

Pomeranian Medical University in Szczecin

SYLLABUS of the MODULE (SUBJECT) General Information

Module title:	Dental Prosthetics
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	3 year (V semester and VI semester)
ECTS credits (incl. semester breakdown)	4
Type/s of training	V semester: lectures (10h), seminars (5h), practical classes (35h) VI semestrer: seminars (5h), practical classes (35h)
	⊠graded assessment: □descriptive ⊠test □practical □oral
Form of assessment*	□non-graded assessment
	☐final examination ☐descriptive ☐test ☐practical ☐oral
Head of the Department/ Clinic, Unit	dr hab. n. med. Ewa Sobolewska
Tutor responsible for the module	adiunkt dydaktyczny: dr hab. n. med. Halina Ey-Chmielewska solo@pum.edu.pl tutor of the 3rd year dr n. med. Małgorzata Kozak, malgorzata.kozak@pum.edu.pl
Department's/ Clinic's/ Unit's website	https://www.pum.edu.pl/wydzialy/wydzial- medycyny-i-stomatologii/Katedra-i-Zaklad- Protetyki-Stomatologicznej
Language	English

 $^{^*}$ replace \square into \boxtimes where applicable

Detailed information

Module objectives		The aim of teaching prosthodontics is to acquire knowledge of prosthetic treatment based on material technologies and laboratory procedures. fixed restorations. Acquiring of the practical skills of selected clinical and laboratory stages and procedures of fixed and removable prosthetics restorations.		
Prerequisite	Knowledge	Knowledge resulting from the implementation of the educational content for the 1st and 2nd year of studies. Knowledge of the equipment of the dental practice and the instruments used in dental procedures. Definition and classification of dental materials.		
/essential Requirements	Skills	Knowledge of the principles of using dental units and equipment. Appropriate selection of dental materials and instruments for dental treatment.		
	Competences	The habit of self-education and lifelong education. Understanding the sense of responsibility for the entrusted property, personal culture.		

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 basic clinical procedures for reconstruction of tooth hard tissue, endodontic treatment and methods and laboratory procedures for prosthetic restorations	C.W28	W, PM, K, ET			
W02	knows mechanisms of degradation (corrosion) of dental biomaterials in oral cavity and influence thereof on biological properties of materials	C.W29	W, PM, K, ET			
W03	characterizes the composition, properties and method of bonding primary and secondary materials used in the manufacture of prosthetic restorations	C.W29	W, PM, K, ET			
W04	knows rules of prophylactic-therapeutic procedures in diseases of stomatognathic system in different phases of development	F.W03	W, PM, K, ET			
W05	knows symptoms, course and procedures for certain diseases of oral cavity, head and neck with regard to age groups	F.W05	W, PM, K, ET			
U01	selects reconstructive, prosthetic and binding materials according to properties of materials and clinical conditions	C.U11	S			
U02	designs prosthetic restorations and knows how to execute them in laboratory	C.U13	S			
U03	prepares teeth for fixed prosthetic restorations on the phantom	C.U13	S			
U04	finds indications as to performance of certain dental procedure	F.U07	S			
U05	performs prosthetic rehabilitation in easy cases with regard to clinical and laboratory procedure	F.U25	S			
K01	shows habit of self-education and lifelong education	K. K01	0			
K02	accepts need of standards of conduct and legislation regarding medical practice	K. K02	О			
K03	can co-operate with team members and care about occupational safety	K. K03	О			
K04	understands sense of responsibility for entrusted property	K. K07	О			

Table presenting LEARNING OUTCOMES in relation to the form of classes								
		Type of training						
No. of learning outcome	Learning outcomes		Seminar	Practical	Clinical	Simulations	E-learning	Other
W01	knows basic clinical procedures for reconstruction of tooth hard tissue, endodontic treatment and methods and laboratory procedures for prosthetic restorations	X		X		X	X	
W02	knows mechanisms of degradation (corrosion) of dental biomaterials in oral cavity and influence thereof on biological properties of materials	X		X		X	X	
W03	characterizes the composition, properties and method of bonding primary and secondary materials used in the manufacture of prosthetic restorations	X		X		X	X	
W04	knows rules of prophylactic-therapeutic procedures in diseases of stomatognathic system in different phases of development	X				X	X	
W05	knows symptoms, course and procedures for certain diseases of oral cavity, head and neck with regard to age groups	X				X	X	
U01	selects reconstructive, prosthetic and binding materials according to properties of materials and clinical conditions					X		
U02	designs prosthetic restorations and knows how to execute them in laboratory					X		
U03	prepares teeth for fixed prosthetic restorations on the phantom					X		
U04	finds indications as to performance of certain dental procedure					X		
U05	performs prosthetic rehabilitation in easy cases with regard to clinical and laboratory procedure					X		
K01	shows habit of self-education and lifelong education					X		
K02	accepts need of standards of conduct and legislation regarding medical practice					X		
K03	can co-operate with team members and care about occupational safety					X		
K04	understands sense of responsibility for entrusted property					X		

No. of a teaching programme		Teaching programme		o. of ours	References to learning outcome	
	T	Winter semester				
		Lectures				
TK 01	Introduction history, pe	on to dental prosthetics classes - rspectives	1hrs	W01, W02		
TK 02	Patient examasticator	amination. Characteristics of a y system.	1hrs	W01, W04, W05		
TK 03	prosthetic prosthetic	n for prosthetic treatment. Pre- treatments. Classifications of the bearing area. Classifications of eth. Types of prosthetic s.	1hrs	W01, W03, W05		
TK 04	edentulous	s patient – introduction, anatomy of s ridges, patient examination, ag OVD, methods of teeth nt	1hrs	W01, W02, W03		
TK 05		e partial dentures – introduction tions, biomechanics, treatment	1hrs	W01, W02, W03		
TK 06		on to fixed dentures – diagnostics ent planning.	1hrs	W01, W02, W04		
TK 07	Repairing	a prosthetic restoration	1hrs	W01, W02, W03		
TK 08	Crowns an	d veneers.	1hrs	W01, W02, W03, W04, V		
TK 09	Rules of d	esigning prosthetic bridges.	1hrs	W01, W02, W03, W04, W		
TK 10	Post and c	ore.	1hrs	W01, W02, W03, W04, W		
		Seminars				
TK 01	Primary ar	nd secondary dental materials.	3 hrs	W01, W03		
TK 02		terials and impression methods ed and removable dentures	2 hrs	hrs W02, W03		

	Simulation		
TK 01	Complete dentures. I clinical and laboratory stage. Fabrication of a shellac custom tray. Pouring casts.	3 hrs	W01, W04, W05, U02, U04, K03, K04
TK 02	Complete dentures. Fabrication of a composite custom tray. Colloquium: "Primary and secondary dental materials"	3 hrs	W01, W02, W03, U01, U02, U05, K01, K03, K04
TK 03	Complete dentures. II laboratory stage. Occlusal rims fabrication.	3 hrs	W01, U01, U02, U05, K03, K04
TK 04	Complete dentures. III clinical stage. Bite registration, facebow transfer into articulator.	3 hrs	W01, U02, U05, K03, K04
TK 05	Complete dentures. III laboratory stage Teeth arrangement.	3 hrs	W01, U02, U05, K03, K04
TK 06	Complete dentures. IV and V clinical stage and IV laboratory stage. Flasking and boiling.	3 hrs	W01, W03, K04
TK 07	Dental crowns. I clinical stage. Tooth preparation for a full metal crown – "knife edge". Colloquium: "Complete dentures".	3 hrs	W01, W02, W03,W04, W05, U03, U04, U05, K01, K02, K03, K04
TK 08	Dental crowns. I clinical stage. Tooth preparation for a full porcelain crown.	3 hrs	W01, U03, U04, U05, K02, K03, K04
TK 09	Dental crowns. Impressions, bite registration, facebow transfer.	3 hrs	W01, U02, U05, K02, K03, K04
TK 10	Dental crowns. Laboratory stage of casting a metal crown. Modelling a crown	3 hrs	W01, U01, U02, U05, K03, K04
TK 11	Temporary crowns. Demonstration of modeling a wax pattern of an acrylic crown. Making a temporary crown.	3 hrs	W01, U01, U02, K03, K04
TK 12	Dental crown. Casting a metal crown, covered with ceramics. Modeling of the wax pattern of the crown framework. Colloquium: "Dental crowns".	3 hrs	W01, W02, W03, U01, U02, U05, K01, K03, K04
	Summer Semestr		
	Seminars		
TK 01	Dental materials used in complete and removable dentures-repetition	3 hrs	W01, W03
TK 02	Mistakes in clinical and laboratory stages of fixed and removable restorations.	2 hrs	W01, W02

	Simulation		
TK 01	Dental bridges. I clinical stage. Teeth prepartion for a dental bridge.	hrs	W01, W04, W05, U03, U04, U05, K02, K03, K04
TK 02	Dental bridges. I clinical stage. Teeth prepartion for a dental bridge – continuation. Methods of protection a tooth after preparation.	3 hrs	W01, U03, U05, K02, K03, K04
TK 03	Dental bridges. Bite registration, facebow transfer.	3 hrs	W01, U02, U05, K02, K03, K04
TK 04	Teeth arrangement – continuation	3 hrs	W01, W03, K04
TK 05	Removable dentures. Occlusal rims fabrication	3 hrs	W01, W02, W03, W04, W05, U01, U02, U04, U05, K01, K03, K04
TK 06	Removable dentures. Teeth arrangement - Clasp bending	3 hrs	W01, U01, U02, U05, K03, K04
TK 07	Removable dentures. Flasking and boiling	3 hrs	W01, U02, U05, K03, K04
TK 08	Partial dentures. Clinical stage IV, V, laboratory stage IV. Demonstration of flasking and polymerization of partial dentures.	3 hrs	W01, W03, K04
TK 09	Methods of making post and core in single-rooted and multi-rooted teeth. Practicing impression methods. Colloquium: "Partial dentures".	3 hrs	W01, W02, W03, W04, W05, U02, U04, U05, K01, K03, K04
TK 10	Teeth preparation for a metal post and core.	3 hrs	W01, U03, U05, K02, K03, K04
TK 11	Post and core. Laboratory stage. Modelling of a wax pattern for casting post and core. Colloquium: "post and core".	3 hrs	W01, W02, W03, U01, U02, U05, K01, K03, K04
TK 12	Dental and prosthetic education of the patient. Adaptation to prosthetic restorations, factors influencing to the adaptation process. Clinical aspects of the technical performance of fixed and removable restorations.	3 hrs	W01, W03, W04, W05, K02

Booklist

Obligatory literature:

- 1. Rosenstiel SF, Land MF, Fujimoto J. "Contemporary Fixed Prosthodontics", 4th Edition, Mosby Elsevier, 2006
- 2. Powers J, Sakaguchi R. "Craig's Restorative Dental Materials" 12th Edition, Mosby Elsevier, 2006
- 3. Basker R, Davenport J. "Prosthetic Treatment of the Edentulous Patient" 4th Edition, Wiley-Blackwell, 2002
- 4. Carr AB, Brown "McCracken's removable partial prosthodontics" Mosby St. Louis, 2005

Supplementary literature:

- 1. Craig, John M. Powers, John C. Wataha, "Dental Materials, Properties and Manipulation", 9th edition, Mosby 2007
- 2. Shillingburg, Herbert T., Jr.: Fundamentals of Fixed Prosthodontics, 3rd edition Chicago: Quintessence Pub., c1997. ISBN: 086715201X
- 3. Zarb G.A., Bolender C.L., Eckert S., Jacob R., Mericske-Stern F, "Prosthodontic Treatment for Edentulous Patients: Complete Dentures and Implant-Supported Prostheses", 12th edition, Mosby Co.
- 4. Okeson J., "Management of Temporomandibular Disorders and Occlusion, Mosby Elsevier 2008

Student's workload				
Form of student's activity	Student's workload [h]			
(in-class participation; activeness, produce a report, etc.)	Tutor			
Contact hours with the tutor	90			
Time spent on preparation to seminars/ practical classess	20			
Time spent on reading recommended literature	40			
Time spent on writing report/making project	2			
Time spent on preparing to colloqium/ entry test	10			
Time spent on preparing to exam	10			
Student's workload in total	172			
ECTS credits for the subject (in total)	4			
D I				

Remarks

winter semester - credit: on the basis of credit for classes and seminars and attendance at lectures; summer semester - graded credit: on the basis of final test credit and tutorial grade; the condition for admission to the final test is passing the classes and seminars;

EP – written examination

 $EU-oral\ examination$

ET – test examination

EPR – practical examination

K - colloqium

R-report

 $S-practical\ skills\ assessment$

RZĆ – 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...

^{*} Selected examples of methods of assessment: