Appendix No. 1.5 to the Rector of the University of Rzeszów Resolution No. 7/2023

SYLLABUS

Concerning the cycle of education **2024- 2030**

Academic year 2027/2028

1. BASIC INFORMATION CONCERNING THIS SUBJECT / MODULE

Subject / Module	**Ophthalmology**
Course code / module *	**Ok/F**
Faculty of (name of the leading direction)	**College of Medical Sciences, University of Rzeszow**
Department Name	**College of Medical Sciences, University of Rzeszow**
Field of study	**Medicine**
Level of education	**Uniform Master's Studies**
Profile	**General Academic**
Form of study	**Stationary**
Year and semester	**4th year, semester VII**
Type of course	**Obligatory**
Coordinator	**Aneta Lewicka-Chomont, PhD**
First and Last Name of the Teacher	**Aneta Lewicka-Chomont, PhD** **Magdalena Futyma- Ziaja, PhD** **Kamila Nester**

* - *According to the resolutions of the Faculty of Medicine*

1.1. Forms of classes, number of hours and ECTS

Lecture	Exercise	Conversation	Laboratory	Seminar	Practical	Self-learning	**Number of points ECTS**
15	15	-	-	-	-	-	**2**
	15			15			**2**

1.2. The form of class activities

☒classes are in the traditional form

☐classes are implemented using methods and techniques of distance learning

1.3. Examination Forms / module (exam, **credit with grade** or credit without grade)

2. REQUIREMENTS

Knowledge of the ocular anatomy

3. OBJECTIVES, OUTCOMES, AND PROGRAM CONTENT USED IN TEACHING METHODS

3.1. Objectives of this course/module

C1	Acquainting with the basic methods of examination of the eye organs
C2	Acquainting with the differential diagnosis of eye and headaches, with particular emphasis on glaucoma, inflammatory diseases of the eye, sometimes associated with disorders or sudden loss of vision.
C3	Getting to know first aid in various random events regarding the eye and sight.
C4	Acquainting with the possibility of supplementing and broadening the diagnosis of general diseases based on an ophthalmological examination.
C5	Acquainting with undesirable symptoms for the organ of sight in the course of treatment of general diseases.
C6	Acquainting with physiology and conditions for the proper development of vision from birth and prevention of amblyopia and improper positioning of the eyes and / or head.
C7	Acquainting with eye diseases related to genetic disorders.
C8	Acquainting with the function of the elderly in the eyes.
C9	Acquainting with modern methods of diagnosis and treatment, including the basics of surgical treatment of eye diseases.
C10	Acquainting with ethical principles in the examination and treatment of people with vision disease.

3.2. Outcomes for the course/module

EK (the effect of education)	The content of the learning effect defined for the subject (module)	Reference to directional effects (KEK)
EK_01	He knows the diseases of the eye, in particular knows and explains the causes, symptoms, principles of diagnosis and therapeutic treatment in the most common ophthalmologic diseases.	F. W11.
EK_02	Performs an ophthalmic screening test.	F. U19
EK_03	Knows diseases of the eye system, in particular: a) knows and explains the causes, symptoms, principles of diagnosis and therapeutic procedures in the most common ophthalmological diseases, b) knows the ophthalmological complications of systemic diseases along with their ophthalmological symptomatology and the correct methods of treatment in these cases, c) knows the basic groups of drugs used in ophthalmology, their side effects and interactions,	F. U20

	d) knows the groups of generally used drugs that are associated with ophthalmological complications and contraindications and explains their mechanism;	
EK_04	He is able to establish and maintain a deep and respectful contact with the patient	K.01.

3.3. Content Curriculum

A. Lectures

Course contents
Anatomy of the eye
Anterior segment diseases
Cataract and glaucoma
Sudden ophthalmic conditions
Ocular sympoms of systemic disorders

B. **Exercises**

Course contents sem 7
Study of visual acuity and refraction, principles of glasses selection, methods of correction of refractive errors
Examination of disturbances in the position and mobility of the eyeballs. Binocular vision. Double vision
Examination of eye fixation in the orbit, examination of the anterior segment of eyeballs, inversion of the eyelids and screen test. Rinsing the conjunctival sac, administering medication. Ophthalmic drugs.
Corneal epithelial continuity test, fluorescein test, Schirmer test, probing tear ducts
Diagnostics of opacity of optical centers. Test in transmitted light. Passing exercises.

Course contents sem 8
Performing and interpreting diagnostic tests in glaucoma. Types of perimetry. Color vision test.
Performing and interpreting diagnostic tests used in the diagnosis of retinal diseases, such as: OCT, OCT angiogram, ultrasound of the eyeball. The importance of fluorescein angiography. Amsler test.

Fundus examination
Familiarization with basic surgical techniques in ophthalmology: plastic surgery on the eye's protective apparatus, intravitreal injections, cataract removal surgery with intraocular lens implantation, antiglaucoma surgery and vitrectomy
Removal of a foreign body from the conjunctival sac and cornea, first aid in cases of eye burns and appendages, principles of treating organ injuries eyesight. Passing exercises.

C. Seminars

Course contents
Glaucoma and other optic nerve neuropathies: ischemic, inflammatory, compression, toxic
Ocular oncology
Retinal diseases: inflammatory, vascular, degenerative. Retinal detachment
Ocular injuries
Uveitis – large spectrum disorders
Contemporary ocular surgery

3.4. Teaching methods

Lecture: multimedia presentation.

Exercises: practical exercises, demonstration, lecture form.

Seminars: multimedia presentation, lecture form.

Student's own work: work with a book

4. METHODS AND EVALUATION CRITERIA

4.1.Methods of verification of learning outcomes

Symbol of effect	**Methods of assessment of learning outcomes (Eg.: tests, oral exams, written exams, project reports, observations during classes)**	**Form of classes**
EK_01	Written test	Lecture
EK_02	Practical pass	Exercises

EK_03	Practical pass	Exercises
EK_04	Practical pass	Exercises

4.2.Conditions for completing the course (evaluation criteria)

Lecture (EK_01):

Written test

5.0 - has knowledge of each of the contents of education at the level of 90% -100%

4.5 - has knowledge of each of the content of education at the level of 84% -89%

4.0 - has knowledge of each of the content of education at the level of 77% -83%

3.5 - has knowledge of each of the content of education at the level of 70% -76%

3.0 - has knowledge of each of the content of education at the level of 60% -69%

2.0 - has knowledge of each of the contents of education below 60%

Exercises and Seminars (EK_02, EK_03):

- pass with an assessment including:

- attendance

- activity on exercises

- grades from partial tests

Rules for conducting the examination:

The test lasts 60 minutes from the start of writing the test, i.e. all students in the room took their place, the examiner presented the applicable rules, explained all doubts and answered all questions of students participating in the exam, the student representative confirmed with his signature that the students participating in the exam they had the opportunity to familiarize themselves with the rules of the exam and obtained answers to all questions.

• The test consists of 60 questions with 1 correct answer.
• To take the final test, you MUST pass ALL exercises and seminars.
• Students leave all handbags, bags, etc. in the room in a specially designated place. During the final test, the student may only carry writing utensils. Mobile phones must be turned off.
• Each attempt to communicate between students and cheating will be punished with taking the test and entering a failing grade.
• Any attempt to use electronic devices, including a mobile phone, will be treated as above.
• Students remain in place (even if they finish writing the final test earlier) until the end of the final test.

• Any comments on the test, including the correctness of the questions, can only be made during the test by raising your hand and reporting the question / problem to one of the examiners. Substantive comments to the content of the questions are submitted in writing during the test on a special sheet. Reported comments are considered by the course coordinator and teachers. Students are informed about the result of the analysis of submitted comments via the Virtual University portal or in person at the course coordinator. If a factual error in the question is confirmed, the question is canceled and the percentage thresholds listed below are calculated in relation to the new number of questions.
• Unexcused absence from the final test results in receiving a fail mark.
• Absence from the final test may be excused only with a rector's / dean's or medical leave presented within 3 days from the date of the final test to the Dean's Office and the Ophthalmology Laboratory. Failure to submit the exemption within this period results in receiving an unsatisfactory grade.

5.0 - the student actively participates in classes, is well prepared, has acquired theoretical and practical knowledge in the field of ophthalmology. To a very good extent, he mastered the skills of collecting medical history, diagnostic tests

4.5 - the student actively participates in classes, has acquired theoretical and practical knowledge in the field of ophthalmology at a very good level. He successfully mastered the skills of collecting medical history, diagnostic tests.

4.0 - the student actively participates in the classes, is improved, has acquired theoretical and practical knowledge in the field of ophthalmology to a good degree. He mastered the skill of collecting medical history and diagnostic tests

3.5 - the student participates in classes, his scope of preparation does not allow for a comprehensive presentation of the problem in the field of ophthalmology discussed. He sufficiently mastered the skills of collecting medical history, diagnostic examination

3.0 - the student participates in the classes, sufficiently acquired theoretical and practical knowledge in the field of ophthalmology. He mastered the skills of collecting medical history, diagnostic testing, however, it is often corrected.

2.0 - the student passively participates in classes, the statements are incorrectly substantive, theoretical and practical knowledge in the field of ophthalmology is not sufficient. He has not mastered the skills of collecting medical history, diagnostic tests, and frequently made mistakes.

5. TOTAL STUDENT WORKLOAD REQUIRED TO ACHIEVE THE DESIRED RESULT IN HOURS AND ECTS CREDITS

Activity	Hours / student work
Hours of classes according to plan with the teacher	30
Preparation for classes	15
Participation in the consultations	2
The time to write a paper / essay	-
Preparation for tests	15
Participation in colloquia	**1**
Other (e-learning)	**-**
SUM OF HOURS	**63**
TOTAL NUMBER OF ECTS	**2**

6. TRAINING PRACTICES IN THE SUBJECT / MODUL

Number of hours	-
Rules and forms of apprenticeship	-

7. LITERATURE

1. OBLIGATORY LITERATURE FOR LECTURES AND LAB CLASSES:

”Basic Ophthalmology : Essentials for Medical Students Richard Harper 2016

„Oxford handbook of ophthalmology” Alistair Denniston, Philipp MurrayAmerican Academy of Ophthalmology”

2.COMPLEMENTARY LITERATURE FOR LECTURES AND LAB CLASSES:

„ Clinical Ophthalmology” Kanski’s Elsevier Health Sciences 2024

Acceptance Unit Manager or authorized person