

**UČNI NAČRT PREDMETA / COURSE SYLLABUS**

Predmet: Izbrana poglavja iz urgentne medicine
Course title: Chosen chapters from emergency medicine

Študijski program in stopnja Study programme and level	Študijska smer Study field	Letnik Academic year	Semester Semester
BIOMEDICINSKA TEHNOLOGIJA BIOMEDICAL TECHNOLOGY		2.	3 ali 4

Vrsta predmeta / Course type

Univerzitetna koda predmeta / University course code:

Predavanja Lectures	Seminar Seminar	Vaje Tutorial	Klinične vaje work	Druge oblike študija	Samost. delo Individ. work	ECTS
15	30				105	5

Nosilec predmeta / Lecturer: Doc. dr. Matej Strnad, dr. med., spec.

Jeziki / Predavanja / Lectures: Slovenščina / Slovene; Angleščina / English
Languages: Vaje / Tutorial: Slovenščina / Slovene; Angleščina / English

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

Kandidat mora doseči 300 ECTS na predhodnem študiju.

Graduate degree 300 ECTS

Vsebina:

Vsebina študijskega predmeta »Izbrana poglavja iz urgentne medicine« zajema proučevanje novih metodologij za diagnostiko, spremljanje in zdravljenje najpogostejših patoloških stanj v urgentni medicini. Študij bo predstavljal povezavo med kliničnim delom, kliničnim znanstvenim raziskovanjem ter novimi spoznanji sodobnih diagnostičnih preiskav in zdravljenja. Poudarek bo predvsem na naslednjih področjih urgentne medicine:

- dispečerski sistem
- oživljanje (reanimacija)
- srčno žilne bolezni
- bolezni pljuč
- bolezni centralnega živčnega sistema
- akutni abdomen
- poškodbe
- sepsa

Content (Syllabus outline):

The contents of the study programme »Chosen chapters from emergency medicine« comprise the studying of new methodologies for diagnosis, evaluation and monitoring of treatment of most common disease entities in/from the field of emergency medicine.

The study will represent a connection between clinical work, clinical scientific research and new knowledge acquired by modern diagnostic investigation and treatment.

The stress will be above all on the following fields of emergency medicine:

- dispatch system
- resuscitation
- cardio vascular diseases
- lung diseases
- central nervous system diseases
- acute abdomen
- trauma
- sepsis

Temeljni literatura in viri / Readings:

1. Tintinalli JE, Kelen GD, Stapczynski JS. Emergency medicine – A comprehensive study guide – 7th ed. , McGraw-Hill, New York 2011.
2. Marx JA, Hockberger RS, Walls RM. Rosen's Emergency Medicine: concepts and clinical practice, 8th ed., Philadelphia, Mosby-Elsevier, 2014.
3. American college of surgeons. Advanced trauma life support. 9th ed. American College of Surgeons, Chicago, 2012.
4. Monsieurs KG, Nolan JP, Bossaert LL et al. European resuscitation council guidelines for resuscitation 2015. Section 1. Executive summary. Resuscitation 2015 (95):1-80.
5. Perkins GD, Handley AJ, Koster RW et al. European resuscitation council guidelines for resuscitation 2015. Section 2. Adult basic life support and automated external defibrillation. Resuscitation 2015 (95): 81-99.
6. Soar J, Nolan JP, Böttiger BW et al. European resuscitation council guidelines for resuscitation 2015. Section 3. Adult advanced life support. Resuscitation 2015 (95): 100-147.

Cilji in kompetence:

Namen predmeta »Izbrana poglavja v urgentni medicini« je pridobiti širše znanje in razumevanje patofiziologije iz posameznih področij urgentne medicine. Poudarek je na kliničnih stanjih, ki so v urgentni medicini najpogostejša in vplivajo na obolevnost in umrljivost prebivalstva. Zato je cilj uvajanje novih ter izboljševanje obstoječih diagnostičnih ter terapevtskih postopkov ter njihov prenos v vsakdanjo klinično prakso.

Objectives and competences:

The objective of the study »Chosen chapters from emergency medicine« is to acquire knowledge and comprehension of pathophysiology from specific fields of emergency medicine. The stress will be on the pathologic conditions most common in emergency medicine and highly affecting the morbidity and mortality of the population. Therefore, the objective will be the introduction of new and improvement of contemporary diagnostic and therapeutic procedures and their transfer into everyday clinical practice.

Predvideni študijski rezultati:

Znanje in razumevanje:

Osvojitev novih znanj s posameznih področij urgentne medicine in njihovo razumevanje, ki jih bo mogoče neposredno koristiti v procesu zdravljenja in spremljanja bolezni.

Prenesljive/ključne spretnosti in drugi atributi:
Odvisno od raziskovalnega področja in samega raziskovalnega projekta.

Intended learning outcomes:

Knowledge and understanding:

Acquired new knowledge from specific fields in emergency medicine, which can be applied directly in the processes of treatment and monitoring of critically ill patients.

Transferable/Key Skills and other attributes:
Depends on the research field and on the research project.

Metode poučevanja in učenja:

Predavanja, seminarji, seminarske vaje, samostojno raziskovalno delo.

Learning and teaching methods:

Lectures, seminars, tutorials, independent research work.

Načini ocenjevanja:

- Ustno izpraševanje
- Seminarska naloga

Delež (v %) /
Weight (in %)

50 %
50 %

Assessment:

- Oral examination
- Coursework

Reference nosilca / Lecturer's references:

1. PELCL, Tine, BOROVIK LESJAK, Vesna, VUJANOVIĆ, Vitka, STRNAD, Matej. Impact of prehospital rapid sequence intubation and mechanical ventilation on prehospital vital signs and outcome in trauma patients. *Signa vitae*, ISSN 1845-206X, 2017, vol. 13, no. 1, str. 51-55. <http://www.signavitae.com/wp-content/uploads/2017/04/sv13-n1-51-55.pdf>, doi: [10.22514/SV131.042017.23](https://doi.org/10.22514/SV131.042017.23) /. [COBISS.SI-ID [512719928](https://www.cobiss.si/id/512719928)], [JCR, SNIP, Scopus do 11. 7. 2017: št. citatov (TC): 0, čistih citatov (CI): 0]

2. STRNAD, Matej, BOROVIK LESJAK, Vesna, VUJANOVIĆ, Vitka, KRIŽMARIĆ, Miljenko. Predictors of mortality in patients with isolated severe traumatic brain injury. *Wiener klinische Wochenschrift*, ISSN 1613-7671, 2017, vol. 129, iss. 3, str. 110-114. <https://link.springer.com/article/10.1007%2Fs00508-016-0974-0>, doi: [10.1007/s00508-016-0974-0](https://doi.org/10.1007/s00508-016-0974-0). [COBISS.SI-ID [512595256](#)], [JCR, SNIP, WoS do 7. 4. 2017: št. citatov (TC): 1, čistih citatov (CI): 1, Scopus do 29. 1. 2017: št. citatov (TC): 2, čistih citatov (CI): 2]

3. STRNAD, Matej, PROSEN, Gregor, BOROVIK LESJAK, Vesna. Bedside lung ultrasound for monitoring the effectiveness of prehospital treatment with continuous positive airway pressure in acute decompensated heart failure. *European journal of emergency medicine*, ISSN 1473-5695, 2016, vol. 23, iss. 1, str. 50-55. http://journals.lww.com/euro-emergencymed/Abstract/2016/02000/Bedside_lung_ultrasound_for_monitoring_the.11.aspx, doi: [10.1097/MEJ.0000000000000205](https://doi.org/10.1097/MEJ.0000000000000205). [COBISS.SI-ID [512583224](#)], [JCR, SNIP, WoS do 26. 3. 2017: št. citatov (TC): 4, čistih citatov (CI): 4, Scopus do 1. 3. 2017: št. citatov (TC): 4, čistih citatov (CI): 4]

4. STRNAD, Matej, BOROVIK LESJAK, Vesna, VUJANOVIĆ, Vitka, PELCL, Tine, KRIŽMARIĆ, Miljenko. Predictors of mortality and prehospital monitoring limitations in blunt trauma patients. *BioMed research international*, ISSN 2314-6141, 2015, vol. 2015. <http://www.hindawi.com/journals/bmri/2015/983409/>. [COBISS.SI-ID [512471608](#)], [JCR, SNIP, WoS do 21. 3. 2015: št. citatov (TC): 0, čistih citatov (CI): 0, Scopus do 2. 12. 2015: št. citatov (TC): 1, čistih citatov (CI): 1]

5. ZADEL, Sabina, STRNAD, Matej, PROSEN, Gregor, MEKIŠ, Dušan. Point of care ultrasound for orotracheal tube placement assessment in out-of hospital setting. *Resuscitation*, ISSN 1873-1570. [Online ed.], 2015, vol. 87, no. , str. [1-6], ilustr. http://ac.els-cdn.com/S0300957214008156/1-s2.0-S0300957214008156-main.pdf?_tid=59e6f5fc-7ebd-11e4-a1ae-00000aab0f26&acdnat=1418031425_06c848659cf50b5f4f271de62ded28ff, doi: [10.1016/j.resuscitation.2014.11.006](https://doi.org/10.1016/j.resuscitation.2014.11.006). [COBISS.SI-ID [5187903](#)], [JCR, SNIP, WoS do 25. 12. 2016: št. citatov (TC): 8, čistih citatov (CI): 8, Scopus do 2. 6. 2016: št. citatov (TC): 8, čistih citatov (CI): 8]

6. VUJANOVIĆ, Vitka, BOROVIK LESJAK, Vesna, PELCL, Tine, STRNAD, Matej. Impact of pre-hospital oxygenation and ventilation status on outcome in patients with isolated severe traumatic brain injury. *Signa vitae*, ISSN 1845-206X, 2014, vol. 9, no. 1. <http://www.signavitae.com/attachments/07%20STRNAD-VUJANOVIC%20-%20SIGNA%2026.pdf>. [COBISS.SI-ID [512404536](#)], [JCR, SNIP, WoS do 24. 8. 2014: št. citatov (TC): 0, čistih citatov (CI): 0, Scopus do 13. 11. 2014: št. citatov (TC): 0, čistih citatov (CI): 0]

7. STRNAD, Matej, ZADEL, Sabina, KLEMENC-KETIŠ, Zalika, PROSEN, Gregor. Identification of lung sliding : a basic ultrasound technique with a steep learning curve. *Signa vitae : specialized medical journal*, ISSN 1334-5605, 2013, vol. 8, no. 1, str. 31-35, ilustr. <http://www.signavitae.com/attachments/SIGNA%20VITAE%202013%208%281%29%2031%20-%2035.pdf>. [COBISS.SI-ID [30588633](#)], [JCR, SNIP, WoS do 4. 5. 2016: št. citatov (TC): 2, čistih citatov (CI): 0, Scopus do 18. 2. 2016: št. citatov (TC): 2, čistih citatov (CI): 0]

8. PROSEN, Gregor, KLEMEN, Petra, STRNAD, Matej, GRMEC, Štefek. Combination of lung ultrasound (a comet-tail sign) and N-terminal pro-brain natriuretic peptide in differentiating acute heart failure from chronic obstructive pulmonary disease and asthma as cause of acute dyspnea in prehospital emergency setting. *Critical care*, ISSN 1466-609X, 2011, vol. 15, no. 2, str. R114. <http://ccforum.com/content/pdf/cc10140.pdf>, doi: [10.1186/cc10140](https://doi.org/10.1186/cc10140). [COBISS.SI-ID [3911231](#)], [JCR, SNIP, WoS do 20. 8. 2017: št. citatov (TC): 47, čistih citatov (CI): 45, Scopus do 24. 6. 2017: št. citatov (TC): 45, čistih citatov (CI): 43]

9. GRMEC, Štefek, STRNAD, Matej, PODGORŠEK, Dejan. Comparison of the characteristics and outcome among patients suffering from out-of-hospital primary cardiac arrest and drowning victims in cardiac arrest. *International journal of emergency medicine*, ISSN 1865-1372, Apr. 2009, vol. 2, no. 1, str. 7-12, tabele. <https://link.springer.com/article/10.1007%2Fs12245-009-0084-0>, doi: [10.1007/s12245-009-0084-0](https://doi.org/10.1007/s12245-009-0084-0). [COBISS.SI-ID

[3266623](#)], [[SNIP](#), [Scopus](#) do 22. 8. 2017: št. citatov (TC): 24, čistih citatov (CI): 23]

10. GRMEC, Štefek, STRNAD, Matej, KUPNIK, Dejan, SINKOVIČ, Andreja, GAZMURI, Raúl J. Erythropoietin facilitates the return of spontaneous circulation and survival in victims of out-of-hospital cardiac arrest. *Resuscitation*, ISSN 0300-9572. [Print ed.], 2009, vol. 80, no. 6, str. 631-637, doi: [10.1016/j.resuscitation.2009.03.010](https://doi.org/10.1016/j.resuscitation.2009.03.010). [COBISS.SI-ID [3285823](#)], [[JCR](#), [SNIP](#), [WoS](#) do 21. 5. 2017: št. citatov (TC): 35, čistih citatov (CI): 35, [Scopus](#) do 22. 12. 2016: št. citatov (TC): 33, čistih citatov (CI): 33]

11. GRMEC, Štefek, STRNAD, Matej, ČANDER, Darko, MALLY, Štefan. A treatment protocol including vasopressin and hydroxyethyl starch solution is associated with increased rate of return of spontaneous circulation in blunt trauma patients with pulseless electrical activity. *International journal of emergency medicine*, ISSN 1865-1380. Online ed., Dec. 2008, vol. 1, no. 4, str. 311-316, doi: [10.1007/s12245-008-0073-8](https://doi.org/10.1007/s12245-008-0073-8). [COBISS.SI-ID [3129663](#)], [[SNIP](#)]