



Pomeranian Medical University in Szczecin

SYLLABUS of the MODULE (SUBJECT) General Information

Module title: ORTHODONTICS	
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 5, semester (IX, X)
ECTS credits (incl. semester breakdown)	7
Type/s of training	seminars (8h)/ practical (95h)
Form of assessment*	<input checked="" type="checkbox"/> graded assessment: <input type="checkbox"/> descriptive <input type="checkbox"/> test <input type="checkbox"/> practical <input checked="" type="checkbox"/> oral <input type="checkbox"/> non-graded assessment <input checked="" type="checkbox"/> final examination <input type="checkbox"/> descriptive <input checked="" type="checkbox"/> test <input checked="" type="checkbox"/> practical <input type="checkbox"/> oral
Head of the Department/ Clinic, Unit	Prof. dr hab. n.med. Krzysztof Woźniak
Tutor responsible for the module	lek.dent. Jacek Światała
Department's/ Clinic's/ Unit's website	Department of Orthodontics 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 integrate the knowledge of the ontogenetic and phylogenetic development of the facial part of the skull in connection with the issues of orthodontics, learning to assess the proper development of the masticatory organ, the ability to assess the condition of the masticatory organ in terms of the occurrence of malocclusion, knowledge of the etiology of malocclusion, the ability to perform selected procedures in the field of prophylaxis and early orthodontic treatment, knowledge of malocclusion treatment techniques with the use of modern methods with the use of modern tools and equipment.
Prerequisite /essential requirements	Knowledge	<i>Knowledge, skills and competences at the level of completion of the fourth year of studies in the field of medicine and dentistry.</i>
	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 occlusion norms in different phases of ontogenesis and deviations from norms	K_F.W01	S, O, ET,EPR
W02	knows and understands mechanism leading to organ and systemic pathology (incl. of infection, auto-immunological diseases and ones caused by immune deficit, metabolic and genetic diseases)	K_F.W02	S, O, ET,EPR
W03	knows rules of prophylactic-therapeutic procedures in diseases of stomatognathic system in different phases of development	K_F.W03	S, O, ET,EPR
W04	knows principles of construction and operation of fixed and removable orthodontic appliances	K_F.W20	S, O, ET,EPR
U01	interviews patient or his/her family	K_F.U01	S, O, ET,EPR
U02	carries out physical examination of patient	K_F.U02	S, O, ET,EPR
U03	provides patient with explanation about nature of ailment, prescribes treatment confirmed by patient's free consent and prognosis	K_F.U03	S, O, ET,EPR
U04	provides patient or his/her relatives with bad news about health state	K_F.U04	S, O, ET,EPR
U05	interprets results of ancillary tests	K_F.U06	S, O, ET,EPR
U06	finds indications as to performance of certain dental procedure	K_F.U07	S, O, ET,EPR
U07	knows prophylaxis of oral cavity diseases	K_F.U08	S, O, ET,EPR
U08	knows procedures applicable to diseases of	K_F.U09	S, O, ET,EPR

	stomatognathic system tissues, tooth and jaw bones		
U09	knows procedures applicable to cases of general and local complications during and after dental treatment	K_F.U11	S, O, ET,EPR
U10	keeps day-to-day patient's records, refers patient to general and special dental and medical examination or treatment	K_F.U13	S, O, ET,EPR
U11	identifies research issues connected with his/her work	K_F.U14	S, O, ET,EPR
U12	presents selected medical issues in written or oral form relevantly to recipient standards	K_F.U15	S, O, ET,EPR
U13	establishes treatment in diseases of stomatognathic system tissues	K_F.U18	S, O, ET,EPR
U14	diagnoses, differentiates and classifies malocclusion	K_F.U21	S, O, ET,EPR
U15	provides first aid in case of orthodontic appliance damage	K_F.U22	S, O, ET,EPR
U16	executes simple orthodontic appliances	K_F.U23	S, O, ET,EPR
U17	performs occlusion defect prevention procedure during period of deciduous dentition and early replacement of dentition	K_F.U24	S, O, ET,EPR
K01	shows habit of self-education and lifelong education	K_K01	S, O
K02	accepts need of standards of conduct and legislation regarding medical practice	K_K02	S, O
K03	can co-operate with team members and care about occupational safety	K_K03	S,O
K04	understands sense of responsibility for entrusted property	K_K07	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 classes	Clinical classes	Simulations	E-learning	Other...
W01	K_F.W01		X		X			
W02	K_F.W02		X		X			
W03	K_F.W03		X		X			
W04	K_F.W20		X		X			
U01	K_F.U01				X			
U02	K_F.U02				X			
U03	K_F.U03				X			
U04	K_F.U04				X			
U05	K_F.U06		X		X			

U06	K_F.U07		X	X			
U07	K_F.U08		X	X			
U08	K_F.U09		X	X			
U09	K_F.U11		X	X			
U10	K_F.U13			X			
U11	K_F.U14		X	X			
U12	K_F.U15		X	X			
U13	K_F.U18		X	X			
U14	K_F.U21		X	X			
U15	K_F.U22			X			
U16	K_F.U23			X			
U17	K_F.U24			X			
K01	K_K01		X	X			
K02	K_K02		X	X			
K03	K_K03		X	X			
K04	K_K07		X	X			

Table presenting TEACHING PROGRAMME			
No. of a teaching programme	Teaching programme	No. of hours	References to learning outcomes
Winter semester			
Seminars			
TK01	Orthodontic prophylaxis. Apparatus, advantages and disadvantages, clinical selection. Grinding of milk teeth. Extractions in orthodontics. Treatment of malocclusion with removable appliances - mechanical appliances. Treatment of malocclusion with removable appliances - functional appliances. Constructive bite - collection rules. Interpretation of telerepentgenograms according to the Hasund-Segner method. Practical assessment of bone age, dental age in relation to the calendar age.	8	W01, W02, W03, W04, U05, U06, U07, U08, U09, U11, U12, U13, U14, K01, K02, K03, K04
Winter and summer semester			
Practical classes			
TK01	Practical application of the acquired knowledge theory during clinical exercises in patients.	95	W01, W02, W03, W04, U01, U02, U03, U04, U05, U06, U07, U08, U09, U10, U11, U12, U13, U14, U15, U16, U17, K01, K02, K03, K04
Simulation			
E-learning			

Booklist
Obligatory literature:
1. M.T. Cobourne, A.T. DiBiase: Handbook of Orthodontics. Elsevier 2015
2. Moyers, Robert E. Tytuł Handbook of orthodontics for the student and general practitioner. 3 ed. Chicago; London: Yearbook Medical Publ., 1973
Supplementary literature:
1. Jeffrey P. Okeson: Management of Temporomandibular Disorders and Occlusion, June 2007, ISBN: 0323046142
2. Mitchell Laura: An introduction of ortodontics. 2007

Standards of procedures required to complete the year:		
1.	Clinical examination of the patient. Analysis of facial features.	10 procedures
2.	Taking an impression.	8 procedures
3.	Preparation and development of a diagnostic model.	2 procedures
4.	Analysis of diagnostic models.	8 procedures
5.	Analysis of the pantomographic image.	8 procedures
6.	Cephalometric analysis of the lateral distance photo of the head.	8 procedures
7.	Assessment of dental age on the basis of X-rays and diagnostic models.	8 procedures
8.	Assessment of bone age on the basis of X-rays.	8 procedures
9.	Preparation of an orthodontic preventive and therapeutic plan.	8 procedures
10.	Conducting treatment to prevent malocclusion in the period of primary dentition and early replacement of the dentition.	8 procedures
11.	Treatment with a simple orthodontic appliance.	4 procedures
12.	Provision of first aid in the event of damage to the orthodontic appliance.	4 procedures

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	103
Time spent on preparation to seminars/ practical classess	15
Time spent on reading recommended literature	30
Time spent on writing report/making project	
Time spent on preparing to colloqium/ entry test	
Time spent on preparing to exam	40
Other	
Student's workload in total	188
ECTS credits for the subject (in total)	7
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...