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Pomeranian Medical University in Szczecin

SYLLABUS of the MODULE (SUBJECT)
General Information

Module title: Norms of Occlusion in Development Age	
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 III
ECTS credits (incl. semester breakdown)	2,5
Type/s of training	lectures – 7 / e-learning lectures - 3 / seminars – 20 / practical – 15
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. Krzysztof Woźniak
Tutor responsible for the module	lek. dent. Jacek Świtała
Department's/ Clinic's/ Unit's website	Zakład Ortodoncji PUM al. Powst. Wlkp. 72, 70-111 Szczecin tel.: 91 4661702 e-mail: kizortod@pum.edu.pl https://www.pum.edu.pl/wydzialy/wydzial-medycyny-i-stomatologii/zaklad-ortodoncji
Language	English

* replace ☐ into ☒ where applicable

Detailed information

Module objectives		The aim of the course is to prepare for modern dental treatment by integrating the knowledge of the anatomy and physiology of the stomatognathic system in developmental age with regard to systemic relations.
Prerequisite /essential requirements	Knowledge	*Knowledge, skills and competences at the level of completion of the first year of studies in the field of medicine and dentistry.*
	Skills	
	Competences	

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.	S, O
W02	knows and understands occlusion norms and deviations in different phases of ontogenesis	F.W1.	S, O
W03	knows and understands causes of complications of stomatognathic system diseases and the rules of their management	F.W12.	S, O
U01	is able to reproduce anatomic occlusion conditions and analyze occlusion	C.U12.	S, O
U02	is able to plan the basic phases of preventive care in patients with orthodontic needs	C.U16.	S, O
U03	is able to diagnose, differentiate and classify malocclusion	F.U18.	S, O
K01	is ready to notice and recognize own limitations, make self-assessment of educational deficits and needs	K.5.	S, O
K02	is ready to draw conclusions from own measurements or observations	K.8.	S, O

Table presenting LEARNING OUTCOMES in relation to the form of classes

No. of learning outcome	Learning outcomes	Type of training						
		Lecture	Seminar	Practical	Clinical classes	Simulations	E-learning	Other…
W01	C.W33.	X	X	X			X	
W02	F.W1.	X	X	X			X	
W03	F.W12.	X	X	X			X	

U01	C.U12.		X	X				
U02	C.U16.		X	X				
U03	F.U18.	X	X	X			X	
K01	K.5.			X				
K02	K.8.			X				

Table presenting TEACHING PROGRAMME			
No. of a teaching programme	**Teaching programme**	**No. of hours**	**References to learning outcomes**
Winter semester			
	Lectures		
TK01	Prenatal development. Bite development disorders in the fetal period. Clefts. The first period of teeth replacement. The second period of teeth replacement. The influence of the occlusion on the TMJ; reflexes and adaptive mechanisms of the stomatognathic system. Acquired malocclusion. Functional and morphological disorders of the masticatory organ. Dysfunctions and parafunctions. Principles of orthodontic prophylaxis in various stages of a child's development.	7	W01, W02, W03, U03
	Seminars		
TK01	Development of the masticatory system. Periods of individual development. Muscles of the stomatognathic system and their function. Temporomandibular joint: structure, function, development. Central, lateral, incisal occlusion; resting position, lateral movements, resting gap, chewing. Functions: sucking, swallowing (visceral, mature), chewing, breathing, participating in speech. The norms of the development of the masticatory apparatus in the fetal period. Chewing organ in infancy until the eruption of milk teeth - stages of tooth development. Bite in the deciduous dentition, Baum classes - differences between the deciduous and permanent dentition. Eruption - periods of the eruption of deciduous and permanent teeth. The first period of teeth replacement. The second period of teeth replacement. Shape, size, number, and structure of permanent teeth. Functional and morphological disorders of the masticatory organ. Dysfunctions and parafunctions. The influence of the bite on the TMJ; reflexes and adaptive mechanisms of the stomatognathic system. Bite development disorders in the fetal period. Clefts. Acquired malocclusion. Principles of orthodontic prophylaxis in various stages of a child's development.	20	W01, W02, W03, U01, U02, U03
	Practical classes		
TK01	Practical application of the acquired knowledge theoretical during the exercises.	15	W01, W02, W03, U01, U02, U03, K01, K02
	Simulation		

E-learning			
TK01	Stages of bite development in deciduous and permanent dentition. Malocclusion - classification, etiology, diagnosis, differentiation. Prenatal development. Bite development disorders in the fetal period. Clefts. Functional and morphological disorders of the masticatory organ. Principles of orthodontic prophylaxis in various stages of a child's development.	3	W01, W02, W03, U03

Booklist
Obligatory literature:
1. Jeffrey P. Okeson: Managment of Temporomandibular Disorders and Occlusion, June 2007, ISBN: 0323046142
2. Mitchell Laura: An introduction of ortodontics. 2007
Supplementary literature:
1. Moyers, Robert E. Handbook of orthodontics for the student and general practitioner. 3 ed. Chicago; London : Year Book Medical Publ., 1973.
2. Jeryl D. English, Timo Peltomäki, Kate Pham-Litschel: Mosby's orthodontic review/ Orthodontic review. St. Louis: Mosby Elsevier, cop. 2009.
3. Samir E. Bishara, [contributors Athanasios E. Athanasiou [et al.]: Textbook of orthodontics . Philadelphia: W. B. Saunders Co., cop. 2001.

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	10
Time spent on reading recommended literature	10
Time spent on writing report/making project	
Time spent on preparing to colloqium/ entry test	
Time spent on preparing to exam	5
Other …..	
Student's workload in total	70
ECTS credits for the subject (in total)	2,5
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
other…