



Projekt „OPERACJA SUKCES – unikatowy model kształcenia na Wydziale Lekarskim Uniwersytetu Medycznego w Łodzi odpowiedź na potrzeby gospodarki opartej na wiedzy” współfinansowany ze środków Europejskiego Funduszu Społecznego, w ramach Programu Operacyjnego Kapitał Ludzki.

COURSE UNIT DESCRIPTION

1. Course unit title

Paediatric Dentistry

2. Course unit code

3. Clinic / Department

Department of Paediatric Dentistry

4. Type of the course unit

compulsory

5. Level of the course unit

master degree level

6. Course profile: general academic

7. Year of study

II

8. Semester when the course unit is delivered

4th

9. Number of ECTS credits allocated

1

10. Number of face-to-face session hours

18 hours (6 hours -seminar group session; 12 hours small group session)

11. Course unit coordinator

Joanna Szczepańska Professor DMD, PhD

12. Names of faculty teachers

Elżbieta Pawłowska Professor DMD, PhD; Patrycja Proc dr hab. DMD, PhD; Agnieszka Bruzda-Zwiech DMD, PhD; Maciej Mikołajczyk DMD, PhD;; Katarzyna Kozłowska DMD, PhD; Kozubska-Markus DMD, PhD; Sylwia Majewska-Beśka DMD PhD Anna Szufnara PhD, DMD ;

13. Prerequisites and co-requisites

Previous courses:

Gross Anatomy

Material Science

14. Course contents

The course is aimed at gaining the knowledge on morphology and anatomy of deciduous and immature permanent dentition in relation to clinical implications.

Seminars and simulation exercises:

1. Anatomy of primary and secondary dentition. Black's and Mount-Hume classifications of caries lesions. The treatment of caries in primary anterior teeth.

Simulation exercise: Restoration of primary anterior teeth with circular caries.

2. Professional application of fluoride products and the silver nitrate impregnation. Atraumatic techniques of cavity preparation in deciduous teeth.

Simulation exercise: Fluoride varnish application, the silver nitrate treatment-lapis impregnation, and atraumatic treatment in primary molars.

3. Fissure sealing and minimally invasive caries treatment in immature permanent teeth. Caries treatment in primary molar teeth

Simulation exercise: Fissure sealing in first permanent molar. Preparation of Black's class I cavity in primary molar tooth.

4. The management of caries in primary posterior teeth -conventional technique.

Simulation exercise: preparation Class II cavity according to Black's classification in primary molar tooth.

5. The management of dental injuries- selected subjects.

Simulation exercise: uncomplicated crown fracture of permanent incisor – restoring with composite resin.

6. Pulpotomy in primary teeth. Final test (see point 19).

Simulation exercise: pulpotomy procedure in primary molar tooth.

15. Learning activities and teaching methods

Seminars supported by multimedia presentations. Phantom trainings. Providing feedback-discussion of student responses of the final quiz.

16. Learning outcomes of the course unit

Knowledge component

Student know and understand: anatomy of teeth and indications and contraindications for selected dental procedures.

Students know and understands:

Class 1

- the differences in anatomy, as well as in morphological built of primary and permanent teeth
- the caries classification by G.V Black and Mount - Hume
- the principles of cavity preparation and restoration in the deciduous anterior teeth with conventional dental materials

Class 2

- indications and contraindications to remineralization and the silver nitrate impregnation in primary teeth
- the measures and modes of remineralization and impregnation
- the differences between principles of conventional and minimal invasive cavity preparation techniques
- atraumatic methods of caries treatment in children: ITR (interim therapeutic restorations), ART (atraumatic restorative treatment)

Class 3

- indications and contraindications to the fissure sealing and principal steps of sealant application
- indications and the principles of Preventive Resin Restoration (PRR)
- steps of preparation according to Black's principles
- properties of restorative materials for class I cavities in primary molars

Class 4

- the principles of cavity preparation in the deciduous molars (Class II) in relation to the material use
- properties of the materials for restoration of primary molars (Class II)

Class 5

- classifications of dental injuries
- the steps of the treatment of uncomplicated crown fractures in permanent anterior permanent teeth- Ellis class II

Class 6

- indications and contraindications for pulpotomy in primary teeth
- steps of pulpotomy in primary molar tooth

Skills component

Aims

Students are able to perform selected dental procedures on phantom teeth.

Objectives

Students is able to:

- chose the most appropriate method of caries treatment in anterior teeth (adjusted to caries involvement and child age) and perform it
- apply professionally topical fluoride
- perform the fissure sealing in first permanent molar
- prepare and fill Class I and Class II cavity in molar tooth
- perform crown reconstruction of upper incisors after injury (Ellis class II –uncomplicated crown fracture)
- perform pulpotomy in primary tooth.

17. Attitudes and transferrable (generic)/ social competencies:

Students have the awareness considering:

- the necessity of the development of manual skills in relation to caries treatment in primary and permanent dentition in children
- the principles of therapeutic management in dentistry
- the need for selecting the most adequate dental treatment method

18. Recommended or required learning resources

main textbooks

1. Compendium of Paediatric Dentistry ed. D.Olczak-Kowalczyk, Med. Tour Press International, 2024. ISBN 978-83-87717-35-3

supplementary textbook

1. Welbury R.R.: Paediatric Dentistry. Oxford University Press, 2012, ISBN-10 : 0199684952
2. Bruzda-Zwiech A, Pawłowska E, Proc P, Szczepańska J: Paediatric Dentistry. Textbook for pre-clinical classes. Part One. First edition. www.dentonet.pl – e- books, ISBN - 978-83-61058-86-1
3. Andreasen J.O. et al: Traumatic Dental Injuries. A Manual, 3rd Edition Wiley-Blackwell 2011, ISBN-10: 1405190612

19. Formative assessment and obtaining credits for the course

credit with grade

20. Assessment methods and criteria

- Presence on all classes is compulsory.
- Final quiz (20 question test)
- Students are obliged to perform required procedures in phantom teeth: see simulation exercise classes 1-6

21. Additional info and support

<http://stomdziecieca.umed.pl/>- (tab: Paediatric dentistry /programs for students)

Students should respect the rules of Department of Paediatric Dentistry (see tab: Rule-Regulations in Department of Paediatric Dentistry) and the regulations of practical work in Department of Paediatric Dentistry Medical University of Lodz