Pomeranian Medical University in Szczecin

SYLLABUS of the MODULE
General Information

Module title: NORMS OF OCCLUSION IN ADULTS	
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 2, semester IV
ECTS credits (incl. semester breakdown)	3
Type/s of training	Seminars 15h/ practical 30h
Form of assessment*	☐graded assessment: ☐descriptive ☒test ☒practical ☐oral ☐non-graded assessment ☐final examination ☐descriptive ☐test ☐practical ☐oral
Head of the Department/ Clinic, Unit	Prof. dr hab. n. med. Katarzyna Grocholewicz
Tutor responsible for the module	Dr n. med. Małgorzata Tomasik E-mail: malgorzata.tomasik@pum.edu.pl
Department's/ Clinic's/ Unit's website	https://www.pum.edu.pl/studia_iii_stopnia/informacje_z_jednostek/wmis/zaklad_stomatologii_zintegrowanej/
Language	English

Detailed information

Module objectives	1. To learn about the standard of occlusion in adults. 2. Acquiring the skills to perform functional waxing of teeth in an articulator.

* replace ☐ into ☒ where applicable

		3. Acquiring the ability to analyze the occlusion.
Prerequisite /essential requirements	Knowledge	Knowledge of the anatomical structure and functions of the stomatognathic system.
	Skills	Wax modeling of the teeth.
	Competences	Ability to cooperate in a group. Self-education and verification of information sources

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 the basic clinical procedures of orthodontic prevention	C.W33.	K, ZAO
W02	knows and understands occlusion norms and deviations in different phases of ontogenesis	F.W1.	K, ZAO
W03	knows and understands causes of complications of stomatognathic system diseases and the rules of their management	F.W12.	K, ZAO
W04	knows and understands therapeutic methods of pain control as well as anxiety and stress reduction	F.W15.	K, ZAO
W05	knows and understands pathomechanism of systemic diseases and their therapy influence on oral cavity	F.W20.	K, ZAO
U01	is able to reproduce anatomic occlusion conditions and analyze occlusion	C.U12.	S,PS,O, ZAO
U02	is able to plan the basic phases of preventive care in patients with orthodontic needs	C.U16.	S, PM, ZAO
U03	is able to establish treatment for stomatognathic system tissues diseases	F.U15	S,SP, ZAO
U04	is able to diagnose, differentiate and classify malocclusion	F.U18	S,ZAO
K01	is ready to notice and recognize own limitations, make self-assessment of educational deficits and needs	K.5.	O
K02	is ready to draw conclusions from own measurements or observations	K.8.	O, PS, ZAO

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	knows and understands the basic clinical procedures of orthodontic prevention		x	x				
W02	knows and understands occlusion norms and deviations in different phases of ontogenesis		x	x				
W03	knows and understands causes of complications of stomatognathic system diseases and the rules of their management		x	x				
W04	knows and understands therapeutic methods of pain control as well as anxiety and stress reduction		x	x				
W05	knows and understands pathomechanism of systemic diseases and their therapy influence on oral cavity		x	x				
U01	is able to reproduce anatomic occlusion conditions and analyze occlusion			x				
U02	is able to plan the basic phases of preventive care in patients with orthodontic needs			x				
U03	is able to establish treatment for stomatognathic system tissues diseases			x				
U04	is able to diagnose, differentiate and classify malocclusion			x				
K01	is ready to notice and recognize own limitations, make self-assessment of educational deficits and needs		x	x				
K02	is ready to draw conclusions from own measurements or observations			x				

Table presenting TEACHING PROGRAMME			
No. of a teaching programme	**Teaching programme**	**No. of hours**	**References to learning outcomes**
Summer semester			
	Seminars		
TK01	Stomatognathic system. Functional anatomy of the masticatory organ	3	W02, W03, W05 K01
TK02	Facebow and articulator – design, types, application. Functional space in the articulator.	3	W01, W03, W04 K01
TK03	Articulation states of the mandible. Centric relation and maximum intercuspation. Posselt's envelope of motion	3	W01, W02, W03 W04, W05 K01
TK04	The importance of correct occlusion in the physiology of the masticatory organ in adults. Form and function of the teeth	3	W01, W02, W03 W05, K01

	Concept of occlusion.		
TK05	Functions of the stomatognathic system. Bruxism. Examination – theoretical part (test)	3	W01, W02, W03 W04, W05, K01
Practical classes			
TK1	Preparing of the dental casts. Clinical application of the facebow.	3	U01, U02, U03, U04 K01, K02
TK2	Construction and application of the articulator. Mounting the upper model to the articulator. Preparing of bruxchecker foil.	3	U01, U02, U03, U04 K01, K02
TK3	Bite registration. Mounting the lower model to the articulator.	3	U01, U02, U03, U04 K01, K02
TK4	Programming of the articulator. Functional space of patient in the articulator. Sagittal condyle path inclination, Bennett angle, occlusal plane, compensation curves. Lower facial height.	3	U01, U02, U03, U04, K01, K02
TK5	Characteristics of "ideal occlusion" in dental class I. Functional lines of dental arches. Functional waxing in skeletal class I – occlusal plane, curve of Spee	3	U01, U02, U03, U04 K01, K02
TK6	Concept of occlusion – main rules. Functional waxing – static interarch relationship of a class I occlusion.	3	U01, U02, U03, U04, K01, K02
TK7	Functional waxing, class I – dynamic occlusion in dental class I, control of movements of the mandible.	3	U01, U02, U03, U04, K01, K02
TK8	Morphology and function of the teeth in stomatognatic system.	3	U01, U02, U03, U04, K01, K02
TK9	Analysis of individual casts in the articulator. Analysis of bruxism on casts. Modern methods of occlusion analysis.	3	U01, U02, U03, U04, K01, K02
TK10	Final examination: practical part.	3	U01, U02, U03, U04, K01, K02
Simulation			
E-learning			

Booklist
Obligatory literature:
1. Okeson J. Management of Temporomandibular Disorders and Occlusion. Elsevier Books, 4th Edition.
2. Nelson SJ, Ash MA. Wheeler's Dental Anatomy, Physiology and Occlusion 9'th Edition Elsevier 2010.
Supplementary literature:
1. Dawson PE. Functional Occlusion From TMJ to Smile Design. Elsevier – Health Sciences Division, 2006.
2. Drake R, Vogl W, Mitchel A. Gray,s Anatomy for students. Elsevier 2019.
3. Rosenstiel SF, Land MF, Fujimoto J. Contemporary Fixed Prosthodontics, 4th Edition, Mosby Elsevier, 2006.

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	45
Time spent on preparation to seminars/ practical classess	5
Time spent on reading recommended literature	10
Time spent on writing report/making project	2
Time spent on preparing to colloqium/ entry test	5
Time spent on preparing to exam	8
Other …..	
Student's workload in total	75
ECTS credits for the subject (in total)	**3**
Remarks	

* Selected examples of methods of assessment:
EP – written examination
EU – oral examination
ET – test examination
EPR – practical examination
K – colloqium
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
ZAO - final test with grade
other…