



Univerza v Mariboru
University of Maribor

Medicinska fakulteta
Faculty of Medicine



UČNI NAČRT PREDMETA / SUBJECT SPECIFICATION

Predmet:	Oftalmologija
Subject Title:	Ophthalmology

Študijski program Study programme	Študijska smer Study field	Letnik Year	Semester Semester
Splošna medicina General medicine - EMŠP		4	8

Univerzitetna koda predmeta / University subject code:

Predavanja Lectures	Seminar Seminar	Sem. vaje Tutorial	Klin. vaje Clin work	Teren. vaje Field work	Samost. delo Individ. work	ECTS
20	25		30		75	5

Nosilec predmeta / Lecturer: Red. prof. dr. Dušica Pahor

Jeziki / Languages: Predavanja / Lecture: Slovenski/slovene
Vaje / Tutorial: Slovenski/slovene

Pogoji za vključitev v delo oz. za opravljanje študijskih obveznosti:

Prerequisites:

Vsebina:

Predavanja:
Predavanja morajo zajeti osnovno znanje na področju oftalmologije in zagotoviti primerni nivo primarne očesne oskrbe. Študenti morajo poznati indikacije za napotitev k oftalmologu. Učni pripomočki, vključno z lastno slikovno dokumentacijo, izbrana literatura in ostale publikacije morajo biti zagotovljeni. Študenti morajo razumeti in poznati znake in simptome očesnih stanj, ki so povezani s pomembnimi sistemskimi boleznimi in diagnozami.
Teme:
osnove oftalmologije - normalna očesna anatomija in fiziologija osnovne preiskovalne metode, anamneza bolezni vek, solznega aparata in orbite bolezni veznice, roženice in beločnice. Rdeče oko.

Content (Syllabus outline):

Lectures:
Ophthalmic education should include the basic knowledge to provide appropriate levels of primary eye care, the students should learn the indications and need for referral to ophthalmologist. Teaching materials, including own clinical photographs, selected readings from existing books and publications will be available. Students should understand the signs and symptoms of ocular conditions that are associated with important systemic disease and diagnosis.
Themes:
1. Fundamentals and principles of ophthalmology (normal ocular anatomy and physiology)
2. Principles of ophthalmological examination, ocular history

leča in katarakta bolezni žilnice in očesni tumorji vitreoretinalne bolezni človeško oko kot optični sistem, refrakcija, refraktivna kirurgija pediatrična oftalmologija in škiljenje nevro oftalmologija glavkom poškodbe očesa očesni znaki pri sistemskih boleznih nujna stanja v oftalmologiji ergooftalmologija

Vaje:

namenjene so pridobivanju praktičnega znanja pod vodstvom kliničnega asistenta v majhnih skupinah. Študent se seznani s pomenom oftalmološke anamneze, z oftalmoskopsko tehniko in oftalmoskopsko diagnostiko s posebnim poudarkom na očesno simptomatologijo, osnovnim oftalmološkim pregledom, kliničnim prikazom očesne patologije, povezanostjo z ostalimi vejami medicine, prvo pomočjo v oftalmologiji, izvajanjem nekaterih diagnostičnih postopkov, oceno bolezenskih sprememb, diferencialno diagnozo in terapevtskimi postopki.

Seminarji:

So namenjeni poglobljenemu znanju s posameznih področij oftalmologij, predstavljajo višji nivo in zahtevajo večjo aktivnost študenta v procesu edukacije

3. Diseases of eyelid, lacrimal system and orbit
4. Disease of conjunctiva, cornea and sclera. Red eye.
5. Lens and cataract
6. Uveal disease and ocular tumors
7. Vitreoretinal diseases
8. Human eye as an optical system, refraction. Refractive surgery.
9. Pediatric ophthalmology and strabismus
10. Neuro-ophthalmology
11. Glaucoma
12. Eye trauma
13. Ocular manifestations of systemic diseases
14. Emergencies in ophthalmology
15. Ergoophthalmology

Clinical work:

are dedicated to mastering the learning objectives and clinical skills labeled as basic under the supervision of clinical assistant in small groups. The student is informed about the importance of ophthalmological history, ophthalmoscopic examination technique and diagnosis, clinical demonstrations of ocular pathology, illustrative case method study and evidence-based medicine where ophthalmic education is paired with neurology, endocrinology, rheumatology and other field of medicine, first help in ophthalmology, performance of different diagnostic procedures, differential diagnosis and treatment.

Seminars:

Are dedicated to mastering the learning objectives and clinical skills labeled as advanced and demand higher level of student's activity in education proces.

Temeljni literatura in viri / Textbooks:

1. G.K. Lang: Ophthalmology. A pocket Texbook Atlas Thieme 2007, 2nd edition
2. G.K.Lang: Augenheilkunde 2.Aufl., Stuttgart, New York, Georg Thieme Verlag 2000
3. F. Grehn: Augenheilkunde 28.Aufl., Berlin, Heidelberg, Springer Verlag 2003
4. B. Gračner, D. Pahor: Oftalmologija. Maribor, Visoka zdravstvena šola 2003
5. J.J.Kanski: Clinical Ophthalmology: A systemic approach Butterworth- Heinemann; 5th edition 2003

Dopolnilna literatura:

6. M Yanoff J S Duker JJ Augsburger Mosby; 2nd edition 2003
7. DJ Spalton, RA Hitchings; PA Hunter, JCH Tan, J Harry: Atlas of clinical ophthalmology Mosby Elsevier 3rd edition 2004
8. JJ Kanski, A Bolton: Illustrated tutorials in clinical ophthalmology with CD-ROM Butterworth-Heinemann; 2001
9. PJ Kertes, TM Johnson: Evidence - Based Eye Care.Wolters Kluwer, Lippincott, Williams & Wilkins 2006

Cilji:

Cilji: je, da študent medicine spozna osnove anatomije, oftalmološkega pregleda, preiskovalne metode, direktno oftalmoskopijo, glavne vzroke poslabšanja vida, stanja povezana z resnimi očesnimi stanji, ki zahtevajo takojšnjo napotitev k oftalmologu, pomen leukokorije, ambliopije in škiljenja pri otroku.

Predvideni študijski rezultati:**Znanje in razumevanje:**

Študent medicine mora biti sposoben nuditi ustrezno primarno oskrbo očesa. Poznati mora očesne manifestacije pri sistemskih boleznih kot del edukacije sodobnega zdravnika.

Prenesljive/ključne spretnosti in drugi atributi:

Vsak študent mora znati:

- določiti vidno ostrino brez in z korekcijo
- pregledati gibljivost zrkla
- določiti vidno polje z metodo konfrontacije
- razložiti širino zenice in reakcijo na svetlobo
- pregled sprednega segmenta s fokalno osvetlitvijo, vključno z evertiranjem zgornje veke
- pregled vidnega živca in zadnjega pola z direktnim oftalmoskopom
- odstranitev povrhnjih roženičnih in vezničnih tujkov

Sposoben mora biti spoznati konjunktivitis, katarakto, roženični ulkus, roženični tujek, degeneracijo makule, diabetično retinopatijo, hipertenzivno retinopatijo, glavkom, refraktivno motnjo, očesno travmo, edem papile, hemianoptične in bi-temporalne izpade vidnega polja, akutni začetek paralize III., IV., VI: možganskega živca, akutni začetek škiljenja in leukokorijo.

Predavanja, praktične vaje, seminarji, samostojno delo

Objectives:

Student should understand basic ocular anatomy, principles of ophthalmologic examination, perform direct ophthalmoscopy, understand important causes of reduced vision, findings that are associated with serious ocular condition that required immediate ophthalmic care, importance for urgent referral for leukocoria, amblyopia and strabismus in a child.

Intended learning outcomes:**Knowledge and Understanding:**

Medical student should be able to provide appropriate primary eye care. Understanding of ophthalmic manifestations of systemic diseases is a necessary for the comprehensive education for modern physicians.

Transferable/Key Skills and other attributes:

All students should demonstrate competency in this area:

- measurement of visual acuity without and with correction,
- assessment of ocular motility
- determination of visual field with confrontation technique
- interpretation of pupillary size and reaction to the light
- penlight examination of the anterior segment, including upper lid eversion
- examination of the optic nerve and posterior pole with direkt ophthalmoscopy
- removal of superficial corneal or conjunctival foreign body

Student should be able to make following diagnosis: conjuncivitis, cataract, corneal ulcer, corneal foreign body, macular degeneration, diabetic retinopathy, hypertensive retinopathy, glaucoma, refractive error, ocular trauma, papilledema, hemianoptic and bi-temporal visual field defects, acute onset of cranial nerve palsies III., IV., VI., acute onset strabismus, leukocoria.

Didactic lectures, practical work with clinical demonstration, seminars, individual work

Načini ocenjevanja:Delež (v %) /
Weight (in %)**Assessment:**

Opravljen kolokvij iz praktičnih vaj je pogoj za pristop k izpitu Izpit je pisni in ustni Ustni del je sestavljen iz praktičnega dela - predstavitev bolnika in 5 izpitnih vprašanj	50 50	Passed test of practical work is a condition for taking the exam. The exam is written and oral. Oral part consists of practical part - presentation of a patient and 5 exam questions.
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