**School of Medicine University of Mostar**
**course: Medical biology**
**course leader: Prof. Katarina Vukojević**
**academic year 2021/22**

| **exam terms:** |
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| 1. exam term 3.12.2021. at 8am |
| 2. exam term 18.2.2022. |
| 3. exam term 05.09.2022. |
| 4. exam term 19.09.2022. |

**course teachers**
Prof. Katarina Vukojević (KV)
Prof. Sandra Kostić (SK)
Prof. Violeta Šoljić (VŠ)
Prof. Suzana Konjevoda (SKo)
Prof. Snjezana Mardesic (SM)
Prof Una Glamočlija (UG)
Senior assistant Maja Barbarić (MB)
Assistant Anita Racetin (AR)

**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 programed 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 | | Saturday | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | 25.10.2021. | | 26.10.2021. | | 27.10.2021. | | 28.10.2021. | | 29.10.2021. | | 30.10.2021. | |
| lecture | all students | | all students | | all students | | all students | | all students | | all students | |
| exercise | A | B | A | B | A | B | A | B | A | B | A | B |
| seminar | all students | | 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 - L4 | | | | SK - S1 | | | | SK - S4 | |
| 15.25-16.10 | SK - L2 | | | | | | | | | | | |
| 16.15-17.00 | | | SK - L5 | | | | SK - S2 | | | | SK - L7 | |
| 17.05-17.50 | SK - L3 | | SK - L6 | | | | | | | | | |
| 17.55-18.40 | | | | | | | SK - S3 | | | | SK - L8 | |
| 18.45-19.30 | | | | | | | | | | | | |

lectures seminars exercise no teaching

| Day | Monday | | Tuesday | | Wednesday | | Thursday | | Friday | |
|---|---|---|---|---|---|---|---|---|---|---|
| Date | 01.11.2021. | | 02.11.2021. | | 03.11.2021. | | 04.11.2021. | | 05.11.2021. | |
| 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 | |
| 11.15-12.00 | | | | | | | SM - L12 | | | |
| 12.05-12.55 | | | | | | | SM - L13 | | | |
| 13.00-13.45 | | | | | | | | | MB - E2 | |
| 13.50-14.35 | | | | | | | AR - E1 | | | |
| 14.35-15.20 | | | UG - L9 | | | | | | | |
| 15.25-16.10 | | | | | | | | | | |
| 16.15-17.00 | | | UG - L10 | | | | | | MB - E3 | |
| 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 | 08.11.2021. | | 09.11.2021. | | 10.11.2021. | | 11.11.2021. | | 12.11.2021. | |
| 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 | | | | | | | | | AR-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 | | | | | | | | | | |
| 16.15-17.00 | | | SKo - S8 | | MB - S9 | | UG- L15 | | | |
| 17.05-17.50 | SKo - S6 | | | | | | | | | |
| 17.55-18.40 | | | | | | | UG- L16 | | | |
| 18.45-19.30 | | | | | | | | | | |

lectures seminars exercise no teaching

| Day | Monday | | Tuesday | | Wednesday | | Thursday | | Friday | |
|---|---|---|---|---|---|---|---|---|---|---|
| Date | 15.11.2021. | | 16.11.2021. | | 17.11.2021. | | 18.11.2021. | | 19.11.2021. | |
| 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 | SM- L17 | | | | | | | | | |
| 13.50-14.35 | | | | | | | | | KV - L20 | |
| 14.35-15.20 | SM- L18 | | MB - S11 | | SM - S13 | | | | | |
| 15.25-16.10 | | | | | | | | | KV - L21 | |
| 16.15-17.00 | SM- L19 | | | | | | | | KV - L22 | |
| 17.05-17.50 | | | | | | | | | KV - L23 | |
| 17.55-18.40 | SM - S10 | | MB - S12 | | | | | | KV- L24 | |
| 18.45-19.30 | | | | | | | | | | |

lectures seminars exercise no teaching

| Day | Monday | | Tuesday | | Wednesday | | Thursday | | Friday | |
|---|---|---|---|---|---|---|---|---|---|---|
| Date | 22.11.2021. | | 23.11.2021. | | 24.11.2021. | | 25.11.2021. | | 26.11.2021. | |
| 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