

**MINISTRY OF HEALTH OF UKRAINE  
ODESSA NATIONAL MEDICAL UNIVERSITY**

**Faculty of medicine, international**

**Department of Ophthalmology**

**Syllabus of the academic discipline**

**«Changes in the organ of vision in general diseases »**

<b>Scope of the academic discipline</b>	Total number of hours per discipline: 90 hours, 3 credits. Semesters: VII-VIII. 6 year of education,
<b>Days, time, place of educational discipline</b>	According to the schedule of classes. Department of Ophthalmology. Odesa, str. Olhivska, 4 (Eye Microsurgery Center of the Multidisciplinary Medical Center of ONMedU, 1-2 floors, auditorium, classrooms); Odesa, 49/51 French Boulevard, laboratory building, 2nd floor, auditorium, classroom).
<b>Teacher(s)</b>	Head of Department, Doctor of Medicine, Prof. Venger Liudmyla Vilenivna Doctor of Medicine, Prof. Konovalova Natalya Valeriivna Associate Professor, Ph.D. Yepisheva Svitlana Mykolaivna Associate Professor, Ph.D. Ivanytska Olena Vyacheslavivna Assistant Tereshchenko Anastasia Anatoliivna Assistant Kovtun Oleksiy Valeriyovych Assistant Diachkova Zinaida Eduardivna
<b>Contact Information</b>	Phone help: Venger Liudmyla Vilenivna, head of the department (048) 723-42-98 Yepisheva Svitlana Mykolaivna, head teacher of the department 093-849-49-18 E-mail: <a href="mailto:eyeklinik@onmedu.edu.ua">eyeklinik@onmedu.edu.ua</a> ; <a href="mailto:eyeklinik@i.ua">eyeklinik@i.ua</a> Face-to-face consultations: from 14:00 to 17:00 every Thursday, from 9:00 to 12:00 every Saturday Online consultations: from 14:00 to 17:00 every Thursday, from 9:00 to 12:00 every Saturday. The link to the online consultation is provided to each group during classes separately.

**COMMUNICATION**

Communication with applicants will be conducted in the classroom (face-to-face).

During distance learning, communication is carried out through the Microsoft Teams platform, as well as through email correspondence, through Viber, Telegram or WhatsApp messengers (through chats created in these messengers for each group, separately through the head of the group).

**ABSTRACT OF THE EDUCATIONAL DISCIPLINE**

*The subject of study* of the educational discipline is an in-depth study of changes in the organ of vision in general diseases, mastering the main issues of theory and practice of all sections of ophthalmology, diagnosis and prevention of the development of ophthalmic complications in general diseases.

*Prerequisites and Post-requisites:* The study of the educational discipline "Changes of the organ of vision in common diseases" is based on previous (providing) disciplines: it is based on in-depth study by students of higher education of normal anatomy, histology, cytology and embryology,

pathological anatomy, propaedeutics of internal diseases and therapy, otolaryngology, endocrinology, neurology, cardiology, infectious diseases, family medicine, phthisiopulmonology, internal medicine, which involves integration with these disciplines and the formation of skills to apply knowledge in the process of further education and professional activity.

*The purpose* of teaching the academic discipline is the acquisition of knowledge and the formation of elements of professional competences in the field of ophthalmology by the student of higher education, namely, changes in the organ of vision in common diseases and improvement of skills and competences acquired during the study of previous disciplines.

***Tasks of the discipline:***

- acquisition and deepening of a set of knowledge, abilities, skills and other competencies sufficient for solving complex tasks in ophthalmology;
- practicing the skills and abilities of analyzing the results of ophthalmological research;
- acquiring theoretical knowledge about ophthalmological symptoms and changes in the organ of vision in general diseases,
- acquisition of theoretical knowledge and practical skills regarding the peculiarities of observation, diagnosis and management of such patients.

***Expected results***

*As a result of studying the academic discipline, the student of higher education should:*

- ***know:***
- rules for determining the functions of peripheral and central vision;
- physiology of binocular vision, research methods, basics of diagnosis, treatment of strabismus (various types);
- diseases of the conjunctiva (clinic, diagnosis, differential diagnosis, treatment); clinic, diagnosis, differential diagnosis, examination, treatment of corneal diseases;
- clinic, diagnosis, differential diagnosis, examination, treatment of diseases of the anterior and posterior segments of the vascular tract;
- clinic, diagnosis, differential diagnosis, treatment of the main diseases of the retina;
- the main forms of optic nerve disease;
- clinic, methods of diagnosis and treatment of diseases of the orbit;
- professional eye diseases, complex measures for dispensation of patients, prevention and medical examination.
- ***be able:***
- - analyze the results of the patient's ophthalmological examination.
- - to analyze the structural and functional relationships and sequence of stages of general pathological processes in ophthalmology.
- - analyze and draw conclusions about the etiology and pathogenesis of functional disorders in eye diseases.
- - to analyze the results of examination of patients with general eye pathology.
- - determine etiological, pathogenetic factors and clinical manifestations, diagnose an emergency and provide emergency assistance to the victim in the conditions of natural and man-made disasters.
- - perform medical manipulations necessary to provide emergency medical care.
- - to provide emergency medical care for emergency conditions in ophthalmology.

## DESCRIPTION OF THE EDUCATIONAL DISCIPLINE

### *Forms and methods of education*

The discipline will be taught in the form of practical classes (30 hours) and organization of the applicant's independent work (60 hours).

*Teaching methods: conversation, role-playing games, solving clinical situational problems, practicing patient examination skills, practicing manipulation skills according to list 5, instruction and practicing skills on simulation dummies, independent and individual work (methodical developments for independent work, information resource of the department, algorithms for performing practical skills, test tasks of the "Krock-2" type).*

### *Content of the academic discipline «Changes in the organ of vision in general diseases»*

**Topic 1. Behcet's disease, Bechterew's (Marie-Strumpell) disease.** Etiology, pathogenesis, prevalence, differential diagnosis, main diagnostic criteria, treatment.

**Topic 2. Still's syndrome, Benye-Beck-Schauman disease.** Etiology, pathogenesis, main diagnostic criteria, differential diagnosis, complications, treatment.

**Topic 3. Changes in the organ of vision in some syndromes (Takayasu's disease, Grenblad-Strandberg syndrome, Recklinghausen's neuro-fibromatosis, Behr's, Vogt-Kayanaga-Harada's diseases).** Etiology, pathogenesis, main diagnostic criteria, differential diagnosis, treatment.

**Topic 4. Changes in the retina and optic nerve in hypertension and atherosclerosis.** Etiology, pathogenesis, main diagnostic criteria, complications, treatment, prevention.

**Topic 5. Changes in the organ of vision with heart defects, chronic heart failure and other vascular diseases.** Etiology, pathogenesis, main diagnostic criteria, differential diagnosis, treatment, prevention.

**Topic 6. Changes in the organ of vision in inflammatory and vascular diseases of the brain.** Etiology, pathogenesis, main diagnostic criteria, differential diagnosis, treatment.

**Topic 7. Pathology of the organ of vision in helminthiasis.** Etiology, pathogenesis, main diagnostic criteria, differential diagnosis, treatment strategy.

**Topic 8. Changes in the organ of vision in diseases of the thyroid gland.** Etiology, pathogenesis, prevalence, main diagnostic criteria, treatment, prevention, dispensation.

**Topic 9. Changes in the organ of vision in diabetes (blepharitis, barley, iridocyclitis, cataract, glaucoma, diabetic retinopathy).** Etiology, pathogenesis, main diagnostic criteria, treatment, prevention, dispensation.

**Topic 10. Changes in the organ of vision in kidney diseases.** Etiology, pathogenesis, main diagnostic criteria, differential diagnosis, treatment, prevention.

**Topic 11. Changes in the organ of vision in toxicoses of pregnancy.** Pathogenesis, main diagnostic criteria, treatment, prevention, dispensation.

**Topic 12. Pathology of the organ of vision in tuberculosis.** Etiology, pathogenesis, main diagnostic criteria, treatment, prevention, dispensation.

**Topic 13. Pathology of the organ of vision in TORCH-infections.** Etiology, pathogenesis, main diagnostic criteria, differential diagnosis, treatment, prevention.

**Topic 14. Pathology of the organ of vision in AIDS.** Etiology, pathogenesis, main diagnostic criteria, treatment, dispensation.

**Topic 15. Pathology of the organ of vision with COVID-19.** Etiology, pathogenesis, main diagnostic criteria, differential diagnosis, treatment, prevention.

## List of recommended literature:

### **Basic:**

1. Ophthalmology: textbook / O. P. Vitovska, P. A. Bezditko, I. M. Bezkorovayna et al.; edited by O. P. Vitovska. -2<sup>nd</sup> edition. - Kyiv: AUS Medicine Publishing, 2020. - 648 p.
2. Ophthalmology: textbook / O. P. Vitovska, P. A. Bezditko, I. M. Bezkorovayna et al.; edited by O. P. Vitovska. - Kyiv: AUS Medicine Publishing, 2017. - 648 p.
3. Atlas of Glaucoma. Second edition: textbook / Neil T. Choplin, Diane C. Lundy. - Informa healthcare, United Kingdom, 2007. -364 p. ISBN-10: 1841845183.
4. Common Eye Diseases and their Management: textbook / N. R. Galloway, W.M.K. Amoaku, P. H. Galloway and A. C. Browning; -Springer - Verlag London Limited, 2006. – 208 p. ISBN 1-85233-050-32.
5. Ophthalmology at a Glance: textbook / JANE OLVER, LORRAINE CASSIDY; - by Blackwell Science Ltd a Blackwell Publishing company, USA, 2005. -113 p. ISBN-10: 0-632-06473-0.

### **Additional:**

1. Eye Diseases. Course of lectures: textbook / G. E. Venger, A. M. Soldatova, L. V. Venger; edited by V. M.Zaporozhan. - Odessa: Odessa Medical University, 2005. – 157p.
2. Ophthalmology: textbook. / Gerhard K. Lang, edited by J. Amann, O. Gareis, Gabriele E. Lang, Doris Recker, C.W. Spraul, P. Wagner. - Thieme Stuttgart. New York, 2000. - 604 p. ISBN 0-86577-936-8.
3. EYE Atlas. Online Atlas of Ophthalmology. / All rights Reserved, Oculisti Online. Copyright 2001. -408 p.
4. ABC of Eyes, Fourth Edition: textbook / P. T. Khaw, P. Shah, A. R. Elkington. - by BMJ Publishing Group Ltd, BMA House, Tavistock Square, London, 2005. - 97 p. ISBN 0 7279 1659

## Electronic information resources

1. <https://info.odmu.edu.ua/chair/ophthalmology/>
2. <https://repo.odmu.edu.ua/xmlui/>
3. <http://library.gov.ua/>
4. <http://www.nbu.gov.ua/>
5. [https://library.gov.ua/svitovi-e-resursy/dir\\_category/general/](https://library.gov.ua/svitovi-e-resursy/dir_category/general/)
6. <http://nmuofficial.com/zagalni-vidomosti/biblioteky/>
7. <https://guidelines.moz.gov.ua/documents>
8. [www.ama-assn.org](http://www.ama-assn.org) –American Medical Association
9. [www.dec.gov.ua/mtd/home/](http://www.dec.gov.ua/mtd/home/)
10. <http://bma.org.uk>
11. [www.gmc-uk.org](http://www.gmc-uk.org)

## EVALUATION

During the classes, various *forms and methods* of current discipline control are used: oral survey, testing, evaluation of the performance of practical skills, evaluation of communication skills, solution of situational clinical tasks, evaluation of activity. The current educational activity of the applicant is evaluated in a practical session according to a traditional 4-point scale.

## Current evaluation criteria in practical training

Оцінка	Критерії оцінювання
Excellent «5»	The student works systematically, shows versatile and in-depth knowledge of the program material during classes, is able to successfully perform the tasks provided for in the program, learns the content of the main and additional literature, is aware of the interrelationship of individual sections of the discipline, their importance for the future profession, shows creative abilities in understanding and the use of educational program material, shows the ability to independently update and replenish knowledge; level of competence - high (creative)
Good «4»	The student demonstrates full knowledge of the educational program material, successfully completes the tasks prescribed by the program, learns the basic literature recommended by the program, shows a sufficient level of knowledge in the discipline and is capable of their independent updating and renewal during further training and professional activity; level of competence - sufficient (constructive and variable)
Satisfactory «3»	The student demonstrates knowledge of the basic curriculum material to the extent necessary for further study and subsequent work in the profession, copes with the tasks provided for by the program, makes individual mistakes in answers, but possesses the necessary knowledge to overcome the mistakes made under the guidance of a scientific and pedagogical worker; level of competence — average (reproductive)
Unsatisfactory«2»	The student does not demonstrate sufficient knowledge of the basic curriculum material, makes fundamental mistakes in the performance of the tasks provided for by the program, cannot use the knowledge in further studies without the help of a teacher, has not managed to master the skills of independent work; the level of competence is low (receptive-productive).

The form of the **final control** is the balance.

Credit is awarded to a student who has completed all the tasks of the work program of the academic discipline, actively participated in practical classes and has an average current grade of at least 3.0 and has no academic debt.

Assessment is carried out: at the last lesson. The credit score is the arithmetic mean of all components on a traditional four-point scale and has a value that is rounded using the statistical method with two decimal places after the decimal point.

Possibility and conditions of obtaining additional (bonus) points: not provided.

### **INDEPENDENT WORK OF HIGHER EDUCATION ACQUIRES**

Independent work involves preparation for each practical session.

### **EDUCATIONAL DISCIPLINE POLICY**

#### ***Deadlines and Rescheduling Policy***

- Absences of classes for non-respectable reasons will be worked out according to the schedule of the teacher on duty.
- Absences for valid reasons are worked out according to an individual schedule with the permission of the dean's office.

### ***Academic Integrity Policy***

Observance of academic integrity by applicants is mandatory, namely:

- ♦ independent performance of educational tasks, tasks of current and final control, provided for by the work program of this educational discipline;
- ♦ link to sources of information in the case of using ideas, development, statements, information;
- ♦ provision of reliable information about the results of one's own (scientific, creative) activity, used research methods and sources of information.

It is unacceptable in educational activities for the participants of the educational process:

- using family or work connections to obtain a positive or higher grade in any form of control of academic performance or academic performance;
- use during control measures of prohibited auxiliary materials or technical means (cheat sheets, notes, micro-masters, smartphones, tablets, etc.);
- going through procedures for monitoring the results of training by fake persons.

For violations of academic integrity, students may be held to such academic responsibility:

- decrease in evaluation results (control work, differentiated credit);
- re -passing the evaluation (control work, differentiated credit);
- appointment of additional control measures (additional individual tasks, control work, tests, etc.);

### ***Attendance and Tardiness Policy***

Attending lectures and practical classes is mandatory. If you are late for more than 15 minutes, the class is considered missed and you need to make up for it in the general manner.

Uniform: a medical gown that completely covers the outer clothing, or medical pajamas, a cap, a mask, and a change of footwear.

Equipment: notebook, pen.

Health: students with acute infectious diseases, including respiratory diseases, are not allowed.

### ***Use of mobile devices:***

Mobile devices can be applied by the teacher's permission if they are required to complete the task.

### ***Behavior in the audience***

The behavior of applicants and teachers in the classrooms should be working and calm, strictly comply with the rules established by the Regulation on academic integrity and ethics of academic relations at ONMedU, in accordance with the Code of academic ethics and relations of the university community of ONMedU, the Regulation on prevention and detection of academic plagiarism in scientific research and educational work of students of higher education, scientists and teachers of ONMedU.