University ofMostar SchoolofMedicine
Department ofMedicalMicrobiology and Parasitology

MEDICAL STUDIES IN ENGLISH

Detailedscheduleofteachingunits: lectures, seminars and practicals for thesubject"BasicsofMedicalMicrobiology and Parasitology" inacademicyear2024./2025.

1.week	
Tuesday, 04. 02. 2025.	
Lecture B1 (4h): Prof. Marija Tonkić, MD. PhD. Introduction to medicalmicrobiology. Bacterialstructure, physiology and genetics. Pathogenesisofbacterialdiseases. Bacterialantigens and vaccines. **08,30 – 11,30**	**Practical B1(4h):** Introduction to microbiologicallaboratory and thebasicsof safe laboratorywork. Laboratory-acquiredinfections. Microscopicexaminationof principal bacterialshapes. Differentialstaininginbacteriology. Cultivationofbacteria. Media types. Group **1: 16,00 – 19,00**Maja Kljakić, MD.
Wednesday, 05. 02. 2025.	
Lecture B2 (2h): Prof. Marija Tonkić, MD. PhD Antibacterialagents. Antimicrobialresistanceinbacteria. **8,30 – 10,00 Seminar group I** **Seminar B1 (2h**): Prof. *Marija Tonkić,* MD. PhD. Genera*Streptococcus, Staphylococcus, Enterococcus* **10,30 – 12,00 Seminar group I**	**Practical B2 (4h):** Performing, reading and interpretationofthe antibiogram (disk diffusionmethod, brothdilution, agar dilution, gradienttest). Collecting and inoculatingofthroatswab. Principlesofisolation and identificationofpyogeniccocci. Group **1: 13,00 – 16,00**Maja Kljakić,MD
Thursday, 06. 02. 2025.	
Seminar B2 (2h): Prof. *Marija Tonkić,* MD. PhD CharacteristicsofbacteriaNeisseria, *Moraxella, Haemophilus*Genera*Bordetella, Brucella.* **08,30 – 10,00 Seminar group I**	**Practical B3 (4h):**Macroscopic and biochemicalidentificationof *Neisseria, Haemophilus* Group **1: 15,00 – 18,00**Doris Martinović Rizikalo,MD

<u>Friday</u>, 07. 02. 2025.	
<u>Seminar B3 (2h</u>): Maja Kljakić, MD. PhD. Characteristicsofbacteriafromthefamily*Enterobacteriaceae.* **8,30 – 10,00 Seminar group I**	**<u>Practical B4</u> (4h):**Macroscopic and biochemicalidentificationof*Enterobacteriaceae.* Group **1: 15,30 – 18,30** Doris Martinović Rizikalo,MD
2.week	
<u>Monday</u>, 10. 02. 2025.	
<u>Seminar B4</u>(2h):A/Prof.Sanja Jakovac, MD. PhD. Gram-negative nonfermentingbacteria – genera*Pseudomonas, Acinetobacter* **8,30 – 10,00 Seminar group I** **<u>Seminar B5</u>(2h):**Maja Kljakić, MD. Gram-negative, curved, rod-shapedbacteria – genera*Vibrio, Helicobacter, Campylobacter.* Anaerobicbacteria – genera*Clostridium, Actinomyces* **10,30 – 12,00Seminar group I**	
<u>Tuesday</u>, 11. 02. 2025.	
	<u>Practical B5</u> (4h): *Pseudomonas*, resistantstrains. *Campylobacter* -cultivation and microscopy. *Vibrio*– culture. *Helicobacter*in tissuesample. Group **1: 08,30-11,30** Maja Kljakić,MD
<u>Wednesday,</u> 12. 02. 2025.	
<u>Lecture B3</u> (2h): A/Prof. Anita Novak, MD. PhD Gram-negative spiralbacteria – family*Spirochaetaceae*. Cellwall-defectivebacteria – family*Mycoplasmataceae.* Obligateintracellularbacteria: *Rickettsiaceae, Chlamydiaceae* **8,30 – 10,00** **<u>Lecture B4</u> (2h):** A/Prof.Sanja Jakovac,MD.PhD. Acido-resistantbacteria – genus*Mycobacterium*. **10,30 – 12,00**	

Thursday, 13. 02. 2025.	
Seminar B6 (2h): A/Prof. Anita Novak, MD. PhD. Genera – *Bacillus, Corynebacterium, Listeria, Legionella.* **11,30 – 13,00 Seminar group I**	.**Practical B6 (4h):** Specimens collecting, transporting and processing for isolation of mycobacteria. Cultivation of mycobacteria. Group **1: 08,30 – 11,30** Doris Martinović Rizikalo, MD.
Friday,14. 02. 2025.	
Seminar B7 (2h): Maja Kljakić, MD. Multidrug-resistantbacteria. **8,30 – 10,00**	**Practical B7 (4h)**Causesofnosocomialinfections. Multidrug-resistantbacteria. Group **1: 10,30 – 13,30**Maja Kljakić,MD

3.week	
Monday, 17. 02. 2025.	
KNOWLEDGE TEST (Bacteriology) – exam **8,30 –9,30X, prostorija**	
Tuesday, 18. 02. 2025.	
Lecture V1 (2h): Prof. *Ivana Goić Barišić,* MD. PhD. Introduction to virology. Chemical composition and structureofviruses. Viralantigens and hemagglutination. Replicationofviruses. **8,30 – 10,00** **Lecture V2 (2h):**Prof. *Ivana Goić Barišić,* MD. PhD. Pathogenesisofviraldiseases. Viralinterference and interferon. Chemoprophylaxis and therapyofviraldiseases. Viralvaccines. Prions **10,30 – 12,00**	

Wednesday, 19.02. 2025.	
Seminar V1 (2h) : Prof. *Ivana Goić Barišić,* MD. PhD. DNA viruses: *Parvoviridae, Papovaviridae, Adenoviridae, Poxviridae* **8,30 – 10,00 Seminar group I** **Lecture V3 (2h):** Prof. *Ivana Goić Barišić,* MD. PhD. *Flaviviridae, Togaviridae, Bunyaviridae, Filoviridae, Arenaviridae.* **10,30 – 12,00**	**Practical V1 (3h):** Methodsofdirectdiagnosisofviraldiseases Group **1:** Maja Kljakić, MD. **13.00-15.15**
Thursday,20. 02. 2025.	
Seminar V2 (2h*):* Prof. *Ivana Goić Barišić,* MD. PhD *Herpesviridae.* Hepatitis B,C and D. **8,30 – 10,00 Seminar group I** **Seminar V3 (2h):** Prof. *Ivana Goić Barišić,* MD. PhD. RNA viruses:*Picornaviridae (Enterovirus*, *Hepatovirus*), *Caliciviridae*,*Reoviridae.* **10,30 – 12,00Seminar group I**	**Practical V2 (2h):** Methodsofindirectdiagnosisofviraldiseases Group **1:** Maja Kljakić, MD. 13.00-14.30
Friday, 21.02.2025.	
Seminar V4 (2h):. Prof. *Ivana Goić Barišić,* MD. PhD *Orthomyxoviridae*, *Paramyxoviridae, Coronaviridae.* **8,30 – 10,00 Seminar group I** **Seminar V5 (2h):** Maja Kljakić, MD..*Rhabdoviridae*, *Retroviridae*. **10,30 – 12,00 Seminar group I**	
4.week	
Monday, 24. 02. 2025.	
KNOWLEDGE TEST (Virology) – exam **8,30 –9,30 X, prostorija** **Lecture M (2h):** A/Prof. Anita Novak, MD. PhD. Introduction to medicalmycology. Morphology and reproductionofthefungi. Fungaldiseases - pathogenesis. Antifungalagents **10,30 – 12,00**	

<u>Tuesday</u>, 25.02.2025.	
<u>Seminar M</u> (2h): A/Prof. Anita Novak, MD. PhD. Medically important fungi. **9,30 – 11,00 Seminar group I**	
<u>Wednesday</u>, 26. 02. 2025.	
<u>Lecture P</u> (3h):A/Prof. Anita Novak, MD. PhD. Introduction to medical parasitology. Medical protozoology. Blood and tissue protozoa - genera: *Toxoplasma, Plasmodium, Leishmania.* **10,30 – 12,45**	**<u>Practical M</u> (2h):**Yeasts and moulds – macro and micromorphology Group **1: 08,30 – 10,00**Maja Kljakić, MD
<u>Thursday,</u> 27. 02. 2025.	
<u>Seminar P1</u> (2h): A/Prof. Anita Novak, MD. PhD. Protists of gastrointestinal and urogenital system – genera: *Giardia, Entamoeba, Cryptosporidium, Trichomonas.* **8,30 – 10,00 Seminar group I** **<u>Seminar P2</u> (2h):** A/Prof.Anita Novak, MD. PhD. Nematodes and Cestodes: *Trichinella, Trichuris,Enterobius, Ascaris, Taenia, Echinococcus*. **10,30 – 12,00 Seminar group I**	**<u>Practical P1</u> (4h):** Diagnosis of toxoplasmosis, leishmaniasis and malaria Group **1: 13,00 – 16,00** Maja Kljakić, MD
<u>Friday,</u> 28. 02. 2025.	
	<u>Practical P2</u> (4h): Diagnosis of intestinal parasitosis. Group **1: 08,30 – 11,30**Doris Martinović Rizikalo, MD.
5.week	
<u>Monday,</u> 03. 03. 2025.	

Tuesday, 04. 03. 2025.	
KNOWLEDGE TEST (Mycology+Parasitology) – exam 8,30 –9,00 **KNOWLEDGE TEST other partial exams 9,30 –11,00**	
Wednesday, 05. 03. 2025.	
Final practical (2h):practicalpart of the exam group.1	
Thursday,06. 03. 2025.	
Friday,07.03. 2025.	
Oral exam	

OBLIGATORY TEXTBOOK Brooks GF, Carroll KC, Butel JS, Morse SA, Mietzner TA, eds. Jawetz, Melnick and Adelbergs**MedicalMicrobiology. 26th ed**. New York: McGraw-Hill; 2013.

EXAMS

1. **07.03.2025.**

Headofthe Department: Prof. Marija Tonkić, MD. PhD