

University of Niš Faculty of Medicine	Study program: INTEGRATED ACADEMIC STUDIES OF MEDICINE <i>ACCREDITATION 2018</i>	
Course: Biology of the cell		
Course head: prof. dr Aleksandar Petrović		
Course status:	Elective	
Semester: III	Study year: II	
ECTS: 4	Course code: M-II-9.a	
Course purpose:		
To provide second year students with detailed understanding with basic organization of the cell, its function and communication with the environment, ie. interactions with other cells and extracellular matrix, cell cycle and cell death.		
Course outcome: (knowledge, skills, attitudes)		
Knowledge of the organisation and function of cell at the molecular level, facilitating understanding of pathologic processes as disease causes (content of other courses).		
Nr. of classes of active teaching: 30		
Lectures: 15	OFT: 15	
Course content		
<p><i>Theoretical teaching</i></p> Structural organisation of human cell; cell membrane, membrane transport, membrane compartments, transport of molecules; cytoskeleton and cell motility; nucleus, cell reproduction, cell cycle, cell populations; interaction of cell with its environment – cell attachments and cell signalling; cell death. <p><i>Practical teaching</i></p> Seminars – structural components of the cell & their involvement in physiological & pathological processes.		
2. OFT (Drugi oblici nastave)		
1.	Seminar – Membrane systems	
2.	Seminar – Nucleus and cell populations	
3.	Seminar – Cytoskeleton and cell motility	
3.	Seminar – Interaction between cells and their environment	
4.	Seminar – Programmed cell death - apoptosis	
5.	Seminar – Cell signalling	
6.	Seminar – Biology of neoplastic transformation of cells and tissues	
7.	Review	
Recommended literature:		
1. Citologija: Avramović i sar. Medicinski fakultet, Galaksija, Niš, 2010. 2. Essential Biology: Albert et al. 2004.		
Teaching methods:		
<ul style="list-style-type: none"> ▪ Theory - lectures ▪ Consultations ▪ Seminars – at practice classes 		
Required previously passed exams:		
None		
Grade (max. 100 points)		
Pre-exam obligations		
<ul style="list-style-type: none"> ▪ Activity at classes: 0 – 30 points ▪ Seminar paper: 0 – 30 points Earned 60 points in pre-exam activities gets a passing grade (6) without final exam.		
Final exam		
<ul style="list-style-type: none"> ▪ Written exam: test 0 – 40 points 		