

## **Collegium Medicum Faculty of Medicine**

SUBJECT CARD Field of studies: Medicine Form of studies: Full-time course Degree: long-cycle Master's program Specializations: No specialization Academic year: 2024/2025

OPHTHALMOLOGY		
SUBJECT NAME	Ophthalmology	
NUMBER OF ECTS POINTS:	4	
LANGUAGE OF INSTRUCTION	english	
TEACHER(S)	Assoc. Professor Anna Roszkowska, MD, PhD Maciej Kozak, MD, PhD Anna Napora-Krawiec, MD, PhD Katarzyna Sajak-Hydzik, MD, PhD Paulina Kalandyk-Sałakowska, MD Ilona Pawlicka, MD Agnieszka Piskorz, MD	
PERSON RESPONSIBLE	Katarzyna Sajak-Hydzik, MD, PhD	
NUMBER OF HOURS:		
LECTURES:	18 h	
CLASSES:	40 h	
SEMINARS:	2 h	
GENERAL OBJECTIVES		

OPHTHALMOLOGY		
OBJECTIVE 1:	To present to the students the physiopathology of the visual system in different age ranges. To present ocular semeiotics. To provide the students with knowledge about the etiopathogenesis, diagnosis and therapies of the visual system diseases. To introduce students to the ophthalmic complications of systemic diseases and systemic therapies.	
OBJECTIVE 2:	Gaining knowledge about diagnosis and management of the ophthalmic emergencies. To present the most common surgical and parasurgical procedures in ophthalmology.	
	LEARNING OUTCOMES	
MK1	Knowledge: Student performs ophthalmologic examinations; presents and explains the main symptoms and diagnostic procedures in common ocular diseases. Explains the main ophthalmic complications of systemic diseases.	
MK2	Knowledge: Student is able to present the para-surgical and surgical procedures in ophthalmology. Knows the ophthalmic drugs and their side effects. Knows the systemic drugs used in ophthalmic diseases.	
MS1:	Skills: Student knows the indications for appropriated screening tests and their interpretation.	
MS2:	Skills: Student is able to perform the basic ophthalmic exams.	
MS3:	Skills: Student chooses the appropriated ocular tests, performs differential diagnosis between age related and pathological ocular changes.	
MS4:	Skills: Student detects acute ophthalmic diseases that require immediate specialized treatment and gives the first aid in ocular trauma. Student is able to perform the irrigation of the conjunctival sac with eyelid eversion and foreign body removal; applies ocular medications.	
<ul><li>[1] Knowledge of internal diseases and pediatrics;</li><li>[2] Knowledge of anatomy and physiology of the visual system.</li></ul>		
COURSE PROGRAM	DESCRIPTION	
LECTURE 1:	Anatomy and physiology of the visual system. Orbital diseases. Diseases of the lids.	
LECTURE 2:	Cornea and ocular surface diseases.	

OPHTHALMOLOGY	
LECTURE 3:	Anterior segment diseases (cataract, glaucoma). Uveitis.
LECTURE 4:	Disease of retina (detachment, maculopathies, vascular diseases).
LECTURE 5:	Neurophthalmology (neuritis, papilledema, chiasmatic diseases).
LECTURE 6:	Refractive errors and their correction.
LECTURE 7:	Ocular emergencies (red eye, amaurosis, chemical burns, trauma, acute glaucoma, endophthalmitis, orbital cellulitis, cavernous sinus thrombosis).
LECTURE 8:	Pediatric ophthalmology. Strabismus.
LECTURE 9:	Ocular involvement in systemic diseases: diabetes, hypertension, thyroid disease. Ocular complications of systemic therapies. Ocular pharmacology.
CLASS 1	Medical history. Patient's examination (visual acuity, slit lamp, retinoscopy, eye movements, tonometry).
CLASS 2	Examination of refractive status of the eye, refractive errors correction.
CLASS 3	Ocular surface examination: Schirmer test, Break Up Time, staining.
CLASS 4	Examination of cornea. Corneal topography, tomography, A-OCT.
CLASS 5	Lasers in ophthalmology. Yag (capsulotomy, iridotomy), argon (retinal photocoagulation, barrage), excimer (refractive surgery), Femtolaser (cataract, refractive surgery).
CLASS 6	Visual field examination in patients with glaucoma and CNS diseases. OCT RNFL examination. Discussion.
CLASS 7	Fundus examination in retinal diseases. OCT, Angio OCT, fluorescein angiography, ultrasound.
CLASS 8	First aid in ophthalmology. Diagnosis and treatment of ophthalmic emergencies.
CLASS 9	Examination of patients after surgical procedures. Drops administration and bandage of the eye.
CLASS 10	Operating room in ophthalmology. Anesthesia. Main surgical techniques in ophthalmology.

OPHTHALMOLOGY		
SEMINAR 1	Ocular involvement in systemic diseases: diabetes, hypertension, rheumatoid arthritis, thyroid disease. Acute vision threating conditions.	
DIDACTIC METHODS (APPLIED)	DESCRIPTION	
	Lectures, Seminar, Classes.	
	STUDENTS WORKLOAD:	
CONTACT HOURS WITH THE ACADEMIC TEACHER	60 h	
HOURS WITHOUT THE PARTICIPATION OF THE ACADEMIC TEACHER	Preparation for classes: 10 hours Preparation of report, presentation, medical history: 20 hours Preparation for the exam: 20 hours	
TOTAL NUMBER OF HOURS FOR THE COURSE	110 h	
CONDITIONS FOR COURSE COMPLETION		
Attendance at all lectures, classes and seminars is obligatory. Active participation in classes and seminars.		
	METHODS OF ASSESMENT:	
IN TERMS OF KNOWLEDGE:	Written multiple choice test.	
IN TERMS OF SKILLS:	Completion of exercises in classes.	
IN TERMS OF SOCIAL COMPETENCE:	Not applicable.	
FORMATIVE:	Not applicable.	
SUMMATIVE (I & II)	I term (EXAM): Test 60 questions II term (RETAKE EXAM): Oral examination	
GRADING SCALE		
3,0 (Satisfactory)	55 - 60 %	
	61 – 69 %	

OPHTHALMOLOGY		
4,0 (Good)	70 – 79 %	
4,5 (Good plus)	80 - 89 %	
5,0 (Very Good)	> 90%	
BASIC LITERATURE		
[1] Kanski's Clinical Ophtalmology. A Systematic Approach. Elsevier		