



Pomeranian Medical University in Szczecin

SYLLABUS of the MODULE (SUBJECT) General Information

Module title: ORAL MICROBIOLOGY	
Module type	Obligatory
Faculty PMU	Faculty of Medicine and Dentistry
Major	Dentistry
Level of study	long-cycle (S2J)
Mode of study	full-time studies
Year of studies, semester	Year II, semester 2 (summer)
ECTS credits (incl. semester breakdown)	2
Type/s of training	seminars (7hrs), e-learning (3hrs) / practical (20hrs)
Form of assessment*	<p>X graded assessment:</p> <p><input type="checkbox"/> descriptive</p> <p>X test</p> <p><input type="checkbox"/> practical</p> <p><input type="checkbox"/> oral</p> <p><input type="checkbox"/> non-graded assessment</p> <p><input type="checkbox"/> final examination</p> <p><input type="checkbox"/> descriptive</p> <p><input type="checkbox"/> test</p> <p><input type="checkbox"/> practical</p> <p><input type="checkbox"/> oral</p>
Head of the Department/ Clinic, Unit	dr n. med. Joanna Jursa-Kulesza asiaju@pum.edu.pl
Tutor responsible for the module	dr n. med. Magdalena Mnichowska-Polanowska magdalena.polanowska@pum.edu.pl 91 466 16 52
Department's/ Clinic's/ Unit's website	Samodzielna Pracownia Mikrobiologii Lekarskiej
Language	<i>www.pum.edu.pl ⇒ https://www.pum.edu.pl/wydzialy/wydzial- medycyny-i-stomatologii/katedra-mikrobiologii,- immunologii-i-medycyny- laboratoryjnej/informacje-dla- studentow/information-for-students</i>

* replace into where applicable

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 collect the appropriate oral samples in the course of oral infections with microbial etiology 7) learn how to manage antimicrobial therapy of oral infections with microbial etiology 8) to propose general therapy protocols of oral and systemic infections <p>to learn students about control of dental healthcare- and nosocomial infections</p>
Prerequisite /essential requirements	Knowledge	Knowledge about human microbiota and pathogens (bacteria, fungi, viruses) with their pathogenicity factors as well as scheme of microbiological lab processing are crucial to take the oral microbiology course. Basic knowledge about antibiotics' classification, mechanism and mode of their action is required
	Skills	Microscope operating, biological samples safe handling, compliance with microbiological safety rules, self-preparation of Gram-stained smears, filling of request form for microbiological examination, general interpretation of microbiological report
	Competences	Self- education, integration of the knowledge obtained on other preclinical courses , 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)	Method of verification of learning outcomes*
W01	knows and understands viral, bacterial and mycotic flora of oral cavity and importance thereof	F.W3.	ZT/W/O/RZĆ
W02	knows and understands symptoms, course and treatment methods of specified diseases of oral cavity, head and neck with regard to age groups	F.W4.	ZT/W/O/RZĆ
W03	knows and understands diagnostics and treatment of periodontal and oral mucosa diseases	F.W9.	ZT/W/O/RZĆ
W04	knows and understands bases for antibiotic therapy and antibiotic resistance	F.W13.	ZT/W/O/RZĆ
W05	knows and understands pathomechanism of oral cavity diseases' influence on general health state	F.W19.	ZT/W/O/RZĆ

W06	knows and understands prophylaxis of oral cavity diseases	F.W21.	ZT/W/O/RZĆ
W07	knows and understands principles of management of masticatory system tissues diseases, teeth and jaw bone trauma	F.W22.	ZT/W/O/RZĆ
U01	is able to sample and protect material for diagnostic tests, including cytology	F.U5.	W/O/S/RZĆ
U02	is able to interpret results of axiliary diagnostics and consultations	F.U6.	W/O/S/RZĆ
U03	is able to prescribe medicines taking into account their interactions and side effects	F.U10.	W/O/S/RZĆ
U04	is able to assess risk of caries applying microbiological and salivary tests	F.U14.	W/O/S/RZĆ
U05	can conduct epidemiologic investigation	G.U19	W/RZĆ
K01	is ready to notice and recognize own limitations, make self-assessment of educational deficits and needs	K.5.	O/RZĆ
K02	is ready to draw conclusions from own measurements or observations	K.8.	O/RZĆ
K03	is ready to implement the principles of professional fellowship and cooperation in a team of specialists, including representatives of other medical professions, also in a multicultural and multinational environment	K.9.	O/RZĆ

Table presenting LEARNING OUTCOMES in relation to the form of classes

No. of learning outcome	Learning outcomes	Type of training						
		Lecture	Seminar	Practical classes	Clinical classes	Simulations	E-learning	Other...
W01	F.W3.		X	X				
W02	F.W4.		X	X			X	
W03	F.W9.		X	X			X	
W04	F.W13.		X	X			X	
W05	F.W19.		X	X				
W06	F.W21.		X	X				
W07	F.W22.		X	X			X	
U01	F.U5.			X				
U02	F.U6.			X				
U03	F.U10.			X				
U04	F.U14.			X				
U05	G.U19			X				
K01	K.5.			X				
K02	K.8.			X				
K03	K.9.			X				

Table presenting TEACHING PROGRAMME

No. of a teaching programme	Teaching programme	No. of hours	References to learning outcomes
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Summer semester			
Seminars			
TK01	Oral ecosystem	1	F.W3
TK02	Microbiology of dental caries and dentoalveolar infections	1	F.W3./ F.W4./ F.W9./ F.W19./ F.W21.
TK03	Blood and CNS infections	2	F.W19./F.W21.
TK04	Oral mucosal and salivary gland infections. Other oral infections	1	F.W3./ F.W4.
TK05	Respiratory tract infections	1	F.W3./ F.W4. /F.W13
TK06	Rules of infection control. Disinfection and sterilization in dentistry	1	F.W4./F.W13./ F.W22./G.W16.
e-learning			
TK07	Chemotherapy in oral infections and soft-tissue infections of a head and neck	3	F.W4./ F.W9./ F.W13./ F.W22.
Practical classes			
TK01	Oral ecosystem	3	F.W3./F.U5./ K.8./ K.9
TK02	Microbiology of dental caries and dentoalveolar infections	2	F.W21./ F.W22./ F.U10. /F.U14./K.9
TK03	Microbiology of periodontal diseases and their complications – students' presentations	4	F.W4./ F.W19./ F.W21. /F.U5./F.U6./F.U10./K.9.
TK04	Blood and CNS infections	2	F.U5./ F.U10./ K.8./ K.9
TK05	Oral mucosal and salivary gland infections. Other oral infections	3	F.U5./ F.U10./K.8./ K.9.
TK06	Respiratory tract infections	3	F.U5./ F.U6./F.U10./K.8./K.9
TK07	Rules of infection control. Disinfection and sterilization in dentistry	3	G.U19./K.8./K.9.

Booklist
Obligatory literature:
1. Oral Microbiology – P.D. Marsh, M.V. Martin, 2016, 6 th ed, ISBN: ISBN 9780702061066
2. L. Samaranyake. Essential Microbiology for Dentistry- 2018, 5 th ISBN: 9780702074356
Supplementary literature:
1. Notes on Medical Microbiology – K.N. Ward, K.C. McCartney, B. Thakker, 2008, ISBN 9780443102844
2. Extra updated handouts from teacher.

Student's workload	
Form of student's activity (in-class participation; activeness, produce a report, etc.)	Student's workload [h]
	Tutor
Contact hours with the tutor	30
Time spent on preparation to seminars/ practical classes	16
Time spent on reading recommended literature	10
Time spent on writing report/making project	2

Time spent on preparing to colloquium/ entry test	14
Time spent on preparing to exam	30
Other	
Student's workload in total	102
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

ZT – final test

Other...