

UČNI NAČRT PREDMETA / COURSE SYLLABUS
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Ime predmeta:	Urgentna medicina
Course title:	Emergency

Študijski program in stopnja Study programme and cycle	Študijska smer Study option	Letnik Year of study	Semester Semester
Splošna medicina, enovit magistrski študijski program		Četrty ali peti	7. ali 8. ali 9. ali 10.
General medicine, Uniform master's degree study program		Fourth or fifth	7th or 8th or 9th or 10th

Vrsta predmeta (obvezni ali izbirni) / Course type (compulsory or elective)	izbirni
	elective

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
5	40					45	3	
		AV	LV	RV				

Nosilec predmeta / Course coordinator:

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):

1. Služba nujne medicinske pomoči v Sloveniji
2. Temeljni in nadaljevalni postopki oživljanja pri odrasli osebi
3. Temeljni in nadaljevalni postopki oživljanja pri otroku
4. Temeljni in nadaljevalni postopki pri oskrbi poškodovanca
5. Nenadna huda prsna bolečina in akutni koronarni sindrom
6. Srčno popuščanje, pljučni edem in pljučna embolija
7. Akutna dispneja in respiratorno popuščanje
8. Akutne motnje ritma
9. Hipotenzija in šok
10. Akutna bolečina in krvavitve iz prebavne cevi
11. Akutno ledvično popuščanje in oligurija
12. Sinkopa in nezavest
13. Akutno stanje zmedenosti, agresivnosti in psihotičnosti

Content (syllabus outline):

1. Emergency medical services in Slovenia
2. Basic and advanced life support in adults
3. Neonatal and paediatric basic and advanced life support
4. Basic and advanced trauma life support
5. Acute Chest Pain and Acute Coronary Syndromes
6. Congestive Heart Failure, Pulmonary Edema and Pulmonary Embolism
7. Respiratory Distress
8. Disturbances of Cardiac Rhythm and Conduction
9. Hypotension and shock
10. Acute Abdominal Pain and gastrointestinal bleeding
11. Acute Renal Failure
12. Syncope and Coma
13. Altered Mental Status, Psychosis and Aggressiveness
14. Stroke
15. Seizures and Status Epilepticus

14. Akutna možganska kap
15. Epileptični status
16. Akutne zastrupitve
17. Akcidentalna stanja
18. Nujna stanja pri otrocih
19. Poškodba glave
20. Poškodbe prsnega koša
21. Poškodbe trebuha
22. Osteomuskularne poškodbe in poškodbe hrbtenice
23. Blast, crush in compartment poškodbe
24. Termične poškodbe
25. Posebnosti poškodb pri otroku in nosečnosti
26. Transport poškodovanca in ocenjevalne lestvice
27. Nujna ginekološka stanja
28. Etika v nujni medicini

16. Toxicology
17. Environmental Injuries
18. Pediatrics Emergency
19. Head Injury
20. Thoracic Trauma
21. Abdominal Injuries
22. Spinal Cord Injuries and Injuries to the Bones, Joints and Soft Tissue
23. Blast, crush and compartment injuries
24. Thermal Injuries
25. Pediatric Trauma and Trauma in Pregnancy
26. Medical Transport and Evaluation Scales
27. Emergency in Gynecology and Obstetrics
28. Ethical issues in Emergency Medicine

Temeljni literatura in viri / Reading materials:

1. Monsieurs KG, Nolan JP, Bossaert LL, Greif R, Maconochie IK, Nikolaou NI, Perkins GD, Soar J, Truhlar A, Wyllie J, Zideman DA; ERC Guidelines 2015 Writing Group. European Resuscitation Council Guidelines for Resuscitation 2015. Resuscitation. 2015.
2. Smernice za oživiljanje Evropskega reanimacijskega sveta 2015 (http://www.szum.si/media/uploads/files/ERC_2015_slo-1.pdf)
3. Šola urgence I – VI, 2013 – 2018 (<http://www.szum.si/literatura.html>)

ADVANCED TEXTBOOKS (nadaljevalna, dopolnilna literatura):

1. Walls R, Hockberger R, Gausche Hill M. Rosen's Emergency Medicine: concepts and clinical practice, 9th ed., Philadelphia, Mosby-Elsevier, 2017.
- 2.

Cilji in kompetence:

- študent pridobi specialna znanja s področja urgentne medicine
- prepozna življenjsko ogrožajoča stanja in zna pravilno ukrepati;
- sposoben je samostojno izvajati nujne ukrepe pri življenjsko ogroženem pacientu;
- zna pripraviti bolnika/poškodovanca na transport v bolnišnico;
- zna uporabiti tehnične pripomočke in medicinske aparate;
- pozna zdravila v urgentni medicini
- pozna naloge v primeru množičnih nesreč in katastrof
- pozna značilnosti helikopterske NMP, tehničnega reševanja v posebnih pogojih, prepozna nevarnosti v okolju in ustrezno ukrepa;
- pozna organiziranost službe NMP v Sloveniji in v svetu ter zakonodajo s področja PNMP

Objectives and competences:

- To acquire knowledge in emergency medicine
To recognize critical condition of patients and appropriate care and intervention
fully acquainted with resuscitative problems and techniques
appropriate preparing of patients to transport
to acquire knowledge of drugs in emergency medicine
- fully acquainted with prehospital equipment and adjuncts and disaster management
 - to be acquainted with air transport and
 - organization of emergency medical services in Slovenia

Predvideni študijski rezultati:

Intended learning outcomes:

Znanje in razumevanje:
osnovnih patofizioloških dogajanj pri nujnih stanjih z
pravilnim ukrepanjem ter obvladanje in znanje na
področju ACLS, APLS, ATLS in toksikologije.

Prenesljive/ključne spretnosti in drugi atributi: zunanja
masaža srca, intravenozna pot in
alternativna defibrilacija, endotrahealna intubacija in
alternativna oskrba dihalne poti, sedacija, analgezija in
RSI, torakalna punkcija, imobilizacija

Knowledge and Understanding:
basics of patho physiological processes in emergency
conditions with appropriate medical care and
interventions and appropriate preparing in ACLS, APLS,
ATLS and toxicology

Transferable/Key Skills and other attributes:
Cardiac massage, iv access and alternative methods,
defibrillation, endotracheal intubation and alternative
methods of airway management, mechanical ventilation,
sedation and analgesia and RSI, thoracocentesis,
immobilization.

Metode poučevanja in učenja:

Predavanja, praktične demonstracije (vaje) in priprava
seminarjev

Learning and teaching methods:

Lectures, lab work, seminars

Načini ocenjevanja:

Delež (v %) /
Share (in %)

Assessment methods:

Način (pisni izpit, ustno izpraševanje, naloge,
projekt)
Pisni test
Seminarji

Pisni izpit je sestavljen iz 50 MCQ vprašanj v
računalniški obliki, za katere je na voljo 45
minut. Ocena iz pisnega izpita se določi po
naslednjem kriteriju: 45-50 točk: ocena 10; 40-
44 točk: ocena 9; 35-39 točk: ocena 8; 30-34
točk: ocena 7; 26-29 točk: ocena 6; 25 točk ali
manj: izpita ni opravil.

Končna ocena se izračuna po formuli: $(0,5 \times$
 $MCQ) + (0,5 \times \text{seminars})$, rezultat se zaokroži na
eno decimalno mesto. V primeru, da ima končni
rezultat decimalno končnico 0,5 ali več se ocena
zaokroži navzgor, sicer pa navzdol.

V primeru, da študent na pisnem izpitu doseže
manj ali enako kot 25 točk, izpita iz predmeta ni
opravil. V primeru, da je na seminarju ocenjen z
manj kot 6, se študent ne more udeležiti
pisnega izpita.

ŠTUDIJSKE OBVEZNOSTI ŠTUDENTOV:
Obvezna prisotnost na seminarjih. Pred vsakim
seminarjem študent samostojno predela snov iz
seminarja na Moodle ter opravi pre-test in
post-test na Moodle. Pre-test in post-test sta
sestavljena vsak iz petih MCQ vprašanj. Iz
opravljenih testov na Moodle prejme študent
oceno za posamezen seminar (npr. 9 pravilno
rešenih vprašanj 9, za 8 pravilno rešenih
vprašanj 8, itn.). Skupna ocena iz seminarja je

50
50

Type (examination, oral, coursework, project):
Examination
Seminars

Written exam consists of 50 MCQ in
computerized format and is 45 minutes long.
Written exam is graded as following: 45-50
points: grade 10; 40-44 points: grade 9; 35-39
points: grade 8; 30-34 points: grade 7; 26-29
points: grade 6; 25 points or less: failed.

Final grade is calculated as follows: $(0.5 \times MCQ) +$
 $(0.5 \times \text{seminars})$. The result is rounded to one
decimal place. Decimal results of the calculation
will be rounded to the nearest whole number
(0.5 or more is rounded up, less than 0.5 is
rounded down).

If a student gets 25 or less points at the written
exam, he/she has failed the course. If a student
does not get at least a grade 6 at the seminars,
he/she cannot take the written exam.

ACADEMIC OBLIGATIONS OF STUDENTS:
Obligatory attendance at coursework. The
student is obligated to study the materials
uploaded on the Moodle before he enters the
coursework and to fulfill the pre-test and post-
test on Moodle. Both the pre-test and post-test
are composed from 5 MCQ. The success of the
MCQ pre- and post-test are transformed into the
grade for each coursework (for example: 9 right

<p>povprečje ocen iz posameznih seminarjev in predstavlja polovico (50 %) skupne ocene predmeta.</p> <p>POGOJI ZA PRISTOP K POSAMEZNEMU PREVERJANJU ZNANJA: Opravljeni seminarji in ocena iz seminarjev</p>		<p>answered MCQ are transformed into grade 9, 8 right answered MCQ are transformed into grade 8, and so on.). The grade from the seminars is an average of grades from each seminar and represents half of the final grade.</p> <p>REQUIREMENTS FOR ACCESS TO INDIVIDUAL KNOWLEDGE CHECKING: Completed coursework assignments and a mark of seminars.</p>
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Reference nosilca / Course coordinator's references:

PEARSE, Rupert M, NOVAK-JANKOVIČ, Vesna, STECHER, Adela, ŠTIVAN, Feri, GRZYNYUK, Andriy, DAMJANOVSKA, Marija, KOSTADINOV, Ivan, KNEZEVIĆ, Mile, MALIVOJEVIĆ, Marko, BOROVSŠAK, Zvonko, KAMENIK, Mirt, MEKIŠ, Dušan, OSOJNIK, Irena, KOSEC, Lučka, OSTOJIĆ-KAPŠ, Silva, ALEKSIČ, Dragoslav, GERJEVIČ, Božislava, KALAN, Katja, URŠIČ, Tomaž, et al. Mortality aftersurgery in Europe : a 7 daycohortstudy. *The Lancet*, ISSN 0140-6736. [Printed.], Sep. 2012, vol. 380, [no.] 9847, str. 1059-1065.
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MOLLER PETRUN, Andreja, MEKIŠ, Dušan, KAMENIK, Mirt. Successful use of rocuronium and sugammadex in a patient with myasthenia. *European journal of anaesthesiology*, ISSN 0265-0215, 2010, vol. 27, no. 10, str. 917-918, doi: 10.1097/EJA.0b013e3283392593. [COBISS.SI-ID 3702591], [JCR, SNIP, WoS do 31. 12. 2013: št. citatov (TC): 11, čistih citatov (CI): 11, normirano št. čistih citatov (NC): 5, Scopus do 31. 12. 2013: št. citatov (TC): 15, čistih citatov (CI): 15, normirano št. čistih citatov (NC): 7]

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KARNJUŠ, Igor, MEKIŠ, Dušan, KRIŽMARIČ, Miljenko. Uncontrolled delivery of liquid volatile anaesthetic when using the anaesthetic conserving device. *Journal of clinical monitoring and computing*, ISSN 1573-2614, str. 1-10, ilustr. <https://link.springer.com/article/10.1007/s10877-017-0022-2>, doi: 10.1007/s10877-017-0022-2. [COBISS.SI-ID 1539365828]

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doi: [10.1016/j.resuscitation.2018.05.014](https://doi.org/10.1016/j.resuscitation.2018.05.014). [COBISS.SI-ID [6385727](#)]

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levobupivacaine and ketorolac for post-caesarean section analgesia : a prospective, randomised, double-blind,
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