

**DISCIPLINE SHEET****ACADEMIC YEAR****2022 - 2023****1. DATA ABOUT THE STUDY PROGRAM**

1.1 Institution of higher education	UNIVERSITY OF MEDICINE AND PHARMACY CRAIOVA
1.2 Faculty	<b>MEDICINE</b>
1.3 Department	7
1.4 Study Domain	HEALTH
1.5 Study cycle	LICENCE
1.6 Study program/ Qualification	MEDICINE

**2. DATA ABOUT THE DISCIPLINE**

2.1. Discipline name	<b>OPHTHALMOLOGY</b>				
2.2. Discipline code	<b>MED5108</b>				
2.3 The holder of course activities	Mocanu Carmen, Stefanescu-Dima Alin				
2.4 The holder of seminar activities	Mocanu Carmen, Stefanescu-Dima Alin, Olaru Andrei, Balasoiu Andrei-Theodor				
2.5. Academic degree	<b>Course:</b> Professor, Lecturer <b>Seminar activities:</b> Lecturer/Lecturer/Lecturer				
2.6. Employment (base norm/associate)	Base norm				
2.7. Year of study	<b>V</b>	2.8. Semester	<b>I</b>	2.9. Course type (content)	<b>CSD</b>
				2.10. Regime of discipline (compulsoriness)	

**3. THE ESTIMATED TOTAL TIME (teaching hours per semester)**

3.1 Number of hours per week	<b>3</b>	3.2 From which course	<b>1</b>	3.3 seminary/laboratory	<b>2</b>
3.4 Total hours in curriculum	<b>42</b>	3.5 From which course	<b>14</b>	3.6 seminary/laboratory	<b>28</b>
Time found distribution (hours):					
Study from manual, course support, bibliography, and notes					<b>12</b>
Additional documentation in the library, specialized electronic platforms and, on the field					<b>6</b>
Training seminars / labs, homework, reports, portfolios, and essays					<b>6</b>
Tutoring					<b>1</b>
Examinations					<b>2</b>
Other activities, counselling, student scientific programs					<b>6</b>
3.7 Total hours of individual study	<b>33</b>				
3.9 Total hours per semester	<b>75</b>				
3.10 Number of credits	<b>3</b>				

**4. PREREQUISITES (where appropriate)**

4.1 curriculum	Students must have solid knowledges about the anatomy, physiology, physiopathology of the visual system
4.2 competency	-

**5. CONDITIONS (where appropriate)**

5.1. of course deployment	Lecture Hall with projector / online
5.2. of seminary/ lab deployment	Ophthalmology clinic / online

**6. SPECIFIC COMPETENCES ACCRUED**

<b>PROFESSIONAL COMPETENCES</b>	C1 – To identify the disease and to establish the correct diagnosis of different eye diseases/disorders
	C2 - Preparing and applying an adequate treatment plan for the identified condition(s).
	C3 - Assessing correctly the risk of disease or the context of the occurrence of an individual/collective disease, followed by the selection and implementation of adequate prophylactic measures.
	C4 - To approach health/disease issues from the community specifics perspective, directly related to the social, economic and/or their cultural collectivities conditions
	C5 – To initiate and to develop a scientific and/or formative research activity in their competence field

<b>TRANSVERSAL COMPETENCES</b>	<p>CT1. Autonomy and responsibility</p> <ul style="list-style-type: none"> <li>- Achievement of moral guidelines, training of professional and civic attitudes that enable students to be fair, honest, non-confrontational, cooperative and understanding the suffering, available to help people and interested to develop the community;</li> <li>- To know, respect and contribute to the development of moral values and professional ethics;</li> <li>- Learning to recognize when a problem arises and provide responsible solutions to solve it.</li> </ul> <p>CT2. Social interactions</p> <ul style="list-style-type: none"> <li>- To recognize and respect diversity and multiculturalism;</li> <li>- Learning to develop teamwork skills;</li> <li>- To communicate orally and in writing requirements, working methods, results, to consult with the team;</li> <li>- To get involved in volunteering, to know the essential problems of the community.</li> </ul> <p>CT3. Personal and professional development</p> <ul style="list-style-type: none"> <li>- To be open to lifelong learning,</li> <li>- To appreciate the need for individual study as the basis of personal autonomy and professional development;</li> </ul> <p>To know how to use information and communication technology.</p>
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### 7. DISCIPLINE OBJECTIVES (based on the grid of specific competences acquired)

7.1 The general objective of the discipline	<ul style="list-style-type: none"> <li>- Assimilation and fixation of the anatomy and physiology of the visual system</li> <li>- To learn and to reproduce necessary concepts for the positive and differential ophthalmological diagnosis.</li> <li>- To learning the methods for the examination of the visual system</li> <li>- To assimilate notions of therapeutic conduct in the ophthalmical diseases</li> </ul>
7.2 The specific objectives of the discipline	<p>Knowledge, understanding, analysis and synthesis concepts of anatomy and physiology of the visual analyzer (ocular globe, optic pathways, the central segment):</p> <ul style="list-style-type: none"> <li>- fixing the basic concepts by description</li> <li>- highlighting particular significant aspects through targeted questions related to anatomical elements (lecture and practical)</li> </ul> <p>Knowledge and application of the clinical ophthalmological examination techniques:</p> <ul style="list-style-type: none"> <li>- history (in different categories of diseases)</li> <li>- clinical examination (anterior pole, fundus)</li> <li>- functional examination (visual acuity, visual field, color sense)</li> <li>- examination of eye pressure, lacrimal apparatus, the pupil, ocular motility, binocular vision.</li> <li>- additional tests (ultrasound, AFG, Rx exam, OCT)</li> </ul> <p>Knowledge, understanding and applying concepts of positive and differential diagnosis in ophthalmology</p> <ul style="list-style-type: none"> <li>• Understanding and interpreting the necessary knowledge in the treatment of ocular diseases (local, general, etiology, pathogenesis and symptomatic)</li> <li>• To propose the correct laboratory investigations and to deduct diagnosis</li> <li>• Formulation of therapeutic management</li> <li>• Evaluation of diagnosis and treatment</li> </ul>

### 8. CONTENTS

<b>8.1 Course (content units)</b>	hours
1. Eyelids, orbit and lachrymal drainage system pathology <ul style="list-style-type: none"> <li>• anatomy – physiology</li> <li>• congenital disorders</li> <li>• injuries</li> <li>• ectropion, entropion, ptosis</li> <li>• tumours (benign, malignant)</li> <li>• inflammatory disorders of the eyelids (skin, tars, grey line)</li> <li>• orbit pathology (injuries, cellulitis, proptosis, tumours)</li> <li>• lachrymal drainage system (dacrioadenitis, dacryocystitis)</li> </ul>	2
2. Inflammatory diseases of the anterior segment of the eye <ul style="list-style-type: none"> <li>• inflammatory diseases of the conjunctiva (bacterial, viral, chlamydial, allergic)</li> <li>• inflammatory diseases of the cornea (keratitis microbial, viral, peripheral corneal disorders, corneal degenerations, neurotrophic keratopathy)</li> <li>• iridocyclitis (physiopathology, clinical and paraclinical features, positive and differential diagnosis, complications, treatment)</li> </ul> <p>differential diagnosis of the red eye disorders (normal and high IOP)</p>	2

3. Cataract and Glaucoma <ul style="list-style-type: none"> <li>• cataract (congenital, age-related, traumatic, secondary, surgical treatment)</li> </ul> glaucoma ( open-angle, angle-closure, congenital, secondary, neovascular, inflammatory, traumatic, lens-related, intraocular tumours glaucomas)	2
4. Retinal and choroidal pathology <ul style="list-style-type: none"> <li>• inflammatory retinal and choroidal diseases – retinchoroidopathy</li> <li>• retinal vascular disease (retinal artery and vein occlusion)</li> <li>• hypertensive retinopathy</li> <li>• diabetic retinopathy</li> <li>• retinitis pigmentosa</li> <li>• age-related macular degeneration</li> <li>• retinal detachment</li> <li>• retinal and choroidal malignant tumours (melanosarcoma, retinoblastoma)</li> </ul> discussions about clinical cases	2
5. Neuro-ophthalmology <ul style="list-style-type: none"> <li>• optic neuritis (papillitis, retrobulbar neuritis)</li> <li>• ischaemic optic neuropathy</li> <li>• papilloedema</li> <li>• optic nerv tumours (meningioma, glioma)</li> <li>• chiasmic disorders</li> <li>• cortical blindness</li> </ul> discussions about clinical cases	2
6. Trauma of the globe, eyelids and orbit <ul style="list-style-type: none"> <li>• anterior segment trauma</li> <li>• posterior segment trauma</li> <li>• complications</li> <li>• discussions about clinical cases</li> </ul> ocular refraction (examination methods, hyperopia, myopia, astigmatism, lens correction, accomodation and refraction disorders, visual acuity, visual field examination, IOP measurement, local treatment in ophthalmology)	2
7. Binocular vision pathology <ul style="list-style-type: none"> <li>• anatomo-physiological particularities (oculomotors muscles, binocular vision)</li> <li>• disorders of the binocular vision (amblyopia, abnormal corresponding points)</li> <li>• eso and exotropia: ethipathogeny, clinical aspects, treatment</li> </ul> paralitic strabismus: ethipathogeny, clinical aspects, treatment	2
<b>BIBLIOGRAPHY</b>	
1. Kansky J.: Clinical Ophthalmology: A Systematic Approach, 9th Edition, 2019	
2. Mocanu Carmen, Barascu Doina: Diagnostic pozitiv si diferential in oftalmologie, editia III, Ed. Sitech 2020	
3. Dumitrache Marieta: Tratat de oftalmologie, Ed. Carol Davila Buc., 2011	
<b>8.2 Practical work (topics / themes)</b>	<b>hours</b>
1. Anatomy and physiology of the eye.	2
2. Patient records	2
3. Visual acuity	2
4. Static refraction. Examination methods.	2
5. Dynamic refraction (accommodation).	2
6. Visual field.	2
7. Tonometry	2
8. Lacrimal ducts exploration	2
9. Binocular vision.	2
10. Functional and paralytic strabismus	2
11. Chromatic sense Examination methods.	2
12. Ophthalmological emergencies.	2
13. Treatment methods in ophthalmology (eye drops).	2
14. Fundus aspects in systemic pathology	2
<b>BIBLIOGRAPHY</b>	
1. Mocanu Carmen: Diagnostic pozitiv si diferential in oftalmologie, editia a II-a, Ed. Sitech 2020	
2. Kansky J.: Clinical Ophthalmology: A Systematic Approach, 9th Edition, 2019	

**9. CORROBORATING THE DISCIPLINE CONTENT WITH THE EXPECTATIONS OF EPISTEMIC COMMUNITY REPRESENTATIVES, PROFESSIONAL ASSOCIATIONS AND EMPLOYEE REPRESENTATIVES RELATING TO THIS PROGRAM**

- The knowledge gained through the Ophthalmology discipline are necessary for the attitude of diagnosis, emergency

treatment to any graduate of the Faculty of Medicine. Prevention of ocular trauma is an important element of the family doctor activity.

## 10. METHODOLOGICAL LANDMARKS

Forms of activity	Techniques of teaching / learning, materials, resources: lecture, interactive group work, learning based problems / projects audio-video recordings, etc.
Cours	In case of special situations (alert states, emergency states, other types of situations that limit the physical presence of people) the activity can be carried out online using computer platforms approved by the faculty / university. The online education process will be adapted accordingly to ensure the fulfillment of all the objectives set out in the discipline sheet.
Practical work	The following combined methods are used: lecture, debate, problematization.
Self-study	For the online version: lecture, debate, problematization based on materials provided in advance.

## 11. RECOVERY PROGRAM

Absences recoveries	No. absences that can recover	Location of deployment	Period	In charge	Scheduling of topics
	3	Ophthalmology Clinic / online	The last week of the semester	Lecturer	According to the internal schedule
Schedule consultations / Students' Scientific Program	2 hours /week	Ophthalmology clinic / online	Weekly	Lecturer	The theme of the week.
Program for students poorly trained	2 hours/ week	Ophthalmology clinic / online	Weekly	Lecturers	According to the situation of each student Theme from that specific week

## 12. ASSESMENT

Activity	Types of assesment	Method of evaluation	Percentage from final grade
Lecture	Formative assesment through essays, projects and surveys during the semester Summative assesment during the exam	Multiple Choice Questions Answering System (MCQ)/MCQ with the help of the IT platform in the online version.	60%
Practical work	Formative assesment through Multiple Choice Questions Answering System (MCQ) or/and descriptive, projects, survey during the semester. Periodic assesment during the semester Summative assesment during the exam	Multiple Choice Questions Answering System (MCQ) simultaneously with the one from the course / with the help of the video platform in the online version.	20%
Periodic assesment			20%
Assesment of individual activities			-
Minimum performance standard	At least 50% for each component of the evaluation		

## 13. GUIDANCE AND COUNSELLING PROGRAMS

### Professional guidance and counselling programs (2 hours/monthly)

Scheduling the hours	Location	In charge
Every last Friday of the month	Ophthalmology Clinic /online	Lecture holders

Endorsement date in the department: 30.09.2022

Department Director,  
Prof. Luminita CHIUȚU

Study program coordinator,  
Prof. Marius Eugen CIUREA

Discipline holder,  
Prof. Carmen MOCANU