



## Pomorski Uniwersytet Medyczny w Szczecinie

### SYLLABUS of the MODULE (SUBJECT)

#### General information

Module title: <b>ORTHODONTICS</b>	
Module type	Obligatory.
Faculty PMU	Medicine and Dentistry (WLS)
Major	Medicine and Dentistry (KLD)
Specialty	n.a.
Level of study	long-cycle
Mode of study	full-time/part-time
Year of studies, semester e.g. Year 1, semester (I and II)	Year 5 (semester IX and X)
ECTS credits (incl. semester breakdown)	7 ECTS ( semester TK - 4, semester X– 3)
Type/s of training	Seminars –10h( sem. IX) Practical classes–95h( sem. IX – 50h, sem. X – 45h) Total – 105h
Form of assessment	Practical and theoretical exam (test)
Head of the Department/ Clinic, Unit	Prof. dr hab. n. med. Krzysztof Woźniak
Persons conducting classes	prof. dr hab. Krzysztof Woźniak Dr Beata Rucińska-Grygiel (tutor) Dr Hanna Bielawska-Victorini Dr Lilianna Szyszka-Sommerfeld Dr Agata Budzyńska Dr Paweł Tsynkiel
Department's/Clinic's/Unit's website	<a href="https://www.pum.edu.pl/wydzialy/wydzial-lekarsko-stomatologiczny/zaklad-ortodoncji">https://www.pum.edu.pl/wydzialy/wydzial-lekarsko-stomatologiczny/zaklad-ortodoncji</a>
Language	Polish/English

### Detailed information

Module objectives		The module objective is: to integrate knowledge on ontogenetic and phylogenetic development of the facial part of the skull in connection with orthodontics, to learn how to assess the proper development of the masticatory organ, to know how to assess the condition of the masticatory organ in terms of occlusal abnormalities, to know the etiology of occlusal abnormalities, to know how to perform selected treatments in the field of prophylaxis and early orthodontic treatment, to know malocclusion treatment techniques with contemporary methods using modern tools and equipment.
Prerequisite /essential requirements	Knowledge	Knowledge, skills and competences at the level of the completion of IV-th year of studies in the medical and dental field of study.
	Skills	
	Competences	

Description of the learning outcomes for the subject /module			
No. of learning outcome	Student, who has passed the module (subject) knows /is able to /can:	SYMBOL (Referring to) Assumed Learning Outcomes	Means of verification of learning outcomes*
W01	knows occlusion norms in different phases of ontogenesis and deviations from norms	K_F.W01	Assessment on classes/ practical skills check Oral theme seminars.
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	
W03	knows rules of prophylactic-therapeutic procedures in diseases of stomatognathic system in different phases of development	K_F.W03	
W04	knows principles of construction and operation of fixed and removable orthodontic appliances	K_F.W20	
U01	interviews patient or his/her family	K_F.U01	
U02	carries out physical examination of patient	K_F.U02	
U03	provides patient with explanation about nature of ailment, prescribes treatment confirmed by patient's free consent and prognosis	K_F.U03	
U04	provides patient or his/her relatives with bad news about health state	K_F.U04	Assessment on classes/ practical skills check
U05	interprets results of ancillary tests	K_F.U06	

U06	finds indications as to performance of certain dental procedure	K_F.U07	Oral theme seminars.
U07	knows prophylaxis of oral cavity diseases	K_F.U08	
U08	knows procedures applicable to diseases of stomatognathic system tissues, tooth and jaw bones	K_F.U09	
U09	knows procedures applicable to cases of general and local complications during and after dental treatment	K_F.U11	
U10	keeps day-to-day patient's records, refers patient to general and special dental and medical examination or treatment	K_F.U13	
U11	identifies research issues connected with his/her work	K_F.U14	
U12	presents selected medical issues in written or oral form relevantly to recipient standards	K_F.U15	
U13	establishes treatment in diseases of stomatognathic system tissues	K_F.U18	
U14	diagnoses, differentiates and classifies malocclusion	K_F.U21	
U15	provides first aid in case of orthodontic appliance damage	K_F.U22	
U16	executes simple orthodontic appliances	K_F.U23	
U17	performs occlusion defect prevention procedure during period of deciduous dentition and early replacement of dentition	K_F.U24	
K01	shows habit of self-education and lifelong education	K_K01	
K02	accepts need of standards of conduct and legislation regarding medical practice	K_K02	
K03	can co-operate with team members and care about occupational safety	K_K03	
K04	understands sense of responsibility for entrusted property	K_K07	

Table presenting LEARNING OUTCOMES in relation to the form of classes								
item	SYMBOL (Referring to) Assumed Learning Outcomes	Form of didactic classes						
		Lecture	Seminar	Practical classes	Clinical classes	...	...	...
1.	K_F.W01		X		X			
2.	K_F.W02		X		X			
3.	K_F.W03		X		X			
4.	K_F.W20		X		X			
5.	K_F.U01				X			
6.	K_F.U02				X			
7.	K_F.U03				X			
8.	K_F.U04				X			
9.	K_F.U06		X		X			
10.	K_F.U07		X		X			
11.	K_F.U08		X		X			
12.	K_F.U09		X		X			
13.	K_F.U11		X		X			
14.	K_F.U13				X			
15.	K_F.U14		X		X			
16.	K_F.U15		X		X			
17.	K_F.U18		X		X			
18.	K_F.U21		X		X			
19.	K_F.U22				X			
20.	K_F.U23				X			
21.	K_F.U24				X			
22.	K_K01		X		X			
23.	K_K02		X		X			
24.	K_K03		X		X			
25.	K_K07		X		X			

No. of learning content			
item	Description of learning content	Number of hours	References to learning outcomes for the module
	Seminars		
TK 01	Orthodontic prophylaxis. Braces, defects, advantages, clinical selection. Grinding of deciduous teeth. Extractions in orthodontics. Treatment of malocclusion with removable braces - mechanical braces. Treatment of malocclusion with removable braces - functional braces. Contraction bite - the rules of extraction. Interpretation of tele-X ray images according to Hasund-Segner method. Practical evaluation of the bone age, dental age in relation to the calendar age.	10	W01, W02, W03, W04, U05, U06, U07, U08, U09, U11, U12, U13, U14, K01, K02, K03, K04
	Practical classes		
TK 02	Practical application of the acquired theoretical knowledge during clinical classes with 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

Booklist:			
Obligatory literature			
1. I. Karłowska: Zarys współczesnej ortodoncji. Podręcznik dla studentów i lekarzy stomatologów. Wydawnictwo Lekarskie PZWL, 2001			
2. F. Łabiszewska-Jaruzelska: Ortopedia szczękowa. Zasady i praktyka. Podręcznik dla studentów stomatologii. Wydawnictwo Lekarskie PZWL, 1995.			
3. G. Śmiech-Słomkowska, W. Rytłowa: Profilaktyka i wczesne leczenie ortodontyczne. Wybrane zagadnienia. Wydawnictwo Lekarskie PZWL, 1999.			
4. Frank Nötzel, Christian Schultz: Kompendium diagnostyki ortodontycznej. Wydawnictwo Czelej, 2004.			
5. Emil Witt, Marta-Elisabeth Gehrke, Anna Komorowska: Wykonywanie aparatów zdejmowanych. Podręcznik dla techników, studentów i lekarzy ortodontów. Wydawnictwo Kwintesencja, 1999.			
Supplementary literature:			
1. W. Łasinski: Anatomia Głowy dla Stomatologów. Wydawnictwo Lekarskie PZWL.			
2. T. W. Sadler: Embriologia Lekarska, Wydawnictwo Med. Tour. Press, 1993.			
Student's workload (balance of ECTS scores)			
Form of student's activity (in-class participation; activeness, produce a report, etc.)	Student's workload [h]		
	Tutor	Student	Mean
Contact hours with the tutor	105		
Time spent on preparation to seminars/ practical classes	15		
Time spent on reading recommended literature	30		
Time spent on writing report/making project			
Time spent on preparing to colloquium/ entry test			
Time spent on preparing to exam	40		
Other .....			
Student's workload in total	190		
ECTS credits for the module/subject	7		
Notes			

\* 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...