# Class schedule of microbiology for the 3<sup>nd</sup> year students of Medicine Academic Year 2022/2023

# www.umw.edu.pl/mikrobiologia

**Monday 0**8.00 – 10.15 (main laboratory)

10.45 - 13.00 (main laboratory)

**Tuesday 0**8.00 – 10.15 (main laboratory)

10.45 – 13.00 (main laboratory)

Wednesday 13.45 – 16.00 (room 209, 2<sup>nd</sup> floor of Department of Medical Microbiology)

Thursday 07.30 – 09.45 (room 209, 2<sup>nd</sup> floor of Department of Medical Microbiology)

Laboratory sessions of microbiology are held in the Department of Medical Microbiology Chałubińskiego 4 Street.

Tests will be written and will take place during stationary classes. The exception are Thursdays class students, who will have the tests on Mondays at 8.00 (according test schedule). For schedule of tests retakes please see: "Important terms" section on our website.

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

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	Class 1. Sexually transmitted diseases (STD)	03.10 - 07.10.2022
Winter semester:	Class 2. Urinary tract infections (UTI).	10.10 – 14.10. 2022
10 weeks x 3 hours= 30h	Class 3. Gastrointestinal tract infections (GTI)	17.10 –21.10. 2022
Total:30h	Class 4. Wound and soft tissue infections. TEST 1 (class 1-3)	24.10 – 28.10. 2022
	Class 5. Upper respiratory tract infections.	02.11 - 04.11. 07.11 - 08.11. 2022
	Class 6. Lower respiratory tract infections.	14.11 – 18.11. 2022
	Class 7. Systemic infections (sepsis). TEST 2 (class 4 - 6)	21.11 – 25.11. 2022
	Class 8. Central nervous system infections.	28.11 – 02.12. 2022
	Class 9.  Healthcare-associated infections and opportunistic infections. TEST 3 (class 7 - 8)	05.12 – 09.12. 2022
	Class 10.	19.12 - 22.12. 2022
	Practical exam.	term after commission test: Wed 11.01.2022 15.15 – 17.30

# CLASS 1.

# SEXUALLY TRANSMITTED DISEASES (STD)

# **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, gonorrhoea, trichomoniasis and non gonococcal urethritis;

# Practice:

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

## CLASS 2.

## **URINARY TRACT INFECTIONS (UTI)**

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

- 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 preparing: inoculation of the samples from patients with GTI;

## Demonstrations:

- a) cultures of common genitourinary pathogens:
  - common intestinal pathogens: E. coli, Klebsiella spp., Proteus spp., Staphylococcus epidermidis, S. saprophiticus, Enterococcus spp., Candida albicans;
- b) positive and negative Gold test demonstration;
- c) contaminated urine sample;
- d) examination of Gram stained slides presenting the pathogens;
- e) Uriline and Uricult culture transport media demonstration;

# CLASS 3.

# **GASTROINTESTINAL TRACT INFECTIONS (GTI)**

# **Learning objectives:**

- 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 last class and discussion of the results;
- b) discussion of exemplary test results for diagnosis of GTI;
- c) next class preparing: inoculation of the samples from patients with upper respiratory tract infections;
- d) microscopic examination of the pathogens;

# **Demonstrations:**

- a) cultures of common intestinal bacteria: E. coli, Klebsiella spp., Proteus spp., Enterococcus spp.;
- b) demonstration of kit for detection of RSV;

# 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 last class and discussion of the results;
- b) discussion of exemplary test results for diagnosis of wound and soft tissue infections;
- c) next class preparing: inoculation of the samples from patients with respiratory tract infections;
- d) microscopic examination of the pathogens;

# Demonstrations:

a) cultures of pathogens associated with soft tissue infections: *E. coli, Pseudomonas aeruginosa, Staphylococcus aureus, Bacteroides fragilis*;

## 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 last class and discussion of the results;
- b) discussion of exemplary test results for diagnosis URTI;
- c) next class preparing: inoculation of the samples from patients with lower respiratory tract infections;

#### **Demonstrations:**

- a) ready-made Plaut Vincent pharyngitis slide stained with Gram and cultures of *Corynebacterium diphtheriae* and *Staphylococcus aureus*;
- b) cultures of common respiratory pathogens;
- c) gram-stained slides presenting the pathogens;

## Next class preparing:

a) inoculation of the samples from patients with LRTI;

# 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 last class and discussion of the results;
- b) discussion of exemplary test results for diagnosis LRTI;
- c) next class preparing: inoculation of the samples from patients with sepsis;

## Demonstrations:

- a) cultures of common respiratory pathogens;
- b) gram-stained slides presenting the pathogens;
- c) demonstration of kit for detection of Legionella.

# Next class preparing:

a) inoculation of the samples from patients with systemic infections;

# 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 last class and discussion of the results;
- b) discussion of exemplary test results of sepsis;
- c) next class preparing: inoculation of the samples from patients with CNSI;

## **Demonstrations:**

- a) cultures of common systemic infections pathogens: *Streptococcus agalactiae, Streptococcus salivarius, Staphylococcus epidermidis, Escherichia coli, Enterobacter cloacae, Candida albicans;*
- b) gram-stained slides presenting the pathogens;
- c) transport media for blood collection and transport;
- d) Bactec Alert System for samples culture;

# 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 last class and discussion of the results;
- b) discussion of exemplary test results of CNSI;
- c) gram-stained slides presenting the pathogens;

# **Demonstrations:**

- a) cultures of common CNSI infections pathogens: *Neisseria meningitidis, Streptococcus agalactiae, Haemophilus influenzae, E. coli* (ID tests: growth factors, API NH, ATB NH demonstration);
- b) gram-stained slides presenting the pathogens;
- c) transport media for cerebrospinal fluid collection and transport;

# CLASS 9.

# **HEALTHCARE-ASSOCIATED INFECTIONS AND OPPORTUNISTIC INFECTIONS**

# Learning objectives:

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

# CLASS 10.

# PRACTICAL EXAM

Person in charge

Prof. dr hab. Beata Sobieszczańska