|  |
| --- |
| **Syllabus for academic year 2019/2020** |
| **Description of the course** |
| **Module/Course** | **Paediatric dentistry and preventive dentistry** | **Group of detailed education results**  |
| **Group code F** | **Group name****VI - Clinical sciences, major-oriented** |
| **Faculty** | Faculty of Dentistry |
| **Major**  | Dentistry |
| **Specialties** | Paediatric dentistry and preventive dentistry |
| **Level of studies** | Uniform magister studies **X** \*1st degree studies 2nd degree studies 3rd degree studies postgraduate studies  |
| **Form of studies** | **X** full-time part-time |
| **Year of studies**  | IV | **Semester** | **X** Winter**X** Summer |
| **Type of course** | **X** obligatory limited choice free choice / elective  |
| **Course** | **X** major basic |
| **Language of instruction** |  Polish **X** English other |
| \* mark with an **X** |
| **Number of hours** |
| Form of education |
| Unit teaching the course | Lectures (L) | Seminars (SE) | Auditorium classes (AC) | Major Classes – not clinical (MC) | Clinical Classes (CC) | Laboratory Classes (LC) | Classes in Simulated Conditions (CSC) | Practical Classes with Patient (PCP) | Specialist Classes – magister studies (SCM) | Foreign language Course (FLC) | Physical Education obligatory (PE) | Vocational Practice (VP) | Self-Study (Student's own work) | E-learning (EL) |
| **Winter Semester** |
|  |  | **18** |  |  | **30** |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Summer Semester** |
|  |  | **12** |  |  | **30** |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **TOTAL per year:** |
|  |  | **30** |  |  | **60** |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Educational objectives** (max. 6 items)G 1. To familiarize students with the basic and specialized knowledge in the diagnosis and treatment of oral cavity diseases in children and adolescents. G 2. Preparing students to perform individual caries risk assessment, establishing the treatment plan and recommendations for the young patient. G3. Preparing students to perform restorative treatment of carious and non-carious hard dental tissues lesions as well as endodontic treatment of patients in the developmental age.G4. Preparing students for active participation in oral health promotion and formulation of preventive programmes. G5. Preparing students for diagnosing and treatment of dental developmental disturbances as well as diagnosing and treatment of dental traumatic injuries in children and adolescents.G6. Preparing students for management of dental anxiety and fear of a patient in developmental age. |
| **Education result matrix for module/course in relation to verification methods of the intended education result and the type of class** |
| Number of course education result  | Number of major education result  | Student who completes the module/course knows/is able to | Methods of verification of intended education results (forming and summarising) | Form of didactic class*\*\*enter the abbreviation* |
| **W01** | **F.W.1** | To describe teeth development and morphology of teeth, periodontal tissues and mucosa | Oral response (F), Test (S) | SE, CC |
| **W02** | **F.W.3** | To explain the principles of preventive-treatment procedures of oral diseases in different stages of individual development  | Oral response (F) | L, SE, CC |
| **W03** | **F.W.7** | To define the principles of management of carious and non-carious hard dental tissues lesions | Oral response (F), Test (S) | L, SE, CC |
| **W04** | **F.W.7** | To describe the principles of management in dental traumatic injures | Oral response (F), Test (S) |  SE, CC |
| **W05** | **F.W.8** | knows the principles of management in pulp diseases and periapical diseases | Oral response (F), Test (S) | L, SE, CC |
| **W06** | **F.W.13** | To define indications and contraindication for esthetic dentistry procedures | Oral response (F), Test (S) | L, SE, CC |
| **W07** | **F.W.14** | To describe and understand the relationships between oral health status and systemic diseases | Oral response (F), Test (S) |  SE, CC |
| **U01** | **F.U01.** | to perform and gather medical and dental history from the patient or the patient`s parents | Clinical assessment, observation |  SE, CC |
| **U02** | **F.U02.** | To perform clinical examination of the young patient and interpret the data | Clinical assessment, observation | L, SE, CC |
| **U03** | **F.U03.** | To be able to explain the patient`s ailments to set the optimal method of treatment confirmed by a conscious consent | Clinical assessment, observation | CC |
| **U04** | **F.U07.** | To be able to present indications and contraindication for dentistry procedures | Clinical assessment, observation | CC |
| **U05** | **F.U08.** | To solve the problem of disease risk assessment and select of the optimal methods of oral disease prevention | Clinical assessment, observation | SE, CC |
| **U06** | **F.U10.** | To perform treatment of dental caries, pulpal diseases and periapical diseases | Clinical assessment, observation | CC |
| **U07** | **F.U13.** | To use and perform the current documentation of the patient, referral for investigations or specialist medical and dental consultation | Clinical assessment, observation |  CC |
| **K01** | **K01** | To cooperate in the group of professionals, in the environment multicultural and multinational | Summarizing methods:- constant evaluation by teacher (surveying)Shaping methods:- observation of student’s work- discussion during classes- opinions of colleagues |  SE, CC |
| **K02** | **K02** | To create rules of the professional comradeship and the cooperation with representatives of other health care professionals  | Summarizing methods:- constant evaluation by teacher (surveying)Shaping methods:- observation of student’s work- discussion during classes- opinions of colleagues |  CC |
| **K03** | **K03** | To participate actively in oral health promotion  | Summarizing methods:- constant evaluation by teacher (surveying)Shaping methods:- observation of student’s work- discussion during classes- opinions of colleagues | SE, CC |
| \*\* L - lecture; SE - seminar; AC – auditorium classes; MC – major classes (non-clinical); CC – clinical classes; LC – laboratory classes; SCM – specialist classes (magister studies); CSC – classes in simulated conditions; FLC – foreign language course; PCP practical classes with patient; PE – physical education (obligatory); VP – vocational practice; SS – self-study, EL – E-learning .  |
| Please mark on scale 1-5 how the above effects place your classes in the following categories: communication of knowledge, skills or forming attitudes:Knowledge: 5Skills: 5Social competences: 4 |
| **Student's amount of work (balance of ECTS points)** |
| **Student's workload** (class participation, activity, preparation, etc.) | **Student Workload (h)** | **Summer** **apprenticeship (h)** |
|  | **Winter** | **Summer** |
| 1. Contact hours: | 48 | 42 | 15 |
| 2. Student's own work (self-study): Individual preparation for theoretical and practical classes (preparing of a project, documentation, case description, etc.). Individual preparation for credit tests/colloquia. Individual preparation for final exam/credit. | 45 | 18 | 0 |
| Total student's workload | 90 | 60 | 15 |
| **ECTS points for module/course** | 3 | 2 | 0,5 |
| Comments  |  |  |  |
|  |
| **Content of classes** (please enter topic words of specific classes divided into their didactic form and remember how it is translated to intended educational effects) |
| **Seminars**Semester 7

|  |  |
| --- | --- |
| **No** | **Topics of seminars** |
| **1** | **I.** Communication with a patient in developmental age (verbal and non-verbal, physician-parent-child triad).Methods of adapting the child to dental treatment: behavioral, non-drug, communication (presence vs. no parents), protective (stabilization and immobilization) and pharmacological (sedation, general anesthesia)Behavior of a child in a dental office in the aspect of individual development, factors affecting behavior - dental fear of mother and child, classification of child's behavior in a dental officeDiscussing the patient's card with particular emphasis on oral indicators. |
| **2** | II. Dental caries in milk dentition - early childhood caries (ECC), epidemiology, definition, classification, main etiological and disposition factors; determining the risk of dental caries).Preventive procedures, specificity of cavity preparation, materials for filling of the deciduous teeth, reconstruction of the anterior and lateral milk teeth, factors determining the selection of the restorative material in the aspect of advancement of carious lesion and age of the patient, atraumatic reconstructive treatment (ART technique). |
| **3** | III. Tooth decay of immature permanent teeth; factors determining the development of caries on the chewing surfaces of permanent teeth, diagnostics, evaluation of the severity of carious lesions in the aspect of the choice of therapeutic treatmentProtection against caries from erupting first molar teeth; sealing of furrows and wells - indications and contraindications, choice of material. Minimally invasive treatment: preventive filling - PRR type 1 (extended sealing) and type 2 (preventive filling), cavity preparation, filling materials; selection of the method of developing the cavity and restorative material in the aspect of the advancement of the lesion.  |
| **4** | **IV.**   **Crediting essay from topics: I-III - TEST** |
| **5** | Pulp diseases of milk teeth: etiology, symptomatology, classification, diagnosis, treatment and drugs and materials in endodontic treatment of milk teeth. Complications during and after treatment, prognosis. |
| **6** | Pulp diseases of immature permanent teeth: etiopathogenesis, symptomatology, classifications, diagnosis, treatment and prognosis. Drugs and materials used in endodontic treatment. Complications during and after treatment.Apexification and apexogenesis. |

**Seminars**Semester 8

|  |  |
| --- | --- |
| **No** | **Seminars topics** |
| **1** | 1. Prevention of dental caries in children: primary, early, conventional (prenatal, perinatal, postnatal)2. Transmission of cariogenic bacteria, windows of infectivity, lowering the level of bacteria in the oral cavity. 3. Carcinogenicity of carbohydrates. |
| **2** | 1. Oral hygiene - pastes, rinses - composition, properties, types, brushes and indications, brushing techniques, cleansing the tongue, cleansing the brows, checking the effectiveness of brushing. 2. Fluoride prophylaxis- professional and home. |
| **3** | 1.First visit of a child in a dental office, date and course 2. Pro-health education of a pregnant woman. 3. Motivation for pro-health attitudes of mother and child |
| **4** | 1. Gingivitis in children and teenagers - etiology, clinical symptoms, classification, diagnosis, and treatment. Incorrect attachment of fraenulum of the tongue and lip – treatment procedures. 2. Periodontitis in children and teenagers – etiology, clinical symptoms, classification, diagnosis, treatment procedures and complications; the inflammatory periodontal diseases induced by systemic diseases and drugs.  3. Oral mucous lesions in children and teenagers – clinical manifestations, therapeutic methods. |

 |
| **Practical classes**Semester 7

|  |  |
| --- | --- |
| No | Topics of practical classes |
| 1 | **I.** Communication with a patient in developmental age (verbal and non-verbal, physician-parent-child triad)Methods of adapting the child to dental treatment: behavioral, non-drug, communication (presence vs. no parents), protective (stabilization and immobilization) and pharmacological (sedation, general anesthesia)Behavior of a child in a dental office in the aspect of individual development, factors affecting behavior - dental fear of mother and child, classification of child's behavior in a dental officeDiscussing the patient's card with particular emphasis on oral indicators. |
| 2 | II. Dental caries in milk dentition - early childhood caries (ECC), epidemiology, definition, classification, main etiological and disposition factors; determining the risk of dental caries) Preventive procedures, specificity of cavity preparation, materials for filling of the deciduous teeth, reconstruction of the anterior and lateral milk teeth, factors determining the selection of the restorative material in the aspect of advancement of carious lesion and age of the patient, atraumatic reconstructive treatment (ART technique). |
| 3 | III. Tooth decay of immature permanent teeth; factors determining the development of caries on the chewing surfaces of permanent teeth, diagnostics, evaluation of the severity of carious lesions in the aspect of the choice of therapeutic treatment.Protection against caries from erupting first molar teeth; sealing of furrows and wells - indications and contraindications, choice of material. Minimally invasive treatment: preventive filling - PRR type 1 (extended sealing) and type 2 (preventive filling), cavity preparation, filling materials; selection of the method of developing the cavity and restorative material in the aspect of the advancement of the lesion.  |
| 4 | **IV.**   **Crediting essay from topics: I-III - TEST** |
| 5 | Pulp diseases of milk teeth: etiology, symptomatology, classification, diagnosis, treatment and drugs and materials in endodontic treatment of milk teeth. Complications during and after treatment, prognosis. |
| 6 | Pulp diseases of immature permanent teeth: etiopathogenesis, symptomatology, classifications, diagnosis, treatment and prognosis.Drugs and materials used in endodontic treatment.Complications during and after treatment.Apexification and apexogenesis. |
| 7 | **Crediting essay from topic IV-V – TEST** Conservative dental treatment of the patients. |
| 8 | Gingivitis and periodontitis in the developmental age, clinical examination, assessment of periodontium and hygiene (indicators: BPE - basic periodontal examination, GI- gingival index, PlI - plaque index, Api - approximated index, GOI - gingival overgrowth index, Additional and radiological examinations , medical treatment, prognosis. |
| 9 | **Crediting essay from topic VI- ESSEY** |
| 10 | **Final crediting test from 7th semester.** Conservative dental treatment of the patients. |

Semester 8

|  |  |
| --- | --- |
| No | **Topics of practical classes** |
| 1 | **I.** 1.Oral health promotion. 2. Pro-health education of pregnant women and children in different stages of developmental age. Conservative dental treatment of the patients. |
| 2 | **II.** 1.Caries prevention in children (prenatal, perinatal, postnatal).2.Transmission of cariogenic bacteria, the window of infectivity, reducing the level of bacteria in the oral cavity.3.Cariogenicity of carbohydrates.4.Oral cavity hygiene in children and adolescents - toothpaste, toothbrush, additional aids. Conservative dental treatment of the patients. |
| 3 | **III.** 1. The role of fluoride in dental caries prevention: mechanisms of action of fluoride, fluoridation methods, fluoride compounds; endogenous and exogenous fluoridation schemes 2.Fluoride toxicology: toxic doses, dental fluorosis. Conservative dental treatment of the patients. |
| 4 | IV. Non-fluoride methods for the prevention of dental caries (arginine, probiotics, calcium-sodium phosphosilicate, the complex of phosphopeptide casinate and amorphous calcium phosphate, xylitol, chlorhexidine |
| 5  | **Crediting essay from topics: I-IV**Conservative dental treatment of the patients. |
| 6 | **V**. Caries risk assessment, definition, estimation methods (CAMBRA, CRA, Cariogram), indicators of oral hygiene, saliva testing parameters using tests. |
| 7 | **VI.** Dental radiology in pediatric dentistry: general information, types of X-rays used in the diagnosis and treatment of children, radiological interpretation of X-rays in developmental age. Radiological image at various stages of masticatory organ development.Principles of radiological protection in the developmental age. |
| 8 | **Crediting essay from topics: V-VI**Conservative dental treatment of the patients. |
| 9 | **Final test from 8th semester**Conservative dental treatment of the patients. |
|  10 | Make up of backlogs. Conservative dental treatment of the patients. |

 |
| **Basic literature** (list according to importance, no more than 3 items)1. Cameron A.C., Widmer R.P.: Handbook of pediatric dentistry. 3rd ed. Mosby, St. Louis 2013
2. Koch G., Poulsen S.: Pediatric dentistry: a clinical approach. Blackwell Munksgaad, Iowa 2009
3. Welbury R.R., Duggal M.S., Hosey M.T.: Pediatric dentistry. 3rd ed. Oxford University

Press, Oxford 2005**Additional literature and other materials** (no more than 3 items)1. Andreasen J.O., Bakland L.K., Flores M.T., Andreasen F.M.: Traumatic dental injures.

Manual. 2011 2. Scully C., Welbury R.: A color atlas of orofacial health and disease in children and adolescents:  diagnosis and management. 20013. McDonald R.E., Avery D.R., Dean J.A.: Dentistry for the child and adolescent. Elsevier 2011 |
| **Didactic resources requirements** (e.g. laboratory, multimedia projector, other…)multimedia projector, intraoral camera, local internet network, models |
| **Preliminary conditions** (minimum requirements to be met by the student before starting the module/course)Student is admitted to 4th year classes after successful completion of the final test summarizing knowledge of the subject from the 3rd year, held at the end of the 6th semester. |
| **Conditions to receive credit for the course** (specify the form and conditions of receiving credit for classes included in the module/course, admission terms to final theoretical or practical examination, its form and requirements to be med by the student to pass it and criteria for specific grades)**Credit conditions:**1. students have a right to be absent on 10% practical classes in the semester according to Student’s Statutory (absence on more than 10% classes should be fulfilled with the tutor in the last week of the semester)2. theoretical knowledge should be credited with positive marks (essays)3. practical skills should be credited on positive mark with the tutor4. implementation of clinical procedures 5. students are obliged to prepare and present all seminars’ topics (Power Point presentation) **Passing the course** requires passing all (100%) of practical/clinical procedures.  "Conditional credit" can be obtained in case of successful realization of 90% of  procedures. All procedures which were not realized during regular course should be  fulfilled before final examination of a Pediatric Dentistry course. This examination takes place  at 5th year of the study.  The last practical class is devoted to fulfill all theoretical and practical goals and  objectives which were not realized during regular courses. In case of failing to  pass all required goals and objectives of the course after the last course - student will  receive "conditional credit" with a deadline to fulfill all areas ordinated by Dean. **Treatment procedures on 4th year (both semesters):*** investigation (filled in questionnaire, treatment plan) - 5 and at each new patient
* hygienic & dietetic instruction (presentation) - 5 and at each new patient
* preparing of the preventive indications - 2
* fluoride and chlorhexidine varnishes - 5
* placing of fissure sealants – 4
* impregnation – 5
* cavities preparations and fillings (decidous and immature permanent teeth)- 15: 1-surface x 8; 2-surfaces x 4; 3 and more surfaces x 3
* post traumatic crown reconstruction – 1
* endodontic treatment (decidous and immature permanent teeth )- 2
* interpretation of 2 radiograms
* assisting – 2

*It is obligatory to use dental clothes, dental mask and dental gloves !***DIPLOMA EXAM REGULATIONS** **The final examination after the 10th semester of 5th year consists of two parts: practical and theoretical. Both parts of the exam are treated synonymously, i.e. the exam must be awarded at least a satisfactory grade for each part of the examination, and admission to the second part of the examination is conditioned by the first part.** **1. Practical –** clinical interview, clinical examination, diagnosis, treatment planning, preventive recommendations, performing the clinical procedure. **2. Theoretical -** test consist of 100 questions. Conditions for passing: 70 % of correct answers. |
| **Grade:** | **Criteria** (only for courses/modules ending with an examination) |
| Very Good(5.0) | achievement of learning outcomes covering all relevant aspects |
| Good Plus (4.5) | achievement of learning outcomes covering all relevant aspects with some errors or inaccuracies |
| Good(4.0) | achievement of intended learning outcomes, with omitting some of the less important aspects |
| Satisfactory Plus (3.5) | achievement of intended learning outcomes, with omitting some important aspects or significant inaccuracies |
| Satisfactory (3.0) | achievement of intended learning outcomes, with omitting some important aspects or serious inaccuracies |
|  |
| **Name and address of module/course teaching unit, contact: telephone and e-mail address:**Dept. Of Conservative Dentistry and Pedodontics, Medical University of Wroclawul. Krakowska 26, WrocławTel.: (71) 784 0361, fax (71)784 0362; email: stomzach@umed.wroc.pl**Coordinator / Person responsible for module/course, contact: telephone and e-mail address:**Prof. Urszula Kaczmarek, DDS, PhD Tel.: (71) 784 0361 urszula.kaczmarek@umed.wroc.pl **List of persons conducting specific classes: full name, degree/scientific or professional title, discipline, performed profession, form of classes**:Research and didactic workers employed in the Chair and Department of Conservative Dentistry and Pedodontics, with respective professional and research competences in the fields mentioned previously. Prof. Urszula Kaczmarek, DDS, PhD Dentistry, dentist seminars, lecturesJoanna Kobierska-Brzoza, PhD Dentistry, dentist seminarsIwona Przywitowska, PhD Dentistry, dentist seminars, classesDagmara Piesiak-Pańczyszyn, DDS Dentistry, dentist seminars, classes Kowalczyk-Zając Małgorzata, PhD Dentistry, dentist classes Marta Berdzik-Janecka, DDS Dentistry, dentist classes

|  |  |
| --- | --- |
| **Date of Syllabus development**  | **Syllabus developed by**  |
| 20.06.2019 |  Agnieszka Czajczyńska-Waszkiewicz, DDS |
| **Signature of Head of teaching unit** |
| ……………....……………………………………………………………… |

**Signature of Faculty Dean**  |
| ……………....……………………………………………………………… |
|  |