



SYLLABUS of the MODULE (SUBJECT)
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 4
ECTS credits (incl. semester breakdown)	3
Type/s of training	practical classes (45 h)
Form of assessment*	<input checked="" type="checkbox"/> graded assessment: <input type="checkbox"/> descriptive <input checked="" type="checkbox"/> test <input checked="" type="checkbox"/> practical <input type="checkbox"/> oral <input type="checkbox"/> non-graded assessment <input type="checkbox"/> final examination <input type="checkbox"/> descriptive <input type="checkbox"/> test <input type="checkbox"/> practical <input type="checkbox"/> 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	Zakład Stomatologii Zintegrowanej PUM Tel: 914661690 E-mail: zstomaog@pum.edu.pl PUM :: Zakład Stomatologii Zintegrowanej
Language	English

* replace into where applicable

Detailed information

Module objectives		<ol style="list-style-type: none"> 1. To acquire theoretical knowledge of articulator design and the concept of functional space within the articulator, including norms of occlusion in adult patients. 2. To develop practical skills in the accurate mounting of dental models in the articulator and in conducting occlusal analysis within the functional space. 3. To understand the correlation between dental morphology and function in relation to occlusal norms characteristic of Angle's Class I occlusion. 4. To gain proficiency in the execution of functional diagnostic wax-ups of teeth using an articulator. 5. To cultivate the ability to independently identify, critically assess, and apply specialized academic and clinical sources of information.
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 biomechanics of masticatory apparatus	C.W30.	ET,W
W02	knows and understands the basic clinical procedures in orthodontic prevention	C.W42.	ET,W
W03	knows and understands the phases of growth of teeth, occlusal standards and deviations and anatomic-functional diversity on various stages of personal life	F.W1.	ET,W,PM
W04	knows and understands the causes of complications after diseases of the stomatognathic system and principles of their elimination	F.W16.	ET,W
W05	knows and understands the differential diagnostics of pain of the oral cavity and face	F.W17.	ET
W06	knows and understands therapeutic methods applied in limiting dental fear and stress	F.W19.	O
W07	knows and understands the principles of detecting, initial treatment and prevention of functional disorders of the masticatory organ	F.W23.	ET
W08	knows and understands the pathomechanism of impact of systemic diseases or applied therapies on the oral cavity	F.W27.	ET
U01	is able to reproduce anatomic occlusion conditions and analyze occlusion	C.U15.	S,O

U02	is able to plan actions in the scope of orthodontic prevention	C.U21.	S,O
U03	is able to recognize functional disorders of the masticatory apparatus	F.U23	S,O
U04	is able to diagnose, differentiate and classify malocclusion	F.U27	S,O
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

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	knows and understands the biomechanics of masticatory apparatus			x				
W02	knows and understands the basic clinical procedures in orthodontic prevention			x				
W03	knows and understands the phases of growth of teeth, occlusal standards and deviations and anatomic-functional diversity on various stages of personal life			x				
W04	knows and understands the causes of complications after diseases of the stomatognathic system and principles of their elimination			x				
W05	knows and understands the differential diagnostics of pain of the oral cavity and face			x				
W06	knows and understands therapeutic methods applied in limiting dental fear and stress			x				
W07	knows and understands the principles of detecting, initial treatment and prevention of functional disorders of the masticatory organ			x				
W08	knows and understands the pathomechanism of impact of systemic diseases or applied therapies on the oral cavity			x				
U01	is able to reproduce anatomic occlusion conditions and analyze occlusion			x				

U02	is able to plan actions in the scope of orthodontic prevention			x				
U03	is able to recognize functional disorders of the masticatory apparatus			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				
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			
Practical classes			
TK01	Stomatognathic system. Functional anatomy of the masticatory organ	3	W01, W03, K01
TK02	Articulator – design, types, application. Functional space in the articulator. Adjusting the articulator.	3	W01, W02, K01
TK03	The importance of correct occlusion in the physiology of the masticatory organ in adults. Occlusal norms in Angle’s Class I.	3	W01, W02, W03, W04, W05, W06 U01, K01
TK04	Facebow – design and application. Mounting the upper model to the articulator.	3	W01, W02, W03, W04, W05, W06, W07, W08 U01, K01, K02
TK05	Mounting the lower model to the articulator. Bite registration. Centric relation. Maximum intercuspitation	3	W01, W02, W03 W04, W05, W07, W08 U01, K01, K02
TK06	Articulation states of the mandible. Analysis of occlusal contacts.	3	U01, U02, U03, U04 K01, K02
TK07	Characteristics of “ideal occlusion” in dental class I. Functional lines of dental arches	3	U01, U02, U03, U04 K01, K02
TK08	Morphology and function of the teeth in stomatognathic system.	3	U01, U02, U03, U04 K01, K02
TK09	Biomechanics of masticatory apparatus. Movements of the mandible. Posselt Diagram.	3	W01, U01, U02, U03, U04, K01, K02
TK10	Functional waxing in Angle’s Class I (1) – occlusal plane, curve of Spee	3	W01, U01, U02, U03, U04 K01, K02
TK11	Functional waxing in Angle’s Class I – static occlusion. Functional arches.	3	W01, U01, U02, U03, U04, K01, K02
TK12	Functional waxing in Angle’s Class I – dynamic occlusion. Control of mandibular movements.	3	W01, U01, U02, U03, U04, K01, K02

TK13	Casts analysis in the articulator. Summary of articulation and norms of occlusion.	3	W01, U01, U02, U03, U04, K01, K02
TK14	Final examination – theoretical and practical part.	3	W01, W02, W03, W04, U01, U02, U03, U04, K01, K02
TK15	Virtual articulation in dentistry - modern possibilities and applications.	3	W01, W02, U01, U02, U03, U04, K01, K02

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 classes	5
Time spent on reading recommended literature	5
Time spent on writing report/making project	2
Time spent on preparing to colloquium/ entry test	3
Time spent on preparing to exam	5
Other	
Student’s workload in total	65
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 – 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 – multimedia presentation
other...