# Class schedule of microbiology for the 3<sup>nd</sup> year students of Medicine Academic Year 2025/2026

www.umw.edu.pl/pl/jednostki/katedra-i-zaklad-mikrobiologii

Microbiology laboratory classes are held at the Department of Medical Microbiology, 4 Chałubińskiego Street, in the following rooms: the main laboratory (room A2); room A6 (adjacent to A2, located behind the main laboratory). Please note: students must always wait for their teacher in front of the main laboratory (A2). Additionally, classes are held in room 209 on the second floor of the Department of Medical Microbiology, with entrance from the opposite side of the building, facing the Pediatrics Clinic.

For each laboratory session, students must prepare using the current lecture and class materials available in the University Repository. During classes, students are expected to demonstrate general knowledge of the pathogens under discussion, including their virulence factors and epidemiology, as introduced in the Microbiology (1) course. The whole test schedule is available in the 'Important Terms' section of our website.

Monday		CL1, room 209; CLr3A, room 209;
Tuesday	08.00 - 10.15 10.30 - 12.45 10.30 - 12.45	CL6, room 209 CL7, room A6_(A2) CL9, room A6_(A2) CL10, room 209 CL8, room 209
Wednesday	10.30 – 12.45	CL3, CL4, CLr5A main laboratory (room A2) CL5, CL12, CLr2A main laboratory (room A2) CLr2Av, room A6_(A2)
Thursday	08.00 - 10.15 10.30 - 12.45	CLr4A, room 209 CL2, room A6_(A2) CLr1A, room 209 CL2, room A6_(A2)

# After each class, for a given human body system, the student must know:

- **a**) Physiological flora; its influence on maintaining health and host homeostasis; endogenous infections typical for a given body system
- **b)** Factors predisposing to infections; routes of microorganisms entering a given system/organ; routes of infection (epidemiology)
- c) Specific etiological factors of infections/diseases, divided into Gram-positive and Gram-negative bacteria, atypical bacteria, anaerobic bacteria, fungi, viruses; endogenous and exogenous infections, iatrogenic, hospital, and non-hospital; divided by the age of the patient in some infections, virulence factors of microorganisms involved in the infection of a given system/organ; knows the pathophysiology of infections
- **d)** Directions of diagnostics number and type of biological samples collected for testing, method of sample collection, conditions of their transport to the laboratory and directions of testing; knows the principles of diagnostics based on microscopy, culture, antibiogram, rapid tests, serology and other specific tests for a given infection (e.g. assessment of vaginal biocenosis), markers of inflammation.

- **e)** Basics of empirical and targeted treatment of outpatients and hospitalized patients, treatment of choice knows groups of antibiotics active against some etiological infections and knows mechanisms of antibiotic resistance.
- f) Methods of specific (vaccination) and non-specific prevention of infections.

# **GENERAL SCHEDULE OF CLASSES IN WINTER SEMESTER**

	Class 1. Sexually transmitted diseases (STDs)	
		06.10 - 10.10.2025
	Class 2. Urinary tract infections (UTIs).	
		13.10 – 17.10.2025
	Class 3. Gastrointestinal tract infections (GTIs)	20.10 – 24.10.2025
Winter semester: 8 weeks x 3 hours 2 weeks x 2 hours Total:28h	Class 4. Wound and soft tissue infections (SSTIs)	27.10 – 31.10.2025
	Class 5. Upper respiratory tract infections (URTIs). TEST 1 (class 1-4)	03.11 - 07.11.2025
	A week off from classes	10.11 - 14.11.2025 Retake TEST #1
	Class 6. Lower respiratory tract infections (LRTIs).	17.11 – 21.11.2025
	Class 7. Systemic infections (sepsis).	24.11 – 28.11.2025
	Class 8. Central nervous system infections.	01.12 - 05.12.2025
	Class 9. 2h	08.12 - 12.12.2025
	Healthcare-associated infections and opportunistic infections.	
	TEST 2 (class 5 - 8)	
	Class 10. 2h	15.12 - 19.12.2025
	Systemic infections. <b>Credit test of the practical part of classes.</b>	Retake Test #2

## CLASS 1.

# SEXUALLY TRANSMITTED DISEASES (STDs)

# **Learning objectives:**

- a) Etiologic agents of sexually transmitted diseases: syphilis, gonorrhea, trichomoniasis, non-gonococcal urethritis (NGU), *Mycoplasma* spp., *Chlamydia trachomatis*, *Candida spp*.
- b) antimicrobial treatment;
- c) diagnostic procedures; collection and transport of patients' specimens;
- d) microbiological diagnosis of syphilis, gonorrhea, trichomoniasis, and non-gonococcal urethritis;

# Practice:

- a) discussion of exemplary test results for the diagnosis of STD;
- b) next class preparation: inoculation of the samples from patients with UTI;

# CLASS 2.

# **URINARY TRACT INFECTIONS (UTI)**

# **Learning objectives:**

- a) etiologic agents of the urinary tract infections;
- b) diagnostic procedures; collection and transport of patients' specimens;
- c) antimicrobial treatment;

# Practice:

- a) examination of the patient cultures and discussion of the results;
- b) discussion of exemplary test results for diagnosis of UTI;
- c) next class preparation: inoculation of the samples from patients with GTI;

#### CLASS 3.

## **GASTROINTESTINAL TRACT INFECTIONS (GTI)**

#### <u>Learning objectives:</u>

- a) etiologic agents of gastrointestinal tract infections;
- b) diagnostic procedures; collection and transport of patients' specimens;
- c) antimicrobial treatment;

#### Practice:

- a) examination of the cultures prepared during the last class and discussion of the results;
- b) discussion of exemplary test results for diagnosis of GTI;
- c) next class preparation: inoculation of the samples from patients with wound and soft tissue infections;
- d) microscopic examination of the pathogens;

#### CLASS 4.

#### **WOUND AND SOFT TISSUE INFECTIONS**

#### Learning objectives:

- a) etiologic agents of wound and soft tissue infections;
- b) diagnostic procedures; collection and transport of patients' specimens;
- c) antimicrobial treatment;

# Practice:

- a) examination of the cultures prepared during the last class and discussion of the results;
- b) discussion of exemplary test results for diagnosis of wound and soft tissue infections;
- c) next class preparation: inoculation of the samples from patients with systemic infections;

#### CLASS 5.

# **UPPER RESPIRATORY TRACT INFECTIONS (URTI)**

# Learning objectives:

- a) etiologic agents of the upper respiratory tract infections: pharyngitis, Plaut–Vincent's & Ludwig's angina, otitis media, sinusitis, diphtheria;
- b) diagnostic procedures; collection and transport of patients' specimens;
- c) antimicrobial treatment;

# Practice:

- a) examination of the cultures prepared during the last class and discussion of the results;
- b) discussion of exemplary test results for diagnosis of URTI;
- c) next class preparation: inoculation of the samples from patients with lower respiratory tract infections;

# CLASS 6.

## LOWER RESPIRATORY TRACT INFECTIONS (LRTI)

#### Learning objectives:

- a) etiologic agents of the lower respiratory tract infections: tracheitis, bronchitis, pneumonia;
- b) diagnostic procedures; collection and transport of patients' specimens;
- c) antimicrobial treatment;

## Practice:

- a) examination of the cultures prepared during the last class and discussion of the results;
- b) discussion of exemplary test results for diagnosis of LRTI;
- c) next class preparation: inoculation of the samples from patients with GTI;

## CLASS 7.

# SYSTEMIC INFECTIONS (SEPSIS)

# **Learning objectives:**

a) etiologic agents of systemic blood infections;

- b) diagnostic procedures; collection and transport of patients' specimens;
- c) antimicrobial treatment;

#### **Practice:**

- a) examination of the cultures prepared during the last class and discussion of the results;
- b) discussion of exemplary test results of sepsis;
- c) next class preparation: inoculation of the samples from patients with CNSI;

#### CLASS 8.

#### **CENTRAL NERVOUS SYSTEM INFECTIONS (CNSI)**

#### Learning objectives:

- a) etiologic agents of central nervous system infections;
- b) diagnostic procedures; collection and transport of patients' specimens;
- c) antimicrobial treatment;

#### Practice:

- a) examination of the cultures prepared during the last class and discussion of the results;
- b) discussion of exemplary test results of CNSI;

#### CLASS 9.

HEALTHCARE-ASSOCIATED INFECTIONS and OPPORTUNISTIC INFECTIONS.

# **Learning objectives:**

- a) etiologic agents of endogenous and exogenous opportunistic infections;
- b) factors increasing the risk of opportunistic infections.
- c) natural flora of the human body;

#### CLASS 10.

Systemic infections. Credit test of the practical part of classes.

Students will be provided with a clinical case for analysis and interpretation. The task includes proposing an appropriate diagnostic approach (selection of clinical specimen, conditions of collection and transport, diagnostic modalities such as direct microscopy, culture and identification, antimicrobial susceptibility testing, and rapid diagnostic methods) as well as suggesting a rational treatment strategy. Particular attention should be given to the mechanisms of antimicrobial resistance of the pathogen(s) responsible for the infection under discussion.

The case will be accompanied by supporting material in the form of a culture plate, microscopic slide, or antibiogram.

# Student Survey

Thank you for participating in our classes. We made every effort to ensure that clinical microbiology classes were conducted as effectively as possible. We dedicated considerable time to preparing materials for classes and lectures, as well as preparing ourselves for the classes. However, we need your opinion on our work to develop and teach students even better. Please evaluate our work in the student survey. Your comments enable us to organize classes and lectures better.

# Please fill out the OZiKA surveys

Thank you very much in advance, A team of teachers from the Department of Microbiology.

Person in charge

Prof. dr hab. Beata Sobieszczańska