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| **Course code:**  **\*** | **Course title:**  **SELECTED TOPICS IN PHARMACOLOGY – PHARMACOTHERAPY OF PAIN** | | |
| **Level:**  **Undergraduate** | **Year:**  **III** | **Semester:**  **VI** | **ECTS credits:**  **2** |
| **Status:**  **Elective** | **Number of hours weekly:**  **1+1** | | **Total hours of teaching: 30** |
| **Teaching staff:** | Fahir Bečić, PhD, full professor  Nermina Žiga-Smajić, PhD, assistant professor  Belma Pehlivanović, MPharm, teaching and research assistant  Dina Lagumdžija, MPharm, teaching and research assistant | | |
| **1. Course objectives:** | Introducing students to the basics needed for their future practical work as pharmacists, in terms of having adequate knowledge of special pharmacology for proper prescribing and control of drugs. | | |
| **1.1. Curriculum:**  **a) Lectures:**  Neuroanatomy of pain. Neurotransmitters and pain. Assessment of pain. Analgesic drugs. Non-steroidal anti-inflammatory drugs. Weak opioids. Strong opioids. Non-opioid analgesic drugs. Opioid agonist-antagonists and partial agonists. Adverse effects of opioids. Opioid tolerance, dependence and addiction. Special techniques of opioid drug delivery: patient-controlled analgesia. Adjuvants. Pediatric pain management. Pain management during pregnancy and breastfeeding. Treatment of selected pain syndromes.  **b) Practical work:**  Aetiology and neurophysiology of pain. Prescription and dosage regimen of analgesic drugs. Clinical studies on the effectiveness of pain therapy with analgesic drugs. Pediatric pain management. Pain management during pregnancy and breastfeeding. Treatment of selected pain syndromes (case studies). | | | |
| **1.2. Learning outcomes:** | Students are expected to gain skills and knowledge in contemporary theoretical propositions in the field of pharmacology as well as techniques and skills for experimental work. | | |
| **2. Course organization:** | | | |
| **2.1. Structure of the course:** | 1. Lectures  2. Practical work and case studies | | 1. 50%  2. 50% |
| **2.2. Grading:** | 1. Attendance and participation in classes  2. Homeworks  3. Colloquiums, programs, seminars, presentations  4. First term (partial) exam (first colloquium)  5. Second term (partial) exam (second colloquium)  6. Final oral exam | | 1. 5%  2. 10%  3. 10%  4. 20%  5. 20%  6. 35% |
| **3. Literature:** | | | |
| Mandatory:   1. Rang, H.P., Dale, M.M., Ritter, J.M. and Moore, P.K. eds., (2009). Pharmacology. 7th ed. London: Churchill Livingstone.   Additional:   1. Katzung, B.G., Masters, S.B. and Trevor, A.J. eds., (2012). Basic and Clinical Pharmacology. 12th ed. New York: McGraw Hill. | | | |