



Pomeranian Medical University in Szczecin

SYLLABUS of the MODULE (SUBJECT)

valid from the academic year 2017/2018

General Information

Module title	Dental Materials & Equipment
Module type	<i>Obligatory</i>
Faculty	<i>Faculty of Medicine and Dentistry</i>
Field of study	<i>Medicine and Dentistry</i>
Major	<i>Not applicable</i>
Level of study	long-cycle (S2J)
Mode of study	intramural
Year of studies, semester	<i>Year II, semester III</i>
ECTS credits (incl. semester breakdown)	<i>4</i>
Type/s of training	<i>seminars (11h)/ practical (40h)</i>
Form of assessment	<i>exam</i>
Head of the Department/ Clinic, Unit	<i>Prof. dr hab. Jadwiga Buczkowska - Radlińska</i>
Tutor responsible for the module	<i>Dr n.med. Łukasz Tyszler</i>
Department's/ Clinic's/ Unit's website	https://www.pum.edu.pl/wydzialy/wydzial-lekarsko-stomatologiczny/katedra-i-zaklad-stomatologii-zachowawczej-i-endodoncji
Language	English

*replace ☐ with X where applicable

Detailed information

Module objectives		The aim of the teaching: knows equipment of dental office and instrumentation for dental procedures, dental materials. Student knows basic knowledge about materials used to temporary and final caries and endodontics fillings. Student has to know basic medicines used to caries and endodontic treatment. Student has to understand basic methods of the mixing and set up of the dental materials. Knows helper equipment to atomization and set up dental materials. Aim of the treatment will achieve when student will know basic equipment of the dental surgery and dental materials and medicines.	
Prerequisite /essential requirements	Knowledge	Knows of anatomy of the permanent and milk teeth. Knows histological building of hard and soft oral tissues. Knows the principles of operation of dental equipment. knows the composition, construction, way binding, properties, purpose and use of dental materials.	
	Skills	Work in dental practice knowing rules of of ergonomics and safety work regulations Can recognize and work with dental hand and rotary instruments can prepare dental materials and use in artificial teeth	
	Competences	habit of self-education and work in group	
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 bases for disinfection, sterilization and aseptics	K_C.W05	Constant evaluation on classes ET
W02	Knows equipment of dental office and instrumentation for dental procedures	K_C.W23	
W03	Knows definition and classification of basic and auxiliary dental materials	K_C.W24	
W04	Knows composition, structure, properties, bonding and intended use of dental materials	K_C.W25	
W05	Knows and explains surface properties of tooth hard tissue and dental biomaterials	K_C.W26	
W06	Knows and explains surface properties of tooth hard tissue and dental biomaterials	K_C.W27	

W07	Knows basic clinical procedures for reconstruction of tooth hard tissue, endodontic treatment and methods and laboratory procedures for prosthetic restorations	K_C.W28	Constant evaluation on classes ET
W08	Knows mechanisms of degradation (corrosion) of dental biomaterials in oral cavity and influence thereof on biological properties of materials	K_C.W29	
W09	Knows basic definitions and dental equipment. knows basic knowledge about materials used to temporary and final caries and endodontics fillings. Student has to know basic medicines used to caries and endodontic treatment. Student has to understand basic methods of the mixing and set up of the dental materials. Knows helper equipment to atomization and set up dental materials.	K_C.W05, K_C.W23, K_C.W24, K_C.W25, K_C.W26, K_C.W27, K_C.W28, K_C.W29	
U01	Uses dental materials for temporary and permanent treatment	K_FU.01	Constant evaluation on classes
U02	Can prepare dentist worksite	K_FU.02	
K01	shows habit of self-education and lifelong education	K_K.01	
K02	Care about fitness needed to work like a dentist	K_K.02	
K03	shows habit of self-education and lifelong education and can orderliness educations of the another persons	K_K.03	

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	Practical classes	Clinical classes	Other...
1.	K_C.W05		x	x				
2.	K_C.W23		x	x				
3.	K_C.W24		x	x				
4.	K_C.W25			x				

5.	K_C.W26		x	x					
6.	K_C.W27		x	x					
7.	K_C.W28			x					
8.	K_C.W29			x					
9.	K_F.U01			x					
10.	K_F.U02			x					
11.	K_K.01		x	x					
12.	K_K.02		x	x					
13.	K_K.03		x	x					
Module (subject) contents no.	Description of teaching programme	No. of hours	References to learning outcomes						
	Seminars								
TK01	Introduction to dental materials	1	W02, W03, K01, K03						
TK02	Dental materials used in dental laboratory	1	W07, W08, K01, K03						
TK03	Composites	1	W03, W04, K01, K03						
TK04	Dental equipment used to make restorations	1	W02, K01, K02, K03						
TK05	Helper materials and dental equipment	1	W06, W08, K01, K03						
TK06	Intermediate materials	1	W03, W04, W05, W06, U01, U02, K01, K02, K03						
TK07	Final fillings: amalgam, glass ionomers	1	W03, W04, W05, W06, U01, U02, K01, K02, K03						
TK08	Final fillings: compomers, ormocers	1	W03, W04, W05, W06, U01, U02, K01, K02, K03						
TK09	Bonding systems. Esthetic fillings	1	W04, W05, W06, W07, W08 U01, U02, K01, K02, K03						
TK10	Burs, stones, gums. Endodontics files. Disinfection, sterilization and asepsis materials	1	W01, W02, W03, U02, K01, K03						
TK11	Pulp cupping materials, biological treatment	1	W03, W04, W05, W06, U01, U02, K01, K02, K03						
	Practical classes								
TK12	Practical activities with dental materials and equipment in artificial tooth	40	W01, W02, W03, W04, W05, W06, W07, W08, U01, U02, K01, K02, K03,						

Booklist			
Obligatory literature:			
1. Introduction to dental materials” Richard von Noort			
2. Dental materials” Robert Craig			
Supplementary literature:			
1. Essentials of dental caries” Edwina E.M.Kidd			
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	40	60	
Time spent on preparation to seminars/ practical classess	30	50	
Time spent on reading recommended literature	60	25	
Time spent on writing report/making project			
Time spent on preparing to colloquium/ entry test			
Time spent on preparing to exam	10	90	
Other			
Student’s workload in total		225	
ECTS credits for the subject (in total)	4		
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...