# kol ang

**SYLLABUS of the MODULE (SUBJECT)**

**General Information**

|  |  |
| --- | --- |
| **Module title: Paedodontics and Dental Prophylaxis** | |
| 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[[1]](#footnote-1) | graded assessment:  descriptive  test  practical  oral  non-graded assessment  final examination  descriptive  test  practical  oral |
| 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, 914661739  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-medycyny-i-stomatologii/samodzielna-pracownia-stomatologii-dzieciecej |
| Language | English |

**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 /essential  requirements | Knowledge | Knowledge and skills at the III year of study in the field of dentistry |
| Skills |
| Competences |

|  |  |  |  |
| --- | --- | --- | --- |
| **Description of the learning out**c**omes 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 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 classes** | **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** |
| **Winter semester** | | | |
| **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. Pseudo-dentinomas. 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 | 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 | Management of primary teeth injuries: (according to the scheme: etiology, extent of damage, diagnostics, patient recommendations, information for parents / caregivers, follow-up visits).  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. | 1 | W01, W02, W08, W10, W11 |
| TK10 | 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).  Consequences of injures 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)  Prevention of post-traumatic dental damage: primary, secondary and tertiary prevention. | 1 | W01, W02, W08, W10, |
| TK11 | Developmental diseases of hard teeth tissues of non-carious origin. Part 1. - causes, enamel hypoplasia, developmental and acquired discoloration.  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). Discoloration formed during odontogenesis (hyperbilirubinemia, congenital porphyria, alkaptonuria, tetracycline discoloration) and after tooth eruption. Treatment. | 1 | W01, W02, W04, W05, W07 |
| TK12 | 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 |
| TK13 | Developmental diseases of hard teeth tissues of non-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,  K01, K02, K03, K04, K05 |
|  |  |  |  |
| **Summer semester** | | | |
| **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,  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) |

|  |
| --- |
| **Standards of procedures required to obtain credit:** |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | 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 | | **For performing the dental procedures from point 8, student should get 3 points.** | | | | | | | 9 | Permanent restorations: | PRR I | | | 2 pkt | | One-surface filling | | | 2 pkt. | | Two-suraface 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 performing the dental procedures from point 9 and 10, student should get 16 points.** | | | | |  | | **During the whole year a student must obtain 69 points for performing dental procedures and in winter semester - 34 points and carry out pulp treatment in 2 phanton teeth.** | | | | | | |

|  |  |
| --- | --- |
| **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

RZĆ – 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…

1. replaceintowhere applicable [↑](#footnote-ref-1)