

# PROFESIONALNA PATOLOGIJA

## UČNI NAČRT PREDMETA/COURSE SYLLABUS

<b>Predmet:</b>	Profesionalna patologija
<b>Course title:</b>	OCCUPATIONAL PATHOLOGY
<b>Članica nosilka/UL Member:</b>	UL FKKT

Študijski programi in stopnja	Študijska smer	Letnik	Semestri	Izbirnost
Tehniška varnost, druga stopnja, magistrski	Ni členitve (študijski program)	1. letnik, 2. letnik		izbirni

<b>Univerzitetna koda predmeta/University course code:</b>	0100768
<b>Koda učne enote na članici/UL Member course code:</b>	TV2B3

Predavanja /Lectures	Seminar /Seminar	Vaje /Tutorials	Klinične vaje /Clinical tutorials	Druge oblike študija /Other forms of study	Samostojno delo /Individual student work	ECTS
25	20	30 SV			75	5

<b>Nosilec predmeta/Lecturer:</b>	prof. dr. Alenka Franko
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<b>Vrsta predmeta/Course type:</b>	izbirni strokovni/Elective Professional
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<b>Jeziki/Languages:</b>	Predavanja/Lectures:	Angleščina, Slovenščina
	Vaje/Tutorial:	Angleščina, Slovenščina

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

Študent oz. kandidat mora imeti predmet opredeljen kot študijsko obveznost.

### Prerequisites:

The course has to be assigned to the student.

### Vsebina:

#### Predavanja:

1. sklop: Uvod - pravni pojmi, mesto in vloga predmeta... Poklicne bolezni. Invalidnost. Poklicna rehabilitacija
2. sklop: Etične dileme v ocenjevanju delazmožnosti in verifikaciji poklicnih bolezni.
3. sklop: Analize delovnih mest z vidika poklicne izpostavljenosti, kvalitativne in kvantitativne metode..
4. sklop: Najpogostejše poklicne bolezni
5. Sklop: Epidemiologija delovnega okolja.

**Seminarji:** področje patologije dela. Vsak študent pripravi seminar določene dolžine in določenega števila literaturnih virov, ga odda v pisni obliki ter predstavi študentom

### Content (Syllabus outline):

#### Lectures:

Section 1: Introduction – legal concepts, context and role of the subject ... Occupational diseases. Disability. Occupational rehabilitation.  
Section 2: Ethic dilemmas in working ability assessment and verification of occupational diseases.  
Section 3: Workplace analysis regarding occupational exposure using qualitative and quantitative methods.  
Section 4: Common occupational diseases.  
Section 5: Epidemiology of the workplace.

#### Seminars:

In the field of labor pathology. Every student writes a paper with the specified number of words and number of references, turns it in in writing and gives a presentation to other students.

<p><b>Vaje:</b> praktično usposabljanje za računanje izpostavljenosti, verjetnosti in tveganja</p>	<p><b>Practical work:</b> Practical training in exposure, probability and risk calculation.</p>
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<p><b>Temeljna literatura in viri/Readings:</b></p>	
<ol style="list-style-type: none"> <li>1. Kermavnar T, (avtor, ilustrator), Dodič Fikfak M. Oblikovanje po meri človeka, Ilustrirani učbenik iz ergonomije. 1. izd. Ljubljana: Univerzitetni klinični center Ljubljana, Klinični inštitut za medicino dela, prometa in športa: Akademija za likovno umetnost in oblikovanje, 2013. (30%)</li> <li>2. Hammit JK. Risk Assessment and Economic Evaluation. In: Rom WN, ed. Environmental and Occupational Medicine. 4th ed. Philadelphia, Baltimore, New York, London, Buenos Aires, Hong Kong, Sydney, Tokyo: Lippincott Williams &amp; Wilkins, 2007: 1697-1711. (30%)</li> <li>3. Rom WN, Markowitz SB, eds. Environmental and occupational medicine. 4th ed. Philadelphia, Baltimore, New York, London, Buenos Aires, Hong Kong, Sydney, Tokyo: Wolters Kluwer, Lippincott Williams&amp;Wilkins, 2007 (20%)</li> <li>4. Rosenstock L, Cullen MR, Brodtkin CA, Redlich CA, eds. Textbook of Clinical Occupational and Environmental Medicine. 2nd ed. Philadelphia, Edinburgh, London, New York, St Luis, Sydney, Toronto: Elsevier Saunders; 2005 (20%)</li> </ol>	

<p><b>Cilji in kompetence:</b></p> <p>Študent spozna:</p> <ul style="list-style-type: none"> <li>- oblike in metode ter načine proučevanj tveganj na delu (obremenitve in škodljivosti);</li> <li>- oblike, metode in načine jemanja delovne anamneze;</li> <li>- oblike, metode in načine ocenjevanja izpostavljenosti – kvalitativne in kvantitativne metode (kumulativna izpostavljenost);</li> <li>- epidemiološke metode v medicini dela</li> <li>- vplive delovnega okolja na zmogljivosti posameznih organov in organskih sistemov ter človeka kot celote;</li> <li>- vplive delovnega okolja na zdravje in delazmožnost (zdravstveni, pravno-upravni, tehnični, organizacijski vidik);</li> <li>- obremenitve (ekološki monitoring) in zgodnje učinke obremenjenosti na zdravje in delazmožnost (biološki monitoring);</li> <li>- vplive delovnega okolja na specifične kazalce negativnega zdravja posameznika ali skupine poklicne bolezni in boleznim povezane z delom (epidemiološki monitoring);</li> <li>- osnove humanizacije dela oziroma ergonomije v najširšem smislu;</li> <li>- osnove promocije zdravja v delovnem okolju;</li> </ul>	<p><b>Objectives and competences:</b></p> <p>The student will familiarize himself with:</p> <ul style="list-style-type: none"> <li>- forms, methods and procedures used to research risks present at the workplace (causes of strain and harm);</li> <li>- forms, methods and procedures of taking occupational medical history;</li> <li>- forms, methods and procedures of exposure assessment – qualitative and quantitative methods (cumulative exposure);</li> <li>- epidemiologic methods in occupational medicine;</li> <li>- effects of the workplace on the capacity of individual organs and organ systems, as well as of the person as a whole;</li> <li>- effects of the workplace on health and ability to work (medical, legal-administrative, technical and organizational aspects);</li> <li>- types of strain (ecological monitoring) and early effects of stress on health and ability to work (biomonitoring);</li> <li>- effects of the workplace on specific negative health indicators of groups and individuals;</li> <li>- occupational and work-related diseases (epidemiological monitoring);</li> <li>- basics of the humanization of labor or ergonomics in its broadest sense;</li> <li>- basics of health promotion at the workplace.</li> </ul>
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<p><b>Predvideni študijski rezultati:</b></p> <p>Znanje in razumevanje</p> <ul style="list-style-type: none"> <li>- praktične in teoretične oblike analiz delovnega okolja z zdravstvenega vidika;</li> <li>- principe in postopke preprečevanja poklicnih tveganj v delovnem okolju;</li> <li>- osvoji vrednotenje ekološkega in biološkega monitoringa ter principe epidemiologije delovnega okolja;</li> </ul>	<p><b>Intended learning outcomes:</b></p> <p><b>Intended Learning Outcomes:</b></p> <p>Knowledge and Comprehension</p> <ul style="list-style-type: none"> <li>- practical and theoretical forms of workplace analysis from the medical perspective;</li> <li>- principles and procedures of work-related risk mitigation at the workplace;</li> </ul>
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<p>- osvoji načine in postopke izdelave celovite delovne anamneza (anamneza ekspozicije);</p> <p>- osvoji osnove ocenjevanja začasne in trajne delanezmožnosti, poklicne orientacije, selekcije in rehabilitacije;</p> <p>- osvoji osnovne oblike, metode in načine izvedbe različnih oblik promocije zdravja v delovnem okolju;</p> <p>Uporaba</p> <p>Varovanje in izboljšanje zdravja zaposlenih;</p> <p>Preprečevanje in obvladovanje poklicnih bolezni, poškodb pri delu...</p> <p>Odpravljanje poklicnih tveganj in pogojev dela, ki ogrožajo varnost in zdravje pri delu;</p> <p>Razvoj in napredek varstva pri delu, organizacije dela, pogojev dela...</p> <p>Izboljšanje poklicnega in socialnega statusa zaposlenih, fizičnega in materialnega statusa zaposlenih;</p> <p>Ohranjanje in razvoj delazmožnosti zaposlenih;</p> <p>Omogočanje socialno in ekonomsko produktivnega življenja...</p> <p>Refleksija</p> <p>Spoznati osnove in pomembnosti proučevanj tveganj, obremenitev in škodljivosti v delovnem okolju, njihov vpliv na zmogljivosti posameznih organov, organskih sistemov in človeka v celoti, na njegovo zdravje in delazmožnost. Spoznali naj bi tudi osnovne principe epidemiologije delovnega okolja, ergonomije in humanizacije dela v najširšem smislu in promocije zdravja v delovnem okolju...</p> <p>Prenosljive spretnosti</p> <p>Povezovanje z ergonomijo, medicino dela, statistiko...</p>	<p>- evaluation of ecological monitoring and biomonitoring, as well as basic principles of epidemiology of the workplace;</p> <p>- methods and procedures of a complete workplace anamnesis (exposition anamnesis);</p> <p>- basics of assessment of temporary and permanent inability to work, basics of occupational orientation, selection and rehabilitation;</p> <p>- basic forms, methods and procedures of various types of health promotion at the workplace;</p> <p>Application</p> <p>- protection and improvement of employee health;</p> <p>- prevention and management of occupational diseases, work-related injuries ...;</p> <p>- mitigation of occupational hazards and work conditions that present a danger to occupational health and safety;</p> <p>- development and advancement of occupational safety, work organization, work conditions ...;</p> <p>- improvement of the occupational, social, physical and material status of employees;</p> <p>- protection and development of the employees' ability to work;</p> <p>- fostering a socially and financially productive life ...</p> <p>Analysis</p> <p>To know the basics and the importance of researching risks, stressors and hazards of the workplace, their effect on the capacities of individual organs, organ system and on the person as a whole, on his health and ability to work. Students are also supposed to familiarize themselves with the basic principles of workplace epidemiology, ergonomics and the humanization of labor in its broadest sense, as well as with health promotion at the workplace.</p> <p>Skill-transference Ability</p> <p>Connections with ergonomics, occupational medicine, statistics ...</p>
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**Metode poučevanja in učenja:**

<p>Predavanja</p> <p>Vaje – obvezna prisotnost in sodelovanje</p> <p>Seminariji – obvezna prisotnost, priprava seminarja, izvedba : ocena izdelka in predstavitve</p>
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**Learning and teaching methods:**

<p>Lectures</p> <p>Practical work – required attendance and participation</p> <p>Seminars – required attendance, preparation of paper, execution: marks given for the paper as well as presentation</p>
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**Načini ocenjevanja:**

Pisni izpit	50,00 %	Written examination
Seminarska naloga	50,00 %	Seminar paper

**Delež/Weight**

**Assessment:**

**Reference nosilca/Lecturer's references:**

<p>1. GORIČAR, Katja, KOVAČ, Viljem, <b>FRANKO, Alenka</b>, DODIČ-FIKFAK, Metoda, DOLŽAN, Vita. Serum survivin levels and outcome of chemotherapy in patients with malignant mesothelioma. Disease markers, ISSN 1875-8630, 2015, vol. 2015, str. 1-8. <a href="http://www.hindawi.com/journals/dm/2015/316739/">http://www.hindawi.com/journals/dm/2015/316739/</a>, doi: 10.1155/2015/316739. [COBISS.SI-ID 32176857], JCR, SNIP, WoS do 24. 10. 2015: št. citatov (TC): 0, čistih citatov (CI): 0, Scopus do 10. 10. 2015: št. citatov (TC): 0, čistih citatov (CI): 0]</p>
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2. KOVAČ, Viljem, DODIČ-FIKFAK, Metoda, ARNERIĆ, Niko, DOLŽAN, Vita, **FRANKO, Alenka**. Fibulin-3 as a biomarker of response to treatment in malignant mesothelioma. *Radiology and oncology*, ISSN 1318-2099. [Print ed.], Sep. 2015, vol. 49, no. 3, str. 279-285, doi: 10.1515/raon-2015-0019. [COBISS.SI-ID 2427564], [JCR, SNIP, WoS do 19. 4. 2017: št. citatov (TC): 3, čistih citatov (CI): 2, Scopus do 30. 3. 2017: št. citatov (TC): 3, čistih citatov (CI): 2]
3. **FRANKO, Alenka**, DOLŽAN, Vita, ARNERIĆ, Niko, DODIČ-FIKFAK, Metoda. The influence of gene-gene and gene-environment interactions on the risk of asbestosis. *BioMed research international*, ISSN 2314-6141, 2013, vol. 2013. <http://www.hindawi.com/journals/bmri/2013/405743/>, doi: 10.1155/2013/405743. [COBISS.SI-ID 30775769], [JCR, SNIP, WoS do 3. 4. 2015: št. citatov (TC): 1, čistih citatov (CI): 1, Scopus do 3. 7. 2015: št. citatov (TC): 2, čistih citatov (CI): 2]
4. **FRANKO, Alenka**, DOLŽAN, Vita, KOVAČ, Viljem, ARNERIĆ, Niko, DODIČ-FIKFAK, Metoda. Soluble mesothelin-related peptides levels in patients with malignant mesothelioma. *Disease markers*, ISSN 0278-0240, 2012, vol. 32, no. 2, str. 123-131, doi: 10.3233/DMA-2011-0866. [COBISS.SI-ID 29611737], [JCR, SNIP, WoS do 19. 4. 2017: št. citatov (TC): 7, čistih citatov (CI): 4, Scopus do 25. 4. 2017: št. citatov (TC): 8, čistih citatov (CI): 5]
5. ERČULJ, Nina, KOVAČ, Viljem, HMELJAK, Julija, **FRANKO, Alenka**, DODIČ-FIKFAK, Metoda, DOLŽAN, Vita. DNA Repair Polymorphisms and Treatment Outcomes of Patients with Malignant Mesothelioma Treated with Gemcitabine-Platinum Combination Chemotherapy. *Journal of thoracic oncology*, ISSN 1556-0864, October 2012, vol. 7, no. 10, str. 1609-1617. [COBISS.SI-ID 512300345], [JCR, SNIP, WoS do 17. 11. 2016: št. citatov (TC): 6, čistih citatov (CI): 2, Scopus do 5. 2. 2016: št. citatov (TC): 7, čistih citatov (CI): 4]