

UČNI NAČRT PREDMETA/COURSE SYLLABUS

Predmet:	Globalna epidemiologija
Course title:	Global Epidemiology

Študijski program in stopnja Study programme and level	Študijska smer Study field	Letnik Academic year	Semester Semester
Zdravstvene vede/3. stopnja	Preventiva v zdravstvu	1. letnik	2.
Health sciences/3 rd Cycle	Prevention in Health Care	1 st year	2 nd

Vrsta predmeta/Course type	temeljni predmet smeri/fundamental subject in study field
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Univerzitetna koda predmeta/University course code:	3_ZV_1_UN4_TPS_PZ
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Predavanja Lectures	Seminar Seminar	Sem. vaje Tutorial	Lab. vaje Laboratory work	Teren. vaje Field work	Samost. delo Individ. work	ECTS
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20	10				420	15
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Nosilec predmeta/Lecturer:	izr. prof. dr. Alenka Kraigher
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Jeziki/ Languages:	Predavanja/Lectures	slovenski/Slovenian
	Vaje/Tutorial:	slovenski/Slovenian

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

- Vpis v prvi letnik študijskega programa.
- Študent mora pred izpitom pripraviti in predstaviti ter zagovarjati raziskovalno nalogo.

Prerequisites:

- Enrolment in the first year of study.
- Student has to prepare, present and defend a research paper before the exam.

Vsebina:

- Epidemiologija kot temeljna in aplikativna veda, ki je usmerjena v populacijo, ki je opredeljena geografsko, z delovnim okoljem, poklicem, izpostavljenostjo migracijam, tveganjem za okvaro zdravja, z vplivi preteklosti in drugimi značilnostmi, ki omogoča opis in kvantifikacijo določenih zdravstvenih problemov ter proučevanje vzrokov za pojav le-teh.
- Izvor podatkov in uporaba v epidemiologiji: demografski podatki, registri, sistemi prijavljanja, presejanja, študije in drugi viri podatkov.

Content (Syllabus Outline):

- Epidemiology as a fundamental and applicative science that focuses on a geographically defined population with work environment, occupation, migration exposure, risk of health damage, with the impact of the past and other characteristics that enable individuals to describe and quantify certain health problems, as well as examine the causes of their emergence.
- Data source and use in epidemiology: demographic data, registries, reporting systems, screening, studies and other data sources.

<ul style="list-style-type: none"> • Epidemiološke raziskave (proučevanje odnosa med možnimi vplivi na zdravje in boleznimi). Opisne študije za prikaz vzorcev bolezni v populaciji glede na osebo, čas in kraj ter vključujejo analize časovnih vrst in študije razširjenosti. Analitične študije, ki vključujejo študije primerov in kontrol (retrospektivne), in kohortne študije (prospektivne). Populacijske študije. Preiskovanje kopičenja primerov, mapiranje in geografski informacijski sistemi. Omejitve študij. • Izpostavljenost dejavnikom, ki vplivajo na zdravje - Ocene izpostavljenosti (raziskovanje vzročno-posledične povezave med izpostavljenostjo tveganjem in boleznim. Ugotavljanje narave izpostavljenosti – hrana, materiali, zrak in voda, nevarni odpadki, podnebne spremembe. Ocena možnih interaktivnih učinkov (potenciranje, sinergija) hkratne izpostavljenosti. Specifičnost, jakost in doslednost povezanosti ter časovna povezanost. • Opredeljevanje determinant zdravja. • Analiza dogodkov, pomembnih za javno zdravje z vidika poti širjenja, virov okužbe, agensa, dovzetnosti gostitelja. • Opredelitev pojmov: kopičenje, izbruh, epidemija, pandemija nalezljivih bolezni. • Proučevanje globalnih nevarnosti in odziv na vplive na javno zdravje (nenamerno in namerno sproščanje nevarnih snovi, kontaminacija hrane, vode, zraka, zmogljivosti za odzivanje globalno in na regionalnem, nacionalnem in lokalnem nivoju – spremljanje bolezni, laboratorijska diagnostika, hitro zaznavanje in naglo odzivanje, preiskovanje in obvladovanje izbruhov, pripravljenost za odziv na množične nesreče). • Obveščanje o nevarnostih za javno zdravje (pomen komunikacije pri obvladovanju tveganja, značilnosti in načela učinkovitega komuniciranja o nevarnostih za zdravje). 	<ul style="list-style-type: none"> • Epidemiologic research (to assess relationships between suspected risk factors and disease). Descriptive studies portray disease patterns in population according to a person, a time, and a place and include time-series analyses and prevalence studies. Analytic studies include case-control (retrospective) and cohort (prospective) studies. Population studies. Cluster study investigation, mapping and geographic information systems. Limitations of studies. Exposure and health risk – Exposure assessment (establishing cause-effect relationships between exposure and adverse health outcomes. Investigation of the nature of exposure – food, materials, air pollution, water, hazardous waste material, climate change. Assessment of potential interactive effects (potentiation, synergy) of simultaneous exposures. Specificity, strength, consistency and temporality of associations. • Defining the determinants of health. • Analysis of events relevant to public health from the routes of spreading perspective, to the infection sources, and the agent and host susceptibility. • Definitions of terms: accumulation, outbreak, epidemic, pandemic of contagious diseases. • Global health hazards and their impact on public health investigation and response (unintentional and deliberate release of hazardous substances, contamination of food, water, air; response capabilities at global, regional, national and local levels – disease monitoring, laboratory diagnostics, early detection and rapid response, outbreak investigation and control, preparedness to mass disaster response) • Risk communication (role of risk communication in risk management, characteristics and principles for effective risk communication).
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Temeljna literatura in viri/Readings:

Temeljna literatura/Basic literature

- Tomažič, J. in Strle, F. (2017). *Infekcijske bolezni*. Ljubljana: Združenje za infektologijo, Slovensko zdravniško društvo.
- Zaletel-Kragelj, L., Eržen, I. in Premik, M. (2011). *Uvod v javno zdravje*. Ljubljana: Medicinska fakulteta, Katedra za javno zdravje.
- Zaletel-Kragelj, L. in Eržen, I. (2010). Cross-sectional studies. V: Zaletel-Kragelj, L. (ur.), Božikov, J. (ur.). *Methods and tools in public health: a handbook for teachers, researchers and health professionals*. Lage: H. Jacobs, str. 309- 332.
- Zaletel-Kragelj, L. in Eržen, I. (2010). Ecological studies: basic principles. V: Zaletel Kragelj, L. (ur.), Božikov, J. (ur.). *Methods and tools in public health: a handbook for teachers, researchers and health professionals*. Lage: H. Jacobs, str. 289-308, ilustr.

Priporočljiva literatura/Recommended literature

- Oxford Textbook of Global Public Health (7 edn) Roger Detels (ed.), Quarraisha Abdool Karim (ed.), Fran Baum (ed.), Liming Li (ed.), Alastair H Leyland (ed.) Publisher:Oxford University Press. Published: November 2021. Dostopno na <https://doi.org/10.1093/med/9780198816805.001.0001>.
- Control of Communicable Diseases Manual, 21st Edition, is the trusted source for public health professionals on identifying. Edited by David L. Heymann, MD. APHA Press. Publishing Date: 06/22.

Cilji in kompetence:

- omogočiti razumevanje epidemioloških metod in njihovo uporabo pri preučevanju zdravja in bolezni prebivalstva ter obvladovanju problemov pomembnih za javno zdravje,
- opremiti kandidata z osnovnim znanjem o epidemioloških značilnostih bolezni, dogodkov in okoljskih dejavnikov, ki imajo vpliv na javno zdravje,
- usposobiti kandidata, da je zmožen poiskati in uporabljati znanstvena spoznanja stroke in prepoznavati ključna vprašanja ter identificirati možne odgovore,
- posredovati ustrezno znanje, ki omogoča sprejemanje odločitev, podprtih z znanstvenimi dokazi, in ki usposoblja, da se teoretična spoznanja prelijejo v prakso,
- motivirati za nenehno pridobivanje novih znanj na področju, kjer so spremembe hitre in nepričakovane,

Objectives and Competences:

- to enable understanding of epidemiological methods and their use in studying the population's health and diseases, and to manage problems relevant to public health,
- to equip the candidate with the basic knowledge of the epidemiological characteristics of diseases, events and environmental factors that have an impact on public health,
- to educate the candidate to be able to find and use scientific findings of the profession, and to identify key issues and possible answers,
- to provide the relevant knowledge that will enable scientifically sound decision making supported by scientific evidence and qualify the candidate to implement theoretical knowledge into practice,
- to motivate the candidate to constantly seek new knowledge in the field where changes are rapid and unexpected,

- usposobiti kandidata, da je fleksibilen in sposoben sodelovanja v interdisciplinarnih skupinah,
- usposobiti za samostojen študij, razumevanje in reševanje problemov s področja javnega zdravja.

- to qualify the candidate to be flexible and able to participate in interdisciplinary groups,
- to qualify the candidate for independent study, understanding and solving issues in the field of public health.

Predvideni študijski rezultati:

Intended Learning Outcomes:

Študent/študentka:

- razume epidemiološke metode in njihovo uporabo pri preučevanju zdravja in bolezni prebivalstva ter obvladovanju problemov pomembnih za javno zdravje,
- pridobi osnovno znanje o epidemioloških značilnostih bolezni, dogodkov in okoljskih dejavnikov, ki imajo vpliv na javno zdravje,
- poišče in uporablja znanstvena spoznanja stroke in prepozna ključna vprašanja ter identificirajo možne odgovore,
- se usposobi za sprejemanje odločitev, podprtih z znanstvenimi dokazi,
- se usposobi za implementacijo teoretičnih spoznanj v prakso,
- je motiviran za nenehno pridobivanje novih znanj na področju, kjer so spremembe hitre in nepričakovane,
- je fleksibilen in sposoben sodelovati v interdisciplinarnih skupinah,
- se usposobi za samostojen študij, razumevanje in reševanje problemov s področja javnega zdravja.

Students:

- understand epidemiological methods and their use in studying the population's health and diseases, and to manage relevant public health,
- gain the basic knowledge of epidemiological characteristics of diseases, events and environmental factors impacting public health,
- seek and use scientific findings of the profession, and to identify key issues and possible answers,
- are qualified to make decisions based on scientific evidence,
- are qualified to implement scientific findings into practice,
- are motivated to constantly seek out new knowledge in the field where changes are rapid and unexpected,
- are flexible and able to participate in interdisciplinary groups,
- are qualified for independent study, understanding and solving issues in the field of public health.

Metode poučevanja in učenja:

- *predavanja* z aktivno udeležbo študentov (razlaga, diskusija, vprašanja, primeri, reševanje problemov),
- *seminarji:*
 - načrt za raziskavo,
 - izvedba raziskave (voden individualni študij),
 - izdelava, predstavitev in zagovor raziskovalne naloge;
- konzultacije (individualne in kolektivne).

Learning and Teaching Methods:

- lectures with active student participation (explanation, discussion, questions, examples, problem solving),
- *seminars:*
 - research plan,
 - research implementation (guided individual study),
 - preparation, presentation and defence of the research paper; consultations (individual and group).

Načini ocenjevanja: Delež (v %)/Weighting Assessment: (in %)

<p>Načini:</p> <ul style="list-style-type: none"> • izpit, • temeljna ali aplikativna raziskovalna naloga z zagovorom (obseg 30.000 znakov). <p><i>Ocenjevalna lestvica:</i> uspešno, neuspešno.</p>	<p>60 40</p>	<p>Types:</p> <ul style="list-style-type: none"> • exam, • fundamental or applicative research paper with defence (30,000 characters). <p><i>Grading scale:</i> pass, fail.</p>
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