



Pomeranian Medical University in Szczecin

SYLLABUS of the MODULE (SUBJECT)

valid from the academic year 2018/2019

General Information

Module title	ORAL MICROBIOLOGY
Module type	Obligatory
Faculty	Faculty of Medicine and Dentistry
Field of study	Medicine and Dentistry
Major	Not applicable
Level of study	long-cycle (S2J)
Mode of study	intramural
Year of studies, semester	Year II, semester 2
ECTS credits (incl. semester breakdown)	2(0+2)
Type/s of training	lectures (10h)/ practical (20h)
Form of assessment	- graded assessment
Head of the Department/ Clinic, Unit	Head of Department of Medical Microbiology - Dr n. med. Joanna Jursa – Kulesza asiaju@pum.edu.pl
Tutor responsible for the module	Dr n. med. Magdalena Mnichowska Polanowska rumianek1978@wp.pl;magdalena.polanowska@pum.edu.pl - course coordinator. Mgr Aleksandra Wścislek aleksandra.wcislek@pum.edu.pl
Department's/ Clinic's/ Unit's website	mikrobio@pum.edu.pl
Language	English

Detailed information

Module objectives		<p>The aim of the oral microbiology course is :</p> <ol style="list-style-type: none"> 1) to evaluate state of oral cavity in the health and in disease and to predict the risk of oral infection and their systemic complications 2) to know distribution, development and benefits of the oral microbiota 3) to explain the complex relationship between resident oral microbiota and the host in health and disease 4) discuss the role of oral microorganisms in dental caries, periodontal diseases, dentoalveolar infections, their pathogenicity, laboratory diagnosis and susceptibility to antimicrobial drugs 5) to know oral clinical manifestation, diagnosis and therapy of oral infections with bacterial, viral and fungal etiology 6) to learn students about control of dental healthcare- and nosocomial infections
Prerequisite /essential requirements	Knowledge	Knowledge about human microbiota and pathogens (bacteria, fungi, viruses) with their pathogenicity factors as well as scheme of microbiological diagnosis are crucial to start the oral microbiology course. Basic knowledge about antimicrobial drugs as well indication for their application are required
	Skills	Microscope operating, self-preparation of Gram-stained smears, general interpretation of microbiological report
	Competences	Self- education, co-operation with team members (class-mates)

Description of the learning outcomes for the subject /module			
No. of learning outcome	Student, who has passed the (subject) knows /is able to /can:	SYMBOL (referring the standards) ZEK	Method of verification of learning outcomes
W01	knows and understands mechanism leading to organ and systemic pathology (incl. of infection, auto-immunological diseases and ones caused by immune deficit, metabolic and genetic diseases)	K_F.W02	W,O,RZC
W02	knows viral, bacterial and mycotic flora of oral cavity and importance thereof	K_F.W04	W,O,RZC
W03	knows symptoms, course and procedures for certain diseases of oral cavity , head and neck with regard to age groups	K_F.W05	W,O,RZC
W04	knows diagnostics and treatment of parodontium and diseases of oral mucosa	K_F.W11	W,O,RZC
W05	knows and understands bases for antibiotic therapy and antibiotic resistance	K_F.W15	W,O,RZC
W06	knows influence of physical, chemical and biological factors, stress and avitaminosis	K_F.W18	W,O,RZC
W07	knows and understands pathomechanism of influence of oral cavity on general health state	K_F.W22	W,O,RZC
U01	samples and protects material for diagnostic examination (incl. of cytology)	K_F.U05	W,O,S,RZC
U02	interprets results of ancillary tests	K_F.U06	W,O,S,RZC
U03	selects and performs certain tests to identify number of caries bacteria in oral cavity	K_F.U17	W,O,S,RZC
K01	shows habit of self-education and lifelong education	K_K.01	W,O,S,RZC
K02	understands sense of responsibility for entrusted property	K_K.07	W,O,S,RZC

Table presenting learning outcomes of the subject/module in relation to the form of classes								
No.	SYMBOL (referring the standards) ZEK	Type/s of training						
		Lecture	Seminar	Students presentation	Practical class	Other
1.	K_F.W02	X			X			
2.	K_F.W04	X			X			
3.	K_F.W05	X			X			
4.	K_F.W11	X			X			
5.	K_F.W15	X			X			
6.	K_F.W18	X			X			
7.	K_F.W22	X			X			
8.	K_F.U05	X			X			
9.	K_F.U06	X			X			
10.	K_F.U17	X			X			
11.	K_K.01	X			X			
12.	K_K.07	X			X			

Module contents no.	Description of teaching programme	No. of hours	References to learning outcomes
TK 01	Lecture 1: Oral ecosystem	1	W01,W02
TK 02	Lecture 2: Microbiology of dental caries and dentoalveolar infections	2	W01,W02,W03,W07
TK 03	Lecture 3: Blood and CNS infections	2	W01,W02,W03,W04,W07
TK 04	Lecture 4: Oral mucosal and salivary gland infections. Other oral infections	1	W01,W02,W03,W04,W07
TK 05	Lecture 5: Respiratory tract infections	1	W01,W02,W03,W04,W07
TK 06	Lecture 6: Rules of infection control. Disinfection and sterilization in dentistry	2	W02
TK 07	Lecture 7: Chemotherapy in oral infections and soft-tissue infections of a head and neck	1	W03,W05,W06
TK 08	Practical class 1: Oral ecosystem	3	U01, K01-02
TK 09	Practical class 2: Microbiology of dental caries and dentoalveolar infections	2	U01-U03, U03, K01-02
TK 10	Practical class 3: Microbiology of periodontal diseases and their complications – students' presentations	3	K01-02
TK 11	Practical class 4: Blood and CNS infections	2	U01,U02, K01-02
TK 12	Practical class 5: Oral mucosal and salivary gland infections. Other oral infections	3	U01,U02, K01-02
TK 13	Practical class 6: Respiratory tract infections	2	U01-U02, K01-02
TK 14	Practical class 7: Rules of infection control. Disinfection and sterilization in dentistry	2	U01, U02, K01-02
TK 15	Practical class 8: Chemotherapy in oral infections and soft-tissue infections of a head and neck	2	U01, U02, K01-02
TK 16	Practical class 9: Practical make ups	1	K01

Booklist			
Obligatory literature:			
1. Essential Microbiology for Dentistry- L Samaranyake, 2006, 3 rd ed, ISBN: 9780443100796			
2. Oral Microbiology – P.D. Marsh, 2016, 6 rd ed, ISBN: 978-0-7020-6106-6			
Supplementary literature:			
1. Notes on Medical Microbiology – K.N. Ward, K.C. McCartney, B. Thakker, 2008, 2 nd ed, ISBN 9780443102844			
Student’s workload (balance sheet of ECTS credits)			
Form of student’s activity (in-class participation; activeness, produce a report, etc.)	Student’s workload [h]		
	Tutor	Student	Average
Contact hours with the tutor	30		
Time spent on preparation to seminars/ practical classess	30		
Time spent on reading recommended literature	20		
Time spent on writing report/making project	2		
Time spent on preparing to colloquium/ entry test	20		
Time spent on preparing to final test	30		
Other			
Student’s workload in total	132		
ECTS credits for the subject (in total)	2		
Remarks			

* Selected examples of methods of assessment:

EP – written examination

EU – oral examination

ET – test examination

EPR – practical examination

K – colloquium

R – report

S – practical skills assessment

RZC – practical classes report, incl. discussion on results

O – student's active participation and attitude assessment

SL – lab report

SP – case study

PS - assessment of student's ability to work independently

W – entry test

PM – multimedial presentation

other...