

**Abstract of the work program of the discipline  
"Ophthalmology"**

The main professional educational program of higher education is a specialty program in the specialty 31.05.01 Medical care, approved in 24.05.2023.

Form of study: full-time

Term of development of OPOP in: 6 years

Department: Otorhinolaryngology with Ophthalmology

1. The purpose of discipline: it consists in mastering knowledge in the field of ophthalmology, as well as the principles of treatment and prevention of eye diseases.
2. The place of discipline in the structure of the PLO: The academic discipline of ophthalmology belongs to the basic part of the Federal state educational standard for medical care.
3. Requirements for the results of mastering the discipline: The process of studying the discipline is aimed at the formation and development of competencies: PC-5; PC-6; PC-8. The teaching of this discipline is based on the following types of professional activity: medical. The process of studying the discipline is aimed at the formation and development of competencies: PC-5; PC-6; PC-8.

As a result of studying the discipline, the student should *know*:

- fundamentals of the physiology of vision, visual functions and clinical manifestations of their disorders;
- methods for studying refraction of the eye;
- procedure for examination of children and adolescents when prescribing optical correction of ametropia;
- General semiotics of eye diseases, clinic of common inflammatory diseases of the visual organs, corneal and lens pathology in adults and children;
- clinical signs of glaucoma;
- early clinical features of benign and malignant tumors of the eye;
- clinical syndromes of emergency conditions in ophthalmology (acute attack of angle-closure glaucoma, injuries, wounds, burns, frostbite);
- principles of clinical (post-syndromic) diagnosis of common eye diseases and emergency conditions in ophthalmology in adults and children;
- forms and methods of local application of medicines in ophthalmology;
- principles of organization of work of doctors of different specialties in providing emergency first aid in emergency conditions in ophthalmology.

*be able to: carry out diagnostic, therapeutic, preventive measures and first aid manipulations used in ophthalmology:*

- clinical examination of the eyes (collect anamnesis, examine and palpate the eyeballs);
- pressure on the projection area of the lacrimal SAC;
- examination of the anterior part of the eye by side lighting;
- inspection of deep media by passing light;
- fundus examination: reverse ophthalmoscopy;
- clinical (post-syndromic) diagnostics of common eye diseases and emergency conditions in ophthalmology in adults and children;
- determination of visual acuity, color vision;
- optical vision correction using trial eyeglass lenses for myopia, hypermetropia, presbyopia;
- measurement of intraocular pressure;
- local use of medicines in the treatment of eye diseases.

*own:*

- visual acuity research;
- defining the boundaries of the field of view;

- color vision detection;
- external examination of the eye and surrounding tissues;
- Eversion of the eyelids;
- determination of the presence of abnormal contents in the lacrimal SAC;
- eye examination by focal lighting;
- by examining the eye in transmitted light;
- study of intraocular pressure;
- determination of binocular vision by approximate methods;
- determination of the type and strength of optical glass;
- by washing the conjunctival SAC;
- by dropping drops;
- laying the ointment;

removal of surface foreign bodies from the cornea and conjunctiva;

- the imposition of bandages on the eyes;
- fixing small children for eye examination;
- tests for patency of the lacrimal tract;
- determining the integrity of the cornea.

4. The total complexity of discipline is 3 points of credit (108 hours)

5. Semester: 8.

6. Main sections of the discipline:

1. Principles and methods of vision protection in children and adults. The role of the eye (part of the brain) in life. The role of light in the functioning of the optical-vegetative system of the photoenergetic system. Connection of eye pathology with common diseases in children and adults. Philo-morphogenesis and anatomy of the visual organ. Anomaly of development.

2. Methods of investigation of the eye and its appendages. The procedure for examining an eye patient and the scheme of the medical history. Performing eye diagnostic and therapeutic manipulations.

3. Visual functions, starting from birth and in adults. Binocular nature of vision and its disorders.

4. The optical system of the eye. Actual problems of clinical refraction. Correction of ametropia (glasses, contact, laser, surgical).

5. diseases of the orbit, eyelids, conjunctiva and lacrimal organs.

6. Diseases of the cornea and sclera.

7. Diseases of the choroid.

8. Diseases of the retina and optic nerve. Eye manifestations of the most common common diseases of people of different ages, radiation injuries.

9. Diseases of the lens and vitreous body.

10. Glaucoma.

11. Neoplasms of the visual organ.

12. Damage to the visual organ.

13. Occupational eye diseases.

14. Examination of military and labor.

15. Binocular vision. Strabismus.

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