsibly and consciously.

GC14. The ability to exercise one's rights and responsibilities as a member of society, to realize the values of a civil (free democratic) society and the need for its sustainable development, the rule of law, and the rights and freedoms of man and citizen in Ukraine.

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

- *special (professional, subject):*

SC1. Skills of interviewing and clinical examination of the patient.

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.

SC7. The ability to determine the tactics of managing patients with diseases of the organs and tissues of the oral cavity and maxillofacial region with concomitant somatic diseases.

SC8. The ability to perform medical and dental manipulations.

SC10. The ability to organize and conduct medical and evacuation measures.

SC11. The ability to determine tactics, methods and provide emergency medical care.

SC13. The ability to assess the impact of the environment on the health of the population (individual, family, population).

SC14. The ability to maintain regulatory medical documentation. FC15. Processing state, social and medical information.

### **Learning outcomes of the discipline:**

*to know:*

- general questions of organization of ophthalmological assistance;
- etiology, pathogenesis and classification of eye diseases;

- clinical manifestations of eye diseases;
- modern standards of diagnosis of diseases of the organ of vision;
- medical and surgical treatment, including prognosis-modifying treatment, for diseases of the organ of vision;
- modern principles treatment sick with different eye pathology;
- standards of emergency care in ophthalmology; standards for providing emergency care for damage to the organ of vision;

*to be able:*

- make a preliminary diagnosis of major diseases and injuries to the organ of vision;
- to provide emergency medical help in case of emergencies conditions and injuries of the organ of vision;
- make decisions regarding treatment tactics for diseases and injuries of the organ of vision;
- to highlight the connection of the pathological process in the patient's body with a disease of the organ of vision, identify and provide medical suggestions;
- be able to carry out preventive measures to prevent the occurrence of epidemiological outbreaks, damage to the organ of vision and the development of a severe form of disability - blindness.

*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:**

**TOPICS OF LECTURES**

| <b>No</b> | <b>Topic</b>   | <b>Hours</b> |
|-----------|--|--------------|
| 1.        | Inflammatory diseases of the conjunctiva, cornea, uvea (“red eye” syndrome). Clinical picture, diagnostics, treatment, prevention. | 1            |
| 2.        | Gradual vision loss. Glaucoma. Clinical picture, diagnostics, treatment, prevention.   | 1            |
| 3.        | Eye trauma. Emergency care. Prevention   | 1            |

|  |                |          |
|--|----------------|----------|
|  | <b>Summary</b> | <b>3</b> |
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### TOPICS OF PRACTICAL LESSONS

| <b>No</b> | <b>Topic</b>   | <b>Practice</b> |
|-----------|--|-----------------|
| 1.        | Anatomy and physiology of eye.<br>Visual functions.<br>Refraction and accommodation.                     | 5,4             |
| 2.        | Pathology of eyelids, lacrimal system, orbit.<br>Pathology of conjunctiva.<br>Pathology of cornea, uvea. | 5,4             |
| 3.        | Pathology of lens.<br>Glaucoma.<br>Retinal and optic nerve diseases.                                     | 5,4             |
| 4.        | Eye trauma. Emergency care.<br>Medical emergencies in ophthalmology.                                     | 5,4             |
| 5.        | Strabismus.<br>Eye and common diseases.<br>Final control.  | 5,4             |
|           | <b>Summary</b>   | 27              |

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:** lecture, 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 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"               | 16                     |

|     |    |
|-----|----|
| "4" | 13 |
| "3" | 10 |
| "2" | 0  |

They are added to the sum of points received by the student in classes during the current educational activity.

| 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-T5              | "5"               | 16                     | -               | 80  | 120  |
|                    | "4"               | 13                     |                 |   |  |
|                    | "3"               | 10                     |                 |   |  |
|                    | "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.

#### **Criteria evaluation on final control.**

##### **Criteria evaluation answers on theoretical question.**

| 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**

|                  |  |
|------------------|--|
| <b>12 points</b> | The student performs the manipulation without the teacher's remarks.   |
| <b>6 points</b>  | The student can perform manipulations with difficulties that can be eliminated with the help of the teacher. |
| <b>0 points</b>  | The student cannot perform the manipulation.   |

### **Assessment for a situational task**

|                  |                     |
|------------------|---------------------|
| <b>12 points</b> | The complete answer |
| <b>6 points</b>  | Incomplete answer   |
| <b>0 points</b>  | 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

### **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)    |