

Рецензия

на экзаменационные вопросы по предмету "Офтальмология" для итоговой аттестации
на 2024-2025 учебный год по направлению 560001 – "Лечебное дело" (GM) кафедры
«Клинические дисциплины» международного медицинского факультета

Представленная на рецензию программа для определения уровня подготовленности обучающихся международной медицинском факультете по офтальмологии для иностранных студентов (на английском языке) составлены в последовательности проведения тестов аттестационных испытаний, которые были установлены приказом ректора Международного медицинского факультета

Тестовые вопросы и клинические ситуационные задачи охватывают всю систему знаний, полученных на лекциях и практических занятиях по дисциплине "Офтальмологии". Ситуационные задачи имеют равноценный характер, требуют одинакового временного для режима подготовки и ответа. Состав экзаменационных заданий позволяет студенту продемонстрировать общую теоретическую подготовку, практические навыки и решения клинических задач, а также оценки и интерпретации лабораторно - инструментального стандарта по подготовке специалиста "Лечебное дело"

Представленные задания на экзамен по дисциплине: "Офтальмология" для студентов лечебного факультета могут быть использованы.

Рецензент:

Заведующий глазным отделением Ошской городской больницы: Шамуратов Р А

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Заведующий глазным отделением Ошской городской больницы: Шамуратов Р А



Рецензия на рабочую программу учебной дисциплины «Офтальмология»
» для специальности Лечебное дело «560001»

Рабочая программа дисциплины «Офтальмология» предназначена для специальности Лечебное дело и составлена в соответствии с Государственным образовательным стандартом по дисциплине «Офтальмология».

При составлении рабочей программы учтены требования к минимуму содержания и уровню подготовки выпускника указанной специальности. Рабочая программа построена по единым методическим принципам, принятым в учебном заведении и состоит из нескольких разделов. В каждом разделе четко определены цели обучения направленные на формирование у студентов умений, необходимых для их будущей профессиональной деятельности, что является несомненным достоинством программы.

Раздел «Офтальмология» посвящен общим вопросам в офтальмологии. Изучаются анатомия и физиология глаза, методы обследования больного, основные симптомы офтальмологических расстройств, рефракционная диагностика. Раздел «Офтальмологии» специальная часть формирует у студентов знания о заболеваниях глаза, умение грамотно организовать и осуществлять в ходе оказания профессиональной помощи пациентам в любом лечебно-профилактическом или медико-социальном учреждении. По каждой теме программы перечислены требования к знаниям и умениям студента, приведено краткое содержание занятий. Программа рассчитана на V семестре 120 часов аудиторного времени, из них 26 часов теоретических и 36 часа практических занятий. Самостоятельная учебная нагрузка студента составляет 60 часов, на V семестре 45 аудиторных, 45 самостоятельных работ. В программе приведены различные темы и формы самостоятельной внеаудиторной работы студентов. Рабочая программа «Офтальмологии» соответствует требованиям Государственного образовательного стандарта и требованиям к уровню подготовки студентов по специальности 560001 Лечебное дело. Программа может быть использована в образовательном процессе.

Заведующий кафедрой медицинского факультета ОшГУ
«Офтальмологии», К.м.н., проф. Токтобаева А.А.



**Рецензия на рабочую программу учебной дисциплины «Офтальмология»
для специальности Лечебное дело «560001»**

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Заведующий кафедрой медицинского факультета ОшГУ

«Офтальмологии», д.м.н., проф.

Токтобаева А.А

MINISTRY OF SCIENCE, HIGHER EDUCATION AND INNOVATION OF THE
KYRGYZ REPUBLIC

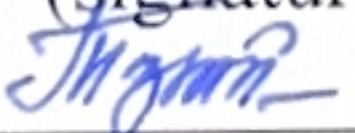
OSH INTERNATIONAL MEDICAL UNIVERSITY

DEPARTMENT OF CLINICAL DISCIPLINES

Syllabus

Speciality(direction)	General medicine	Course code	560001
Language of instruction	English language	Discipline	Ophthalmology
Academic year	2025-2026	Number of credits	4 credits
Teacher	Kadyrkulova Dzh.U.	Semester	5th semester 3rd year
E-mail		Schedule for the ebilim app	
Consultations (time/audio)	Wednesday 9:00-12:00 and during breaks	Location (building/room)	IMU room. 013
Form of study(daytime/corres pondence course/evening/dista nce)	Daytime	Course type: (compulsory/elective)	Required

Head of department:  Abdimomunova B.T.

Program Manager:  Tursunova V.D.
(signature)

Osh, 2025

1. Purpose of the discipline

The purpose of teaching the clinical discipline "Ophthalmology" is to study the basic anatomical and physiological features of the organ of vision, the peculiarities of the course of eye diseases, in the development of a tactician's tactics for managing patients with diseases of the eye organs. Mastering the basic methods of examination of the eye, early diagnosis, symptomatology, treatment principles, taking into account the individual characteristics of the body and the development of preventive measures.

2. The results of the training of the discipline "Ophthalmology"

As a result of studying the discipline of "Ophthalmology" the student will reach the following results of training (ROD), corresponding to the expected results of mastering the educational program (POpen) and the competencies assigned for the discipline:

PO Code and its wording	The POon competency code and its wording	Code PO discipline (PO) and its wording
RO 1 - Is able to use the basic provisions of mathematical, natural, humanitarian, economic sciences in professional work and independently acquire new knowledge.	OK-1 - is able to analyze socially-significant problems and processes, to use in practice the methods of humanitarian, natural-science, medical-biological and clinical sciences in various types of professional and social activities;	Knows and understands: anatomy and physiology of the organ of vision and an auxiliary apparatus of the eye; etiology, pathogenesis, clinical course, complications, principles of treatment and prevention; on changes in the organ of vision in general pathology; Can: analyze socially significant problems and processes, collect and analyze information about the patient's health; to carry out preventive measures of possible ophthalmologic complications; apply fundamental knowledge, to be examined with the help of basic ophthalmologic techniques; to evaluate the results of the conducted survey to make a preliminary diagnosis; Owens: an algorithm for setting a preliminary diagnosis;

RO 5 - Can apply fundamental knowledge (anatomical and topographical and histophysiological, microbiological rationale) and the basics of physical examination (propaedeutic skills), with subsequent planning of basic laboratory and instrumental research methods and construction of a syndromic and topical diagnosis;	PC-2 - is able and ready to conduct and interpret the survey, physical examination, clinical examination, the results of modern laboratory and instrumental studies, to write a medical record of an outpatient and inpatient adult and child patient; PC-3 is able to conduct a pathophysiological analysis of clinical syndromes, to substantiate pathogenetically justified methods (principles) of diagnosis, treatment, rehabilitation and prevention among the adult population and children, taking into account their age and sex groups; PC-11 - is able and ready to make a diagnosis based on the results of biochemical and clinical studies, taking into account the course of pathology in organs, systems and the organism as a whole; PC-13 - is able to identify the main pathological symptoms and syndromes of diseases in patients, using the knowledge of the basics of medical and biological and clinical disciplines, taking into account the course of pathology in organs, systems of the body as a whole, analyze the patterns of functioning of organs and systems in various diseases and pathological processes, use the algorithm for diagnosing (primary, concomitant, complications), taking into account ICD-10, perform basic diagnostic measures to identify urgent and life threatening TATUS;	Knows and understands: anatomy of the physiology of the organ of vision in the age aspect; etiology, classification, pathogenesis, diagnosis and prevention of the most common eye diseases; on changes in the organ of vision in general pathology; (PC-2), (PC-13), (PC-3), (PC-11). Can: apply fundamental knowledge, to be examined with the help of basic ophthalmologic techniques; to evaluate the results of the conducted examination to prescribe a diagnosis of the most common eye diseases and injuries; find the link pathological process in the patient's body. (PC-2), (PC-3), (PC-11), (PC-13). Owens: conduct and interpret the survey, conduct a clinical examination, and then plan the main laboratory and instrumental methods of research. (PC-2), (PC-13), (PC-3), (PC-11).
RO 6 - Is able to recognize the causes and mechanisms of development, the course of infectious and tropical diseases among children and adults, can prescribe current treatment and assist with complications and carry out activities for the early detection of tuberculosis and HIV infection.	PC-7 - to carry out preventive measures to prevent infectious, parasitic and non-infectious diseases, to conduct sanitary and educational work on hygiene issues;	Knows and understands: moral and ethical norms, rules and principles of professional conduct; anatomy of the physiology of the organ of vision in the age aspect; etiology, classification, pathogenesis, diagnosis and prophylaxis of infectious, parasitic and non-infectious diseases, conduct sanitary-educational work on hygienic issues; (PK-7) Can: To examine the eye patient with the help of basic ophthalmologic techniques; to evaluate the results of the conducted survey to put a preliminary diagnosis of infectious, parasitic and non-infectious diseases, to conduct sanitary-educational work on hygiene issues to provide first medical assistance and to decide on follow-up medical tactics; to find the connection of the pathological process in the patient's body with diseases of the organ of vision; (PK-7) Owens: skills in drawing up a plan for a standard (clinical, laboratory, instrumental) survey; prepare medical documentation (medical history, outpatient card). conduct sanitary-educational work on hygiene issues; (PK-7)

RO-10-Can analyze and interpret the obtained objective examination data, laboratory and instrumental data by using modern methods of research and diagnosis, somatic diseases and pathological conditions to prescribe adequate treatment. Apply the main issues of work capacity examination.	PC-15 - is able to assign adequate treatment to patients in accordance with the diagnosis;	He knows and understands: moral and ethical norms, rules and principles of professional conduct; anatomy of the physiology of the organ of vision in the age aspect; etiology, classification, pathogenesis, diagnosis and prevention of eye diseases; (PK-15) Can: examine the eye patient with the help of basic ophthalmologic techniques; to evaluate the results of the conducted survey to make a preliminary diagnosis; to render the first medical aid and to make a decision on the subsequent medical tactics; to find the connection of the pathological process in the patient's body with diseases of the organ of vision; (PK-15) Owens: skills in drawing up a plan for a standard (clinical, laboratory, instrumental) survey; algorithm for setting a preliminary and expanded clinical diagnosis; skills in developing a treatment plan; to apply the basic issues of examination of work capacity (PC-15)
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In the course of mastering the discipline, the student will achieve the following **learning outcomes**:

Will Know and understand:

Moral and ethical norms, rules and principles of professional conduct;
 Anatomy of the physiology of the organ of vision in the age aspect;
 Etiology, classification, pathogenesis, diagnosis and prevention of the most common eye diseases;
 On changes in the organ of vision in general pathology;
 Features of first aid in case of eye trauma;
 Fundamentals of medical and labor expertise in ophthalmology.

Be able to:

To examine the eye patient with the help of basic ophthalmologic techniques;
 To assess the results of the conducted examination to prescribe a diagnosis of the most common eye diseases and injuries;
 Provide first medical assistance and decide on follow-up medical tactics for inflammation, burns, blunt and penetrating eye injuries;
 Find the relationship of the pathological process in the patient's body with diseases of the organ of vision;
 Carry out preventive measures to prevent the emergence of epidemic outbreaks, eye damage and development of blindness.

Own:

Scoring skills for myopia, hypermetropia, presbyopia, aphakia;
 Methods of instilling eye drops and laying ophthalmic ointments in the conjunctival cavity, washing the conjunctival sac;
 The method of removing surface foreign bodies from the surface of the conjunctiva and the cornea;
 The method of applying a mono-and binocular bandage;
 Preparation of medical documentation (medical history, outpatient card).

3. Prerequisites:

anatomy, physiology, patanatomy, pathophysiology, histology, microbiology, Latin, pharmacology, honey. radiology, topographic anatomy.

4. Postrequest: oncology, neurology, neurosurgery, family medicine, traumatology, etc. Production practice: 1. Assistant doctor-in-patient. 2. Assistant doctor in the FMC.

5. Technological map of the discipline "Ophthalmology".

Modules	Audit ors	SIW	Lectures		Seminars		SIW		BC	FC	Points
			hour	point	hour	point	hour	point			
<i>I</i>	45	45	18	60	27	60	45	60	60		60
<i>II</i>											40
<i>FC</i>											
<i>Total:</i>	45 h	45 h	18 h	60 p	27 h	60 h	45 h	60 h	60p		100 p
	90 h										

6. Map of accumulation of points on discipline "Ophthalmology". VII semester

	Module 1 (30p)										Module 2 (30 p)						Final control.
	CC1			CC2			CC3			BC1	CC1			CC2			BC2
	lec	prc	siw	lec	prc	siw	lec	prc	siw		lec	prc	siw	lec	prc	siw	
	2	3	3	1,5	2	2,5	1,5	2	2,5	10	3	3,5	3,5	3	3,5	3,5	10
<i>Points</i>	8 p			6 p			6 p			10p	10 p			10 p			10 p
	Topics 1-3			Topics 4-6			Topics 7-8				Topics 9-10			Topics 11-12			

7. The summary of the discipline.

Theme 1. Anatomy of the visual analyzer.

Eyeball. External (fibrous) skin of the eye: a) cornea, structure, functions; b) sclera, structure, topographic anatomy, functions; c) limb, topographic anatomy. Vascular membrane: Departments of the choroid: a) iris, structure, functions; b) ciliary body, topographic anatomy, structure, functions; c) choroid, structure, function. The lens. Topographical anatomy, structure, functions. Vitreous body. Features of structure, function. The anterior and posterior chamber of the eye. Topographical anatomy, angle of anterior chamber. Retin. Structure and functions.

Theme 2. Attachments of the eye. Anatomy.

Lacrimal organs. Tear-producing apparatus. Seducing paths. Conjunctiva. Anatomy, functions. Oculomotor apparatus. Topographical anatomy. Innervation. Functions of oculomotor muscles. Visual path. Topographic anatomy of the optic nerve, chiasmatic, visual tract, subcortical visual centers. Blood supply and innervation of the eye and ancillary apparatus. Orbit. Structure, content, functions.

Theme 3. Functions of the organs of vision: visual acuity, field of vision. Color and light perception.

Physiology of the visual analyzer. The role of the state of conducting paths. Visual acuity. Line of sight. The role of the state of the conducting paths and optic nerves in the act of sight. Visual acuity. Units of its measurement and methods of determination. Field of view: The role of determining the field of vision in the diagnosis of pathological processes in the eye and the central nervous system.

Color vision. Color and its main features. The time of appearance of color vision in children. Types of pathology color sensitivity. Types of pathology light perception. Color and its main features. The time of appearance of color vision in children. Isopolychromatic table. Types of pathology light perception (day, twilight and night vision). Speed adaptation to light and darkness. Three features of twilight vision (achromaticity, change in lightness, peripheral character). Types and frequency of pathology.

Theme 4. Physiological optics, refraction.

Optical system of the eye. Physical and clinical refraction of the eye. Types of clinical refraction, research methods. Myopia, hypermetropia, presbyopia, astigmatism, a clinic of various types of refraction. Accommodation. Age features of refraction and accommodation. Principles of correction of ametropia.

Theme 5. Binocular vision. Strabismus.

The general concept of monocular, simultaneous and binocular vision. Strabismus The conditions necessary for the implementation of binocular vision. Time of fixation of binocular vision. Common and local causes of impaired binocular vision.

Methods for determining binocular vision. Types of strabismus Difference between friendly and paralytic strabismus. Treatment of strabismus.

Topic 6. Pathology of the eyelids, conjunctival diseases.

Bacterial conjunctivitis. Acute conjunctivitis. Clinic, course, complications, treatment and prevention. Viral conjunctivitis. Adenoviral, epidemic, herpesvirus conjunctivitis. Differential diagnosis, diagnostic methods, principles of treatment and prevention. Allergic conjunctivitis. Clinic, course, principles of treatment. Chlamydial conjunctivitis. Clinic, course, principles of treatment. Anomalies of the position and shape of the eyelids. Coloboma of the eyelids, epicanthus, ankyloblepharon. Ptosis congenital, acquired (neurogenic, myogenic, aponeurotic, mechanical). Entropion congenital, acquired (spastic, scarring). Ectropion is congenital, acquired (paralytic, cicatricial). Retraction of the eyelids. Lagophthalm. Infectious-inflammatory, allergic and other diseases of the eyelids. Bacterial and viral infections. Blepharitis. Barley. Abscess of the eyelids. Etiology, clinic, treatment, complications, outcomes. Chalazion. Etiology, clinic, differential diagnosis, treatment. Herpetic lesion of the eyelids. Clinic, treatment. Allergic diseases of the eyelids. Acute allergic edema. Medicinal dermatitis of the eyelids. Atopic dermatitis. Causes and features of the onset, clinic, course, treatment.

Theme 7. Pathology of lacrimal organs, cornea.

Pathology of the tear-producing apparatus. Dacryoadenitis. Etiology, clinic, diagnostics, complications, principles of treatment. Sjögren's syndrome. Clinic, diagnosis, treatment. Neoplasms of the lacrimal gland (adenocarcinoma). Pathology of the teardrop device.

Dacryocystitis of newborns. Clinic, causes, methods of diagnosis and treatment, complications. Dacryocystitis acute (phlegmon of the lacrimal sac). Clinic, course, outcomes, principles of treatment and prevention. Dacryocystitis is chronic. Clinic, course, complications, treatment, prevention. Congenital malformations of the cornea. Micro- and macro-cornea, keratoconus and keratoglobus. Visual functions, treatment, outcomes. Inflammatory diseases of the cornea (keratitis). Exogenous keratitis - bacterial, viral, fungal. Endogenous keratitis is infectious (tubercular, syphilitic) viral, neurogenic. Clinic, course, diagnosis, treatment, outcomes, complications. Outcomes.

Topic 8. Diseases of the vascular tract and lens.

Inflammatory diseases. Acute and chronic iridocyclitis. Clinic, course, diagnosis, treatment. Choroiditis, etiology, clinic, diagnosis, treatment. Tumors of the vascular tract. Clinic. Diagnostics. Treatment. Congenital, acquired, complicated cataracts. Clinic, diagnosis, treatment.

Topic 9. Glaucoma.

Congenital glaucoma. Etiology, early signs of the disease. Principles, terms and methods of surgical treatment, outcomes. Primary glaucoma. Etiology, classification, clinical course of open- and closed-angle glaucoma, diagnosis, treatment. Acute attack of glaucoma. Causes, clinic, differential diagnosis, emergency care. Secondary glaucoma. Features of the course, treatment, outcomes.

Theme 10. Trauma of the organs of vision.

Blunt damage to the eyeball. Clinic, treatment, outcomes. Injuries of eyelids, conjunctiva, lacrimal organs. First aid. Injury of the eye (non-penetrating, penetrating, through). First aid. Features in the presence of a foreign body. Methods for determining and localizing foreign bodies. Complications of penetrating wounds. Principles of treatment. Sympathetic ophthalmia. Etiology, prevention and treatment. Damage to the orbit. Diagnosis, symptoms of fractures of bones and damage to orbit contents. First medical aid. Principles of treatment. Combined damage to the eyes and the middle zone of the face. The order of rendering of the first medical and specialized help. Eye burns, thermal, and chemical emergency care, complications

Topic 11. Diseases of the optic nerve.

Neuritis of the optic nerve (intra- and retrobulbar). Etiology, clinic, principles of treatment, outcomes. Stagnant disc of the optic nerve. Causes, clinics, treatment principles, outcomes. Toxic lesions of the optic nerve. Etiology, clinic, diagnostics, treatment.

Topic 12. Retinal diseases.

Acute obstruction of the central artery of the retina and its branches. Acute obstruction of the central vein of the retina and its branches. Changes in the retina in hypertension and diabetes. Retinal disinsertion. Clinic, diagnosis, treatment.

8. Thematic plan for the distribution of hours by occupation types of the discipline "Ophthalmology".

№	Name sections of the discipline	Total	Auditor. classes		SIW	Educational technologies	Assess ment faciliti es
			Lectu res	pract ical exerc ise			
	VI- semester						
	Module 1.						
1	Anatomy of the visual analyzer	8	2	3	3	КСТ, ЛБ, ЛВ, Пр, РК, РКС	Т, МШ, КР, КСТ, Р, Д
2	Attachments of the eye	8	2	3	3	ЛБ, ЛВ, Пр, РК	МШ, КР, КСТ, Д
3	Functions of the organs of vision: Visual acuity, field of vision. Color and light perception.	8	2	3	3	ЛБ, ЛВ, РИ, РК, РКС	КСТ Т, МШ, КР, ПНУ, Д
4	Physiological optics, refraction. Myopia, hypermetropia, presbyopia, astigmatism, accommodation, clinic of various types of refraction.	8	2	3	3	КСТ, ЛБ, ЛВ, Пр, РИ, РК, РКС	МШ, КР, КСТ, ПНУ
5	Binocular vision. Strabismus, types, methods of research and treatment.	8	2	3	3	ЛБ, ЛВ, С, РК, РКС	Т, МШ, КР
6	Pathology of the eyelids, eyelid anomalies, barley, haljazion, abscess of the eyelid, blepharitis diagnosis and treatment. Diseases of conjunctivitis, adenovirus, bacterial, allergic, epidemic classification, treatment.	8	2	3	3	ЛБ, ЛВ, РИ, РК, РКС	КСТ Т, МШ, КР, СЗ ПНУ
7	Pathology of lacrimal organs, cornea, clinic and treatment. Dacryoadenitis, dacryocystitis, diagnosis and treatment. Pathology of the cornea, keratitis, corneal ulcer clinic and treatment.	8	2	3	3	КСТ, ЛБ, ЛВ, Пр, РИ, РК, РКС	КСТ, СЗ, Т, МШ, КР, ПНУ
8	Principles of treatment of eye diseases	3			3	С, Р, ТП	

9	<i>Congenital malformations of the organ of vision. Retinoblastoma</i>	3			3	C, P, ТП	
	Total Module 1:	70 h	16h	24h	30h		
	Module 2						
10	<i>Diseases of the vascular tract, irites, iridocyclitis, choroiditis and classification and treatment. The pathology of the lens. Cataract classification and treatment methods.</i>	8	2	3	3	КСТ, ЛБ, ЛВ, Пр, РИ, РК, РКС	КСТ Т, МШ, КР, СЗ, ПНУ
11	<i>Glaucoma, classification and treatment methods, congenital glaucoma, secondary glaucoma</i>	8	2	3	3	КСТ, ЛБ, ЛВ, Пр, РИ, РК, РКС	КСТ Т, МШ, СЗ, КР, Р, Д, ПНУ
12	<i>Injuries to the organs of vision, contusion, penetrating injuries of the eyeball, diagnosis and treatment, complications. Eye burns, thermal, and chemical emergency care, complications</i>	8	2	3	3	КСТ, ЛБ, ЛВ, Пр, РИ, РК, РКС	КСТ Т, МШ, КР, Р, ПНУ, СЗ
13	<i>Diseases of the optic nerve, neuritis, atrophy of the optic nerve</i>	8	2	3	3	КСТ, ЛБ, ЛВ, Пр, РИ, РК, РКС	КСТ Т, МШ, КР, Д, ПНУ, СЗ
14	<i>Retinal diseases. Chorioretinitis, dystrophic changes in the retina, detachment of the retina.</i>	8	2	3	3	КСТ, ЛБ, ЛВ, РК, РИ, РКС	КСТ Т, МШ, КР, ПНУ, Д, СЗ
15	<i>Computer Visual Syndrome</i>	3			3	C, P, ТП	
16	<i>Dry eye syndrome</i>	3			3	C, P, ТП	
17	<i>Allergic eye diseases</i>	3			3	C, P, ТП	
18	<i>Sympathetic ophthalmia. Rehabilitation for burns of the organ of vision</i>	3			3	C, P, ТП	
19	<i>Changes in the fundus in hypertensive disease. Diabetes and eyes</i>	3			3	C, P, ТП	
20	<i>Age-related macular degeneration. Contemporary representations</i>	3			3	C, P, ТП	
	Total Module 2:	50 h	8 h	12 h	30 h		
	TOTAL:	120 h	24 h	36 h	60 h		

Note: ЛБ - lecture-visualization, ЛК - lecture consultation, МШ - brainstorming, Д - discussion, РИ - role play, КСм - Case-study (or method of concrete situation), Т - testing, С - interview, ТП - protection creative projects, Пр - presentation, КР - control work, РК - team work, Р - writing and defense of the abstract, РКС - case analysis, СЗ - solution of situational tasks

9. Teaching and methodological support of the course

Basic:

1. Comprehensive ophthalmology 6th edition A. K. Khurana
2. Basic ophthalmology. Renu Jogi. 2006
3. Parson's "Diseases of the eye". Twentieth edition. Ramanjit Sihota. 2007
4. Kanski. Clinical ophthalmology. 2007
5. Basic and clinical science course on ophthalmology. 14 Sections. American Academy of Ophthalmology. 2004-2005

Additional:

1. Modern ophthalmology - Dutta .Vol I, II, III 3rd Edition Jaypee, 2005.
2. Ophthalmology Yanoff Duker
3. Renu Jogi. Basic ophthalmology. - Jayee Brothers, 2003 - 346 pages.
4. Basic ophthalmology for medical students. 2003 - Naeem Khatak. 161 pages.
5. The red book of ophthalmology. 2002 - Shafiq-ur-Kehman Cheeme. 336 pages.
6. Atlas of Ophthalmology. Kanski

Internet resources:

1. Russian Medical Journal (www.rmj.ru)
2. Russian ophthalmology online (www.eyepress.ru)
3. American Academy of Ophthalmology (www.aaojournal.org)

10. Evaluation information

Rating (points)	Alphabetic system	Digital equivalent for the GPA system	Traditional system
87-100	A	4,0	Excellent
80-86	B	3,33	Good
74-79	C	3,0	
69 -73	D	2,33	Satisfactorily
61-68	E	2,0	
31-60	FX	0	Unsatisfactory
0 - 3 0	F	0	

11. Pointing Policy

The grading of exams is carried out on the basis of the principles of objectivity, fairness, comprehensive analysis of the quality of students' knowledge, and other provisions that contribute to improving the reliability of assessing students' knowledge and eliminating subjective factors.

Evaluation - this is the final stage of student activities, aimed at determining the success of training.

Evaluation of discipline exhibited as the sum of the estimates for the modules, which are structured as an academic discipline (60 points), and the estimates in the final control - exam (40 points).

Evaluation of the module is defined as the sum of the estimates of the current educational activity and a landmark assessment module control, which is expressed on a scale (60 points).

I. Evaluation of module

Evaluation of the module is defined as the sum of the estimates of the current educational activity (in points) and assessment a landmark module control (in points), which is exposed when evaluating the theoretical knowledge and practical skills. The maximum number of points that a student can score in the study of each module is 30 points, including for current educational activity - 20 points, as a result of boundary control - 10 points.

A) Evaluation of current educational activity.

In evaluating of mastering of each theme of the module student gets points for **attendance** and for taking **test controls**. This takes into account all types of work, provided by methodological development to study the theme.

Weight (price of points) of each control works within a single module is the same but may be different for different modules and determined by the number of practical classes in the module.

The main difference of current **test controls** from practical classes is that during test controls the student must demonstrate the ability to synthesize the theoretical and practical knowledge acquired in one

control works (semantic module). During test controls are considered quizzes, tests and situational tasks proposed in the methodical development for students, as well as carried out consolidation and control of practical skills on the topics of semantic module.

B) Landmark control (colloquium) of semantic models takes place in two stages:

1. oral interview.

2. Written test or a computed test control;

150-200 tests on each subject are proposed for test control, which the computer or teacher randomly selects 70 test, 3-4 variants.

Oral interview takes place based on the practical, lecture and extracurricular courses. Price in points of boundary control is the same as the price of the current practice classes in the framework of this module discipline. Criteria for evaluation of landmark control exhibited in the application.

Students are allowed to retake only the unsatisfactory evaluation, positive assessments are not retakeable.

Evaluation of extracurricular work of students.

A) Evaluation of students' independent work.

Independent work of students, which is provided on the subject, along with classroom work, are evaluated at the time of test control during the appropriate class.

The level of assimilation of topics that are carried only on independent work, estimated at boundary control.

B) Assessment of individual work (task) of student.

Students (optional) can choose one of the individual tasks on the module topic. It can be educational and research work of students in the form of:

1. The preparation of the review of the scientific literature (abstract);

2. The preparation of illustrative material on the topics dealt

(A multimedia presentation, a set of tables, charts, drawings, etc.);

3. Conducting scientific research in the framework of student scientific group

4. The publication of scientific reports, presentations at scientific conferences, etc. ;

5. Participate in the Olympic Games.

Points are awarded for individual tasks to the student only at successful implementation and their protection (prizes in the respective competitions). The number of points is awarded for individual work, added to the amount of points earned by students during the exam.

II. Final control - exam.

The final control is carried out on completion of study of the discipline. By the final control allowed students who visited all the planned curriculum for classroom training sessions (classes, lectures) and in the study module scored points **sum not less than the minimum amount** (see. OshSU Newsletter №19.).

Students who have a valid reason was missing training sessions (classes, lectures) are permitted to liquidate the academic debt within 2 weeks following the absence. For students *who missed training sessions without a valid reason*, the decision regarding their rework is taken individually by the dean of the Faculty, *as well as the accrued penalty points (-1 point for each missing classes or lectures).*

Course Policy:

Organization of educational process is carried out on the basis of credit-modular system according to the requirements, using the module-rating system of evaluation of students' progress using AVN information system.

12. Course Policy

Students are presented with the following systems of requirements and rules of conduct in class:

a) Compulsory attendance;

b) Activity during practical (seminar) classes;

c) Preparation for classes, homework and SIW.

Not acceptable:

a) Missing or leaving the class;

b) The use of cell phones during class;

c) Cheating and plagiarism;

d) Late submission of assignments, etc.

13. List of questions and tasks on topics and forms of control

Module 1

1. The general structure of the organ of vision.

2. The eyeball, the weight and size, shape of the eyeball, the structure.

3. The outer layer of the eye (the capsule, the cornea, sclera and limb).

4. The cornea, its structure, chemical composition, functions.

5. The structure of the middle (vascular) layer of the eye.
6. Iris, structure, blood supply, innervations.
7. The structure of the inner layer of the eye, blood supply, innervation.
8. The retina, structure, functions.
9. Anatomy and function of eyelids.
10. The structure of the orbit and function.
11. Superior and inferior orbital fissure syndrome.
12. Extraocular muscles.
13. Anatomy and physiology of the lacrimal organs.
14. The lens. Structure, chemical composition, particularities of the lens exchange processes, functions.
15. Vitreous body, particularities of the structure.
16. The anterior and posterior chamber of the eye. Intraocular fluid, its chemical composition.
17. The structure of the angle of anterior chamber.
18. The connective tissue and the mucous membrane of the eye.
19. Blood supply of the eyeball and its appendages.
20. Nerves of eye and orbit.
21. The visual pathway. Topography. Anatomy of 4 divisions of the optic nerve.
22. The visual act, its stages.
23. Methods of examination of the eye.
24. Methods for determination of visual acuity at different ages.
25. Functions of organs of vision. Visual acuity, its unit of measurement.
26. The field of vision. And methods of its examination.
27. Control and hardware methods of perimetry.
28. The role of the field of vision in determining the diagnosis of pathological processes in the central nervous system and eye.
29. Pathological changes in field of vision.
30. The concepts of physical refraction of the eye.
31. Characteristics of clinical refraction and its variants.
32. The optical system of the eye. Formula refraction "D".
33. The concepts of proportionate and disproportionated clinical refraction (emmetropia, ametropia, anisometropia).
34. Objective and subjective methods for determining of clinical refraction.
35. Units of refraction - Formula. Diopter.
36. Myopia (nearsightedness). Characteristic.
37. Hyperopia (farsightedness). Correction.
38. Presbyopia. It's correction depending on age
39. Astigmatism. Forms and methods of correction.
40. Skiascopy.

Module 2

41. Accommodation. The mechanism of accommodation.
42. Accommodative asthenopia.
43. Binocular vision. The methods of its examination
44. Types of strabismus, treatment.
45. Differential diagnosis of paralytic strabismus and concomitant squint.
46. Biomicroscopy.
47. Method of transmitted-light microscopy.
48. The light perception, methods of determination
49. Disorders of light perception.
50. Color perception and its main features.
51. Pathology of the conjunctiva (conjunctivitis). Types, basic subjective and objective signs of conjunctivitis.
52. Inflammatory diseases of the eyelids. Etiology and treatment.
53. Trachoma. Etiopathogenesis, clinical stage, treatment.
54. Pathology of tear-producing apparatus. Sjögren's syndrome.
55. Inflammatory diseases of the lacrimal sac. neonatal dacryocystitis.
56. Phlegmon of orbit. Etiology, pathogenesis, clinical features. Methods of medical and surgical treatment.
57. Inflammatory diseases of the cornea (keratitis). Classification. Etiology, pathogenesis. General symptoms.
58. Ulcer and creeping ulcer of the cornea. Etiopathogenesis. Clinic, treatment, complications.
59. The classification of uveitis. Etiology, pathogenesis, clinical features of uveitis. Fuchs syndrome.

60. Pathology of the lens, the clinic, the stage of development of a cataract, the indications for surgery.
61. Primary glaucoma. Classification, clinical features, treatment.
62. Congenital glaucoma. The etiology, clinical features, treatment.
63. Examination of intraocular pressure.
64. Tonography.
65. Differential diagnosis of an acute attack of glaucoma and iridocyclitis.
66. Classification of eye injuries on the etiology, localization, severity, presence of foreign bodies, and others.
67. Classification of eye injuries.
68. The X-ray diagnosis of foreign bodies of the eye. The principle of removing magnetic and nonmagnetic bodies.
69. Methods for determination of intraocular foreign bodies.
70. Complications of penetrating eye injuries.
71. Sympathetic ophthalmia.
72. Burns of eye. Classification, emergency care for burns.
73. Diseases of the retina. Clinic and treatments.
74. Retinal detachment.
75. Retinitis pigmentosa, etiology, clinical features, treatment.
76. Central retinal vein occlusion.
77. Acute retinal artery occlusion.
78. Changes in the fundus in hypertension.
79. Changes in the fundus in renal disease.
80. Changes in the fundus in diabetes.