

**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. Topic of the lesson "**Eye trauma**".

3. Competencies.

After studying the topic, students should **know:** signs of penetrating injuries of the eyeball and emergency care; clinical manifestations and treatment of contusions of the eyeball; complications of penetrating wounds of the eye (endophthalmitis, panophthalmitis, sympathetic inflammation, metallosis); eye burns, their clinic and emergency care; methods of removing foreign bodies of the conjunctiva and cornea; electroophthalmic clinic and emergency care; **be able to:** diagnose a penetrating wound; provide emergency aid in case of penetrating eye injury; remove a conjunctival foreign body; provide emergency aid for chemical and thermal burns; apply monocular and binocular bandages.

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, Komberg-Baltin prosthesis indicator , a magnet for removing foreign bodies, spears for removing foreign bodies from the cornea, a table lamp, a magnifying glass, a slit lamp, an ophthalmoscope, dressing material disinfecting hand sanitizers.

### 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) classification of traumatic injuries of the organ of vision; 2) clinic, principles of treatment, consequences of contusions of the organ of vision; 3) clinical signs of penetrating injuries of the eye; 4) methods of localization of foreign bodies inside the eye and methods of their removal; 5) emergency care and principles of treatment of penetrating eye injuries; 6) complications of eye injuries: clinical picture, diagnosis, principles of treatment; 7) burns of the organ of vision: classification, clinical signs, emergency care, principles of treatment, consequences; 8) clinical signs, emergency care and treatment of electroophthalmia.	II	28 min.
2.	<b>Basic (65%).</b> Methodological support materials: non- typical problems in the forms: patients, case histories, textual situational problems, 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 examination of patients (medical	1. Control and correction of the level of professional skills and abilities. 2. Discussion of the results of the examination of patients. 3. Summary of lessons (theoretical, practical, organizational).	III	38 min.

	histories); indicative map of independent work with literature.	4. Homework: educational literature on the topic (main, additional).		
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## Recommended Books:

### 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.