

## SUBJECT CARD

**Faculty of Medicine and Health Sciences**

**Field of studies: Medicine**

**Form of studies: Full-time**

**Degree: long-cycle Master's program**

**Specializations: No specialization**

**Academic year: 2022/2023**

OPHTHALMOLOGY	
<b>SUBJECT</b>	<b>Ophthalmology</b>
<b>NUMBER OF ECTS POINTS</b>	4
<b>LANGUAGE OF INSTRUCTION</b>	English
<b>TEACHER(S)</b>	Assoc. Professor Anna Roszkowska, MD, PhD Maciej Kozak, MD, PhD Anna Napora-Krawiec, MD, PhD Katarzyna Sajak-Hydzik, MD, PhD Paulina Kalandyk-Sařakowska, MD Ilona Pawlicka, MD Agnieszka Piskorz, MD
<b>PERSON RESPONSIBLE</b>	Katarzyna Sajak-Hydzik, MD, PhD
NUMBER OF HOURS	
<b>LECTURES</b>	18 h
<b>CLASSES</b>	40 h
<b>SEMINARS</b>	2 h
GENERAL OBJECTIVES	
<b>OBJECTIVE 1</b>	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.
<b>OBJECTIVE 2</b>	Gaining knowledge about diagnosis and management of the ophthalmic emergencies. To present the most common surgical and parasurgical procedures in ophthalmology.
LEARNING OUTCOMES	
<b>MK1</b>	<b>Knowledge:</b> 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.

OPHTHALMOLOGY	
<b>MK2</b>	<b>Knowledge:</b> 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.
<b>MS1</b>	<b>Skills:</b> Student knows the indications for appropriated screening tests and their interpretation.
<b>MS2</b>	<b>Skills:</b> Student is able to perform the basic ophthalmic exams.
<b>MS3</b>	<b>Skills:</b> Student chooses the appropriated ocular tests, performs differential diagnosis between age related and pathological ocular changes.
<b>MS4</b>	<b>Skills:</b> 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.
INTRODUCTORY REQUIREMENTS	
[1] Knowledge of internal diseases and pediatrics; [2] Knowledge of anatomy and physiology of the visual system.	
COURSE PROGRAM	DETAILED DESCRIPTION OF THE TOPIC BLOCKS
<b>LECTURE 1</b>	Anatomy and physiology of the visual system. Orbital diseases. Diseases of the lids.
<b>LECTURE 2</b>	Cornea and ocular surface diseases.
<b>LECTURE 3</b>	Anterior segment diseases (cataract, glaucoma). Uveitis.
<b>LECTURE 4</b>	Disease of retina (detachment, maculopathies, vascular diseases).
<b>LECTURE 5</b>	Neurophthalmology (neuritis, papilledema, chiasmatic diseases).
<b>LECTURE 6</b>	Refractive errors and their correction.
<b>LECTURE 7</b>	Ocular emergencies (red eye, amaurosis, chemical burns, trauma, acute glaucoma, endophthalmitis, orbital cellulitis, cavernous sinus thrombosis).
<b>LECTURE 8</b>	Pediatric ophthalmology. Strabismus.
<b>LECTURE 9</b>	Ocular involvement in systemic diseases: diabetes, hypertension, thyroid disease. Ocular complications of systemic therapies. Ocular pharmacology.
<b>CLASS 1</b>	Medical history. Patient's examination (visual acuity, slit lamp, retinoscopy, eye movements, tonometry).
<b>CLASS 2</b>	Examination of refractive status of the eye, refractive errors correction.

<b>OPHTHALMOLOGY</b>	
<b>CLASS 3</b>	Ocular surface examination: Schirmer test, Break Up Time, staining.
<b>CLASS 4</b>	Examination of cornea. Corneal topography, tomography, A-OCT.
<b>CLASS 5</b>	Lasers in ophthalmology. Yag (capsulotomy, iridotomy), argon (retinal photocoagulation, barrage), excimer (refractive surgery), Femtolasar (cataract, refractive surgery).
<b>CLASS 6</b>	Visual field examination in patients with glaucoma and CNS diseases. OCT RNFL examination. Discussion.
<b>CLASS 7</b>	Fundus examination in retinal diseases. OCT, Angio OCT, fluorescein angiography, ultrasound.
<b>CLASS 8</b>	First aid in ophthalmology. Diagnosis and treatment of ophthalmic emergencies.
<b>CLASS 9</b>	Examination of patients after surgical procedures. Drops administration and bandage of the eye.
<b>CLASS 10</b>	Operating room in ophthalmology. Anesthesia. Main surgical techniques in ophthalmology.
<b>SEMINAR 1</b>	Ocular involvement in systemic diseases: diabetes, hypertension, rheumatoid arthritis, thyroid disease. Acute vision threatening conditions.
<b>DIDACTIC METHODS (APPLIED)</b>	
	Lectures, Seminar, Classes.
<b>STUDENTS WORKLOAD</b>	
<b>NUMBER OF HOURS UNDER SUPERVISION</b>	60 hours
<b>NUMBER OF PREPARATION HOURS</b>	Preparation for classes: 10 hours Preparation of report, presentation, medical history: 20 hours Preparation for the exam: 20 hours
<b>TOTAL NUMBER OF HOURS FOR THE COURSE</b>	110 hours
<b>CONDITIONS FOR COURSE COMPLETION</b>	
Attendance at all lectures, classes and seminars is obligatory. Active participation in classes and seminars.	
<b>METHODS OF ASSESMENT</b>	
<b>IN TERMS OF KNOWLEDGE</b>	Written multiple choice test.
<b>IN TERMS OF SKILLS</b>	Completion of exercises in classes.

OPHTHALMOLOGY	
IN TERMS OF SOCIAL COMPETENCY	Not applicable.
FORMATIVE	Not applicable.
SUMMATIVE (I & II terms)	<b>I term (EXAM):</b> Test 60 questions <b>II term (RETAKE EXAM):</b> Oral examination
GRADING SCALE	
3,0 (SATISFACTORY)	55 - 60 %
3,5 (SATISFACTORY PLUS)	61 – 69 %
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.	