

UČNI NAČRT PREDMETA / COURSE SYLLABUS	
Ime predmeta:	Patologija I (splošna patologija)
Course title:	Pathology I (general pathology)

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
30	27						30	3
		AV	LV	RV				
			3					

Nosilec predmeta / Course coordinator:

izr. prof. dr. Veronika Kloboves Prevodnik

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):

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 / Reading materials:

TEMELJNA LITERATURA

- JCW Underwood. General and systematic pathology. 6 Ed. Churchill Livingstone, .2013, 7 Ed. 2019
- Robbins Basic Pathology. Tenthth ed. Elsevier Saunders 10th Ed 2019

DODATNA LITERATURA

Ivan Damjanov. Pathology secrets. 3 Ed. Elsevier Mosby 2008

- Osnove patologije. (N Zidar, N Gale) 1. izdaja, Katedra za patologijo Medicinske fakultete Univerze v Ljubljani 2011
- Klinično-patološki primeri, vaje iz patologije za študente medicine in dentalne medicine (N Zidar, M Popović), 1. izdaja, Katedra za patologijo Medicinske fakultete Univerze v Ljubljani 2012
- Rosai and Ackerman's Surgical Pathology, 11Ed, Vol 1 and 2, Elsevier 2017

Cilji in kompetence:

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

Objectives and competences:

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.

Predvideni študijski rezultati:

Študent bo spoznal osnovne morfološke in funkcijske značilnosti bolezni.

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.

Intended learning outcomes:

Basic understanding of morphological and functional characteristics of diseases.

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

Vaje - metode v patologiji in citopatologiji

Learning and teaching methods:

Lectures

Seminars

Course - methods in pathology and cytopathology

Načini ocenjevanja:

Delež (v %) /
Share (in %)

Assessment methods:

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

Opravljeni kolokviji iz seminarjev (povprečna ocena na vseh seminarskih kolokvijih je najmanj 70% točk)

Končni izpit

10

90

Type (examination, oral, coursework, projectS)

Partial exam after courseworks (the combined average mark of all partial exams must be at least 70% points)

ŠTUDIJSKE OBVEZNOSTI ŠTUDENTOV •Obvezna 50 % udeležba na predavanjih •Obvezna priprava predhodnih seminarjev •Ovezna prisotnost na 6 od 9 seminarjih •Obvezna prisotnost na vajah z diskusijo klinično-patoloških primerov Pogoji za pristop k posameznemu preverjanju znanja: Opravljeni seminarji in pozitivna ocena na 6 od 9 seminarskih kolokvijih. Za pozitivno oceno seminarskega kolokvija je potrebno zbrati najmanj 60% točk. Končni izpit - testi proste izbire Ocene izpita s 50 vprašanji proste izbire so: <table><tr><td>26-30 pravilnih odgovorov</td><td>6</td></tr><tr><td>31-35</td><td>7</td></tr><tr><td>36-40</td><td>8</td></tr><tr><td>41-45</td><td>9</td></tr><tr><td>46-50</td><td>10</td></tr></table>	26-30 pravilnih odgovorov	6	31-35	7	36-40	8	41-45	9	46-50	10	Final examination ACADEMIC OBLIGATIONS OF STUDENTS •Obligatory 50% attendance at lectures •Obligatory preparation of previous coursework •Obligatory attendance at 6 out of 9 courseworks •Obligatory attendance at courses with discussion of clinically-pathological cases REQUIREMENTS FOR ACCESS TO INDIVIDUAL KNOWLEDGE CHECKING: Completed coursework and 6 out of 9 coursework partial exams (60% points per exam). Final exam – multiple choice tests Exam marks with 50 questions of multiple choice are: <table><tr><td>26-30 correct answers</td><td>6</td></tr><tr><td>31-35 correct answers</td><td>7</td></tr><tr><td>36-40 correct answers</td><td>8</td></tr><tr><td>41-45 correct answers</td><td>9</td></tr><tr><td>46-50 correct answers</td><td>10</td></tr></table>	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
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Reference nosilca / Course coordinator'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, NOVAKOVIĆ, 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, GAŠLJEVIĆ, 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, TODOROVIĆ, 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]
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7. BROŽIČ, Andreja, POHAR-MARINŠEK, Živa, NOVAKOVIĆ, 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. GAŠLJEVIĆ, 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]

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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>,

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