

UČNI NAČRT PREDMETA / COURSE SYLLABUS

Ime predmeta:	ORL z osnovami maksilofacialne kirurgije
Course title:	Otorhinolaryngology with the basics of maxillofacial surgery

Študijski program in stopnja Study programme and cycle	Študijska smer Study option	Letnik Year of study	Semester Semester
Splošna medicina, enovit magistrski študijski program		4	7.
General medicine, Uniform master's degree study program		4th	7th

Vrsta predmeta (obvezni ali izbirni) /
Course type (compulsory or elective)

obvezni

compulsory

Univerzitetna koda predmeta / University course code:

Predavanja Lectures	Seminar Seminar	Vaje Tutorial	Klinične vaje Clinical training	Druge oblike študija Other forms of study	Samost. delo Individual work	ECTS
60	40	AV LV RV	40		70	7

Nosilec predmeta / Course coordinator:

doc. dr. Bogdan Čizmarević
doc. dr. Janez Rebol (sonosilec)

Jeziki /Languages:

Predavanja / Lectures:

slovenski/slovene

Vaje / Tutorial:

slovenski/slovene

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

Prerequisites for enrolling in the course or for performing study obligations:

Vsebina (kratek pregled učnega načrta):

Uho (razvoj in kratek pregled anatomije, temelji fiziologije, slušnega in ravnotežnega aparata), bolezni uhlja (razvojne nepravilnosti, mehanične in termične poškodbe, vnetja, benigni in maligni tumorji), zunanega sluhovoda (razvojne nepravilnosti, tujki, vnetja, benigni in maligni tumorji), srednjega ušesa (razvojne nepravilnosti, poškodbe, vnetja in njihovi zapleti, otoskleroza, pareza in paraliza obraznega živca, benigni in maligni tumorji), notranjega ušesa (razvojne nepravilnosti, poškodbe, vnetja, Menierova bolezen in sindromi, starostna naglušnost, tumorji, gluhost, rehabilitacija naglušnih).

Nos in obnosne votline: pregled razvoja in anatomije, temelji fiziologije, bolezni nosu in obnosnih votlin (prirojene nepravilnosti, poškodbe, tujki, krvavitve nosu, vnetja in njihovi zapleti, motnje voja, benigni in maligni tumorji).

Content (syllabus outline):

Ear: (development and anatomy, principles of physiology of hearing and equilibrium), diseases of the auricle (congenital abnormalities, mechanical and thermal injuries, inflammation, benign and malignant tumours), external ear canal (congenital abnormalities, foreign bodies, injuries, inflammation, benign and malignant tumours), middle ear (congenital abnormalities, injuries, inflammation and complications, otosclerosis, paresis and paralysis of the facial nerve benign and malignant tumours), inner ear (congenital abnormalities, injuries, inflammation, Meniere's disease and syndromes, presbycusis, tumours, deafness, rehabilitation of deaf patients).

Nose and paranasal sinuses: development and anatomy, principles of physiology, diseases of the nose and paranasal sinuses (congenital abnormalities, injuries, foreign bodies, epistaxis, inflammation and

Žrelo in požiralnik: pregled razvoja in anatomije, temelji fiziologije, bolezni žrela in požiralnika (prirojene nepravilnosti, poškodbe, tujki, vnetja in njihovi zapleti, parestezije žrela, divertikli, benigni in maligni tumorji).

Grlo in sapnik: pregled razvoja in anatomije, temelji fiziologije, bolezni grla in sapnika (prirojene nepravilnosti, poškodbe in njihove posledice, tujki, vnetja, otekline grla, zamejene hiperplastične spremembe na laringalni sluznici, prekanceroze grla, tumorji grla in sapnika, pareze in paralize laringalnih živcev).

Vrat: anatomija, bolezni bezgavk (vnetja, maligni tumorji), prirojene ciste in fistule na vratu.

Slinavke: anatomija in fiziologija, bolezni slinavk (vnetja, sialolitiza, sialoadenoze, benigni in maligni tumorji).

Motnje glasu in govora: fonacijske motnje, artikulacijske motnje, motnje govornega ritma, subsimbolične motnje, simbolične motnje, govor duševno zaostalih, ezofagalni glas in govor.

Otorinolaringološke preiskave in posegi: otoskopija, sprednja rinoskopija, orofaringoskopija, indirektna in direktna laringoskopija, mikrolaringoskopija, zadajšnja rinoskopija, slušne preiskave, preiskave ravnotežnega aparata, rentgenske preiskave; **posegi:** izpiranje zunanjega sluhovoda, prepričevanje ušesne troblje, paracenteza, odstarnjevanje tujka iz zunanjega sluhovoda in iz nosu, ustavitev krvavitve iz nosu, izpiranje nosu, punkcija čeljustne votline, incizija peritonozilarnega abscesa, treheotomija in konikotomija, orotrahealna intubacija, nega traheostome.

Maksilofacialna kirurgija z osnovami stomatologije:

1. Odontogena vnetja
2. Poškodbe maksilofacialnega področja
3. Tumorji
4. Prirojene anomalije
5. Disgnatije
6. Bolezni čeljust. sklepa in obrazna bolečina
- 8
9. Čeljustna in zobna ortopedija (splošni pregled)
10. Zobne bolezni (splošni pregled)
11. Ustne bolezni in parodontologija
12. Fiksna protetika in snemna protetika (splošni pregled)
13. Implantologija

complications, smell disorders, benign and malignant tumours).

Pharynx and oesophagus: development and anatomy, principles of physiology, diseases of the pharynx and oesophagus (congenital abnormalities, injuries, foreign bodies, inflammation and complications, paresthesias, diverticles, benign and malignant tumours).

Larynx and trachea: development and anatomy, principles of physiology, diseases of the larynx and trachea (congenital abnormalities, injuries, foreign bodies, inflammation and complications, hyperplastic changes of laryngeal mucosa, precanceroses, benign and malignant tumours, paresis and paralysis of the vocal cords).

Neck: anatomy, lymph node diseases (inflammation, malignant tumours), congenital cysts and neck fistulas.

Salivary glands: anatomy and physiology, salivary gland diseases (inflammation, sialolithiasis, sialoadenosis, benign and malignant tumours).

Speech and voice disorders: fonation disorders, articulation disorders, speech rhythm disorders, subsymbolic disorders, symbolic disorders, speech of mentally impaired, oesophageal voice and speech.

Investigations and procedures in otorhinolaryngology: otoscopy, anterior rhinoscopy, oropharyngoscopy, indirect and direct laryngoscopy, microlaryngoscopy, posterior rhinoscopy, audiological investigations, vestibular investigations, roentgen investigations; procedures: cerumen removal, eustachian tube ventilation, myringotomy, foreign body removal from the ear canal and nose, treatment of epistaxis, maxillary sinus puncture, quinsy incision, tracheotomy, conicotomy, orotracheal intubation, tracheostomy care.

Maxillofacial surgery with basic clinical stomatology

1. Odontogenic inflammations
2. Maxillofacial region injuries
3. Tumors
4. Congenital anomalies
5. Disgnatia
6. Temporomandibular joint diseases and facial pain
- 8
9. Orthodontics - general examination
10. Dental diseases
11. Oral diseases and periodontology
12. Prostodontics - general examination
13. Implantology

Temeljni literatura in viri / Reading materials:

- Lee KJ. Essential Otolaryngology (12e).Mc Graw Hill 2017.
- Probst, Grevers,Iro. Basic otorhinolaryngology:a step-by step learning guide.Thime (2e) 2017.
- Bagatin Marijo, Mišo Virag i suradnici: Maksilofacijalna kirurgija - Zagreb : školska knjiga, 1991. - 255 str. - (Udžbenici Sveučilišta u Zagrebu) COBISS.SI-ID 3459849

Priporočeni učbeniki:

- Vinko Kambic, Otorinolaringologija, Ljubljana, Mladinska knjiga, 1984.
- Becker and al. Ear, Nose and Throat Diseases, Thieme Stuttgart 1993.
- Peterson L et al. Contemporary Oral and Maxillofacial Surgery (4th edition),St. Louis, Mosby, cop. 2003. - XVIII, 776 str. COBISS.SI-ID 2612756Open Access Atlas of Otolaryngology, Head & Neck Operative Surgery, ki je na linku :<http://www.entdev.uct.ac.za/guides/open-access-atlas-of-otolaryngology-head-neck-operative-surgery/> .

Cilji in kompetence:

Otorinolaringologija seznanja bodočega zdravnika s patofiziologijo, kliničnimi znamenji, diagnostiko, zdravljenjem in preprečevanjem bolezni ušes, nosu, žrela in grla. Študenta usposobi za oceno bolezni in določitev, kdaj bo kot zdravnik splošne medicine zdravil bolnika sam in kdaj ga bo poslal k specialistu. V sklopu teoretičnega, predvsem pa praktičnega dela, se študent nauči temeljnih otorinolaringoloških preiskav in enostavnejših oziroma nujnih posegov. Študent se seznanja s tumorji, prirojenimi anomaliji, čeljustno in zobno ortopedijo, netumorski bolezni žlez slinovk, disgnatijami... Študenta usposobi za oceno bolezni in določitev, kdaj bo kot zdravnik splošne medicine zdravil bolnika sam in kdaj ga bo poslal k specialistu. V sklopu teoretičnega in praktičnega dela, se študent nauči temeljnih stomatoloških in oralno-kirurških preiskav in enostavnejših oziroma nujnih posegov.

Objectives and competences:

Students get acquainted with patophysiology, clinical signs, investigations, treatment and prevention of ENT diseases. They should be able to asses the disease and decide when to treat the patient by themselves or send him to specialist. During theoretical and especially practical work student learns about fundamental ENT investigations and simple respectively urgent procedures. The student of medicine is introduced to tumors, congenital anomalies, orthodontics, non-tumor diseases of the saliva glands, disgnatia, Student is trained to estimate the disease and to decide whether he/she (as a general practitioner) will treat the patient by himself or direct him to the specialist. Within the theoretical and practical work the student is trained the basic dental and oral surgery examining and emergency interventions

Predvideni študijski rezultati:

Znanje in razumevanje:

- Poznavanje in zdravljenje pomembnejših otorinolaringoloških bolezni.
- prepoznavanje klinične slike
- uvajanje diagnostičnih preiskav
- diferencialna diagnostična presoja
- pravilno usmerjanje ustreznim stomatološkim vejam za nadaljnjo terapijo

Prenesljive/ključne spretnosti in drugi atributi:

Otorinolaringološka preiskava, osnovni posegi v ORL.

Intended learning outcomes:

Knowledge and understanding

- Knowledge and treatment of important ENT diseases.
- establishing the clinical status
- introducing diagnostic examinations
- differential diagnostic analysis
- right referral to adequate dentistry branches for further treatment

Transferable/Key Skills and other attributes:

ENT investigation, basic procedures in ENT

Metode poučevanja in učenja:

Vaje se izvajajo z učenjem preiskave na študentih in preiskovanjem bolnikov.

Seminarji- pod vodstvom mentorjev se predstavijo izbrane teme.

Predavanja s strani predavateljev.

Learning and teaching methods:

ENT investigation is learnt on student colleagues and later practiced on patients.

Seminar- special themes are presented under mentorship.

Lectures by lecturers.

Načini ocenjevanja:

Delež (v %) /

Share (in %)

Assessment methods:

Način (pisni izpit, ustno izpraševanje, naloge, projekt)

- Pisni izpit
- opravljen ustni izpit iz ORL in osnov maksilofacialne kirurgije

ŠTUDIJSKE OBVEZNOSTI ŠTUDENTOV:

Obvezna 50 % prisotnost na predavanjih je pogoj za pristop k izpitnemu roku.

POGOJI ZA PRISTOP K POSAMEZNEMU PREVERJANJU ZNANJA:

Opravljene vaje, 3 kolokviji in opravljen PREIZKUS OTORINOLARINGOLOŠKE PREISKAVE PRI IZVAJALCU VAJ IN 1 seminar so pogoj za pristop k pisnemu delu.

Pozitiven pisni izpit je pogoj za pristop k ustnemu izpitu.

Kriteriji za pisni izpit:

56% - 65% 6
66% - 75% 7
76% - 85% 8
86% - 95% 9
96 - 100% 10

50

50

Type (examination, oral, coursework, project):

- written exam
- oral examination in otorhinolaryngology and in the basics of maxillofacial surgery

ACADEMIC OBLIGATIONS OF STUDENTS:

Obligatory 50% attendance at lectures is a requirement for access to an examination date.

REQUIREMENTS FOR ACCESS TO INDIVIDUAL KNOWLEDGE CHECKING:

Completed practice, 3 partial exams and completed testing of otorhinolaryngological examination by the performer of practice and one seminar assignment are requirements for access to the written part.

A positive written exam is a requirement for access to an oral exam.

Criteria for the written exam:

56% - 65% 6
66% - 75% 7
76% - 85% 8
86% - 95% 9
96% - 100% 10

Reference nosilca / Course coordinator's references:**BOGDAN ČIZMAREVIĆ**

ČIZMAREVIĆ, Bogdan, LANIŠNIK, Boštjan, DINEVSKI, Dejan. Cervical lymph node metastasis of squamous cell carcinoma from unknown primary tumor. Collegium antropologicum, ISSN 0350-6134, 2012, vol. 36, suppl. 2, str. 27-32, ilustr. [http://www.collantropol.hr/_doc/Coll.Antropol.36\(2012\)Suppl.2:%2027%E2%80%9332.pdf](http://www.collantropol.hr/_doc/Coll.Antropol.36(2012)Suppl.2:%2027%E2%80%9332.pdf). [COBISS.SI-ID 4586303], [JCR, SNIP, WoS do 15. 3. 2013: št. citatov (TC): 0, čistih citatov (CI): 0, normirano št. čistih citatov (NC): 0]

LANIŠNIK, Boštjan, ČIZMAREVIĆ, Bogdan. Necrotizing fasciitis of the head and neck: 34 cases of a single institution experience. European archives of oto-rhino-laryngology, ISSN 0937-4477, Mar. 2010, vol. 267, no. 3, str. 415-421, doi: 10.1007/s00405-009-1007-7. [COBISS.SI-ID 3394111], [JCR, SNIP, WoS do 14. 2. 2013: št. citatov (TC): 3, čistih citatov (CI): 3, normirano št. čistih citatov (NC): 3, Scopus do 5. 11. 2013: št. citatov (TC): 13, čistih citatov (CI): 13, normirano št. čistih citatov (NC): 11]

KRAVOS, Alenka, ŽUPEVC, Avgust, ČIZMAREVIĆ, Bogdan, HOČEVAR-BOLTEŽAR, Irena. The role of allergy in the etiology of Reinke's edema on vocal folds. Wiener klinische Wochenschrift. Supplementum, ISSN 0300-5178, 2010, vol. 122, suppl. 2, str. 44-48, doi: 10.1007/s00508-010-1349-6. [COBISS.SI-ID 3668287], [JCR, WoS do 17. 1. 2013: št. citatov (TC): 1, čistih citatov (CI): 1, normirano št. čistih citatov (NC): 0, Scopus do 1. 8. 2012: št. citatov (TC): 2, čistih citatov (CI): 2, normirano št. čistih citatov (NC): 1]

ČIZMAREVIČ, Bogdan, LANIŠNIK, Boštjan, DEBEVC, David, LEVART, Primož. Accurate histopathological determination of the status of the neck with the serial cuts and immunohistochemical staining of the sentinel node. V: 5th International symposium on sentinel node biopsy in head and neck cancer, Amsterdam, 2012 : [24 & 25 May 2012]. [Amsterdam: s. n., 2012], str. 34. [COBISS.SI-ID 4299583]

ČIZMAREVIČ, Bogdan, PUKLAVEC, Ludvik, LANIŠNIK, Boštjan, KAVALAR, Rajko, LEVART, Primož. Sentinel lymph node detection in the surgical treatment of oral cavity and oropharyngeal carcinomas. V: PRGOMET, Drago (ur.), et al. Minimally invasive and endoscopic head and neck surgery : manual, (University textbook, Manualia Universitatis studiorum Zagrabienensis), (Medicinska biblioteka). Zagreb: Naklada Ljevak, cop. 2010, str. 57-62. [COBISS.SI-ID 3809343]

JANEZ REBOL:

REBOL, Janez, NAHTIGAL, Maja. Argon laser stapedotomy = Stapedotomija z argonskim laserjem. Acta medico-biotechnica, ISSN 1855-5640, 2011, vol. 4, [no.] 2, str. 18-23, ilustr. http://www.actamedbio.mf.uni-mb.si/pdf/02%207id_amb_%2050_11.pdf. [COBISS.SI-ID 4161087]

REBOL, Janez, MILOJKOVIČ, Vojin. Označitev proksimalnega krna obraznega živca za odloženo rekonstrukcijo živca po odstranitvi vestibularnega švanoma = Marking of the proximal facial nerve stump for delayed repair after vestibular schwannoma removal. Acta medico-biotechnica, ISSN 1855-5640, 2010, vol. 3, no. 1, str. 56-60. [COBISS.SI-ID 512084536]

REBOL, Janez, NAHTIGAL, Maja. Conductive hearing loss - otosclerosis, genetics. V: KOUNTAKIS, Stilianos E. (ur.). Encyclopedia of otolaryngology, head and neck surgery. Berlin; Heidelberg: Springer, cop. 2013. http://link.springer.com/content/pdf/10.1007%2F978-3-642-23499-6_820.pdf. [COBISS.SI-ID 4746815]

REBOL, Janez. Otosclerosis. V: KOUNTAKIS, Stilianos E. (ur.). Encyclopedia of otolaryngology, head and neck surgery. Berlin; Heidelberg: Springer, cop. 2013, ilustr. http://link.springer.com/content/pdf/10.1007%2F978-3-642-23499-6_702.pdf. [COBISS.SI-ID 4746559]

REBOL, Janez. Atlas otoskopije. Maribor: Fakulteta za zdravstvene vede, 2011. 88 str., ilustr. ISBN 978-961-6254-46-5. [COBISS.SI-ID 67048961]