



Educational objectives (max. 6 items)

- C1. Familiarisation of students with the most important groups of Gram-positive and Gram-negative bacteria, and atypical bacteria.
- C2. Familiarisation of students with basic procedures for diagnostic microbiology: proper collection and transport of diagnostic materials, cultivation, isolation and identification of microorganisms.
- C3. Familiarisation of students with various methods for determining antibiotic susceptibility; criteria for choosing an antibiotic while preparing an antibiogram.
- C4. Familiarisation of students with the most important mechanisms of antimicrobial resistance.
- C5. Preparation of students for a proper interpretation of microbiological test results and being able to select an efficient antibiotic therapy.
- C6. Familiarisation with methods for preventing and combating infections (disinfection, sterilisation, antibiotic therapy, vaccines).

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>
W01	C.W1 C.W2	- identify microorganisms, including pathogenic and those being a part of the human microbiota.	oral test, oral exam, written exam	SE, LC
W02	C.W1	- recognize invasive forms or growth phases of selected parasitic fungi.		
W03	C.W3	-understand procedures for diagnostic bacteriology, virology, and mycology.		
W04	C.W4	- define alert pathogens and their antimicrobial resistance mechanisms.		
W05	C.W5	- define sterilisation and disinfection methods applied in dentistry.		
U 01	C.U1	- select a proper clinical sample and a method for its collection and transportation for microbiological testing.	oral test, oral exam, written exam	SE, LC
U02	C.U1 C.U2	- prepare a section, stain it, and recognise pathogen groups under a microscope.		
U03	C.U3	- prepare and carry out antibiotic susceptibility testing according to the adopted procedures and national regulations.		
U04	C.U2	-interpret microbiological testing results, including mechanisms of antimicrobial resistance		
U05	C.U2 C.U3	-design a regimen of effective antimicrobials for infections (empirical and targeted)		
K01		-demonstrate their self-study skills and habits		LC
K02		-cooperate in a group		



K03		The necessity to provide for their own health and their co-workers'		
<p>** 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 .</p>				
<p>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: 5 Skills: 4 Social competences: 3</p>				
Student's amount of work (balance of ECTS points)				
Student's workload (class participation, activity, preparation, etc.)			Student Workload (h)	
			35	
1. Contact hours:				
2. Student's own work (self-study):			115	
Total student's workload			150	
ECTS points for module/course			5	
Comments				
Content of classes (please enter topic words of specific classes divided into their didactic form and remember how it is translated to intended educational effects)				
Lectures --				
Seminars				
<ol style="list-style-type: none"> 1. Pathogenic properties of microbes associated with the cell structure and their metabolic properties (bacterial toxins, enzymes) 2. Tuberculosis, actinomycosis, nocardiosis, diphtheria 3. Gram-positive cocci 4. Antibiotic therapy of infections 5. Influence of microbes on gum, periodontium, and oral cavity mucosa diseases 6. RNA viruses of particular importance in dentistry 7. DNA viruses of particular importance in dentistry 8. Infections in dental surgeries (1-hour seminar) 				
Practical classes				
<ol style="list-style-type: none"> 1. Morphology of microorganisms. Staining principles (Gram, Loeffler, ink). Microbial cultivation methods (aerobic and anaerobic bacteria, fungi). 2. Gram-positive cocci: <i>Staphylococcus</i>, <i>Streptococcus</i> 3. Gram-positive bacilli: <i>Bacillus</i>, <i>Clostridium</i> 4. Gram-negative, fermentative <i>Enterobacteriaceae</i> and non-fermenting rods 5. Gram-negative cocci <i>Neisseria</i>, <i>Moraxella</i>, small bacilli <i>Haemophilus</i> and others 6. Spiral bacteria: <i>Borrelia</i>, <i>Treponema</i>, <i>Leptospira</i> 7. Anaerobic bacteria 8. Antibiotics pt 1. Antibiotic susceptibility testing methods 9. Antibiotics pt 2. Mechanisms of antimicrobial resistance 10. Sterilisation and disinfection. 				



Other --	
Basic literature (list according to importance, no more than 3 items) 1. Essential Microbiology for Dentistry. Lakshman Samaranayake 2. Medical Microbiology. P.R.Murray, K.S.Rosenthal 3. Human Virology: A Text for Students of Medicine, Dentistry, and Microbiology. Leslie Collier, John S. Oxford	
Additional literature and other materials (no more than 3 items) 1. 2.	
Didactic resources requirements (e.g. laboratory, multimedia projector, other...) Microbiological laboratory - burners, microscopes, ATB microbe identification system, incubators and: overhead projector, multimedia projector, writing boards	
Preliminary conditions (minimum requirements to be met by the student before starting the module/course) 1. Attendance at seminars, classes 2. Preparation for classes and seminars according to the syllabus	
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) 1. Class credit – passing all written tests with a grade of at least satisfactory. 2. Proper attendance and receiving the class credit are required to be able to take the exam.	
Grade:	Criteria (only for courses/modules ending with an examination)
Very Good (5.0)	60-56 /60 correct answers
Good Plus (4.5)	55-51/60 correct answers
Good (4.0)	50-46/60 correct answers
Satisfactory Plus (3.5)	45-41/60 correct answers
Satisfactory (3.0)	40-36/60 correct answers

Name and address of module/course teaching unit, contact: telephone and e-mail address

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Coordinator / Person responsible for module/course, contact: telephone and e-mail address

Prof dr hab. Grażyna Gościńskiak, phone: 71 784 00 65
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List of persons conducting specific classes: full name, degree/scientific or professional title, discipline, performed profession, form of classes.

Dr. Ewa Dworniczek

Date of Syllabus development

.....26.06.2018.....

Syllabus developed by

dr. Katarzyna Jermakow, dr. Ewa Dworniczek

Signature of Head of teaching unit

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