



UČNI NAČRT PREDMETA / SUBJECT SPECIFICATION

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

Študijski program Study program	Študijska smer Study field	Letnik Year	Semester Semester
Splošna medicina - EMŠP General medicine	Splošna medicina General medicine	3.	5,6

Univerzitetna koda predmeta / University subject code:

Predavanja Lectures	Seminarji Seminars	Sem. vaje Tutorials	Klin. vaje Clin. work	Teren. vaje Field. work	Samost. Delo Individ. work	ECTS
60	155		70		315	20

Nosilec predmeta / Lecturer:

Red. prof. dr. Ivan Krajnc
Red. prof. dr. Breda Pečovnik Balon (sonosilka)
Red. prof. dr. Radovan Hojs (sonosilec)

Jeziki /
Languages:

Predavanja /
Lecture:
Vaje / Tutorial:

Slovenski / Slovene
Slovenski / 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.
- Seznaniti 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

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 and peripheral blood, scintigraphy, abdominal puncture, venipuncture, x-ray, CT, MRI, allergy tests, bronchoscopy, cardiac

funkcijski testi, dializa.

- Obvlada naj terapevtske veščine: dajanje insulina, katetrizacija sečnega mehurja, masaža srca, nastavljanje i.v. katetrov, umetno dihanje, vstavljanje nazogastrične sonde, subkutane in intramuskularne injekcije.
- Dijete.
- Priporočila bolnikom o življenjskem stilu.
- Komuniciranje.

V sklopu INTERNE MEDICINE mora študent obvladati

- Bolezni srca in ožilja: angina pectoris, bolezni aorte, atrijska fibrilacija, atrijska undulacija, AV prevodne motnje, aortna anevrizma, kardiomiopatija, endokarditis, srčna odpoved, miokardni infarkt, mitralna insuficienca, mitralna stenoza, miokarditis, perikarditis, sinusna tahikardija, ekstrasistole, supraventrikularna tahikardija, ventrikularna fibrilacija, kardiogeni, hipovolemični, septični šok, globoka venska tromboza, hipertenzija, ateroskleroza.
- Pljučne bolezni: astma, akutni bronhitis, alergične pljučne bolezni, bronhiektazije, kronični bronhitis, empiem, intersticijske pljučne bolezni, pljučni absces, pljučni karcinom, emfizem pljuč, pljučna fibroza, pljučni infarkt, plevritis, pljučnica, pnevmotorax, pljučni embolizmi, respiratorna insuficienca, kronično pljučno srce, bolezni plevre, tuberkulozni plevritis, transudati, tumorji plevre, hemotoraks, bolezni mediastinuma.
- Gastrointestinalne bolezni: ahalazija, akutni abdomen, akutni apendicitis, karcinoid, karcinom požiralnika, karcinom želodca, divertikuloza črevesja, krvavitev iz gastrointestinalnega trakta, gastritis, gastroenterokolitis, hemeroidi, Mallory-Weiss sindrom, varice požiralnika, peptični ulkus, peritonitis, polipi kolona, vnetne bolezni črevesja, zaprtje, kolorektalni karcinom, gastrointestinalni hormoni.
- Bolezni jeter, žolčnika, trebušne slinavke: alkoholni hepatitis, Budd-

catheterization, ECG, exercise tests, Holter monitoring, joint puncture, pulmonary function tests, dialysis.

- Be able to safely perform therapeutic actions: insulin application, catheterization of urinary bladder, cardiac massage, application of IV catheters, artificial respiration, nasogastric tube insertion, subcutaneous and intramuscular injections.
- Dietary measures.
- Recommendations regarding life style.
- Communication.

Within the field of INTERNAL MEDICINE the student must be fully acquainted with

- Cardiac and vascular diseases: angina pectoris, aortic diseases, atrial fibrillation, atrial flutter, AV conduction disturbances, aortic aneurysm, cardiomyopathy, endocarditis, heart failure, myocardial infarction, mitral stenosis and regurgitation, myocarditis, pericarditis, sinus tachycardia, extrasystoles, supraventricular tachycardia, ventricular fibrillation, cardiogenic, hypovolemic, septic shock, deep venous thrombosis, hypertension, atherosclerosis.
- Pulmonary diseases: asthma, acute bronchitis, allergic pulmonary diseases, bronchiectasis, chronic bronchitis, empyema, interstitial pulmonary diseases, pulmonary abscess, pulmonary carcinoma, pulmonary emphysema, pulmonary fibrosis, pulmonary infarction, pleuritis, pneumonia, pneumothorax, pulmonary embolism, respiratory failure, chronic pulmonary heart, pleural diseases, tuberculosis and pleuritis, transudates, tumors of pleura, hemothorax, mediastinal diseases.
- Gastrointestinal diseases: achalasia, acute abdomen,

Chiari sindrom, malignom žolčnika in trebušne slinavke, žolčni kamni, kronični hepatitis, ciroza jeter, infekcijski hepatitis, vnetje trebušne slinavke, portalna hipertenzija, primarni karcinom jeter.

- Bolezni ledvic: motnje v kislinsko baznem ravnotežju, motnje v presnovi kalija, akutni glomerulonefritis, akutna ledvična odpoved, karcinom mehurja, kronični glomerulonefritis, kronična ledvična odpoved, Goodpasture sindrom, ledvice in hipertenzija, intersticijski nefritis, nefrotski sindrom, cistične in prirojene bolezni ledvic, vnetja v predelu sečil, sečni kamni, nadomestno zdravljenje, nosečnost in ledvica, zdravila in ledvica.
- Hematološke bolezni: laboratorijske preiskave v hematologiji, bolezni matične krvne celice, transplantacija kostnega mozga, anemije, fiziološke spremembe levkocitov, akutne levkemije, mielodisplastični sindromi, kronične mieloproliferativne bolezni, maligni limfomi, bolezni vranice, fiziologija in patofiziologija hemostaze, trombocitopenije, motnje koagulacije, tromboza.
- Autoimune in revmatološke bolezni: imunski sistem, artritis, artroza, Bechterewa bolezen, Behcetova bolezen, temporalni arteritis, giht, revmatoidni artritis, seronegativni spondilartritis, sistemske vezivnotkivne bolezni, vaskulitisi, amiloidoza, metabolni revmatizem, nesteroidni antirevmatiki in analgetiki, kortikosteroidi, infekcijski artritis, degenerativne bolezni sklepov in hrbtenice, sinovijska tekočina.
- Endokrinološke bolezni: bolezni hipotalamusa in hipofize, insuficienca skorje nadledvične žleze, feokromocitom, Cushingov sindrom, primarni hipoaldosteronizem, golša in druge bolezni ščitnice, sladkorna bolezen, hipoglikemija, gastrointestinalni hormoni, hiperlipoproteinemija, porfirija, multipli endokrini sindrom, metabolne bolezni kosti, densitometrija, bolezni obščitnic, osteoporoza, osteomalacija, Pagetova bolezen.
- Prehrano: debelost, anoreksija

acute appendicitis, carcinoid tumors, esophageal carcinoma, gastric carcinoma, intestinal diverticula, gastrointestinal hemorrhage, gastritis, gastroenteritis, hemorrhoids, Mallory-Weiss syndrome, esophageal varices, peptic ulcer, peritonitis, polyps in colon, inflammatory bowel disease, obstipation, colorectal carcinoma, gastrointestinal hormones.

- Liver, gallbladder and pancreatic diseases: alcoholic hepatitis, Budd-Chiari syndrome, gallbladder and pancreatic malignancies, cholelithiasis, chronic hepatitis, liver cirrhosis, viral hepatitis, pancreatitis, portal hypertension, liver carcinoma.
- Kidney diseases: acid-base balance, disturbances in potassium metabolism, acute glomerulonephritis, acute renal failure, urinary bladder carcinoma, chronic glomerulonephritis, chronic renal failure, Goodpasture syndrome, renal hypertension, interstitial nephritis, nephrotic syndrome, cystic and hereditary kidney diseases, inflammatory kidney diseases, urolithiasis, replacement therapy, pregnancy and the kidney, drugs and the kidney.
- Hematologic diseases: laboratory tests in hematology, stem cell disorders, transplantation of bone marrow, anemia, physiologic changes of leukocytes, acute leukemia, myelodysplastic syndrome, chronic myelodysplastic disorders, lymphoma, splenic diseases, physiology and pathophysiology of hemostasis, thrombocytopenia, coagulopathy, thrombosis.
- Autoimmunity and rheumatic diseases: immune system, arthritis, arthrosis, Bechterew and Behcet's disease, temporal

nervoza, parenteralna prehrana, vitamini. • Anafilaktično reakcijo. • Zastrupitve. • Oživljanje. • Šok.	arteritis, gout, reumatoid arthritis, seronegative spondylarthritis, vasculitis, amyloidosis, metabolic rheumatism, nonsteroid antireumatics and analgesics, corticosteroids, inflammatory arthritis, degenerative joints and vertebral diseases, synovial fluid. • Diseases of endocrine system: hypothalamic and pituitary disorders, adrenal gland cortex dysfunction, pheochromocytoma, Cushing syndrome, primary hypoaldosteronism, goiter, other thyroid diseases, diabetes mellitus, hypoglycemia, gastrointestinal hormones, hyperlipoproteinemia, porphyria, multiple endocrine syndrome, metabolic bone disease, densitometry, parathyroid gland diseases, osteoporosis, osteomalacia, Paget's disease. • Dietary measures: obesity, anorexia nervosa, parenteral nutrition, vitamins. • Anaphylaxis. • Poisoning. • Resuscitation. • Shock.
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Temeljni literatura in viri / Textbooks:

1. A. Kocijančič: *Klinična preiskava*. Ljubljana: Littera picta, 2000.
2. J. Thomas, T. Monaghan (eds): *Oxford Handbook of Clinical Examination and Practical Skills*. Oxford: Oxford University Press, 2007.
3. M. Košnik et al (eds): *Interna medicina*. Ljubljana: Littera picta, 2011.
4. D. Longo et al (eds): *Harrison's Principles of Internal Medicine, 18th edition*. New York: McGraw-Hill, 2011.
5. P.J. Kumar, M.L. Clark (eds): *Clinical Medicine*, 7th edition. Edinburgh: Saunders Elsevier, 2009.

Cilji:

Cilj tega predmeta je pripraviti študente na samostojno delo z internističnimi bolniki.

Objectives:

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

Predvideni študijski rezultati:

Znanje in razumevanje:
Študent bo praktično osvojil veščine jemanja anamneze in izvedbe kliničnega pregleda preden bo pristopil k bolniku. Ustrezen nivo obvladanja teh veščin bo zagotovljen z uporabo objektivnega strukturiranega kliničnega izpita. Klinične veščine bo s

Intended learning outcomes:

Knowledge and Understanding:
Student will practically acquire history taking and patient examination skills before approaching the patient. Appropriate competence level will be determined by using objective structured clinical examination. By upgrading these skills with practical work in

praktičnim delom na oddelkih ustrezno nadgradil, tako da bo po zaključku tega predmeta sposoben samostojno in varno pristopiti k bolniku, obvladal bo odnos z njim in svojci, znal bo vzeti anamnezo, pregledati bolnika ter ovrednotiti diagnostične metode. Študent osvoji veščine citiranja po Vancouverskem stilu, razvija veščine javnega nastopanja in argumentiranja ter kritičnega vrednotenja literature. Prenesljive/ključne spretnosti in drugi atributi: Študent se bo naučil tudi praktičnih opravil, ki so potrebna pri delu z bolniki: jemanje krvi, dajanje injekcij, snemanje EKG, opravljanje punkcij, kateterizacija mehurja, pisanje receptov.

the ward, the student will be able to approach the patient independently and safely, communicate effectively with the patient and his family members, take the history and examine the patient, and evaluate the diagnostic methods to be applied. Student is able to apply Vancouver style of citations, develops presentation and argumentation skills, as well as critical appraisal of literature. Transferable/Key Skills and other attributes: The student will also acquire the necessary practical knowledge: withdrawing of blood, giving injections, ECG recording, performing of punctures and bladder catheterization, making out prescriptions.

Metode poučevanja in učenja:

- Predavanja.
- Vaje in simulacije: študentje vadijo jemanje anamneze s pomočjo simulacij, vadijo klinične preglede drug na drugem in šele nato na bolnikih ter trenirajo praktične posege na simulatorjih. V proces poučevanja se aktivno vključujejo tutorji študenti pod nadzorom habilitiranih visokošolskih (so)delavcev.
- Seminarji: Ena ura je namenjena podajanju povratne informacije po sprotih preverjanjih znanja. Seminarji temeljijo na predstavitev študentov. Vsak študent pripravi vsaj dva seminarja; bodisi kot predavanje, lahko predstavi teorijo na podlagi realnega ali virtualnega primera bolnika ali seminar zapiše v obliki članka in ga tudi predstavi.

Learning and teaching methods:

- Lectures.
- Work in the wards and simulations: students practice history taking and clinical examinations on each other. After achieving competence in these two fields they enter wards and practice on patients. They also train practical procedures on simulators. The teaching process is enriched by peer assisted learning applied under close supervision of faculty members.
- Seminars: One hour is for giving feedback after interim assessments. Seminars are based on student presentations. Each student prepares at least two seminars; either as a lecture, or as the theory on the basis of a real or virtual patient case, or as seminar written in the form of an article which student also presents.

Načini ocenjevanja:

Delež (v %) /
Weight (in %)

Assessment:

• Sprotno preverjanje znanja: objektivni strukturirani klinični izpit, zapis anamneze in statusa bolnikov, kolokviji iz teorije s posameznih področij interne medicine (vprašanja izbirnega tipa).		• Interim assessments: objective structured clinical examination, written assignments (notes on history taking and patient examination), multiple choice partial exam on theory from each internal medicine field.
• Seminarji.	20	• Seminars.
• Pisni izpit (opravljeni seminarji, klinične vaje in sprotna preverjanja znanja so pogoj za	30	• Final written examination (eligible to enter after completion of seminars, clinical

pristop k pisnemu izpitu). • Ustni izpit (pogoj za pristop: opravljen pisni izpit).	50	work and interim assessments). • Oral examination (eligible after passing final written examination).
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