

UČNI NAČRT PREDMETA / SUBJECT SPECIFICATION

Predmet:	Interna medicina s propedevtiko
Subject Title:	Internal Medicine and Propedeutics

Študijski program in stopnja Study programme and cycle	Študijska smer Study option	Letnik Year of study	Semester Semester
Dentalna medicina /Dental Medicine 2. stopnja/2nd cycle		3	6.
Vrsta predmeta / Course type	Obvezni/ Compulsory		

Univerzitetna koda predmeta / University subject code:

Predavanja Lectures	Seminar Seminar	Vaje Tutorial	Klinične vaje Clinical training	Druge oblike študija Other forms of study	Samost. delo Individual work		ECTS
30	30		45		75		6

Nosilec predmeta / Lecturer:

red. prof. dr. Robert Ekart (nosilec)
 red. prof. dr. Ivan Krajnc (sonosilec)

Jeziki /

Predavanja / Lecture: slovenščina/slovene

Languages:

Vaje / Tutorial: slovenščina/slovene

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

Prerequisites:

Vsebina:

V sklopu PROPEDEVTIKE mora študent obvladati:

- Osnovne metode klinične preiskave: inspekcija, palpacija, perkusija, avskultacija.
- Anamnezo: družinska, dosedanje bolezni, sedanja bolezen, socialna anamneza.
- Seznani naj se z diagnostičnimi metodami in razume njihov pomen: arterijska punkcija, UZ, endoskopija, ledvična ali jetrna biopsija, plevralna punkcija, pregled urinskega sedimenta, pregled krvne slike, scintigrafske preiskave, abdominalna punkcija, venepunkcija, RTG pregled, CT pregled, MRI, alergijski testi, bronhoskopija, katetrizacija srca, EKG, obremenilni testi za srce, Holter monitoring, punkcija sklepov, pljučni funkcijski testi, dializa.
- Dijete.
- Priporočila bolnikom o življenjskem stilu.
- Komuniciranje.

V sklopu INTERNE MEDICINE mora študent spoznati za dentalno medicino pomembne notranje bolezni:

- Bolezni srca in ožilja: angina pektoris, atrialna fibrilacija, endokarditis, srčna odpoved, miokardni infarkt, ekstrasistole, kardiogeni,

Contents (Syllabus outline):

Within the field of PROPEDEUTICS the student must be fully acquainted with

- Basic methods of clinical examination: inspection, palpation, percussion, auscultation
- History taking: family history, history of past and present disease, social history.
- Diagnostic methods and understanding of their role: arterial puncture, ultrasound, endoscopy, renal or liver biopsy, pleural puncture, examination of urine sediment, check-up of blood count, scintigraphic tests, abdominal puncture, venipuncture, x-ray, CT, MRI, allergy tests, bronchoscopy, cardiac catheterization, ECG, exercise tests, Holter monitoring, joint puncture, pulmonary function tests, dialysis.
- Dietary measures.
- Recommendations to patients regarding life style.
- Communication.

Within the field of INTERNAL MEDICINE the student must be fully acquainted with important internal diseases for dental medicine:

- Cardiac and vascular diseases: angina pectoris, atrial fibrillation, endocarditis, heart failure, myocardial infarction, extrasystoles, cardiogenic, hypovolemic,

- hipovolemični, septični šok, globoka venska tromboza, hipertenzija, ateroskleroz.
- Pljučne bolezni: astma, akutni bronhitis, alergične pljučne bolezni, kronični bronhitis, pljučni karcinom, pljučni infarkt, plevritis, pljučnica, pnevmotorax, pljučni embolizmi, respiratorna insuficienca, kronično pljučno srce, tuberkolozni plevritis,
 - Gastrointestinalne bolezni: karcinom požiralnika, karcinom želodca, krvavitev iz gastrointestinalnega trakta, gastritis, gastroenterokolitis, Mallory-Weiss sindrom, varice požiralnika, peptični ulkus, vnetne bolezni črevesja, zaprtje,
 - Bolezni jeter, žolčnika, trebušne slinavke: alkoholni hepatitis, žolčni kamni, kronični hepatitis, ciroza jeter, infekcijski hepatitis,
 - Bolezni ledvic: akutna ledvična odpoved, kronična ledvična odpoved, ledvice in hipertenzija, nefrotski sindrom, vnetja v predelu sečil, sečni kamni, nadomestno zdravljenje, zdravila in ledvica.
 - Hematološke bolezni: laboratorijske preiskave v hematologiji, anemije, fiziološke spremembe levkocitov, akutne levkemije, mielodisplastični sindromi, kronične mieloproliferativne bolezni, maligni limfomi, fiziologija in patofiziologija hemostaze, trombocitopenije, motnje koagulacije, tromboza.
 - Avtoimune in revmatološke bolezni: imunski sistem, artritis, artroza, Bechterewa bolezen, Behcetova bolezen, temporalni arteritis, revmatoidni artritis, seronegativni spondilartritisi, sistemske vezivnotkivne bolezni, vaskulitisi, nesteroidni antirevmatiki in analgetiki, kortikosteroidi, infekcijski artritisi,
 - Endokrinološke bolezni: Cushingov sindrom, golša in druge bolezni ščitnice, sladkorna bolezen, hipoglikemija, metabolne bolezni kosti, denzitometrija, bolezni obščitnic, osteoporiza, osteomalacija, Pagetova bolezen.
 - Prehrano: debelost, anoreksija nervosa, parenteralna prehrana, vitamini.
 - Anafilaktično reakcijo.
 - Zastrupitve.
 - Oživljjanje.
 - Šok.

septic shock, deep venous thrombosis, hypertension, atherosclerosis.

- Pulmonary diseases: asthma, acute bronchitis, allergic pulmonary diseases, chronic bronchitis, pulmonary carcinoma, pulmonary infarction, pleuritis, pneumonia, pneumothorax, pulmonary embolism, respiratory failure, chronic pulmonary heart, tuberculous pleuritis.

Gastrointestinal diseases: achalasia, gastric carcinoma, gastrointestinal hemorrhage, gastritis, gastroenteritis, Mallory-Weiss syndrome, esophageal varices, peptic ulcer, inflammatory bowel disease, obstipation.

- Liver, gallbladder and pancreatic diseases: alcoholic hepatitis, gallstones, chronic hepatitis, liver cirrhosis, viral hepatitis.

- Kidney diseases: acute renal failure, chronic renal failure, renal hypertension, nephrotic syndrome, inflammatory kidney diseases, urolithiasis, replacement therapy, drugs and the kidney.

- Hematologic diseases: laboratory tests in hematology, anemias, physiologic changes of leukocytes, acute leukemia, myelodysplastic syndromes, chronic myeloproliferative diseases, malignant lymphomas, physiology and pathophysiology of hemostasis, thrombocytopenia, coagulopathy, thrombosis.

- Autoimmunity and rheumatic diseases: immune system, arthritis, arthrosis, Bechterew and Behcet's diseases, temporal arteritis, rheumatoid arthritis, seronegative spondylarthritides, systemic connective tissue diseases, vasculitides, nonsteroid antirheumatics and analgesics, corticosteroids, infectious arthritides.

- Diseases of endocrine system: Cushing syndrome, goiter and other thyroid diseases, diabetes mellitus, hypoglycemia, metabolic bone diseases, densitometry, parathyroid gland diseases, osteoporosis, osteomalacia, Paget's disease.

- Dietary measures: obesity, anorexia nervosa, parenteral nutrition, vitamins.

- Anaphylaxis.

- Poisoning.

- Resuscitation.

- Shock.

Temeljni literatura in viri / Textbooks:

1. A. Kocijančič: Klinična preiskava. Ljubljana: Littera picta, 2000.
2. Interna medicina / glavni uredniki Mitja Košnik, Dušan Štajer, Borut Jug, Tomaž Kocjan, Mirta Koželj; področni uredniki Aleš Blinc ... [et al.] ; [vsebinsko kazalo Žiga Košnik ... [et al.] ; risbe Dušan Štajer]. – 6. izd. – Ljubljana : Medicinska fakulteta : Slovensko zdravniško društvo : Buča, 2022
3. Loscalzo et al (eds): Harrison's Principles of Internal Medicine, 21th edition. New York: McGraw-Hill, 2022.

Cilji:

Cilj tega predmeta je pripraviti študente dentalne medicine na delo z bolniki, ki imajo internistične diagnoze.

Objectives:

This course objective is to prepare students of dental medicine for independent work with internal medicine patients.

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

Študent bo osvojil večine jemanja anamneze in izvedbe kliničnega pregleda preden bo pristopil k bolniku.

Obvladal bo odnos z bolnikom in svojci, znaš bo vzeti anamnezo, pregledati bolnika ter ovrednotiti diagnostične metode.

Pri pripravljanju seminarjev bo študent osvojil večine citiranja po Vancouverskem stilu, razvijal večine javnega nastopanja in argumentiranja ter kritičnega vrednotenja literature.

Znanja in spretnosti so podrobnejše zapisane v Katalogu znanj in spretnosti.

Metode poučevanja in učenja:**Predavanja. (50% obvezna prisotnost)****Seminarji: (80% prisotnost)**

Seminarji temeljijo na predstavitvah študentov. Vsak študent pripravi seminar; bodisi kot predavanje, lahko predstavi teorijo na podlagi realnega ali virtualnega primera bolnika ali seminar zapiše v obliki članka in ga tudi predstavi.

Klinične vaje: vaje in simulacije (80% obvezna prisotnost) Študentje vadijo jemanje anamneze s pomočjo simulacij, vadijo klinične preglede drug na drugem in šele nato na bolnikih. V proces poučevanja se aktivno vključujejo tutorji študenti pod nadzorom habilitiranih visokošolskih (so)delavcev.

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

Student will master skills of anamnesis taking and of implementing clinical examination before approaching the patient.

Student will master relations with the patient and patient's relatives and will know how to take anamnesis, examine the patient and evaluate diagnostical methods. Student will master, in preparing seminars, skills of Vancouver citation style and will develop skills of public speaking and argumentation and critical literature evaluation.

Knowledge and skills are described in more detail in the Catalog of Knowledge and Skills.

Learning and teaching methods:**Lectures (50% obligatory attendance)****Seminars: (80% attendance)**

Seminars are based on student presentations. Each student prepares a seminar; either as a lecture or as a theory on the basis of a real or virtual patient case, or as a seminar written in the form of an article which student also presents.

Clinical training: Practice and simulations: (80% obligatory attendance), students practice anamnesis taking with simulations, practice clinical examinations on each other and only then on patients. Tutor students actively participate in the teaching process under the supervision of habilitated higher education (co)-workers.

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

Opravljeni seminarji, klinične vaje in sprotna preverjanja znanja so pogoj za pristop k pisnemu izpitu).

- Pisni izpit
- Ustni izpit (pogoj za pristop: opravljen pisni izpit).

**POGOJI ZA PRISTOP K POSAMEZNEMU
PREVERJANJU ZNANJA**

- izpit je pisni in ustni

Completed seminars, clinical practice and regular knowledge checking represent a requirement for taking written exam.

- Final written examination
- Oral examination (eligible after passing final written examination).

**REQUIREMENTS FOR ACCESS TO INDIVIDUAL
KNOWLEDGE CHECKING**
-the exam is written and oral

<ul style="list-style-type: none"> - pisni izpit: do 50 vprašanj iz vseh obravnavanih tematskih sklopov - do 5 možnih odgovorov - različno število pravilnih odgovorov - možna tudi vprašanja esejskega tipa, štejejo po 2 točki - štejejo le pravilni odgovori v celoti - pozitivna ocena je od 56 % naprej in omogoča pristop k ustnemu izpitu - ustni izpit: izvajajo ga vsi habilitirani učitelji znotraj predmeta, ki jih določi predstojnik katedre - če študent ne opravi ustnega izpita, ponavlja izpit v celoti (pisni in ustni del) - uspešno opravljen pisni in ustni izpit je pogoj za vpis v 4. letnik • k izpitu lahko pristopi študent, ki je opravil vse obveznosti, ima oddan zapis anamneze in statusa ter ima opravljen in pozitivno ocenjen seminar in klinične vaje • ustno izpraševanje (pogoj za pristop: opravljen pisni izpit) 		<ul style="list-style-type: none"> -the written exam: up to 50 questions from all thematic sets dealt with -up to 5 possible answers -various numbers of correct answers -possible also essay-type questions, valued with 2 points each -only correct answers on the whole are taken into account -a mark is positive from 56% onwards and enables access to the oral exam -the oral exam: is implemented by all habilitated professors within the subject who are appointed by the Head of the Department -in case a student fails the oral exam, he/she takes the entire exam (written and oral part) again -successfully completed written and oral exam are the enrolment requirements for the 4th academic year -the exam can be taken by a student who has completed all obligations, who has handed in a record of anamnesis and status and has a completed and positively marked coursework and clinical practice <ul style="list-style-type: none"> • oral questioning (the requirement for access: passed written exam)
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Reference nosilca / Lecturer's references:**ROBERT EKART:**

EKART, Robert, BEVC, Sebastjan, VODOŠEK HOJS, Nina, HOJS, Radovan. Derived subendocardial viability ratio and cardiovascular events in patients with chronic kidney disease. *Cardiorenal medicine*. 2019, vol. 9, no. 1, str. 41-50, ilustr. ISSN 1664-5502. <https://www.karger.com/Article/Abstract/493512>, <https://doi.org/10.1159/000493512>, DOI: [10.1159/000493512](https://doi.org/10.1159/000493512). [COBISS.SI-ID [6622783](#)], [[JCR](#), [SNIP](#), [WoS](#)] do 14. 12. 2022: št. citatov (TC): 8, čistih citatov (CI): 7, čistih citatov na avtorja (CIAu): 1,75, [[Scopus](#)] do 3. 2. 2023: št. citatov (TC): 9, čistih citatov (CI): 9, čistih citatov na avtorja (CIAu): 2,25]

DEL VECCHIO, Lucia, EKART, Robert, FERRO, Charles J., MALYSZKO, Jolanta, MARK, Patrick B., ORTIZ, Alberto, SARAFIDIS, Pantelis, VALDIVIELSO, Jose M., MALLAMACI, Francesca. Intravenous iron therapy and the cardiovascular system: risks and benefits. *Clinical kidney journal*. 2021, vol. 14, no. 4, str. 1067-1076, ilustr. ISSN 2048-8513. <https://doi.org/10.1093/ckj/sfaa212>, <https://academic.oup.com/ckj/advance-article/doi/10.1093/ckj/sfaa212/6006724>, DOI: [10.1093/ckj/sfaa212](https://doi.org/10.1093/ckj/sfaa212). [COBISS.SI-ID [51131651](#)], [[JCR](#), [SNIP](#), [WoS](#)] do 16. 1. 2023: št. citatov (TC): 5, čistih citatov (CI): 5, čistih citatov na avtorja (CIAu): 0,56, [[Scopus](#)] do 13. 2. 2023: št. citatov (TC): 6, čistih citatov (CI): 6, čistih citatov na avtorja (CIAu): 0,67]

EKART, Robert, VARDA, Luka, VODOŠEK HOJS, Nina, DVORŠAK, Benjamin, PIKO, Nejc, BEVC, Sebastjan, HOJS, Radovan. Early detection of arteriovenous fistula stenosis in hemodialysis patients through routine measurements of dialysis dose (Kt/V). *Blood purification*. 2022, vol. 51, no. 1, str. 15-22, ilustr. ISSN 1421-9735. <https://www.karger.com/Article/Abstract/514939>, DOI: [10.1159/000514939](https://doi.org/10.1159/000514939). [COBISS.SI-ID [69932291](#)], [[JCR](#), [SNIP](#), [WoS](#)] do 13. 1. 2022: št. citatov (TC): 1, čistih citatov (CI): 1, čistih citatov na avtorja (CIAu): 0,14, [[Scopus](#)] do 3. 12. 2021: št. citatov (TC): 1, čistih citatov (CI): 1, čistih citatov na avtorja (CIAu): 0,14

ZOCCALI, Carmine, TORINO, Claudia, MALLAMACI, Francesca, SARAFIDIS, Pantelis, PAPAGIANNI, Aikaterini, EKART, Robert, HOJS, Radovan, KLINGER, Marian, LETACHOWICZ, Krzysztof, FLISER, Danilo, et al. A randomized multicenter trial on a lung ultrasound-guided treatment strategy in patients on chronic hemodialysis with high cardiovascular risk. *Kidney international*. [Online ed.]. Dec. 2021, vol. 100, issue 6, str. 1325-1333, ilustr. ISSN 1523-

1755. <https://doi.org/10.1016/j.kint.2021.07.024>, <https://www.sciencedirect.com/science/article/abs/pii/S0085253821007481?via%3Dhub>, DOI: [10.1016/j.kint.2021.07.024](https://doi.org/10.1016/j.kint.2021.07.024). [COBISS.SI-ID [89215491](#)], [[JCR](#), [SNIP](#), [WoS](#)] do 24. 2. 2023: št. citatov (TC): 18, čistih citatov (CI): 18, čistih citatov na avtorja (CIAu): 1,12, [Scopus](#) do 28. 2. 2023: št. citatov (TC): 17, čistih citatov (CI): 17, čistih citatov na avtorja (CIAu): 1,06]

HEMMELDER, Marc H., NOORDZIJ, Marlies, VART, Priya, HILBRANDS, Luuk B., JAGER, Kitty, ABRAHAMS, Alferso C, ARROYO, David, BATTAGLIA, Yuri, EKART, Robert, MALLAMACI, Francesca, et al., BUTUROVIĆ-PONIKVAR, Jadranka (927), MARN-PERNAT, Andreja (927), KOVAC, Damjan (927), ARNOL, Miha (927), et al. Recovery of dialysis patients with COVID-19 : health outcomes 3 months after diagnosis in ERACODA. *Nephrology dialysis transplantation*. [Online ed.]. 2022, [v tisku][36 str.], ilustr. ISSN 1460-2385. <https://academic.oup.com/ndt/advance-article/doi/10.1093/ndt/gfac008/6507563>, <https://doi.org/10.1093/ndt/gfac008>, DOI: [10.1093/ndt/gfac008/6507563](https://doi.org/10.1093/ndt/gfac008/6507563). [COBISS.SI-ID [96405251](#)], [[JCR](#), [SNIP](#)]

EKART, Robert, LUČIČ ŠRAJER, Lucijan, MARKO, Katharina, PIKO, Nejc, PETRESKI, Tadej, VODOŠEK HOJS, Nina, HOJS, Radovan, JAKOPIN, Eva. Association between lung comets and subendocardial viability ratio in peritoneal dialysis patients. *Clinical nephrology*. str. s80-s84. ISSN 0301-0430. <https://www.dustri.com/nc/article-response-page.html?artId=188862&doi=10.5414%2FCNP96S14>, DOI: [10.5414/CNP96S14](https://doi.org/10.5414/CNP96S14). [COBISS.SI-ID [81808899](#)], [[JCR](#), [SNIP](#)]

IVAN KRAJNC:

1. KRAJNC, Mitja, PEČOVNIK-BALON, Breda, KRAJNC, Ivan. Non-traditional risk factors for coronary calcification and its progression in patients with type 2 diabetes : the impact of postprandial glycemia and fetuin-A. *JIMR* on-line. 2019, vol. 47, iss. 2, str. 846-858, ilustr. ISSN 1473-2300. <https://journals.sagepub.com/doi/pdf/10.1177/0300060518814080>, DOI: [10.1177/0300060518814080](https://doi.org/10.1177/0300060518814080). [COBISS.SI-ID [6578239](#)]
2. ŽITEK MAKOTER, Taja, BJELIĆ, Dragana, KOTNIK, Petra, GOLLE, Andrej, JURGEC, Staša, POTOČNIK, Uroš, KNEZ, Željko, FINŠGAR, Matjaž, KRAJNC, Ivan, KRAJNC, Igor, KNEZ MAREVCI, Maša. Natural hemp-ginger extract and its biological and therapeutic efficacy. *Molecules*. 2022, vol. 27, iss. 22, 16 str., ilustr. ISSN 1420-3049. DOI: [10.3390/molecules27227694](https://doi.org/10.3390/molecules27227694). [COBISS.SI-ID [129523715](#)]
4. KRAJNC, Ivan. Pogled v zgodovino ustanovitve Medicinske fakultete Univerze v Mariboru leta 2003 in pogled na njen nadaljnji strokovni razvoj do junija 2020. V: KRAJNC, Ivan (ur.), PIVEC, Gregor (ur.). Medicinska fakulteta Univerze v Mariboru : monografija o ustanovitvi. 1. izd. Maribor: Univerzitetna založba: = University Press, 2022. Str. 105-144, ilustr. ISBN 978-961-286-682-2. [COBISS.SI-ID [145113603](#)]
5. KRAJNC, Ivan, TAKAČ, Iztok, MIČETIĆ-TURK, Dušanka, BORKO, Elko. Strokovni temelji za nastanek Medicinske fakultete Univerze v Mariboru in statutarne spremembe učne bolnišnice Maribor v Univerzitetni klinični center Maribor. V: KRAJNC, Ivan (ur.), PIVEC, Gregor (ur.). Medicinska fakulteta Univerze v Mariboru : monografija o ustanovitvi. 1. izd. Maribor: Univerzitetna založba: = University Press, 2022. Str. 7-102, ilustr. ISBN 978-961-286-682-2. [COBISS.SI-ID [145110275](#)]
6. MAVER, Uroš, KRAJNC, Ivan. Prihodnji izzivi Medicinske fakultete - pogled skozi prizmo raziskovalnega dela in projektov. V: KRAJNC, Ivan (ur.), PIVEC, Gregor (ur.). Medicinska fakulteta Univerze v Mariboru : monografija o ustanovitvi. 1. izd. Maribor: Univerzitetna založba: = University Press, 2022. Str. 331-339, ilustr. ISBN 978-961-286-682-2. [COBISS.SI-ID [145125379](#)]