

**Ministry of Health of Ukraine  
Bogomolets National Medical University**

**GUIDELINES  
for independent work of students**

**Academic discipline  
"Ophthalmology"  
Educational level "Master"  
Field of knowledge 22 "Health care"  
Specialty 221 "Dentistry"  
Department of Ophthalmology**

**Kyiv - 2024**

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Approved at the meeting of the Department of Ophthalmology from “29” August 2024 year, protocol No.1

Head of the Department, Doctor of Medicine, Professor Zhaboiedov D.G.

Considered and approved: Central Committee on Surgical Disciplines from \_\_\_\_\_ 202\_, protocol No.\_\_\_\_

2. The topic of the lesson "**Glaucoma**".

3. Competencies.

After studying the topic, students should **know:** methods of intraocular pressure research; classification of glaucoma; clinical picture of different forms of glaucoma and principles of glaucoma treatment; clinical picture, emergency care of an acute attack of glaucoma, differential diagnosis of an acute attack of glaucoma with acute iridocyclitis; **be able to:** determine intraocular pressure by palpation; evaluate tonometry data according to Maklakov; provide emergency care in case of an acute attack of glaucoma; assess the size of the cornea in newborns.

4. Didactic goal - expansion, deepening and detailing of scientific knowledge obtained by students at lectures and in the process of independent work and aimed at increasing the level of assimilation of educational material, instilling skills and abilities, development of scientific thinking and oral speech of students.

5. Number of classroom hours: 4,25 hours.

6. Equipment: tables, drawings, video, Maklakov's tonometer, table lamp, magnifying glass, slit lamp, gonioscope, 0.5% alkaine solution, 0.25% chloramphenicol solution, box with sterile material, disinfecting means for treating hands.

### Lesson plan:

No	The name of the stage	Description of the stage	Levels of learning	Time
1.	<b>Preparatory (15%).</b> Methodological support materials: questions, problems of the II level, written theoretical tasks, tests of the II level.	1. Organization of the lesson. 2. Setting educational goals, motivation of the topic. 3. Control of the initial level of knowledge, skills, abilities: 1) methods of studying intraocular pressure (IOP); 2) etiopathogenesis of glaucoma; 3) glaucoma research methods; 4) classification of glaucoma; 5) clinical picture of open-angle and closed-angle forms of primary glaucoma; 6) glaucoma treatment methods (drug, laser, surgical); 7) etiopathogenesis, clinic, principles of treatment of congenital glaucoma; 8) types of secondary glaucoma; 9) clinical picture of an acute attack of glaucoma and differential diagnosis with acute iridocyclitis; 6) emergency care for an acute attack of glaucoma.	II	28 min.
2.	<b>Basic (65%).</b> Methodological support materials: atypical tasks in the forms: patients, case histories, textual situational tasks, business game; algorithms of formation of professional skills.	1. Formation of professional skills and abilities: 1) master the skills of 'objective examination; 2) justify the diagnosis based on the results of the study; 3) conduct the patient's treatment, substantiate and make a clinical diagnosis, prescribe treatment.	III	125 min.
3.	<b>Final (20%).</b> Methodological support materials: textual situational problems, level III tests, results of curation of patients (medical histories); indicative map of	1. Control and correction of the level of professional skills and abilities. 2. Discussion of the results of the curation of patients. 3. Summary of lessons (theoretical, practical, organizational).	III	38 min.

	independent work with literature.	4. Homework: educational literature on the topic (main, additional).		
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## 7. Recommended literature:

### **Basic**

1. Zhaboyedov G.D., Kireev V.V. Ophthalmology: practicum: educational guide. - K.: VSV "Medicine", 2013. - 280 p.
2. "Ophthalmology" textbook /OP Vitovska et al.; K.: " Medicine ", 2017. - 648 c.

### **Auxiliary**

1. Wills Clinic. Diagnosis and treatment of eye diseases / Ed. Douglas Cullom and Benjamin Chang - Lviv: Medicine of the World, 2019. - 504 p.
2. Augusta Azuara-Blanco and others. Glaucoma terminology and guidelines. 5th edition. – 2021, 170 p.
3. Wenger G.Yu., Soldatova A.M., Wenger L.V. Ophthalmology. Course of lectures. – 2010., 180 p.
4. Zavhorodnia N.G., Sarzhevskaya L.E., Ivakhnenko O.M. etc. Anatomy of the eye. Research methods in ophthalmology: teaching. manual for medical students. facts. - Zaporizhzhia, 2017. - 76 p.