



# Pomeranian Medical University in Szczecin

## SYLLABUS of the MODULE (SUBJECT) General Information

<b>Module title: Paedodontics and Dental Prophylaxis</b>	
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*	<input checked="" type="checkbox"/> graded assessment: <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> descriptive</li> <li><input checked="" type="checkbox"/> test</li> <li><input checked="" type="checkbox"/> practical</li> <li><input type="checkbox"/> oral</li> </ul> <input type="checkbox"/> non-graded assessment <ul style="list-style-type: none"> <li><input type="checkbox"/> final examination <ul style="list-style-type: none"> <li><input type="checkbox"/> descriptive</li> <li><input type="checkbox"/> test</li> <li><input type="checkbox"/> practical</li> <li><input type="checkbox"/> oral</li> </ul> </li> </ul>
Head of the Department/ Clinic, Unit	Dr n. med. Anna Jarząbek
Tutor responsible for the module	Lek. Dent. Aleksandra Wdowiak- Szymanik tel. +48 91 466 1730, 914661739 e-mail: zstdz@pum.edu.pl
Department's/ Clinic's/ Unit's website	INDEPENDENT LABORATORY OF PEADIATRIC DENTISTRY <a href="https://www.pum.edu.pl/wydzialy/wydzial-medycyny-i-stomatologii/samodzielna-pracownia-stomatologii-dzieciecej">https://www.pum.edu.pl/wydzialy/wydzial-medycyny-i-stomatologii/samodzielna-pracownia-stomatologii-dzieciecej</a>
Language	English

\* replace  into  where applicable

## Detailed information

<b>Module objectives</b>		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 /essential requirements	Knowledge	Knowledge and skills at the III year of study in the field of dentistry
	Skills	
	Competences	

<b>Description of the learning outcomes for the subject /module</b>			
<b>No. of learning outcome</b>	<b>Student, who has passed the (subject) knows /is able to /can:</b>	<b>SYMBOL (referring the standards)</b>	<b>Method of verification of learning outcomes*</b>
W01	Knows occlusion norms and deviations in different phases of odontogenesis	F.W1.	S
W02	Knows the principles of preventive and therapeutic management in the masticatory system diseases at various stages of development	F.W2.	K, W
W03	Knows and understands viral, bacterial and mycotic flora of oral cavity and importance thereof	F.W3.	K
W04	Knows and understands symptoms, course and treatment methods of specified diseases of oral cavity, head and neck with regard to age groups	F.W4.	K, W
W05	Knows and understands course and indicates treatment procedures for certain diseases of oral cavity, head and neck with regard to age groups	F.W4.	K, W
W06	Knows and understand principles of management in pulp diseases in children and adolescents	F.W5.	K, W
W07	Knows and understand the principles of managements in diseases of the mineralized tissues in children and adolescents.	F.W5	K, W
W08	Knows and understand the treatment protocols in case of injuries of teeth and facial bones of children and adolescents.	F.W5	K, W
W09	Knows and understand the principles of treatment of the diseases of periapical periodontium in children and adolescents.	F.W6	K, W
W10	Knows causes and procedures for management in case of complications of stomatognathic system diseases.	F.W12.	K, W

W11	Knows and understand therapeutic methods of preventing and controlling pain, stress and anxiety	F.W15.	S
U01	Is able to interview patient or his/her family	F.U1.	S
U02	Is able to carry out dental examination of patient in developmental age	F.U2.	S
U03	Is able to provid patient with explanation about nature of ailment,	F.U3.	S
U04	Is able to establish treatment confirmed by informed conset of the patient as well as establish prognosis	F.U3.	S
U05	Is able to provide patient or his/her family with the information about unfavorable prognosis	F.U4.	S
U06	Is able to interpret of axiliary diagnostics and consultation in children in developmental age	F.U6.	S
U07	Is able to determine indications and contraindications to a specific dental procedure	F.U7	S
U08	Is able to treat tooth-derived and non-tooth-derived acute and chronic inflammation of soft tissue, periodontium and jaw bones	F.U8.	S
U09	Is able to manage general and local complications during and after dental procedures	F.U9.	S
U10	Is able to keep current patient records, refer patient to general and specialist dental and medical examination or treatment	F.U11.	S
U11	Is able to asses risk of caries applying microbiological and salivary test	F.U14.	S
U12	Is able to establish treatment for stomatognathic system tissue diseases	F.U15	S
U13	Is able to use adequate anxiety and pain relieving agents during and after dental procedure	F.U16.	S
K01	Is ready to establish and maintain deep and respectful contact with the patient as well as to show understanding for ideological and cultural differences	K.1.	O
K02	Is ready to be guided by the patient wellbeing	K.2.	O
K03	Is ready to take activities towards patient on the basis of ethical principles with awareness of social conditions and disease restrictions	K.4.	O
K04	Is ready to notice and recognize own limitations, make self-assessment of educational deficits and needs	K.5.	O
K05	Is ready to propagate health-promoting behavior	K.6.	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	F.W1.		X					
W02	F.W2.		X					
W03	F.W3.		X					
W04	F.W4.		X					
W05	F.W4		X					
W06	F.W5.		X					
W07	F.W5.		X					
W08	F.W5.		X					
W09	F.W6.		X					
W10	F.W12.		X					
W11	F.W15.		X					
U01	F.U1.				X			
U02	F.U2.				X			
U03	F.U3.				X			
U04	F.U3.				X			
U05	F.U4.				X			
U06	F.U6.				X			
U07	F.U7				X			
U08	F.U8.				X			
U09	F.U9.				X			
U10	F.U11.				X			
U11	F.U14.				X			
U12	F.U15.				X			
U13	F.U16.				X			
K01	K.1.				X			
K02	K.2.				X			
K03	K.4.				X			
K04	K.5.				X			
K05	K.6.				X			

Table presenting TEACHING PROGRAMME

No. of a teaching programme	Teaching programme	No. of hours	References to learning outcomes
<b>Winter semester</b>			
<b>Seminars</b>			
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. Pseudo-dentinomas. Diagnosis of pulpopathy and changes in periapical tissues (history, physical examination,	1	W02, W03, W06, W09, W010, W11

	viability tests, Hall scale). Classification of pulp diseases in primary and immature permanent teeth. Differentiation of acute and chronic periodontal inflammation.		
TK02	Indications and contraindications for the treatment of pulp diseases in children (milk and immature permanent teeth)	1	W02, W03, W06, W09
TK03	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
TK04	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
TK05	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.	1	W01, W02, W08, W10, W11
TK06	Diagnosis and therapeutic management in enamel breakage, enamel fracture, uncomplicated and enamel dentin fracture and complicated permanent teeth. 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
TK07	Management of permanent teeth injuries: Partial dislocations: Concussion, Subluxation, Extrusion, Intrusion, Lateral dislocation (definition, etiology, extent of damage, diagnosis, radiological recommendations, dental treatment, instructions for the patient, follow-up visits).	1	W01, W02, W08, W10, W11
TK08	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

TK09	<p>Management of primary teeth injuries: (according to the scheme: etiology, extent of damage, diagnostics, patient recommendations, information for parents / caregivers, follow-up visits).</p> <p>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 and with pulp exposure. Root fracture. Alveolar fracture.</p>	1	W01, W02, W08, W10, W11
TK10	<p>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).</p> <p>Consequences of injuries of deciduous teeth as manifested in permanent teeth (enamel discoloration combined with hypoplasia, torn crowns, odontoma, splint roots, intra-atrial root kink, sickle incisor, lateral root kink, root tear, root growth is retained, germinal cyst associated with trauma)</p> <p>Prevention of post-traumatic dental damage: primary, secondary and tertiary prevention.</p>	1	W01, W02, W08, W10,
TK11	<p>Developmental diseases of hard teeth tissues of non-carious origin. Part 1. - causes, enamel hypoplasia, developmental and acquired discoloration.</p> <p>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).</p> <p>Discoloration formed during odontogenesis (hyperbilirubinemia, congenital porphyria, alkaptonuria, tetracycline discoloration) and after tooth eruption. Treatment.</p>	1	W01, W02, W04, W05, W07
TK12	<p>Developmental diseases of hard teeth tissues of non-carious origin. Part II - enamel hypomineralization (turbidity) with particular emphasis on fluorosis and MIH.</p> <p>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.</p>	1	W01, W02, W04, W05, W07
TK13	<p>Developmental diseases of hard teeth tissues of non-carious origin. Part III - abnormalities in hard tissues caused by genetic factors. Developmental disorders of</p>	1	W01, W02, W04, W05, W07

	dentin and cement caused by genetic and environmental factors. Amelogenesis imperfecta. Dentine dysplasia. Regional odontodysplasia. Congenital dentin hypoplasia. Cement developmental disorders.		
<b>Practical classes</b>			
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, K01, K02, K03, K04, K05
<b>Summer semester</b>			
<b>Practical classes</b>			
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, K01, K02, K03, K04, K05

<b>Booklist</b>	
Obligatory literature:	
1. Olczak-Kowalczyk D.: Compendium of Paediatric Dentistry; 2023	
2. Cameron A.C., Widmer R.P.: Handbook of pediatric dentistry. Edinburgh: Mosby; 2012.	
3. <a href="http://www.dentaltraumaguide.org/">http://www.dentaltraumaguide.org/</a>	

<b>Standards of procedures required to obtain credit:</b>			
1	Patient examination with dental diagram and calculate DMFT/dmft	1 pkt.	
2	Oral hygiene indices:	OHI	2 pkt.
		API	1 pkt
		PL.I	1pkt
3	Oral hygiene instruction with toothbrushing instruction	1 pkt	
4	Caries preventive and treatment plan with caries risk assessment	2 pkt	
5	Professional teeth cleaning	1 pkt	

6	Topical fluoride application		2pkt
7	Temporary filling		1 pkt.
8	Fissure sealants:	In the molars	2 pkt
		In the premolars	1 pkt
<b>For performing the dental procedures from point 8, student should get 3 points.</b>			
9	Permanent restorations:	PRR I	2 pkt
		One-surface filling	2 pkt.
		Two-surface filling	3 pkt.
		Multi-surface filling	4 pkt.
		Deep caries treatment (Additional points are added to the final filling or in two-stage biological treatment when the final filling is postponed).	2 pkt.
10	Mortal or vital amputation in a milk tooth		3 pkt.
For procedures from point no. "8" you must obtain 3 points. For procedures from points "9" and "10" you must obtain 16 points (in the winter semester you must obtain at least 8 points).			
For performing procedures in the winter and summer semesters, a student must obtain 69 points, while in the winter semester the student is required to obtain 34 points.			

<b>Student's workload</b>	
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 classes	45
Time spent on reading recommended literature	5
Time spent on writing report/making project	
Time spent on preparing to colloquium/ entry test	25
Time spent on preparing to exam	
Other .....	
Student's workload in total	150
<b>ECTS credits for the subject (in total)</b>	4
<b>Remarks</b>	

\* 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...