

**School of Medicine University of Mostar**

**course: Medical biology**

**course leader: Prof. Katarina Vukojević**

**academic year 2020/21**

**course teachers**

Prof. Katarina Vukojević (KV)

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Assistant Martina Vukoja (MV)

**exam terms:**

1. exam term 12.11.2020. at 8am

2. exam term 19.2.2021.

3. exam term 12.07.2021.

4. exam term 13.09.2021.

**Lectures (42 hours), seminars (38 hours), exercise (30 hours)**

L1 - Cell -evolution prokaryotes vs. eukaryotes, cell compartments, inner membrane, cytoplasm

L2 - cell structure, the cell chemistry, macromolecules, enzymes

L3 - Cell membrane

L4 - Nucleic Acids, gens, eukaryotic organisms, DNA

L5 - Nucleus, transport, organization, nucleolus

L6 - cytoskelet - microfilaments, intermediar filamets, microtubuls

L7 - extracellular matrix and organization, cell surface, cellular interactions

L8 - Cell research methods and microscopy

L9 - Introduction to molecular biology - DNA replication and telomeres

L10 - maintainance and DNA recombination, DNA repair

L11 - synthesis and RNA transcription, transcription factors

L12 - synthesis and RNA transcription, RNA trafficking

L13 - genomic DNA, recombination

L14 - synthesis of proteins, translation, protein sorting and transport

L15 - Bioenergetics and metabolism, mitochondria and peroxisomes

L16 - transport and protein sorting - ER, Golgy apparatus

L17 - protein transport - vesicular transport, lysosome

L18 - Cell signaling - signal molecules and action of cell surface receptors

L19 - Cell signaling - intracellular signal transduction, cytoskelet and signaling network

L20 - cell cycle - cell cycle checkpoints, cell cycle regulation, mitosis and meiosis

L21 - Meiosis

L22 - Programed cell death

L23 - Stem cells

L24 - Cancer - development and causes, tumor viruses, onkogenes

S1 - cell structure, the cell chemistry, macromolecules, enzymes

S2 - cell membrane - micro and macro molecules transport

S3 - Nucleus, DNA

S4 - extracellular matrix and cytoskeleton  
S5 - DNA analysis  
S6 - protein analysis  
S7 - cell genome, DNA replication  
S8 - transcription, transcription regulation, transport and processing of RNA  
S9 - translation and translational regulation  
S10 - ER and Golgi apparatus  
S11 - Bioenergetics and metabolism, mitochondria and peroxisomes  
S12 - Cell signaling  
S13 - cell cycle  
S14 - Stem cells and programmed cell death  
S15 - Cancer  
S16 - repetition and knowledge testing

E1 (10 hours) - DNA analysis  
E2 (4 hours) - Methods of cell investigation. Microscope and microscopy 1  
E3 (4 hours) - Methods of cell investigation. Microscope and microscopy 1  
E4 (2 hours) - Repetition. Microscope and microscopy  
E5 (10 hours) - Protein analysis

Day	Monday		Tuesday		Wednesday		Thursday		Friday	
Date	05.10.2020.		06.10.2020.		07.10.2020.		08.10.2020.		09.10.2020.	
lecture	all students		all students		all students		all students		all students	
exercise	A	B	A	B	A	B	A	B	A	B
seminar	all students		all students		all students		all students		all students	
08.50-12.05										
12.05-12.55										
13.00-13.45										
13.50-14.35										
14.35-15.20	SK - L1		SK - S1		SK - S2		SK - S3		SK - L8	
15.25-16.10	SK - L2		SK - L4		SK - L5		SK - L7		SK - S4	
16.15-17.00					SK - L6					
17.05-17.50	SK - L3									
17.55-18.40										
18.45-19.30										

lectures
  seminars
  exercise
  no teaching

Day	Monday		Tuesday		Wednesday		Thursday		Friday	
Date	12.10.2020.		13.10.2020.		14.10.2020.		15.10.2020.		16.10.2020.	
lecture	all students		all students		all students		all students		all students	
exercise	A	B	A	B	A	B	A	B	A	B
seminar	all students		all students		all students		all students		all students	
08.50-12.05					MV - E1					
12.05-12.55										
13.00-13.45										
13.50-14.35										
14.35-15.20	UG - L9		SM - L12							
15.25-16.10			SM - L13				MB - E2		MB - E3	
16.15-17.00	UG - L10									
17.05-17.50										
17.55-18.40	UG - L11									
18.45-19.30										

lectures
  seminars
  exercise
  no teaching

Day	Monday		Tuesday		Wednesday		Thursday		Friday	
Date	19.10.2020.		20.10.2020.		21.10.2020.		22.10.2020.		23.10.2020.	
lecture	all students		all students		all students		all students		all students	
exercise	A	B	A	B	A	B	A	B	A	B
seminar	all students		all students		all students		all students		all students	
08.50-12.05									MV-E5	
12.05-12.55										
13.00-13.45										
13.50-14.35										
14.35-15.20	SKo - S5		SKo - S7		MB -E4		UG- L14			
15.25-16.10			SKo - S8		MB - S9		UG- L15			
16.15-17.00	SKo - S6									
17.05-17.50										
17.55-18.40							UG- L16			
18.45-19.30										

lectures
  seminars
  exercise
  no teaching

Day	Monday		Tuesday		Wednesday		Thursday		Friday	
Date	26.10.2020.		27.10.2020.		28.10.2020.		29.10.2020.		30.10.2020.	
lecture	all students		all students		all students		all students		all students	
exercise	A	B	A	B	A	B	A	B	A	B
seminar	all students		all students		all students		all students		all students	
08.50-12.05										
12.05-12.55										
13.00-13.45										
13.50-14.35										
14.35-15.20	MB - S10		SM- L17		SM- L18				MB - S13	
15.25-16.10							KV - L21			
16.15-17.00	MB - S11		SM - S12		SM- L19		KV - L22			
17.05-17.50							KV - L23			
17.55-18.40							SM- L20		KV - L24	
18.45-19.30										

lectures
  seminars
  exercise
  no teaching

Day	Monday		Tuesday		Wednesday		Thursday		Friday	
Date	02.11.2020.		03.11.2020.		04.11.2020.		05.11.2020.		06.11.2020.	
lecture	all students		all students		all students		all students		all students	
exercise	A	B	A	B	A	B	A	B	A	B
seminar	all students		all students		all students		all students		all students	
08.50-12.05										
12.05-12.55										
13.00-13.45										
13.50-14.35										
14.35-15.20	MB - S14		MB - S16							
15.25-16.10										
16.15-17.00	MB - S15									
17.05-17.50										
17.55-18.40										
18.45-19.30										

lectures
  seminars
  exercise
  no teaching