

## **Pomeranian Medical University in Szczecin**

## SYLLABUS of the MODULE (SUBJECT) General Information

Module title: Paedodontics and Dental P	rophylaxis
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 IV, semester VII, VIII
ECTS credits (incl. semester breakdown)	4 (semester VII-2, semester VIII-2)
Type/s of training	seminars -15 h / practical-60 h
Form of assessment*	Server descriptive Server descriptive Server descriptive Server descriptive Inon-graded assessment
Head of the Department/ Clinic, Unit	Dr n. med. Joanna Manowiec
Tutor responsible for the module	Dr n.med. Magdalena Gońda-Domin Dr n.med. Karolina Węsierska tel. +48 91 466 1730, e-mail: zstdz@pum.edu.pl
Department's/ Clinic's/ Unit's website	INDEPENDENT LABORATORY OF PEADIATRIC DENTISTRY https://www.pum.edu.pl/wydzialy/wydzial- lekarsko-stomatologiczny/zaklad-stomatologii- dzieciecej
Language	English

<sup>\*</sup> replace  $\Box$  into  $\boxtimes$  where applicable

## **Detailed information**

Module objectives		Expanding theoretical knowledge, consolidating and acquiring new practical skills in the field of health promotion, prevention, diagnosis and treatment of masticatory diseases in developmental age.
Prerequisite	Knowledge	
/essential	Skills	Knowledge and skills at the III year of study in the field of dentistry
requirements	Competences	

Description o	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 at various stages of individual development and deviations from norms	K_F.W01	S	
W02	Knows the rules of prophylactic-therapeutic procedures in diseases of the stomatognathic system of patients in the developmental age	K_F.W03	K, W	
W03	Knows the viral, bacterial and fungal flora of the oral cavity and its meaning	K_F.W04	К	
W04	Knows the symptoms for certain diseases of oral cavity, head and neck with regard to the age groups	K_F.W05	K, W	
W05	Knows course and indicates treatment procedures for certain diseases of oral cavity, head and neck with regard to age groups	K_F.W05	K, W	
W06	Knows and lists the principles of treatment of the pulp diseases in children and adolescents	K_F.W07	K, W	
W07	Knows the principles of the treatment of diseases of the mineralized tissues in children and adolescents.	K_F.W07	K, W	
W08	Knows the treatment protocols in case of injuries of teeth and facial bones of children and adolescents.	K_F.W07	K, W	
W09	Knows the principles of treatment of the diseases of periapical periodontium in children and adolescents.	K_F.W08	K, W	
W10	Knows causes and procedures for management in case of complications of stomatognathic system diseases.	K_F.W14	K, W	
W11	Knows therapeutic methods of preventing and controlling pain, stress and anxiety	K_F.W17	S	
U01	Interviews patient in developmental age and his/her parents/ caregivers	K_F.U01	S	

U02	Carries out physical examination of patient in developmental age	K_F.U02	S
U03	Provides patient with explanation about ailment and their nature	K_F.U03	S
U04	Prescribes treatment confirmed by patient's (parents'/ caregivers') free consent	K_F.U03	S
U05	Informs the patient and his/her parents/ caregivers about the prognosis	K_F.U03	S
U06	Provides patient or his/her relatives with bad information about health state	K_F.U04	S
U07	Interprets results of ancillary tests of patients in developmental age	K_F.U06	S
U08	Finds indications to perform a certain dental procedure in patients in developmental age	K_F.U07	S
U09	Prevents the oral cavity diseases of patients in developmental age	K_F.U08	S
U10	Identifies diseases of the stomatognathic system, traumatic injuries of the teeth and jaw bones of patients in developmental age	K_F.U09	S
U11	Provides treatment procedures applicable to diseases of the tissues of stomatognathic system, traumatic injuries of the teeth and jaw bones, basing on the treatment protocols for children and adolescence.	K_F.U09	S
U12	Provides treatment of acute and chronic tooth- related and non-tooth-related inflammatory processes of the oral soft tissues, periodontal tissues and jaw bones	K_F.U10	S
U13	Choose and provides treatment procedures applicable to cases of general and local complications during and after dental treatment	K_F.U11	S
U14	Keeps day-to-day patient'srecords. Refers patient to special dental and medical treatment and prescribes ancillary tests	K_F.U13	S
U15	Selects and performs tests determining the number of cariogenic bacteria in the oral cavity	K_F.U17	S
U16	Indicates and determines treatment in diseases of stomatognathic system	K_F.U18	S
U17	Uses the certain drugs during and after dental procedure to relieve pain and stress	K_F.U19	S
K01	Accepts the need of ethical standards in medical practice	K_K02	0
K02	Understands the sense of responsibility for entrusted property	K_K07	О

K03	Shows the habit of self-education and lifelong education	K_K01	0
K04	Shows respect to a patient and understands the specificity of working with the children	K_K05	0
K05	Understands proper examiner– examined relationship	K_K08	0

Table prese	nting LEARNING OUTCOMES in re	elation to the form	of cl	asse	5			
		Ty	pe of	f trai	ining			
No. of learning outcome	Learning outcomes	Lecture	Seminar	Practical	Clinical classes	Simulations	E-learning	Other
W01	K_F.W01		Х					
W02	 K_F.W03		Х					
W03	K_F.W04		Х					
W04	K_F.W05		Х					
W05	K_F.W05		Х					
W06	 K_F.W07		Х					
W07	 K_F.W07		Х					
W08	 K_F.W07		Х					
W09	 K_F.W08		Х					
W10	 K_F.W14		Х					
W11	 K_F.W17		Х					
U01	K F.U01				Х			
U02	 K_F.U02				Х			
U03	 K_F.U03				Х			
U04	K_F.U03				Х			
U05	K_F.U03				Х			
U06	K_F.U04				Х			
U07	K_F.U06				Х			
U08	K_F.U07				Х			
U09	K_F.U08				Х			
U10	 K_F.U09				Х			
U11	K_F.U09				Х			
U12	K_F.U10				Х			
U13	K_F.U11				Х			
U14	K_F.U13				Х			
U15					Х			
U16	K_F.U18				Х			
U17	K_F.U19				Х			
K01	K_K02				Х			
K02	K_K07				Х			
K03	 K_K01				Х			
K04	K05				Х			
K05	 K_K08				Х			

## Table presenting TEACHING PROGRAMME

No. of a teaching programme	Teaching programme	No. of hours	References to learning outcomes
Winter semest	er		
	Seminars		
TK01	Diseases of the pulp of primary and permanent immature teeth. Classification and diagnostics. Differences in the structure of the pulp of primary and permanent teeth. Pathogenesis of pulp diseases (sclerotic dentin, defensive dentin). Hyperplastic pulpitis. Inflammatory internal resorption. Removable internal resorption. PCO tooth obliteration. Pseudoethomas. Diagnosis of puplopathy and changes in periapical tissues (history, physical examination, viability tests, Hall scale). Classification of pulp diseases in primary and immature permanent teeth. Differentiation of acute and chronic periodontal inflammation.	1	W02, W03, W06, W09, W010, W11
TK02	Diseases of the pulp of primary teeth. Classification: American Academy of Pediatric Dentistry (reversible inflammation, irreversible inflammation, necrosis); simplified classification (reversible pulpopathy, partial irreversible pulpopathy, total irreversible pulpopathy). Methods of treatment (biological and non-biological in-life, mortal). Drugs and materials used in milk tooth endodontics. Local and general indications and contraindications for the treatment of pulp of milk teeth. Direct and indirect coverage, total lifelong amputation, amputation after devitalization, pulp extirpation - treatment techniques.	2	W02, W03, W06, W09, W010, W11
TK03	Pulp in immature permanent teeth. Indirect pulp cupping method (one- and two-stage treatment). Direct pulp cupping method. Vital pulp amputation (partial and total). Apexogenesis. Apexification. Revascularization. Indications, contraindications, materials and procedures for the above procedures.	2	W02, W03, W06, W09, W010, W11
TK04	Etiology and epidemiology of injuries. Classification of injuries according to Ellis and Andreas according to WHO. Examination of the patient after injury: general medical and dental history, clinical examination, x- ray. Diagnosis and therapeutic management in enamel breakage, enamel fracture, uncomplicated and enamel dentin fracture and complicated permanent teeth.	2	W01, W02, W08, W10, W11
TK05	Diagnosis and treatment in uncomplicated and complicated crown-root fractures, root fractures, alveolar ridge of permanent teeth. Damage to the gums and oral mucosa (abrasions, bruises and rags) - treatment.	1	W01, W02, W08, W10, W11
TK06	Management of permanent teeth injuries: Partial dislocations: Concussion, Subluxation, Extrusion, Intrusion, Lateral dislocation (definition, etiology, extent of damage, diagnosis, radiological	1	W01, W02, W08, W10, W11

	recommendations, dental treatment, instructions for the patient, follow-up visits).		
TK07	Management of permanent teeth injuries: Avulsion of permanent teeth with open and closed root apex: (definition, etiology, extent of damage, diagnosis, radiological recommendations, dental treatment and factors determining the choice of treatment method, instructions for the patient, follow- up visits, prognosis).	1	W01, W02, W08, W10, W11
TK08	<ul> <li>Management of primary teeth injuries: (according to the scheme: etiology, extent of damage, diagnostics, patient recommendations, information for parents / caregivers, follow-up visits).</li> <li>Concussion, Subluxation, subluxation. Elongation, extrusion. Lateral dislocation. Forcing, intrusion. Total dislocation, tooth extraction. Breakage, enamel rupture. Enamel fracture. Enamel-dentine fracture without pulp exposure and with pulp exposure. Root-fracture without pulp exposure. Alveolar fracture.</li> </ul>	1	W01, W02, W08, W10, W11
ТК09	Consequences of post-traumatic lesions of milk and permanent teeth. Prevention of post-traumatic damage. Early complications immediately after injury. Late complications (death of tooth pulp, resorption, inhibition of root development, obliteration of the tooth cavity). Consequences primary teeth injuries (crown discoloration, pulp necrosis, periapical inflammation, premature root resorption, obliteration, formation of abscesses and cysts, ankylosis). Prevention of post-traumatic dental damage: primary, secondary and tertiary prevention.	1	W01, W02, W08, W10,
TK10	<ul> <li>Developmental diseases of hard teeth tissues of non- carious origin. Part 1 causes, enamel hypoplasia, developmental and acquired discoloration.</li> <li>Systemic causes of enamel and dentin developmental defects - factors from the prenatal, perinatal and postnatal periods. Local causes of enamel malformations. The mechanism of hypoplasia (definition and types of hypoplasia, clinical picture).</li> <li>Discoloration formed during odontogenesis (hyperbilirubinemia, congenital porphyria, alkaptonuria, tetracycline discoloration) and after tooth eruption. Treatment.</li> </ul>	1	W01, W02, W04, W05, W07
TK11	Developmental diseases of hard teeth tissues of non- carious origin. Part II - enamel hypomineralization (turbidity) with particular emphasis on fluorosis and MIH. The mechanism of hypomineralization (definition, clinical picture). Fluorosis (causes and time of origin, clinical picture, fluorosis classification, characteristics, fluoride poisoning). MIH (causes and time of origin, clinical picture, stages of advancement, characteristics). Differentiation of fluorosis and other turbidity. Treatment.	1	W01, W02, W04, W05, W07

	Developmental diseases of hard teeth tissues of non-		
TK12	carious origin. Part III - abnormalities in hard tissues caused by genetic factors. Developmental disorders of dentin and cement caused by genetic and environmental factors. Amelogenesis imperfecta. Dentine dysplasia. Regional odontodysplasia. Congenital dentin hypoplasia. Cement developmental disorders.	1	W01, W02, W04, W05, W07
	Practical classes		
TK01	Treatment of patients. Examination of the child, assessment of hygiene indices, oral hygiene teaching, fluoride prophylaxis, preventive-treatment plan, caries risk assessment, prophylactic fissure sealing. Treatment of caries: filling the cavities. Shaping the child's dental attitude. Treatment of children's pulp diseases. First aid after injury.	30	U01, U02, U03, U04, U05, U06, U08, U09, U10, U11, U12, U13, U14, U15, U16, U17 K01, K02, K03, K04, K05
G			
Summer seme	ster Practical classes		
	Fractical classes		
TK01	Treatment of patients. Examination of the child, assessment of hygiene indices, oral hygiene teaching, fluoride prophylaxis, preventive-treatment plan, caries risk assessment, prophylactic fissure sealing. Treatment of caries: filling the cavities. Shaping the child's dental attitude. Treatment of children's pulp diseases. First aid after injury.	30	U01, U02, U03, U04, U05, U06, U08, U09, U10, U11, U12, U13, U14, U15, U16, U17 K01, K02, K03, K04, K05

Booklist
Obligatory literature:
1. Koch G., Poulsen S.: Pediatric dentistry – a clinical approach. Copenhagen: Blackwell Munksgaard; 2008.
2. Cameron A.C., Widmer R.P.: Handbook of pediatric dentistry. Edinburgh: Mosby; 2012.
3. http://www.dentaltraumaguide.org/
Supplementary literature:

1. Cohen S., Hargreaves K.M.: Pathways of the pulp. St. Louis: Mosby Elsevier, 2006 (chapter 8 and 22)

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	75			
Time spent on preparation to seminars/ practical classess	45			
Time spent on reading recommended literature	5			
Time spent on writing report/making project				
Time spent on preparing to colloqium/ entry test	25			
Time spent on preparing to exam				
Other				
Student's workload in total	150			
ECTS credits for the subject (in total)	4			
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
- $RZ\dot{C}$  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...