



### UČNI NAČRT PREDMETA / COURSE SYLLABUS

<b>Ime predmeta:</b>	Patologija I (splošna patologija)
<b>Course title:</b>	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
22	20	AV	LV	RV	18		30	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 (kratak 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:

<p>TEMELJNA LITERATURA</p> <ul style="list-style-type: none"> <li>Underwood's pathology : a clinical approach / edited by Simon S. Cross.7th ed..Edinburgh [etc.], 2019.</li> <li>Robbins Basic Pathology. Tenthth ed. Elsevier Saunders 10th Ed 2019</li> </ul> <p>DODATNA LITERATURA</p> <ul style="list-style-type: none"> <li>Ivan Damjanov. Pathology secrets. 3 Ed. Elsevier Mosby 2008</li> <li>Osnove patologije. (N Zidar, N Gale) 1. izdaja, Katedra za patologijo Medicinske fakultete Univerze v Ljubljani 2011</li> <li>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</li> <li>Rosai and Ackerman's Surgical Pathology, 11Ed, Vol 1 and 2, Elsevier 2017</li> <li>Rubin's Pathology, Clinicopathologic Foundations of Medicine, 7Ed. Lippincott Williams &amp;Wilkins, 2015</li> <li>The New England Journal of Medicine (www.nejm.org)</li> </ul>
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### Cilji in kompetence:

Študent spozna klasifikacije bolezni in se seznanj 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:

#### 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:

#### 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, osnovni patološki procesi s prikazom kliničnih primerov v obliki seminarskih nalog, obdukcija

### Learning and teaching methods:

Lectures

Seminars

Course - methods in pathology and cytopathology, basic pathological processes with presentation of clinical cases, autopsy

### Načini ocenjevanja:

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

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

Končni izpit

Delež (v %) /

Share (in %)

### Assessment methods:

Type (examination, oral, coursework, projectS)

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

Final examination

<p><b>ŠTUDIJSKE OBVEZNOSTI ŠTUDENTOV</b></p> <ul style="list-style-type: none"> <li>•Obvezna 50 % udeležba na predavanjih</li> <li>•Obvezna priprava predhodnih seminarjev</li> <li>•Obvezna prisotnost na 6 od 9 seminarjih</li> <li>•Obvezna prisotnost na vajah z diskusijo klinično-patoloških primerov</li> </ul> <p>Pogoji za pristop k posameznemu preverjanju znanja: Opravljene vaje in seminarji ter pozitivna ocena na 6 od 9 kolokvijih. Za pozitivno oceno kolokvija je potrebno zbrati najmanj 60% točk.</p> <p>Končni izpit - testi proste izbire Ocene izpita s 50 vprašanji proste izbire so:</p> <table border="0"> <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		<p><b>ACADEMIC OBLIGATIONS OF STUDENTS</b></p> <ul style="list-style-type: none"> <li>•Obligatory 50% attendance at lectures</li> <li>•Obligatory preparation of previous coursework</li> <li>•Obligatory attendance at 6 out of 9 courseworks</li> <li>•Obligatory attendance at courses with discussion of clinically-pathological cases</li> </ul> <p><b>REQUIREMENTS FOR ACCESS TO INDIVIDUAL KNOWLEDGE CHECKING:</b> Completed coursework and 6 out of 9 coursework partial exams (60% points per exam).</p> <p>Final exam – multiple choice tests Exam marks with 50 questions of multiple choice are:</p> <table border="0"> <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:**

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- KLOBOVES-PREVODNIK, Veronika, POHAR-MARINŠEK, Živa, ZALAR, Janja, ROZINA, Hermina, KOTNIK, Nika, JERMAN, Tine, VARL, Jerneja, IVANUŠ, Urška. Evaluation of the training program for p16/ Ki-67 dual immunocytochemical staining interpretation for laboratory staff without experience in cervical cytology and immunocytochemistry. Radiology and oncology. [Print ed.]. Jun. 2020, vol. 54, no. 2, str. 201-208, ilustr. ISSN 1318-2099. <https://content.sciendo.com/view/journals/raon/54/2/article-p201.xml>, DOI: 10.2478/raon-2020-0018. [COBISS.SI-ID 3514747]
- GAZIĆ, Barbara, KLOBOVES-PREVODNIK, Veronika. Histopatološke in citopatološke značilnosti raka dojke. V: TAKAČ, Iztok (ur.), ARKO, Darja. Ginekološka onkologija. 1. izd. Maribor: Univerzitetna založba Univerze, 2020. Str. 789-800. ISBN 978-961-286-330-2. [COBISS.SI-ID 23045379]
- KLOBOVES-PREVODNIK, Veronika, JERMAN, Tine, NOLDE, Nataša, REPŠE-FOKTER, Alenka, JEZERŠEK, Sandra, POHAR-MARINŠEK, Živa, KLOPČIČ, Ulrika, HUTTER-ČELIK, Simona, GORNIK-KRAMBERGER, Kristina, PRIMIC-ŽAKELJ, Maja, IVANUŠ, Urška. Interobserver variability and accuracy of p16/Ki-67 dual immunocytochemical staining on conventional cervical smears. Diagnostic pathology. [Online ed.]. 2019, vol. 14, no. 1, str. [1-9]. ISSN 1746-1596. [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6533697/pdf/13000\\_2019\\_Article\\_821.pdf](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6533697/pdf/13000_2019_Article_821.pdf), DOI: 10.1186/s13000-019-0821-5. [COBISS.SI-ID 3256443]
- VARL, Jerneja, IVANUŠ, Urška, POHAR-MARINŠEK, Živa, JERMAN, Tine, OŠTRBENK VALENČAK, Anja, POLJAK, Mario, KLOBOVES-PREVODNIK, Veronika. Clinical relevance of the borderline results of the Hybrid Capture 2 High-Risk HPV DNA assay with cervical samples collected in Specimen Transport Medium. Radiology and oncology. [Print ed.]. Sep. 2019, vol. 53, no. 3, str. 316-322, ilustr. ISSN 1318-2099. [https://content.sciendo.com/view/journals/raon/53/3/article-p316.xml?tab\\_body=Article](https://content.sciendo.com/view/journals/raon/53/3/article-p316.xml?tab_body=Article). [COBISS.SI-ID 3359355]
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7. BROŽIČ, Andreja, POHAR-MARINŠEK, Živa, BUČEK, Simon, ČEMAŽAR, Maja, KLOBOVES-PREVODNIK, Veronika. Usefulness of Bcl-2 expression and the expression of cytoplasmic immunoglobulin light chains in the differentiation between B-cell lymphoma and reactive lymphocytic proliferations in FNA. *International journal of molecular sciences*. 2019, vol. 20, no. 11, str. [1-12]. ISSN 1422-0067. <https://www.mdpi.com/1422-0067/20/11/2648>, DOI: 10.3390/ijms20112648. [COBISS.SI-ID 3261307]8.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. [COBISS.SI-ID 6576959], [JCR, SNIP]