UNIWERSYTET MEDYCZNY
IM. PIASTÓW ŚLĄSKICH WE WROCŁAWIU

Appendix No.3
to Resolution No. 2303
of Senate of Wroclaw Medical University
of 28 April 2021

Syllabus for academic year: 2021/2022
Training cycle: 2019/2020 - 2024/2025

Description of the course

Course	**Microbiology (2)**	Group of detailed education results: Group code **C**	Group name **Preclinical sciences**
Faculty	Faculty of Medicine		
Major	medicine		
Level of studies	X uniform magister studies ☐ 1st degree studies ☐ 2nd degree studies ☐ 3rd degree studies ☐ postgraduate studies		
Form of studies	X full-time ☐ part-time		
Year of studies	**III**	**Semester:** V	**X** winter ☐ summer
Type of course	**X** obligatory ☐ limited choice ☐ free choice / optional		
Language of study	☐ Polish **X** English		

Number of hours

Form of education

	Lectures (L)	Seminars (SE)	Auditorium classes (AC)	Major Classes – not clinical (MC)	Clinical Classes (CC)	Laboratory Classes (LC)	Classes in Simulated Conditions (CSC)	Practical Classes with Patient (PCP)	Foreign language Course (FLC)	Physical Education (PE)	Vocational Practice (VP)	Directed Self-Study (DSS)	E-learning (EL)
Winter semester: 40 h													
Department of Microbiology													
Direct (contact) education[1]						**30**							
Distance learning[2]	**10**												
Summer semester: 0 h													

[1] Education conducted with direct participation of university teachers or other academics
[2] Education with applied methods and techniques for distance learning

Direct (contact) education													
Distance learning													
TOTAL per year: 40 h													
Department of Microbiology													
Direct (contact) education						**30**							
Distance learning	**10**												

Educational objectives

C1. Introduction to clinically important microorganisms causing systemic and generalized infections.

C2. Learning students about basic diagnostic procedures: proper sampling and transport of clinical samples, isolation and identification of microorganisms.

C3. Learning students about general antimicrobial treatment of systemic infections including bacterial resistance to antimicrobials.

C4. Preparing students how to interpret correctly microbiological tests results and antimicrobial susceptibility testing results.

C5. Learning students with the epidemiology of systemic infections; spreading infections acquired in and outside the hospital; prevention of nosocomial infections.

C 6. Development social competences needed to practice the medical profession, in accordance with graduate's profile.

Education result for course in relation to verification methods of the intended education result and the type of class:

Number of detailed education result	Student who completes the course knows/is able to	Methods of verification of intended education results	Form of didactic class **enter the abbreviation*
C.W11	the genetic mechanisms for the acquisition of drug resistance by micro-organisms and cancer cells;	Tests, oral questioning, Final test exam	L, LC
C.W12	microorganisms, including pathogenic and those present in the physiological flora		
C.W13	the epidemiology of viral and bacterial infections, as well as fungal and parasitic infections, taking into account their geographical distribution;		
C.W14	the influence of abiotic and biotic (viruses, bacteria) environmental factors on the human body and human populations and the pathways of their entry into the human body		
C.W18	the symptoms of iatrogenic infections, the routes of their spread and the pathogens causing lesions in the various organs;		
C.W19	the basics of microbiological and parasitological diagnostics		
C.W20	the basics of disinfection, sterilization and aseptic techniques		
C.W33	the external and internal pathogens, modifiable and non-modifiable		
C.W40	the problem of drug resistance, including multi-drug		

	resistance		
C.U9	make preparations and recognize pathogens under the microscope	Practical exam	LC
C.U10	interpret microbiological test results		
C.U15	design regimens for rational, empirical and targeted chemotherapy of infections;		

* L- lecture; LC- laboratory classes;

Student's amount of work (balance of ECTS points):

Student's workload (class participation, activity, preparation, etc.)	**Student Workload**
1. Number of hours of direct contact:	30
2. Number of hours of distance learning:	10
3. Number of hours of student's own work:	63
4. Number of hours of directed self-study	n/a
Total student's workload	103
ECTS points for course	**4,5**

Content of classes:

Lectures (5 weeks x 90 min) online Microsoft Teams platform
1. Sexually transmitted diseases and urinary tract infections.
2. Gastrointestinal tract infections and food poisonings.
3. Wound and soft tissue infections.
4. Upper and lower respiratory tract infections.
5. Blood infections and the central nervous system infections.

Classes (10 weeks x 135 min) direct contact/onlie
1. Sexually transmitted diseases.
2. Urinary tract infections.
3. Gastrointestinal tract infections and food poisoning.
4. Wound and soft tissue infections.
5. Upper respiratory tract infections.
6. Lower respiratory tract infections.
7. Blood infections.
8. Central nervous system infections.
9. Hospital acquired and opportunistic infections in immunocompromised patients.
10. Practical exam.

Basic literature (list according to importance, no more than 3 items)
1. Mim's Medical Microbiology and Immunology 6th ed. Goering R., Dockrell H., Zuckerman, Chiodini
2. Medical Microbiology. 9th ed. Murray P.R., Pfaller M.A., Rosenthal K.S.

Additional literature and other materials (no more than 3 items)
1. Medical Microbiology. 4th ed. Baron S.
2. Medical Microbiology. 2nd ed. Sherris JC.

Preliminary conditions:

Credit of the course: Microbiology (1)

Conditions to receive credit for the course:

1. Attendance on classes and lectures - according to the study regulations
2. Each absence must be made up, including rector's days or dean's hours.

3. Passed all class tests.
4. Practical exam - the condition for admission to the practical test is the passing of all class tests and credit from all classes
5. Final exam is oral - the conditions for admission to the final exam include: passed all classes and passed practical exam. Pass criteria for the exam : the correct answer to two from four questions from course Microbiology (1) & Microbiology (2) (25% each question)

Grade:	Criteria for courses ending with a grade[3]
Very Good (5.0)	average grade from course Microbiology (2) ≥ 4.8
Good Above (4.5)	average grade from course Microbiology (2) 4,3 - 4,7
Good (4.0)	average grade from course Microbiology (2) 3.8 – 4,29
Satisfactory Plus (3.5)	average grade from course Microbiology (2) 3,3 – 3,7
Satisfactory (3.0)	average grade from course Microbiology (2) 2,8 – 3,29

Grade:	Criteria for exam[3]
Very Good (5.0)	92 – 100% correct answers
Good Above (4.5)	84 – 91% correct answers
Good (4.0)	76 – 83% correct answers
Satisfactory Plus (3.5)	68 – 75% correct answers
Satisfactory (3.0)	60 – 67% correct answers

Department in charge of the course:	Department of Microbiology
Department address:	Chałubińskiego 4 Street, 50 – 346 Wrocław
Telephone:	Tel. 071/ 784-12-75; Fax: 071/ 784-01-17
E-Mail:	katarzyna.dygas-surma@umed.wroc.pl

Person in charge for the course:	prof. dr hab. Beata Sobieszczańska
Telephone:	Tel. 784 – 13 – 08
E-Mail:	beata.sobieszczanska@umed.wroc.pl

List of persons conducting specific classes:

Name and surname	Degree/scientific or professional title	Discipline	Performed profession	Form of classes
Beata Sobieszczańska	prof. dr hab. n. med. professor	medical science	Academic teacher	lectures, classes
Urszula Walczuk	dr med. assistant leader	medical science	Academic teacher	lectures, classes
Paweł Krzyżek	dr med. assistant	medical science	Academic teacher	classes

[3] The verification must cover all education results, which are realize in all form of classes within the course

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Date of Syllabus development

29.06.2021

Syllabus developed by

prof. dr hab. n. med. B. Sobieszczańska

dr n. med. U. Walczuk.

Signature of Head(s) of teaching unit(s)

KATEDRA I ZAKŁAD MIKROBIOLOGII
kierownik
prof. dr hab. Grażyna Gościniak

Dean's signature

Wroclaw Medical University
Faculty of Medicine
Vice-Dean for Health Studies
prof. Beata Sobieszczańska, PhD