2026/2027

Univerza v Mariboru
Medicinska fakulteta

UČNI NAČRT PREDMETA / COURSE SYLLABUS	
Ime predmeta:	PBL – Predklinika IV
Course title:	PBL – Preclinic IV

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

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**
	45	**AV**	**LV**	**RV**			45	3

Nosilec predmeta / Course coordinator:	**red. prof. dr. Radovan Hojs**
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:**
Pogoj za uspešno opravljene obveznosti je najmanj 80 % prisotnost. Aktivno sodelovanje pri reševanju problemov v skladu z metodo sedmih korakov.	The condition for successfully completed obligations is at least 80 % attendance. Active participation in problem solving according to the Seven-Step Method.

Vsebina (kratek pregled učnega načrta):	**Content (syllabus outline):**
Pouk pri predmetu poteka na osnovi reševanja primerov, ki so didaktično strukturirani tako, da pokrivajo vsa področja medicine in se pokrivajo s predmeti, ki jih študent obiskuje v tem letniku. PBL teče vzporedno ob predavanjih. Probleme študenti rešujejo v manjših skupinah, kar pomeni tudi pridobivanje in nadgrajevanje sposobnosti skupinskega dela, komuniciranja v skupini, itd. Učitelji so »pospeševalci učenja«. Vsebina primerov je priložena za učnim	Course is based on case study, didactically structured to cover all medicine fields and overlap with courses studied during the academic year. PBL is carried out at the same time as lectures. Problems are solved in smaller groups. It means that students gain skills in team work, communication in team etc. Professors are »learning stimulators«. The contentce of cases follows the subject specification of PBL IV - applied Physiology – pathophysiology II.

načrtom Modul PBL IV – Temelji fiziologije – patofiziologije II.	

Temeljni literatura in viri / Reading materials:

1. Košnik, M., Štajer, D., Jug, B., Kocjan, T., & Koželj, M. (Eds.). (2022). Interna medicina (6. izd.). Medicinska fakulteta; Buča.

2. Loscalzo J, Fauci A, Kasper D, Hauser S, Longo D, Jameson J.L. Harrison's Principles of Internal Medicine (Vol.1 & Vol. 2). 21st ed. McGraw-Hill Education Ltd, 2022.

3. Feather, A., Randall, D., & Waterhouse, M. (Eds.). (2021). Kumar & Clark's clinical medicine (10th ed.). Elsevier.

Dodatna literatura:

1. ostala literatura letnika vpisa

Cilji in kompetence:	**Objectives and competences:**
Aktiviranje, izpopolnjevanje in prestrukturiranje že obstoječega znanja. Cilj je tudi sposobnost sočasne uporabe vseh razpoložljivih informacijskih virov. Pomemben del je tudi argumentiranje in citiranje uporabljenih virov v obravnavi posameznih problemov.	Activating, upgrading and restructuring of already gained knowledge. Ability of simultaneous usage of all available information sources. Argumentation and quotation of used sources in problem solving.

Predvideni študijski rezultati:	**Intended learning outcomes:**
Znanje in razumevanje: Gre za izpopolnjevanje, poglabljanje, aktiviranje ter prestrukturiranje že obstoječega znanja, ki ga študenti pridobivajo pri vzporedno potekajočem »klasičnem« pouku. Prenesljive/ključne spretnosti in drugi atributi: Sposobnost skupinskega dela, komuniciranja v skupini, argumentiranje, samodisciplina.	Knowledge and Understanding: Activating and restructuring of upgraded and depend knowledge, acquired simultaneously with "classical" study. Transferable/Key Skills and other attributes: Ability of team work, communications in group, argumentation and self discipline.

Metode poučevanja in učenja:	**Learning and teaching methods:**
Metoda sedmih korakov: -ugotoviti in razjasniti besede in fraze, ki se pojavljajo ob opisu problema -iskanje pomembnih sestavin -s pomočjo ključnih beseduporaba viharjwenja možgan za iskanje razlag -urejanje razlag v rešitve -opredelitev ciljev za preverjanje veljavnosti razlag -individualen študij z uporabo informacijskih virov -izmenjava rezultatov individualnega študija z drugimi člani	The Seven-Step Method: -find out and explain terms and phrases related to description of problem -looking for important components -key words - brainstorming of key words to generate explanation -organising of explanations into solution -definition of aims for testing of the validity of interpretations -individual study and usage of information sources

	-exchange of results of individual study with other members.

Načini ocenjevanja:	Delež (v %) / Share (in %)	**Assessment methods:**
Način (pisni izpit, ustno izpraševanje, naloge, projekt): Sodelovanje pri pedagoškem procesu	**100**	Type (examination, oral, coursework, project): In-class participation

Reference nosilca / Course coordinator's references:

1. Physicians' responsibility toward environmental degradation and climate change: A position paper of the European Federation of Internal Medicine. Campos L, Barreto JV, Bassetti S, Bivol M, Burbridge A, Castellino P, Correia JA, Durusu-Tanriöver M, Fierbinteanu-Braticevici C, Hanslik T, Heleniak Z, Hojs R, Lazebnic L, Mylona M, Raspe M, Melo JQE, Pietrantonio F, Gans R, Pálsson R, Montano N, Gómez-Huelgas R, Dicker D. Eur J Intern Med. 2022 Oct;104:55-58. doi: 10.1016/j.ejim.2022.08.001. Epub 2022 Aug 31. PMID: 36055953

2. The Role of Vascular Lesions in Diabetes Across a Spectrum of Clinical Kidney Disease. Rodríguez-Rodríguez R, Hojs R, Trevisani F, Morales E, Fernández G, Bevc S, Cases Corona CM, Cruzado JM, Quero M, Navarro Díaz M, Bettiga A, Di Marco F, López Martínez M, Moreso F, García Garro C, Khazim K, Ghanem F, Praga M, Ibernón M, Laranjinha I, Mendonça L, Bigotte Vieira M, Hornum M, Feldt-Rasmussen B, Fernández-Fernández B, Concepción PF, Negrín Mena N, Ortiz A, Porrini E; DIABESITY working group of the ERA. Kidney Int Rep. 2021 Jun 12;6(9):2392-2403. doi: 10.1016/j.ekir.2021.06.001. eCollection 2021 Sep. PMID: 34514200 Free PMC article.

3. A randomized multicenter trial on a lung ultrasound-guided treatment strategy in patients on chronic hemodialysis with high cardiovascular risk. Zoccali C, Torino C, Mallamaci F, Sarafidis P, Papagianni A, Ekart R, Hojs R, Klinger M, Letachowicz K, Fliser D, Seiler-Mußler S, Lizzi F, Wiecek A, Miskiewicz A, Siamopoulos K, Balafa O, Slotki I, Shavit L, Stavroulopoulos A, Covic A, Siriopol D, Massy ZA, Seidowsky A, Battaglia Y, Martinez-Castelao A, Polo-Torcal C, Coudert-Krier MJ, Rossignol P, Fiaccadori E, Regolisti G, Hannedouche T, Bachelet T, Jager KJ, Dekker FW, Tripepi R, Tripepi G, Gargani L, Sicari R, Picano E, London GM. Kidney Int. 2021 Dec;100(6):1325-1333. doi: 10.1016/j.kint.2021.07.024. Epub 2021 Aug 19.PMID: 34418415 Clinical Trial.

4. Diabetic patients with chronic kidney disease: Non-invasive assessment of cardiovascular risk. Piko N, Bevc S, Ekart R, Petreski T, Vodošek Hojs N, Hojs R. World J Diabetes. 2021 Jul 15;12(7):975-996. doi: 10.4239/wjd.v12.i7.975. PMID: 34326949 Free PMC article. Review.

5. Mineralocorticoid Receptor Antagonists in Diabetic Kidney Disease. Vodošek Hojs N, Bevc S, Ekart R, Piko N, Petreski T, Hojs R. Pharmaceuticals (Basel). 2021 Jun 11;14(6):561. doi: 10.3390/ph14060561. PMID: 34208285 Free PMC article. Review.

6. CHA2DS2-VASc Score as a Predictor of Cardiovascular and All-Cause Mortality in Chronic Kidney Disease Patients. Vodošek Hojs N, Ekart R, Bevc S, Piko N, Hojs R. Am J Nephrol. 2021;52(5):404-411. doi: 10.1159/000516121. Epub 2021 May 11. PMID: 33975308

7. Subclinical atherosclerosis in patients with relapsing-remitting multiple sclerosis. Omerzu T, Magdič J, Hojs R, Potočnik U, Gorenjak M, Fabjan TH. Wien Klin Wochenschr. 2021 Apr 26. doi: 10.1007/s00508-021-01862-7. Online ahead of print. PMID: 33903956

8. Oxidative Stress Markers in Chronic Kidney Disease with Emphasis on Diabetic Nephropathy. Vodošek Hojs N, Bevc S, Ekart R, Hojs R. Antioxidants (Basel). 2020 Sep 27;9(10):925. doi: 10.3390/antiox9100925. PMID: 32992565 Free PMC article. Review.

9. The association between pulse wave analysis, carotid-femoral pulse wave velocity and peripheral arterial disease in patients with ischemic heart disease. Piko N, Bevc S, Hojs R, Naji FH, Ekart R. BMC Cardiovasc Disord. 2021 Jan 13;21(1):33. doi: 10.1186/s12872-021-01859-0. PMID: 33441117 Free PMC article.