



Pomeranian Medical University in Szczecin

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 2
ECTS credits (incl. semester breakdown)	3
Type/s of training	Seminars 15h/ practical 30h
Form of assessment*	<input 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 małgorzata.tomasik@pum.edu.pl 914661690
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Language	English

* replace into where applicable

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. 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 equipment of dental office and instrumentation for dental procedures	C.W23.	K
W02	knows and understands the basic clinical procedures of orthodontic prevention	C.W33.	K
W03	knows and understands occlusion norms and deviations in different phases of ontogenesis	F.W1.	K
W04	knows and understands the principles of preventive and therapeutic management in the masticatory system diseases at various stages of development	F.W2.	K
W05	knows and understands therapeutic methods of pain control as well as anxiety and stress reduction	F.W15.	K
W06	knows and understands pathomechanism of systemic diseases and their therapy influence on oral cavity	F.W20.	K
W07	knows and understands principles of management of masticatory system tissues diseases, teeth and jaw bone trauma	F.W22.	K
U01	is able to provide endodontic treatment and restore missing mineralized tissue of phantom tooth	C.U9	S
U02	is able to reproduce anatomic occlusion conditions and analyze occlusion	C.U12.	S
U03	is able to plan the basic phases of preventive care in patients with orthodontic needs	C.U16.	S
U04	is able to establish treatment for stomatognathic system tissues diseases	F.U15.	S

U05	is able to diagnose, differentiate and classify malocclusion	F.U18.	S
K01	is ready to draw conclusions from own measurements or observations	K.8.	O
K02	is ready to notice and recognize own limitations, make self-assessment of educational deficits and needs	K.5.	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 equipment of dental office and instrumentation for dental procedures		X	X				
W02	knows and understands the basic clinical procedures of orthodontic prevention		X	X				
W03	knows and understands occlusion norms and deviations in different phases of ontogenesis		X	X				
W04	knows and understands the principles of preventive and therapeutic management in the masticatory system diseases at various stages of development		X	X				
W05	knows and understands therapeutic methods of pain control as well as anxiety and stress reduction		X	X				
W06	knows and understands pathomechanism of systemic diseases and their therapy influence on oral cavity		X	X				
W07	knows and understands principles of management of masticatory system tissues diseases, teeth and jaw bone trauma		X	X				
U01	is able to provide endodontic treatment and restore missing mineralized tissue of phantom tooth			X				
U02	is able to reproduce anatomic occlusion conditions and analyze occlusion			X				

U03	is able to plan the basic phases of preventive care in patients with orthodontic needs			x				
U04	is able to establish treatment for stomatognathic system tissues diseases			x				
U05	is able to diagnose, differentiate and classify malocclusion			x				
K01	is ready to draw conclusions from own measurements or observations			x				
K02	is ready to notice and recognize own limitations, make self-assessment of educational deficits and needs			x				

Table presenting TEACHING PROGRAMME			
No. of a teaching programme	Teaching programme	No. of hours	References to learning outcomes
Summer semester			
Seminars			
TK01	Functional anatomy and physiology of the temporomandibular joints.	1	W02
TK02	Face bow and articulator - design and application.	1	W01
TK03	Analysis of models in the articulator - occlusion determinants.	1	W01
TK04	The importance of correct occlusion in the physiology of the masticatory apparatus in adults. The basic clinical procedures of orthodontic prevention.	1	W02, W03, U03
TK05	Functional space.	1	W03
TK06	Form and functions of the teeth.	1	W03
TK07	Static occlusion. The occlusal plane.	1	W02, W03
TK08	Dynamic occlusion - the function of the incisors and canines.	1	W02, W03
TK09	Dynamic occlusion - the function of the premolars and molars.	1	W02, W03
TK10	Electronic examinations of the temporomandibular joints in healthy patient - the basic aims.	1	W01
TK11	Lower facial height – definition and measurements.	1	W01
TK12	Compensation curves.	1	W03
TK13	Bruxism.	1	W04, W05, W06, W07
TK14	Occlusion concepts.	1	W03
TK15	Final examination – theoretical part	1	W01, W02, W03, W04, W05, W06, W07
Practical classes			
TK1	The examination of the range of movements of the lower jaw.	2	W03, U02, K01, K02
TK2	Mounting the upper model to the articulator.	2	W01, U02, K01, K02

TK3	Mounting the lower model to the articulator. Programming of the articulator.	2	W01, U02, K01, K02
TK4	Analysis of individual models in the articulator.	2	W01, U02, U05, K01, K02
TK5	Functional waxing in skeletal class I - occlusal plane, static occlusion.	3	W03, U01, U02, K01, K02
TK6	Functional waxing in skeletal class I – molars.	3	W03, U01, U02, K01, K02
TK7	Functional waxing, class I – incisors.	3	W03, U01, U02, K01, K02
TK8	Functional waxing, class I – canines and premolars.	3	W03, U01, U02, K01, K02
TK9	Methods of measuring the lower facial height.	2	W01, U02, U03, U05, K01, K02
TK10	Compensation curves on models.	2	W03, U02, U03, K01, K02
TK11	Analysis of bruxism on models.	2	W04, W07, U04, K01, K02
TK12	Analysis of static and dynamic occlusion in the mouth and on models.	2	W03, U02, U03, U05, K01, K02
TK14	Examination – practical part.	2	U02
Simulation			
E-learning			

Booklist
Obligatory literature:
1. Okeson J., "Management of Temporomandibular Disorders and Occlusion, Elsevier Books 2019
2. Nelson SJ., Ash M., A. Wheeler's Dental Anatomy, Physiology and Occlusion 9'th Edition Elsevier 2010.
Supplementary literature:
1. Dawson P.E. Functional Occlusion From TMJ to Smile Design
2. Gray,s Anatomy for students ; Richard Drake, Wayne Vogl, Adam Mitchel
3. RosenstielSF, 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	20
Time spent on writing report/making project	-
Time spent on preparing to colloquium/ entry test	10
Time spent on preparing to exam	20
Other	
Student's workload in total	100
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 – multimedial presentation

other...