

SUBJECT: MEDICAL MICROBIOLOGY
II academic year 2024-2025

SCHEDULE & PROGRAMME - LECTURES

Microbiology Lecture: All groups in Main classroom (2nd floor) at the Head building - Friday 14:00-15:30

III (WINTER) SEMESTER

| WEEK/DATE | LESSONS (number) | TOPIC |
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| I 04.10.2024. | Lecture (2) | Introduction in Medical Microbiology. Bacterial taxonomy and general bacterial properties. Bacterial structures (capsule, cell wall). |
| II 11.10.2024. | Lecture (2) | Bacterial structures, biosynthesis and organization of bacterial cell (spore, flagelum, pilli, etc.). Sterilization, control of sterilization, disinfection. |
| III 18.10.2024. | Lecture (2) | Bacterial genetic material. Genetic exchange in bacteria: transformation, conjugation and transduction. |
| IV 25.10.2024. | Lecture (2) | Virulence factors of bacteria (adhesive factors, invasive factors, toxins). |
| V 01.11.2024. | Lecture (2) | Mechanism of action of antibacterial agents (antibiotics). Bacterial resistance to antibacterial agents. |
| VI 08.11.2024. | Lecture (2) | Physiology of bacterial cells. Bacterial metabolism; nutrition requirements for growth and replication of bacteria. |
| VII 15.11.2024. | Lecture (2) | Properties of and medical importance of Streptococcus spp. and Enterococcus spp. |
| VIII 22.11.2024. | Lecture (2) | Properties and medical importance of Clostridium spp. |
| IX 29.11.2024. | Lecture (2) | Properties and medical importance of Mycobacterium spp. |
| X 06.12.2024. | Lecture (2) | Properties and medical importance of order Enterobacterales. Characteristics and medical importance of Escherichia coli. Characteristics and medical importance of opportunistic enterobacteria. |

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| XI 13.12.2024. | Lecture (2) | Properties and medical importance of <i>Haemophilus influenzae</i> , HACEK group and <i>Bordetella pertussis</i> . |
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| XII 20.12.2024. | Lecture (2) | Properties and medical importance of Gram negative non-fermentative bacteria. |
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| XIII 27.12.2024. | Lecture (2) | Properties and medical importance of <i>Neisseria</i> spp. and <i>Moraxella</i> spp. Properties and medical importance of <i>Nocardia</i> spp. and <i>Rhodococcus</i> spp. |
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| XIV 10.01.2025. | Lecture (2) | Properties and medical importance of genus <i>Chlamydia</i> , <i>Mycoplasma</i> , and <i>Ureaplasma</i> . |
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| XV 16.01.2025. | Lecture (2) | Properties and medical importance of <i>Brucella</i> spp. and <i>Francisella</i> spp. Properties and medical importance of the genera <i>Rickettsia</i> , <i>Bartonella</i> , <i>Ehrlichia</i> , <i>Anaplasma</i> , and <i>Coxiella</i> . |
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