

**UČNI NAČRT PREDMETA / SUBJECT SPECIFICATION**

Predmet:	Patologija I (splošna patologija)
Subject Title:	Pathology I (general pathology)

Študijski program Study programme	Študijska smer Study field	Letnik Year	Semester Semester
Splošna medicina General medicine - EMŠP		2	4

Univerzitetna koda predmeta / University subject code:

Predavanja Lectures	Seminar Seminar	Sem. vaje Tutorial	Lab. vaje Labor work	Teren. vaje Field work	Samost. delo Individ. work	ECTS
30	27		3		30	3

Nosilec predmeta / Lecturer:

Izr. prof. dr. Veronika Kloboves Prevodnik

Jeziki /

Predavanja / Lecture:

Slovenski/slovene

Languages:

Vaje / Tutorial:

Slovenski/slovene

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

Prerequisites:

Vsebina:

Uvod v patologijo
 Značilnosti, klasifikacije incidenca bolezni
 Vzroki bolezni (genetski, okolje)
 Diagnostična patologija v klinični praksi
 Motnje rasti, diferenciacije in morfogeneze
 Reakcije na celično okvaro
 Motnje metabolizma in homeostaze
 Ishemija, infarkt, šok
 Imunologija in imunopatologija
 Vnetje
 Karcinogeneza in neoplazija
 Staranje in smrt

Content (Syllabus outline):

Introduction to pathology
 Characteristics, classification and incidence of disease
 Genetic and environmental causes of disease
 Diagnostic pathology in clinical practice
 Disorders of growth, differentiation and morphogenesis
 Response to cellular injury
 Disorders of metabolism and homeostasis
 Ischaemia, infarction and shock
 Immunology and immunopathology
 Inflammation
 Carcinogenesis and neoplasia
 Ageing and death

Temeljni literatura in viri / Textbooks:

- JCW Underwood. General and systematic pathology. Fourth ed. Churchill Livingstone 2004, Fifth ed. 2009, Sixth ed. 2013
- Robbins and Cotran. Pathologic basis of disease. Seventh ed. Elsevier Saunders 2005
- Kumar, Abbas, Aster. Robbins Basic Pathology Ninth ed. Elsevier 2013
- Ivan Damjanov. Pathology secrets. Second ed. Elsevier Mosby 2005
- Patologija. Izbrana poglavja iz patologije z navodili za vaje. (A Cerar, B Luzar, T Rott, N Zidar) 3. izdaja, 2006
- Rosai and Ackerman's Surgical Pathology. Mosby, Ninth ed. 2004, Tenth ed. 2011
- R Rubin, DS Strayer. Rubin's Pathology, Sixth ed. Wolters Kluwer/Lippincott 2012
- The New England Journal of Medicine (www.nejm.org)

Cilji:

Študent spozna klasifikacije bolezni in se seznani z njihovimi vzroki in s pomenom diagnostične patologije v klinični praksi. Predmet temelji na klasični patologiji in na napredku celične in molekularne biologije. Študent spozna ob študiju mehanizmov bolezni procese pomembnih bolezenskih kategorij

Predvideni študijski rezultati:

Študent bo spoznal osnovne morfološke in funkcijske značilnosti bolezni.

Objectives:

The student is introduced to the classification of diseases, their causes and the importance of diagnostic pathology in clinical practice. The course is based on classical pathology as well as on the current knowledge of cellular and molecular biology. The student learns basic disease mechanisms which are fundamental to understand specific diseases.

Intended learning outcomes:

Basic understanding of morphological and functional characteristics of diseases.

Znanje in razumevanje:

Pripravljen bo na študij specifičnih patoloških procesov v različnih organih in organskih sistemih.

Prenesljive/ključne spretnosti in drugi atributi:

Rezultati študija so pomembni predvsem za varno in uspešno izvajanje zdravljenja.

Knowledge and Understanding:

The student is prepared for study of specific pathological processes in different organs and systems.

Transferable/Key Skills and other attributes:

Results of the study are oriented primarily towards the practising medicine safely and effectively.

Metode poučevanja in učenja:

Predavanja
Seminarji
Obukcijske vaje

Learning and teaching methods:

Lectures
Seminars
Autopsy course

Načini ocenjevanja:	Delež (v %) / Weight (in %)	Assessment:
Način (pisni izpit, ustno izpraševanje, naloge, projekt)		Type (examination, oral, coursework, projectS)
Opravljeni kolokviji iz seminarjev	10 %	Partial exam after seminars and
Končni izpit	90 %	Final examination
ŠTUDIJSKE OBVEZNOSTI ŠTUDENTOV •Obvezna 50 % udeležba na predavanjih •Obvezna priprava predhodnih seminarjev •Obvezna prisotnost na obdukcijskih vajah z diskusijo klinično-patoloških primerov		ACADEMIC OBLIGATIONS OF STUDENTS Obligatory 50% attendance at lectures Obligatory preparation of previous coursework Obligatory attendance at autopsy with discussion of clinically-pathological cases
Pogoji za pristop k posameznemu preverjanju znanja: Opravljeni seminarji in seminarski kolokviji		REQUIREMENTS FOR ACCESS TO INDIVIDUAL KNOWLEDGE CHECKING: Completed coursework and coursework partial exams
Končni izpit - testi proste izbire Ocene izpita s 50 vprašanji proste izbire so: 26-30 pravih odgovorov 6 31-35 7 36-40 8 41-45 9 46-50 10		Final exam – multiple choice tests Exam marks with 50 questions of multiple choice are: 26-30 correct answers 6 31-35 correct answers 7 36-40 correct answers 8 41-45 correct answers 9 46-50 correct answers 10

Reference nosilca / Lecturer's references:

1. BOLTEŽAR, Lučka, KLOBOVES-PREVODNIK, Veronika, POHAR PERME, Maja, GAŠLJEVIĆ, Gorana, JEZERŠEK NOVAKOVIĆ, Barbara. Comparison of the algorithms classifying the ABC and GCB subtypes in diffuse large B-cell lymphoma. *Oncology Letters*, ISSN 1792-1074, 2018, vol. 15, str. 6903-6912, doi: [10.3892/ol.2018.8243](https://doi.org/10.3892/ol.2018.8243). [COBISS.SI-ID [2918523](#)], [JCR, SNIP, WoS do 25. 5. 2018: št. citatov (TC): 0, čistih citatov (CI): 0, Scopus do 21. 4. 2018: št. citatov

(TC): 0, čistih citatov (CI): 0]

2. IVANUŠ, Urška, JERMAN, Tine, REPŠE-FOKTER, Alenka, TAKAČ, Iztok, KLOBOVES-PREVODNIK, Veronika, MARČEC, Mateja, SALOBIR GAJŠEK, Uršula, PAKIŽ, Maja, KOREN, Jakob, HUTTER-ČELIK, Simona, GORNIK-KRAMBERGER, Kristina, KLOPČIČ, Ulrika, KAVALAR, Rajko, ŠRAMEK ZATLER, Simona, GRČAR-KUZMANOV, Biljana, FLORJANČIČ, Mojca, NOLDE, Nataša, NOVAKOVIČ, Srdjan, POLJAK, Mario, PRIMIC-ŽAKELJ, Maja. Randomised trial of HPV self-sampling among non-attenders in the Slovenian cervical screening programme ZORA : comparing three different screening approaches. *Radiology and oncology*, ISSN 1581-3207. [Online ed.], dec. 2018, vol. 52, no. 4, str. 399-412, ilustr. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6287183/pdf/raon-52-399.pdf>, doi: [10.2478/raon-2018-0036](https://doi.org/10.2478/raon-2018-0036). [COBISS.SI-ID [6576959](#)], [JCR, SNIP]

3. KLOPČIČ, Ulrika, LAVRENČAK, Jaka, GAŠLJEVIČ, Gorana, BRAČKO, Matej, POHAR-MARINŠEK, Živa, KLOBOVES-PREVODNIK, Veronika. Grading of follicular lymphoma in cytological samples. *Cytopathology*, ISSN 0956-5507. [Print ed.], 2016, vol. 27, iss. 6, str. 390-397, doi: [10.1111/cyt.12319](https://doi.org/10.1111/cyt.12319). [COBISS.SI-ID [2251387](#)], [JCR, SNIP, WoS do 13. 1. 2017: št. citatov (TC): 0, čistih citatov (CI): 0, [Scopus](#) do 27. 2. 2016: št. citatov (TC): 0, čistih citatov (CI): 0]

4. PREVC, Ajda, BEDINA ZAVEC, Apolonija, ČEMAŽAR, Maja, KLOBOVES-PREVODNIK, Veronika, SAVARIN, Monika, TODOROVIČ, Vesna, STROJAN, Primož, SERŠA, Gregor. Bystander effect induced by electroporation is possibly mediated by microvesicles and dependent on pulse amplitude, repetition frequency and cell type. *The journal of membrane biology*, ISSN 0022-2631, Oct. 2016, vol. 249, iss. 5, str. 703-711, doi: [10.1007/s00232-016-9915-0](https://doi.org/10.1007/s00232-016-9915-0). [COBISS.SI-ID [2389627](#)], [JCR, SNIP, WoS do 4. 11. 2016: št. citatov (TC): 0, čistih citatov (CI): 0, [Scopus](#) do 30. 11. 2018: št. citatov (TC): 2, čistih citatov (CI): 2]

5. MARKELC, Boštjan, SKVARČA, Eva, JESENKO, Tanja, KLOBOVES-PREVODNIK, Veronika, CÖR, Andrej, SERŠA, Gregor, ČEMAŽAR, Maja. Inhibitor of endocytosis impairs gene electrotransfer to mouse muscle in vivo. V: *Bioelectrics*, (Bioelectrochemistry (Amsterdam), ISSN 1567-5394, vol. 103). Amsterdam: Elsevier. 2015, str. 111-119, ilustr., doi: [10.1016/j.bioelechem.2014.08.020](https://doi.org/10.1016/j.bioelechem.2014.08.020). [COBISS.SI-ID [1852795](#)], [JCR, SNIP, WoS do 15. 10. 2018: št. citatov (TC): 14, čistih citatov (CI): 12, [Scopus](#) do 18. 10. 2018: št. citatov (TC): 15, čistih citatov (CI): 12] tipologija 1.08 -> 1.01

6. GAŠLJEVIČ, Gorana, GRČAR-KUZMANOV, Biljana, GROŠEL, Alenka, SEVER, Matjaž, GAZIĆ, Barbara, KLOBOVES-PREVODNIK, Veronika. Hodgkin's lymphoma is a rare form of clonal haematological non-mast cell disease in systemic mastocytosis. *Diagnostic pathology*, ISSN 1746-1596. [Online ed.], 2015, vol. 10, no. 1. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4367971/>, doi: [10.1186/s13000-015-0235-y](https://doi.org/10.1186/s13000-015-0235-y). [COBISS.SI-ID [2033531](#)], [JCR, SNIP, WoS do 26. 2. 2017: št. citatov (TC): 1, čistih citatov (CI): 1, [Scopus](#) do 1. 9. 2015: št. citatov (TC): 1, čistih citatov (CI): 1]

7. BROŽIČ, Andreja, POHAR-MARINŠEK, Živa, NOVAKOVIČ, Srdjan, KLOBOVES-PREVODNIK, Veronika. Inconclusive flow cytometric surface light chain results : can cytoplasmic light chains, Bcl-2 expression and PCR clonality analysis improve accuracy of cytological diagnoses in B-cell lymphomas. *Diagnostic pathology*, ISSN 1746-1596. [Online ed.], 2015, vol. 10, št. 191. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4612408/pdf/13000_2015_Article_427.pdf, doi: [10.1186/s13000-015-0427-5](https://doi.org/10.1186/s13000-015-0427-5). [COBISS.SI-ID [2232955](#)], [JCR, SNIP, WoS do 22. 1. 2016: št. citatov (TC): 0, čistih citatov (CI): 0, [Scopus](#) do 24. 1. 2016: št. citatov (TC): 0, čistih citatov (CI): 0]

8. GAŠLJEVIČ, Gorana, KLOBOVES-PREVODNIK, Veronika, GAZIĆ, Barbara, VOVK, Marjeta. Coexistent hairy cell leukaemia and hepatosplenic t-cell lymphoma : a case report. *Diagnostic pathology*, ISSN 1746-1596. [Online ed.], 2014, vol. 9, no. 58. <http://www.diagnosticpathology.org/content/pdf/1746-1596-9-58.pdf>, doi: [10.1186/1746-1596-9-58](https://doi.org/10.1186/1746-1596-9-58). [COBISS.SI-ID [1883003](#)], [JCR, SNIP, WoS do 27. 8. 2018: št. citatov (TC): 2, čistih citatov (CI): 2, [Scopus](#) do 27. 12. 2018: št. citatov (TC): 4, čistih citatov (CI): 4]

9. ČEMAŽAR, Maja, JESENKO, Tanja, KOSJEK, Tina, MARKELC, Boštjan, SERŠA, Gregor, KLOBOVES-PREVODNIK, Veronika, STROJAN, Primož. Schedule-dependent interaction between vinblastine and irradiation in experimental sarcoma. *Strahlentherapie und Onkologie*, ISSN 0179-7158, Jun. 2014, vol. 190, iss. 7, str. 661-666, doi: [10.1007/s00066-014-0645-x](https://doi.org/10.1007/s00066-014-0645-x). [COBISS.SI-ID [1730427](#)], [JCR, SNIP, WoS do 7. 7. 2014: št. citatov (TC): 0, čistih citatov (CI): 0, [Scopus](#) do 12. 7. 2014: št. citatov (TC): 0, čistih citatov (CI): 0]

10. URBANČIČ, Mojca, KLOBOVES-PREVODNIK, Veronika, PETROVIČ, Danijel, GLOBOČNIK PETROVIČ, Mojca. A flow cytometric analysis of vitreous inflammatory cells in patients with proliferative diabetic retinopathy. *BioMed research international*, ISSN 2314-6141, 2013, vol. 2013. <http://www.hindawi.com/journals/bmri/2013/251528/>, doi: [10.1155/2013/251528](https://doi.org/10.1155/2013/251528). [COBISS.SI-ID [30928089](#)], [JCR, SNIP, WoS do 15. 10. 2018: št. citatov (TC): 9, čistih citatov (CI): 9, Scopus do 26. 12. 2018: št. citatov (TC): 9, čistih citatov (CI): 9]

11. KLOBOVES-PREVODNIK, Veronika, LAVRENČAK, Jaka, HORVAT, Mateja, JEZERŠEK NOVAKOVIČ, Barbara. The predictive significance of CD20 expression in B-cell lymphomas. *BMC cancer*, ISSN 1471-2407, 2011, vol. 6, str. 33 [1-6], doi: [10.1186/1746-1596-6-33](https://doi.org/10.1186/1746-1596-6-33). [COBISS.SI-ID [1085563](#)], [JCR, SNIP, WoS do 21. 10. 2018: št. citatov (TC): 19, čistih citatov (CI): 18, Scopus do 24. 10. 2018: št. citatov (TC): 21, čistih citatov (CI): 20]

12. ANSHU, KLOBOVES-PREVODNIK, Veronika, POHAR-MARINŠEK, Živa, et al. Survey of medical training in cytopathology carried out by the journal Cytopathology. *Cytopathology*, ISSN 0956-5507. [Print ed.], 2010, vol. 21, issue 3, str. 147-156, ilustr. <http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2303.2010.00761.x/pdf>, doi: [10.1111/j.1365-2303.2010.00761.x](https://doi.org/10.1111/j.1365-2303.2010.00761.x). [COBISS.SI-ID [516157977](#)], [JCR, SNIP, WoS do 25. 2. 2018: št. citatov (TC): 15, čistih citatov (CI): 15, Scopus do 23. 2. 2018: št. citatov (TC): 18, čistih citatov (CI): 18]

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