40. OPHTHALMOLOGY (М6-OPHT)

**STUDY PROGRAM**
INTEGRATED STUDIES IN MEDICINE

**DEPARTMENT**
DEPARTMENT OF OPHTHALMOLOGY

**COURSE TITLE / CODE**
OPHTHALMOLOGY

**COURSE STATUS**
COMPULSORY

**Condition:** SURGERY

<table>
<thead>
<tr>
<th>Year of study</th>
<th>Winter semester (hours/week)</th>
<th>Summer semester (hours/week)</th>
<th>Colloquia</th>
<th>Seminars</th>
<th>ECTS Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lectures</td>
<td>Practice</td>
<td>Lectures</td>
<td>Practice</td>
<td></td>
</tr>
<tr>
<td>VI</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1-1</td>
</tr>
</tbody>
</table>

**Teaching methods**
Lecture, practical work, multimedial presentations.

**AIM**
The aim of this course is to provide medical knowledge of anatomy, vision function and eye diseases; identify most important ophthalmology problems important for vision protection and blindness prevention.

**GOAL**

**Knowledge**
To acquire theoretical knowledge on the function of vision, optics and eye refraction, oculomotor balance and its disorders, diseases and injuries of the outer eye (eyelids, lacrimal apparatus, cornea), the inner eye (anterior eye chamber, uvea, retina, papilla, visual nerve), orbital and intracranial pupilomotor fibers and centres, diagnostics, prognosis and medication and surgical treatment of eye diseases and anomalies.

**Skills**
To acquire the ability to identify the most important eye defects, diseases and injuries that endanger the eye function and vision; to be able to provide appropriate treatment and to refer the patient to the ophthalmologist or surgeon.

**COURSE DESCRIPTION**

**Theoretical classes**

1. Epidemiology of blindness and visual impairment and the importance and role of vision. Association between eye and general diseases.
2. Eyelids: structure, physiology, skin disorders, vascular disorders, bacterial and viral infections, inflammations and gland disorders, shape, position, mobility, and tumors of the eyelids. Treatment principles.
10. Ocular fundus - chorioretinal complex, physiology and function of the retina and choroid. Semiology of changes of the ocular fundus. Diseases of the uvea and rear-choriocapillaris, chorioretinitis, uvea and retinal tumors, diagnosis and treatment
14. Optic nerve, visual pathway, diseases of the optic nerve and visual field disorders. Iris and pupilomotor reaction.
15. Refraction of the eye - refractive errors, nearsightedness, farsightedness, astigmatism. Eyeglasses, contact lenses, refractive surgery.
17. Mechanical, physical and chemical eye and orbital injuries, emergency conditions and principles of diagnosis and treatment.
Practical classes

1. Eye bulb - macroscopic anatomy.
2. History taking in ophthalmologic patients. Principal problems, external examination, inspection.
3. Vision acuity measurement, near and distance measurement in each eye.
4. Eyelids - anatomy, fissures, inspection, palpation, (upper eyelid ecropion).
5. Lacrimal apparatus - lacrimal glands, drainage pathways (fluorescein test, Schirmer test, palpation - massage).
6. Examination of the conjunctiva, anatomy, types of hyperemia, conjunctival, ciliary.
7. Local therapy - drops, ointment, removal of foreign body from the conjunctiva, eye washing.
8. Examination of the cornea and sclera, focal illumination, fluorescein test sensitivity.
10. Biomicroscopy of the anterior eye chamber - demonstration and analysis of physiological properties of tissues, pathological changes, erosion, edema, corneal scars.
11. Digital measurement of the intraocular pressure (IOP), aplanatic tonometry, gonioscopy, visual field. Acute glaucoma - a case report.
13. White pupils - leukocoria, cataract - iris shadow, pupil illumination and parallax, aphakia, pseudophakia.
15. Iris dilation, direct ophthalmoscopy, red reflex, parallax.
18. Subjective and objective determination of refraction, vision, various glasses.
19. Eye mobility, the primary position, the visual axis. Detection of strabismus and amblyopia, Hisberg test, cover test, test for diplopia methods of penalizing (amblyopia).
21. Watching eye surgeries on the monitor.

Student’s activity assessment (points)

<table>
<thead>
<tr>
<th>Lectures</th>
<th>Practice</th>
<th>Colloquium</th>
<th>Essay</th>
<th>Other</th>
<th>Written</th>
<th>Oral</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>20</td>
<td>10</td>
<td>10</td>
<td>0</td>
<td>20</td>
<td>30</td>
</tr>
</tbody>
</table>

Total: 100

Teaching staff

1. Prof. Dr. Ana Oros
2. Doc. Dr. Desanka Grković
3. Doc. Dr. Vladimir Čanadanović
4. Doc. Dr. Nikola Babić
5. Assist. Dr. Sofija Davidović
6. Assist. Dr. Tatjana Bedov
7. Assist. Dr. Sandra Jovanović
8. Assist. Dr. Aleksandar Miljković
9. Assist. Dr. Zorka Grgić

Head of the Department
Doc. Dr. Nikola Babić

Recommended literature


Optional

Student's activity assessment (points)