


University of Niš Faculty of Medicine	Study program: INTEGRATED ACADEMIC STUDIES OF MEDICINE <i>ACCREDITATION 2018</i>	
Course: Homeostasis of water and electrolytes		
Course head: Prof. dr Suzana Branković		
Course status:	Elective	
Semester: VI	Study year: III	
ECTS: 4	Course code: M-III-20.g	
Course purpose:		
<p>Students should learn about the mechanisms involved in the maintenance of constant composition and volume of the extracellular fluid:</p> <ul style="list-style-type: none"> ▪ renal mechanisms ▪ reactions of the respiratory and cardiovascular system ▪ voluntary mechanisms ▪ physiological roles of particular electrolytes (K⁺, Na⁺, Ca⁺⁺) and effects created if dysbalances should occur ▪ changes in the function of organism if changes in the EST osmolarity should occur ▪ impact of pH changes on the function of central nervous and other systems. 		
Course outcome: (knowledge, skills, attitudes)		
<p>The knowledge acquired will qualify a doctor of medicine to:</p> <ul style="list-style-type: none"> ▪ resolve the disorders occurring due to disturbed water balance ▪ recognize and treat electrolyte dysbalances ▪ recognize and regulate electrolyte dysbalance disturbances ▪ recognize and regulate the states disturbing acid-base balance 		
Nr. of classes of active teaching: 45		
Lectures: 30	Practice: 15	
Course content		
Recommended literature:		
<ol style="list-style-type: none"> 1. Veljković S. (urednik) Voda i elektroliti. Punta Niš, 2010. 2. Veljković S, Radenković M (urednici). Medicinska fiziologija. Medicinski fakultet Univerziteta u Nišu. Niš, 2016. 3. Baret K, Barman S, Bojtano S, Bruks H. Ganongov pregled medicinske fiziologije. Donvas Kragujevac, 2015. 4. Guyton AC, Hall JE. Medicinska fiziologija, 11. izdanje. Savremena administracija: Beograd, 2008. 		
Teaching methods:		
<ul style="list-style-type: none"> ▪ Interactive theoretical and practical teaching ▪ Consultations ▪ Seminar papers 		
Required previously passed exams:		
None		
Grade (max. 100 points)		
Pre-exam obligations		
<ul style="list-style-type: none"> ▪ Attendance and activity at lectures: 0 – 10 points ▪ Activity at practice classes: 0 – 20 points 		
Final exam		
<ul style="list-style-type: none"> ▪ Written exam: 0 – 70 points 		