

UČNI NAČRT PREDMETA / COURSE SYLLABUS

Predmet:	PROFESIONALNA PATOLOGIJA
Course Title:	OCCUPATIONAL PATHOLOGY

Študijski program in stopnja Study Programme and Level	Študijska smer Study Field	Letnik Academic Year	Semester Semester
MAG Tehniška varnost, 2. stopnja	/	1. ali 2.	1., 2., 3.
USP Technical Safety, 2 nd Cycle	/	1 st or 2 nd	1 st 2 nd 3 rd

Vrsta predmeta / Course Type: izbirni /Elective

Univerzitetna koda predmeta / University Course Code: TV2B3

Predavanja Lectures	Seminar Seminar	Vaje Tutorial	Klinične vaje Work	Druge oblike študija	Samost. delo Individual Work	ECTS
20	25	20 SV	/	10	75	5

Nosilec predmeta / Lecturer: prof. dr. Marjan Bilban / Dr. Marjan Bilban, Full Professor

Jeziki / Languages: slovenski / Slovenian
Predavanja / Lectures: slovenski / Slovenian
Vaje / Tutorial: slovenski / Slovenian

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

Vaje: praktično usposabljanje za računaje izpostavljenosti, verjetnosti in tveganja

words and number of references, turns it in in writing and gives a presentation to other students.

Practical work:

Practical training in exposure, probability and risk calculation.

Temeljna literatura in viri / Readings:

1. Bilban M. Medicina dela za študente tehniške varnosti, ZVD, Ljubljana 2005
2. Bilban M. Medicina dela, ZVD, Ljubljana 1999
3. Bilban M. Medicina dela za zdravnike družinske medicine, SZD – ZMDPŠ Ljubljana 2002
4. Bilban M. Prva pomoč v delovnem okolju, ZVD, Ljubljana 2003
5. Sušnik J. Ergonomska fiziologija, Didakta, 1992
6. Šarić M. Žuškin E. Medicina rada i okoliša, Medicinska naklada, Zagreb 2002
7. Vidaković A. Medicina rada, KCS – Institut za medicinu rada i radiološku zaštitu, Udruženje za medicinu rada Jugoslavije, Beograd 1996 in 1997
8. Hernberg S. Introduction to Occupational Epidemiology. USA. Lewis Publishers, 1992
9. Rothman KJ. Modern Epidemiology. Boston Toronto. Little Brown and Company, 1986
10. McCurney RJ. A Practical Approach to Occupational and Environmental Medicine, Lippincott Williams & Wilkins, USA, 2003
11. Premik M. Uvod v epidemiologijo. Inštitut za socialno medicino MF, Ljubljana, 1998

Cilji in kompetence:

Študent spozna:

- oblike in metode ter načine proučevanja tveganj na delu (obremenitve in škodljivosti);
- oblike, metode in načine jemanja delovne anamneze;
- oblike, metode in načine ocenjevanja izpostavljenosti – kvalitativne in kvantitativne metode (kumulativna izpostavljenost);
- epidemiološke metode v medicini dela
- vplive delovnega okolja na zmogljivosti posameznih organov in organskih sistemov ter človeka kot celote;
- vplive delovnega okolja na zdravje in delazmožnost (zdravstveni, pravno-upravni, tehnični, organizacijski vidik);
- obremenitve (ekološki monitoring) in zgodnje učinke obremenjenosti na zdravje in delazmožnost (biološki monitoring);
- vplive delovnega okolja na specifične kazalce negativnega zdravja posameznika ali skupine poklicne bolezni in boleznim povezane z

Objectives and Competences:

The student will familiarize himself with:

- forms, methods and procedures used to research risks present at the workplace (causes of strain and harm);
- forms, methods and procedures of taking occupational medical history;
- forms, methods and procedures of exposure assessment – qualitative and quantitative methods (cumulative exposure);
- epidemiologic methods in occupational medicine;
- effects of the workplace on the capacity of individual organs and organ systems, as well as of the person as a whole;
- effects of the workplace on health and ability to work (medical, legal-administrative, technical and organizational aspects);
- types of strain (ecological monitoring) and early effects of stress on health and ability to work (biomonitoring);
- effects of the workplace on specific negative

delom (epidemiološki monitoring);
 - osnove humanizacije dela oziroma ergonomije v najširšem smislu;
 - osnove promocije zdravja v delovnem okolju;

health indicators of groups and individuals;
 - occupational and work-related diseases (epidemiological monitoring);
 - basics of the humanization of labor or ergonomics in its broadest sense;
 - basics of health promotion at the workplace.

Predvideni študijski rezultati:

Znanje in razumevanje

- praktične in teoretične oblike analiz delovnega okolja z zdravstvenega vidika;
 - principe in postopke preprečevanja poklicnih tveganj v delovnem okolju;
 - osvoji vrednotenje ekološkega in biološkega monitoringa ter principe epidemiologije delovnega okolja;
 - osvoji načine in postopke izdelave celovite delovne anamneza (anamneza ekspozicije);
 - osvoji osnove ocenjevanja začasne in trajne delanezmožnosti, poklicne orientacije, selekcije in rehabilitacije;
 - osvoji osnovne oblike, metode in načine izvedbe različnih oblik promocije zdravja v delovnem okolju;

Uporaba

Varovanje in izboljšanje zdravja zaposlenih;
 Preprečevanje in obvladovanje poklicnih bolezni, poškodb pri delu...
 Odpravljanje poklicnih tveganj in pogojev dela, ki ogrožajo varnost in zdravje pri delu;
 Razvoj in napredek varstva pri delu, organizacije dela, pogojev dela...
 Izboljšanje poklicnega in socialnega statusa zaposlenih, fizičnega in materialnega statusa zaposlenih;
 Ohranjanje in razvoj delazmožnosti zaposlenih;
 Omogočanje socialno in ekonomsko produktivnega življenja...

Refleksija

Spoznati osnove in pomembnosti proučevanj tveganj, obremenitev in škodljivosti v delovnem okolju, njihov vpliv na zmogljivosti posameznih organov, organskih sistemov in

Intended Learning Outcomes:

Knowledge and Comprehension

- practical and theoretical forms of workplace analysis from the medical perspective;
 - principles and procedures of work-related risk mitigation at the workplace;
 - evaluation of ecological monitoring and biomonitoring, as well as basic principles of epidemiology of the workplace;
 - methods and procedures of a complete workplace anamnesis (exposition anamnesis);
 - basics of assessment of temporary and permanent inability to work, basics of occupational orientation, selection and rehabilitation;
 - basic forms, methods and procedures of various types of health promotion at the workplace;

Application

- protection and improvement of employee health;
 - prevention and management of occupational diseases, work-related injuries ...;
 - mitigation of occupational hazards and work conditions that present a danger to occupational health and safety;
 - development and advancement of occupational safety, work organization, work conditions ...;
 - improvement of the occupational, social, physical and material status of employees;
 - protection and development of the employees' ability to work;
 - fostering a socially and financially productive life ...

Analysis

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

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...

Prenosljive spretnosti

Povezovanje z ergonomijo, medicino dela, statistiko...

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.

Skill-transference Ability

Connections with ergonomics, occupational medicine, statistics ...

Metode poučevanja in učenja:

Predavanja
Vaje – obvezna prisotnost in sodelovanje
Seminarji – obvezna prisotnost, priprava seminarja, izvedba : ocena izdelka in predstavitev

Learning and Teaching Methods:

Lectures
Practical work – required attendance and participation
Seminars – required attendance, preparation of paper, execution: marks given for the paper as well as presentation

Načini ocenjevanja:

Pisni izpit
Seminarska naloga

Delež (v %) /

Weight (in %) **Assessment:**

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

Reference nosilca / Lecturer's references:

- DOVJAK, Mateja, KUKEC, Andreja, KRISTL, Živa, KOŠIR, Mitja, **BILBAN, Marjan**, SHUKUYA, Masanori, KRAINER, Aleš. Integral control of health hazards in hospital environment. *Indoor + built environment*, ISSN 1420-326X, okt. 2013, letn. 22, št. 5, str. 776-795, ilustr. <http://ibe.sagepub.com/content/22/5/776.full.pdf>, doi: [10.1177/1420326X12459867](https://doi.org/10.1177/1420326X12459867). [COBISS.SI-ID [5988705](https://www.cobiss.si/urn:nbn:si:coibis:5988705)]

- VENDRAMIN, Andreja, **BILBAN, Marjan**. Poklicna izpostavljenost zdravstvenega osebja ionizirajočemu sevanju = Occupational exposure to ionizing radiation for medical workers. *Zdravstveno varstvo*, ISSN 0351-0026. [Tiskana izd.], 2012, letn. 51, št. 3, str. 182-189, graf. prikazi. <http://versita.metapress.com/content/h324056p3xmv40v8/fulltext.pdf>, doi: [10.2478/v10152-012-0021-0](https://doi.org/10.2478/v10152-012-0021-0). [COBISS.SI-ID [2746853](https://www.cobiss.si/urn:nbn:si:coibis:2746853)]

-**BILBAN, Marjan**, VOJVODA, Alenka, JERMAN, Janez. Age affects drivers' response times. *Collegium antropologicum*, ISSN 0350-6134, 2009, letn. 33, št. 2, str. 467-471, ilustr. [COBISS.SI-ID [7993929](https://www.cobiss.si/urn:nbn:si:coibis:7993929)]