



APPROVED
EMD decision

" 12 " 10 2021

Protocol No. 5

Chairman of the EMC, Vice-Rector,
candidate of pedagogical sciences,
associate professor Apezova D.U.

SYLLABUS by discipline

CC.3.8.13. OPHTHALMOLOGY

For students of the educational program, higher professional education in the specialty 560001 "General Medicine" (5-year education) in the specialty "Doctor"

Type of study work	Total hours
course	3
Semester	5
Number of weeks	13
<i>The total complexity of the discipline</i>	3
Classroom/practical studies (PS)	90
Student Independent Work (SIW)	54/36
Control of student's independent work	36
Forms of control	
current control	Testing, oral questioning, written test
Frontier control	Testing
Midterm	Testing
Final control	exam
Semester rating by discipline:	Point-rating system

Information about the teacher of the academic discipline

Full Name	Bazarbaeva Aidai Ruslanbekovna
Post	teacher
Academic degree	Candidate of medical sciences
Academic title	-
Email address	-
Location of the department (address)	KR, Bishkek, st. Shabdan Baatyr 4/4, floor 2
Telephone	0555100xxx
Consultation hours	13.00-14.00

Characteristics of the academic discipline:

The purpose of studying the discipline: Students gain knowledge about the structure, functions, basic methods of examination, semiotics, clinic, diagnostics, differential diagnosis, tactics of treatment of diseases of the visual organ, their connection with general diseases of the body, treatment of eye diseases in order to maximize the restoration of the functional state of the visual organ and prevention of blindness; further formation of clinical thinking by mastering practical skills in the independent supervision of patients, in the management of medical documentation, the preparation of a diagnostic program, interpretation of the results of special research methods and solving issues of tactics of management of ophthalmic patients. The training of students is carried out with the development of skills and abilities in

the independent work of a doctor in the diagnosis and treatment of the most common diseases of the organ of vision

Discipline Prerequisites:

- Basic pharmacology
- Propedtherapy
- Endocrinology
- Childhood illnesses
- Outpatient pediatrics
- General hygiene
- Bioethics

Postrequisites of the discipline:

- ENT diseases
- Dentistry
- Topographic anatomy
- Medical parasitology
- Evidence-based medicine

Learning outcomes of the discipline according to the RO GPP

The study of the subject endocrinology will contribute to the achievement of RO OOP:

RE-8: interpret, analyze and evaluate data from clinical, laboratory and instrumental diagnostic methods, make a treatment plan, including emergency care, taking into account urgent and priority signs of the disease.

The achievement of RO-8 is realized by the acquisition of competencies by the graduate, i.e. his ability to apply knowledge, skills and personal qualities in accordance with the tasks of professional activity - PC-16, PC-17

PC-16 is capable and ready to use the algorithm of diagnosis (main, concomitant, complications) taking into account the ICD, perform basic diagnostic measures to identify urgent and life-threatening conditions.

PC-17 is capable and ready to perform basic therapeutic measures for the most common diseases and conditions in adults and children in outpatient and hospital settings;

Content of the discipline

№№	Name of topics
1.	Anatomy, physiology, refraction and methods of examination of the organ of vision
2.	History of ophthalmology development. Modern achievements. Clinical anatomy of the organ of vision
3.	Anatomy of the eyeball. Anatomy of the appendages of the eye and orbit
4.	Functions of the visual organ. Age dynamics of their development
5.	Visual functions. Central and peripheral vision, light perception and color perception in children and adults
6.	Methods of visual field research
7.	Refraction of the eye. Myopia, modern methods of treatment
8.	Clinical refraction. Types of refraction. Methods of determination
9.	Clinical refraction. Types of refraction. Methods of determination
10.	Prescriptions for glasses
11.	Myopia. Types, complications of myopia. Treatment, prevention
12.	Prevention and modern methods of treatment of myopia
13.	Pathology of the oculomotor apparatus. Binocular vision
14.	Binocular vision. Research methods. Strabismus, types, treatment
15.	Diseases of the anterior segment of the eyeball
16.	Diseases of the cornea. Problems of keratoplasty
17.	Diseases of the century Diseases of the century
18.	Diseases of the lacrimal organs. Modern methods of treatment of Diseases of the lacrimal organs. Modern methods of treatment
19.	Dry eye syndrome Dry eye syndrome

20.	Conjunctival diseases. Marginal pathology of conjunctiva conjunctival diseases. Marginal pathology of the conjunctiva
21.	Marginal pathology of the visual organ
22.	Treatment of adenovirus infection of the eye
23.	Diseases of the cornea. Problems of keratoplasty Corneal diseases. Problems of keratoplasty
24.	The current state of the issue of keratoplasty
25.	Pathology of the lens. Diseases of the vascular tract
26.	Diseases of the lens. Modern methods of treatment and correction
27.	Cataract treatment, modern technologies
28.	Pathology of the vascular membrane
29.	Glaucoma, types, prevention of blindness from glaucoma
30.	Glaucoma, types, clinic
31.	Glaucoma. Modern methods of diagnosis and treatment of glaucoma, prevention of blindness
32.	Diseases of the posterior segment of the eyeball
33.	Injuries of the visual organ, complications
34.	Damage to the organ of vision
35.	Complications of injuries of the visual organ, prevention
36.	Laser use in Ophthalmology
37.	Work in an eye emergency room
38.	Diseases of the retina and optic nerve. Ocular manifestations in general diseases of the body
39.	Diseases of the retina, optic nerve. Diabetic Retinopathy
40.	Prescription of medications for ocular pathology
41.	Work in the operating room, duty in the department
42.	Curation of patients

List of main and additional literature:

Main literature:

Eye Diseases: Textbook for Medical Students, 2005

Additional literature:

1. Ophthalmology. Myron Yono, 2014
2. Avetisov S.E., Egorov E.A., Moshetova L.K. Neroev V.V., Takhchidi H.P. Ophthalmology: National Guide M.: GEOTAR-Media 2018

Internet resources:

<https://drive.google.com/drive/u/2/folders/19TBGH70moUJsAZ5fofpP3a0Ryt-M07ME>

<http://www.pubmed.com>

<http://www.booksmed.com>

Monitoring and evaluation of learning outcomes

The content of the rating system for assessing student performance

The rating assessment of students' knowledge in each academic discipline, regardless of its total labor intensity, is determined on a 100 (one hundred) - point scale and includes current, boundary, intermediate and final control.

The distribution of rating scores between types of control is established in the following ratio (according to the table of the score-rating system of assessments):

Form of control				
current (CC)*	boundary control (BC)**	mid-term exams (MC)***	Final /exam (FE)	Discipline Rating (RD)
0-100 points	0-100 points	0-100 points	0-100 points	0-100 points, with the translation of points into a letter designation

Note:

* $TK(middle) = \frac{\sum_1^n \times point}{\sum_1^n}$, where n is the number of types of classroom and extracurricular work of students in the discipline;

**PK (*middle*) = $\frac{\sum_1^n \text{credit} \times \text{point}}{\sum_1^n \text{credits}}$, where n is the number of modules (credits) in the discipline;

***ПК (*middle*) = $\frac{\sum_1^n \times \text{point}}{\sum_1^n}$, where n is the number of intermediate controls (2 controls per semester: in the middle and at the end of the semester) by discipline;

****ИК – examination conducted at the end of the study of the discipline

;

*****РД = $\frac{\text{TK}_{\text{ср}} + \text{PK}_{\text{ср}} + \text{ПК}_{\text{ср}} + \text{ИК}}{4}$, the final rating of the results of all types of control at the end of the discipline;

GPA = $\frac{\sum_1^n \times \text{балл}}{\sum_1^n}$ where, n is the number of disciplines in the semester (for the past period of study).

A student who has not passed the current, boundary and intermediate controls to the final control (exam) is not allowed.

The current control is carried out during the period of classroom and independent work of the student on time according to the schedule, at the end of the study of the discipline, the average score of the current control (CC) is calculated. *Forms of current control can be:*

- testing (written or computerized);
- performance of individual homework assignments, abstracts and essays;
- student's work in practical (seminar) classes;
- various types of colloquia (oral, written, combined, express, etc.);
- control of performance and verification of reporting on laboratory work;
- visiting lectures and practical (seminar, laboratory) classes;
- Incentive rating (up to 10 points).

Other forms of current monitoring of results are also possible, which are determined by the teachers of the department and recorded in the work program of the discipline.

The frontier control is carried out in order to determine the results of the student's development of one credit (module) as a whole. *Frontier control* should be carried out only in writing, at the end of the study of the discipline, the average score of boundary control (BC) is calculated. As forms of *frontier control* of the training module, you can use:

- testing (including computer testing);
- interview with written fixation of students' answers;
- test.

Other forms of intermediate control of results are also possible.

Intermediate control (mid-term exams) is carried out in order to check the completeness of knowledge and skills in the material in the middle and end of the semester (2 times per semester) of studying the discipline, by the end of the study of the discipline, the average score of intermediate control (PCsr) is calculated, *forms of intermediate control (mid-term exams) can be:*

- testing (including computer testing);
- interview with written fixation of students' answers;
- test.

Other forms of intermediate control of results are also possible.

The final control is carried out during the session, by conducting an exam, it can be carried out in the following forms:

- testing (including computer testing);
- written exam (ticketing system).

Correspondence of the point-rating system of assessments used by the institute and the assessments of the European system for the transfer of credit units, labor intensity (ECTS)

Grade						Criterion
System of letters	digital system	Traditional system	Points (%)	Scored points (max - 100)	Evaluation by discipline without an exam	
A	4	5	95-100	95-100	Credited/ passed	"Excellent" - deserves a student who has shown a deep, systematic and comprehensive knowledge of the educational material, who freely performs practical tasks, who has mastered the recommended basic and additional literature on the discipline
A-	3,67		90-94	90-94		"Excellent" - deserves a student who has shown a deep, systematic and comprehensive knowledge of the educational material, who freely performs practical tasks, who has mastered the recommended basic literature on the discipline, but is not familiar with additional literature
B+	3,33	4	85-89	70-89		"Good" - exhibited to a student who has shown a systematic and comprehensive knowledge of the educational material, able to independently replenish and update this knowledge in the course of training, performing practical tasks, familiar with the main literature on the discipline
B	3,0		80-84			"Good" is given to a student who has shown a systematic and comprehensive knowledge of the educational material, who is able to independently replenish this knowledge in the course of training, performing practical tasks, but not fully familiar with the main literature on the discipline
B-	2,67		75-79			"Good" - is given to a student who has shown the systematic nature of knowledge in the discipline, who is able to independently replenish this knowledge in the course of training, performing practical tasks, but not fully familiar with the main literature on the discipline
C+	2,33		70-74			"Satisfactory" - is given to a student who does not have a systematic nature of knowledge in the discipline, who is not capable of independently replenishing and updating knowledge in the course of further education, performing practical tasks with errors
C	2,0	3	65-69	50-69		"Satisfactory" - is given to a student who made mistakes in completing assignments, but who has the necessary knowledge to eliminate them under the guidance of a teacher
C-	1,67		60-64			"Satisfactory" - is set to a student who made errors in the performance of tasks, but who has the possible knowledge to eliminate them under the guidance of a teacher
D+	1,33		55-59			"Satisfactory" - is set to a student who made errors in the performance of tasks, who does not have the necessary knowledge to eliminate them
D-	1,0		50-54			Satisfactory" - is given to a student who has made significant errors in the performance of tasks, who does not have the necessary knowledge to eliminate them
FX	0,5	2	25-49	Less of 50	not credited/not passed	"Unsatisfactory" - is set to a student who has not completed the task, does not have the necessary knowledge to eliminate them
F	0		0-24			"Unsatisfactory" - is set to a student who has not completed the task, does not have the necessary knowledge to eliminate them, even under the guidance of a teacher

Academic achievement requirements:

Attendance by students of all classroom classes without delay is mandatory.

In case of absence, classes are worked out in the order established by the dean's office.

If there are three passes, the teacher has the right not to allow the student to attend classes until the issue is administratively resolved.

If the absence of classes is more than 20.0% of the total number of classes, the student automatically enters the summer semester.

Note to the student:

- ✓ regularly review lecture material;
- ✓ Do not be late and do not miss classes;
- ✓ work off missed classes if you have permission from the dean's office;
- ✓ Actively participate in the classroom (individually and in groups;)
- ✓ timely and fully complete homework assignments;

- ✓ submit all assignments within the time specified by the teacher;
- ✓ independently study the material in the library and at home;
- ✓ timely and accurately fulfill the tasks of the teacher, individual tasks for the IWS to achieve learning outcomes;
- ✓ to master the basic and additional literature necessary for the study of the discipline;
- ✓ performing tasks, the student should not copy or reproduce the work of other students, scientists, practitioners, plagiarism;
- ✓ develop their intellectual and oratory skills;

In case of non-compliance with the requirements of the Memo, the student will be penalized in the form of deducting points (one point for each violated item).

If the requirements of the Memo are fully met, the student is encouraged in the form of an additional 10 points to the final control in the discipline.

Academic Integrity, Conduct and Ethics Policy:

- turn off your cell phone during class;
- Be polite;
- respect other people's opinions;
- formulate objections in the correct form;
- do not shout or raise your voice in the audience;
- independently complete all semester assignments;
- Eliminate plagiarism from your practice;

Methodical instructions.

It is recommended to organize the time required to study the discipline as follows:

When preparing for a practical lesson, you must first read the abstract with the teacher's explanations.

When performing exercises, you must first understand what you want to do in the exercise, then proceed to its implementation.

Literature work. The theoretical material of the course becomes more understandable when books are studied in addition to the abstract. After studying the main topic, it is recommended to perform several exercises.

Preparation for boundary and intermediate controls. In preparation for the boundary and intermediate control, it is necessary to study the theory: the definitions of all concepts before understanding the material and independently do several exercises.

Independent work of students is organized on all studied topics of each section. Independent work is carried out in the form of:

- work in Internet sites;
- work with basic and additional literature;
- fulfillment of written assignments;
- preparation of reports, abstracts, tables and posters on