





TOTAL per year: 40													
Department of Microbiology	10				30								
Educational objectives (max. 6 items)													
<p><b>C1.</b> Introduction to clinically important microorganisms causing systemic infections.</p> <p><b>C2.</b> Learning students about basic diagnostic procedures: proper sampling and transport of clinical samples, isolation and identification of microorganisms.</p> <p><b>C3.</b> Learning students about general antimicrobial treatment of systemic infections including bacterial resistance to antimicrobials.</p> <p><b>C4.</b> Preparing students how to interpret correctly microbiological tests results and antimicrobial susceptibility testing results.</p> <p><b>C5.</b> Learning students about epidemiology of systemic infectious diseases (modes of transmission of hospital-acquired and community-acquired systemic infections) and how to prevent spreading of bacteria in hospital wards.</p>													
Education result matrix for module/course in relation to verification methods of the intended education result and the type of class													
Number of course education result	Number of major education result	Student who completes the module/course knows/is able to				Methods of verification of intended education results (forming and summarising)				Form of didactic class <i>**enter the abbreviation</i>			
<b>K.1</b>	<b>C.K12</b>	Graduate is able to name and classify pathogenic microorganisms causing human's systemic infections; knows the normal microflora and its influence on human's endogenous and iatrogenic infections.				Oral response, class tests, practical exam, final exam				L, LC			
<b>K.2</b>	<b>C.K17</b>	Graduate knows and understands pathomechanism of iatrogenic infections, ways of their transmission, main clinical symptoms, and prevention.				Oral response, class tests, practical exam, final exam				L, LC			
<b>K.3</b>	<b>C.K18</b>	Graduate knows and understands diagnostic procedures of bacterial, viral and fungal systemic infections, the biological material sampling, transport to the laboratory, and is able to interpret microbiological testing results.				Oral response, class tests, practical exam, final exam				L, LC			
<b>K.4</b>	<b>C.K33</b>	Graduate is able to characterize clinical picture of most common				Oral response, class tests, practical				L, LC			



		systemic infections and etiologic agents responsible for these infections.	exam, final exam	
<b>K.6</b>	<b>C.K39</b>	Graduate understands the problem of drug resistance, including multi-drug resistance and its importance in treatment of systemic infections	Oral response, class tests, practical exam, final exam	L, LC
<b>S1.</b>	<b>C.S6</b>	Graduate uses the basic methods to detect pathogenic microbiological agents.	Evaluation of self-made culture of biological material	L, LC
<b>S2.</b>	<b>C.S9</b>	Student is able to prepare slides and recognize bacteria under microscope.	Evaluation of the performance and interpretation of microscopic preparations in the immersion system	L, LC
<b>S3.</b>	<b>C.S10</b>	Graduate is able interpret microbiological testing results.	Assessment of individual interpretation of test results on the basis of laboratory cultures	L, LC
<b>S4.</b>	<b>C.S15</b>	Student is able propose rationale antimicrobial therapy in systemic infections .	Assessment of student individual ability to interpret antimicrobial susceptibilities tests of selected pathogens and resistance mechanisms	L, LC

\*\* L - lecture; SE - seminar; AC – auditorium classes; MC – major classes (non-clinical); CC – clinical classes; LC – laboratory classes; SCM – specialist classes (magister studies); CSC – classes in simulated conditions; FLC – foreign language course; PCP practical classes with patient; PE – physical education (obligatory); VP – vocational practice; SS – self-study, EL – E-learning .

Please mark on scale 1-5 how the above effects place your classes in the following categories:  
communication of knowledge, skills or forming attitudes:

Knowledge: .4

Skills: 2

Social competences: 4

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



Student's workload (class participation, activity, preparation, etc.)	Student Workload (h)
1. Contact hours:	40
2. Student's own work (self-study):	63
Total student's workload	103
ECTS points for module/course	4,5
Comments	
<b>Content of classes</b> (please enter topic words of specific classes divided into their didactic form and remember how it is translated to intended educational effects)	
<b>Lectures</b> 1. Upper and lower respiratory tract infections . 2. Wound and soft tissue infections. 3. Blood infections and infections of the central nervous system. 4. Gastrointestinal tract infections and food poisonings. 5. Sexually transmitted diseases and urinary tract infections.	
<b>Practical classes</b> 1. Upper respiratory tract infections . 2. Lower respiratory tract infections. 3. Wound and soft tissue infections. 4. Blood infections – sepsis. 5. Infections of the central nervous system. 6. Gastrointestinal tract infections and food poisonings. 7. Urinary tract infections 8. Sexually transmitted diseases 9. Opportunistic infections in immunocompromised patients. 10. Practical exam.	
Basic literature 1. Mim's Medical Microbiology and Immunology 6 <sup>th</sup> ed. Goering R., Dockrell H., Zuckerman, Chiodini 2. Medical Microbiology. 4 <sup>th</sup> ed. Murray P.R., Tenover F.C., Tenover K.S. <b>Additional literature and other materials</b> (no more than 3 items) 1. Medical Microbiology. 4 <sup>th</sup> ed. Baron S. 2. Medical Microbiology. 2 <sup>nd</sup> ed. Sherris JC.	
Didactic resources requirements (e.g. laboratory, multimedia projector, other...) Microbial laboratory with full equipment, multimedia projector.	
Preliminary conditions (minimum requirements to be met by the student before starting the module/course) Credit of the course: Microbiology (1)	
Conditions to receive credit for the course (specify the form and conditions of receiving credit for classes included in the module/course, admission terms to final theoretical or practical examination, its form and requirements to be met by the student to pass it and criteria for specific grades) <b>Each absence must be made up, including rector's days or dean's hours.</b> 1. Attendance on classes and lectures with printed materials - according to the study regulations 2. Passed all class tests. Criteria for passing tests are the same as for passing the final exam i.e. 60% of correct answers for satisfactory grade (3.0) 3. Practical exam - the condition for admission to the practical test is the passing of all tests and have a credits from all classes 4. Final exam is written (test exam) - the conditions for admission to the final exam include: passed all class	



tests and final exam, and the presence on classes and lectures according to the study regulations  
Conditions for passing practical and final exams are included in the internal regulations of the Department of Microbiology

<b>Grade:</b>	<b>Criteria</b> (only for courses/modules ending with an examination)
Very Good (5.0)	92-100% positive answers
Good Plus (4.5)	84-91% positive answers
Good (4.0)	76-83% positive answers
Satisfactory Plus (3.5)	68-75% positive answers
Satisfactory (3.0)	60-67% positive answers

<b>Name of unit teaching course:</b>	University of Medicine, Department of Microbiology
Address	Chałubińskiego 4 Street, 50 - 346 Wrocław
Phone	Tel. /071/ 784-12-75; Fax: /071/ 784-01-17
E-mail	<a href="mailto:w1-13@am.wroc.pl">w1-13@am.wroc.pl</a>
<b>Person responsible for course:</b>	prof. dr hab. Beata Sobieszczkańska, prof. nadzw.
Phone	Tel. 784 - 1 - 08
E-mail	<a href="mailto:beata.sobieszczanska@umed.wroc.pl">beata.sobieszczanska@umed.wroc.pl</a>

<i>List of persons conducting specific classes:</i>	<i>degree/scientific or professional title</i>	<i>Discipline</i>	<i>Performer profession</i>	<i>Form of classes</i>
<b>Beata Sobieszczkańska</b>	<b>Prof. dr hab. n. Med.</b> professor	microbiology	specialist in microbiology	lectures, calsses
<b>Ewa Dworniczek</b>	<b>dr n. med.</b> assistant leader	microbiology	specialist in microbiology	classes
<b>Jolanta Rusiecka-Ziółkowska</b>	<b>dr med.</b> <b>lek. med.</b> assistant leader	microbiology ophthalmology	specialist in microbiology specialist in ophthalmology	classes
<b>Urszula Walczuk</b>	<b>dr med.</b> assistant leader	microbiology biotechnology	specialist in microbiology	lectures, calsses
<b>Paweł Krzyżek</b>	<b>mgr</b> assistant	microbiology	microbiology Ph.D student	classes
<b>Marcin Choroszy</b>	<b>lek. med.</b>	microbiology	Ph.D student	classes
<b>Jerzy Maksymowicz</b>	<b>lek. med.</b>	microbiology	Ph.D student	classes

Date of Syllabus development

29.05.2019

Syllabus developed by

dr n. med. Urszula Walczuk.

Signature of Head of teaching unit

Signature of Faculty Dean



regulations

Conditions for passing practical and final exams are included in the internal regulations of the Department of Microbiology

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<b>Urszula Walczuk</b>	<b>dr med.</b> assistant leader	microbiology biotechnology	specialist in microbiology	lectures, classes
<b>Paweł Krzyżek</b>	<b>mgr</b> assistant	microbiology	microbiology Ph.D student	classes
<b>Marcin Choroszy</b>	<b>lek. med.</b>	microbiology	Ph.D student	classes
<b>Jerzy Maksymowicz</b>	<b>lek. med.</b>	microbiology	Ph.D student	classes

**Date of Syllabus development**

29.05.2019

Uniwersytet Medyczny we Wrocławiu  
KATEDRA I ZAKŁAD MIKROBIOLOGII  
Syllabus developed by  
adiunkt

dr n. med. inż. Urszula Walczuk  
dr n. med. Urszula Walczuk.

**Signature of Head of teaching unit**

Uniwersytet Medyczny we Wrocławiu  
KATEDRA I ZAKŁAD MIKROBIOLOGII  
Kierownik

*Gościński*  
prof. dr hab. Grażyna Gościński

**Signature of Faculty Dean**

Wrocław Medical University  
FACULTY OF MEDICINE  
VICE-DEAN FOR STUDIES IN ENGLISH

*Hendrich*  
Prof. Andrzej Hendrich, PhD