



University of Rijeka

Faculty of Dental Medicine

Course: Pediatric dentistry I

Course Coordinator: Prof.prim.dr.sc.Nataša Ivančić Jokić, PhD, DDM

Department: Department of Pediatric dentistry

Study program: University Integrated Undergraduate and Graduate Study of Dental Medicine (in English)

Study year: 4

Academic year: 2026./27.

SYLLABUS

Course description (a brief description of the course, general instructions, where and in what form the lessons are organized, necessary equipment, instructions for attendance and preparation for classes, student obligations, etc.):

Course Coordinator:

Prof.prim.dr.sc.Nataša Ivančić Jokić, PhD, DMD

Course Collaborators:

Prof.prim.dr.sc.Danko Bakarčić, PhD, DMD

Odri Cicvarić, PhD, DMD

Leda bašić, DMD

Marija Šimunović Erpušina, DMD

Course goal is the application of theoretical knowledge: approach to the pediatric patient and preparing the child for dental medical procedures, treatment of dental and oral diseases in children (from infant to adolescents). Develop practical competence in methods for caries prevention, diagnostic procedures, treatment of deciduous and young permanent teeth, dental treatment in persons with developmental disabilities, methods of treating the most common types of dentofacial injuries and timely recognition of malocclusion.

Course content: Through lectures and clinical practicals, students are expected to acquire the knowledge necessary to begin clinical work with children. In particular, they should gain knowledge of methods for managing children's behavior, diagnosing and treating diseases of primary and young permanent teeth, and various forms of primary prevention of caries and oral diseases.

Assigned reading:

1. Koch G., Poulsen S., Espelid I., Haubek D. Pediatric Dentistry: A Clinical Approach . Wiley-Blackwell, 2017.
2. Cameron A., Widmer RP. Handbook of pediatric dentistry. 4th Edition. Elsevier, 2013.
3. Andreasen JO., et all. Traumatic Dental Injuries, A Manual. 2nd Edition. Blackwell Munsgaard, 2003.
4. Texts from lectures

Optional/additional reading:

1. Harris N.O., Garcia-Godoy F., Nielsen Nathe C. Primary preventive dentistry. 8th Edition. Pearson, 2014.
2. Casamassimo P. et all. Pediatric Dentistry; Infancy through Adolescence. 5th Edition. Elsevier, 2012



3. Jurić H. Dječja dentalna medicina. Jastrebarsko: Naklada Slap; 2015.
4. Bakarčić D, Ivančić Jokić N. Osnove prevencije karijesa i parodontnih bolesti. Split: Redak; 2013. Str
5. Zukanović A, Gržić R. Stomatološko liječenje medicinski kompromitiranih pacijenata. Zagreb: Hrvatska komora dentalne medicine; 2012

COURSE TEACHING PLAN:

The list of lectures (with topics and descriptions):

- P1. Introduction to pediatric dental medicine, first visit, child development
Expected learning outcomes
Familiarize yourself with the aim of the pediatric dental medicine course, the specifics of working with children and the basics of child development.
- P2. Specificities of the child's behavior
Expected learning outcomes
Describe the specifics of the development of a child's behavior in a dental office with regard to age
- P3. Behavior control techniques
Expected learning outcomes
Describe and compare techniques for controlling child behavior in the dental office with regard to age and behavior classification.
Describe and compare the forms of behavior of children in the dental office.
Describe, define and perform methods of behavior control in children.
Define and differentiate between dental fear and dental anxiety.
- P4. The first examination of the child
Expected learning outcomes
Describe and perform the first examination of the child with regard to age and developed cooperation with the child.
Adopt the elements that are necessary for a proper and comprehensive dental examination of the child.
- P5. Tooth development, Chronology of tooth mineralization and eruption
Expected learning outcomes
Describe the growth and development of teeth, pulp and roots, describe and differentiate disorders of the development of teeth and oral structures from normal findings.
- P6. Complications of tooth eruption, Root resorption
Expected learning outcomes
Describe and compare the complications of tooth eruption, deviations from the normal eruption pattern, and be able to explain the mechanisms that occur during physiological and pathological root resorption.
- P7. MIH, Dental fluorosis
Expected learning outcomes
Define and differentiate the etiology of MIH and dental fluorosis, notice the differences between them and recognize the differences in the clinical presentation and therapy methods.



P8. Tooth development anomalies

Expected learning outcomes

Describe and diagnose tooth development anomalies.

Associate specific anomalies with systemic conditions

P9. Development of occlusion, Characteristics of deciduous and permanent dentition

Expected learning outcomes

Describe the development of occlusion and understand the changes that occur during the transition from deciduous to mixed and permanent dentition.

P10. Diagnostic methods and procedures in pediatric dentistry

Expected learning outcomes

Describe and define the diagnostic methods and procedures that are used for the diagnosis of dental and oral cavity pathology in children.

P11. Pain control and premedication in children

Expected learning outcomes

Define and distinguish between painful conditions, mechanisms of pain generation and action, and know how to apply methods and procedures to eliminate pain.

Get acquainted with the possibilities of applying premedication as a means of solving anxiety in children and creating conditions for cooperation in the dental office.

P12. Anesthesia in pediatric dentistry

Expected learning outcomes

Describe and state the techniques of local anesthesia that are used when performing dental procedures in children. Know how to apply local anesthetic and the technique of performing local anesthesia with regard to the indication.

Describe the possibilities of performing dental procedures under general anesthesia. Learn to define indications and contraindications for procedures under general anesthesia, and become familiar with the way anesthesia is administered.

P13. Caries lesion and its therapy (initial and superficial)

Expected learning outcomes

Describe and diagnose the initial carious lesion, and know how to apply all the therapeutic methods used in its treatment.

P14. Caries lesion and its therapy (dentin caries)

Expected learning outcomes

Describe, recognize and diagnose an advanced caries lesion, and know the possible complications of untimely treatment. To acquire knowledge that enables the application of all the therapeutic methods available to us for the treatment of caries.

P15. Endodontic therapy of primary teeth

Expected learning outcomes

To describe the etiology and accurate diagnosis of the condition of the pulp of primary teeth. State and describe the pathology of pulp diseases.

Describe the pulp treatment techniques of primary teeth



To define therapeutic methods that enable the treatment of pulpopathy for the purpose of preserving the vitality of the dental pulp or preserving the teeth in the jaw.

The lectures are set up on the Merlin e-learning system

The list of practicals with descriptions:

Practicals are conducted at the Pediatric Dentistry Department of the KBC Rijeka Dental Clinic, which is located in the office number 3 at Krešimirova 40. Students actively participate in the Department's clinical work under the supervision of pedodontics specialists and doctors of dental medicine. Given the level of acquired knowledge, they independently perform the treatment of pathological changes in the oral cavity in children.

Students' obligations:

All forms of teaching are mandatory, and accordingly student attendance at lectures and clinical practicals will be recorded. Only justified absences due to illness or similar reason are accepted, in the framework of permissible regulations on the study. In accordance with the decision of the Faculty of Dental Medicine, a student may be excused from a maximum of 20% of each form of teaching in an individual course. Students are required to actively participate in all forms of teaching and pass the final exam.

Assessment (exams, description of written / oral / practical exam, the scoring criteria):

Students evaluation and assessment is provided during classes (clinical exercises) and at the final exam. According to the regulations on studies at the University of Rijeka, a student must achieve at least 50% of the grade during classes in order to be able to take the final exam. Other 50% student achieve during the final exam. The final grade represents the sum of grade points achieved during classes and at the final exam.

Practicals

During the practicals, the student must independently perform the following procedures that are graded with 0 – 5 - 10 points:

- systematic examination of a child (extraoral examination, intraoral examination, dental status)
- treatment plan
- analysis of X-ray in children (intraoral)
- analysis of X-ray in children (orthopantomograph)
- preventive measures, cleaning soft sediments

A student can get a maximum of 50 points during practicals. The minimum number of points required to take the final examination is 25.



Final exam

Final examination is a written exam consisting of 50 questions. The student is awarded 25 points for achieving 50% correct answers, and for each correct answer above 50% of the test, the student is awarded an additional 1 point, up to a maximum of 50 points

In order to get the final grade, student must successfully pass (50%) the final exam. If the student does not pass the final exam, he/she will receive a total negative grade. The student has the right to access the next exam date.

Final grade:

- the points achieved in the practicals are summed with the points from the final exam
- final grade:

0 - 49 % insufficient 1 F
50 - 59 % enough 2 D
60 - 74 % good 3C
75 - 89 % very good 4 B
90 - 100 % excellent 5 A.

Other important information regarding to the course:

The introductory lecture will be held according to the course schedule, while the other lectures will be posted on the e-learning system MERLIN as part of the e-course.

Any use of another's text or other form of author's work, as well as the use of ChatGPT or any other tools whose functionality is based on artificial intelligence technology, without clear and unambiguous citation of sources, is considered a violation of someone else's copyrights and the principles of academic integrity and represents serious violation of student obligations, which entails disciplinary responsibility and disciplinary measures accordingly to Rulebook on disciplinary responsibility of students.

During student practicals at the Dental Medicine Clinic of KBC Rijeka, photography and/or recording of patients and staff is strictly prohibited.

Consultation time: Thursday 14.00-15.00



COURSE SCHEDULE (for the academic year 2025/2026)

Date	Lectures (time and place)	Seminars (time and place)	Practicals (time and place)	Instructor
23.02.2027			P1 11.00 – 12.30 D	Prof.prim.Nataša Ivančić Jokić, PhD, DMD Odri Cicvarić, PhD, DDM
23.02.2027	L1 18.30 - 20.00			Prof.prim.Nataša Ivančić Jokić, PhD, DMD
02.03.2027.			P2 11.00 – 12.30 D	Prof.prim.Danko Bakarčić, PhD, DMD Marija Šimunović Erpušina, DDM
02.03.2027.	L2 e-course 18.30 - 20.00			Prof.prim.Nataša Ivančić Jokić, PhD, DMD
09.03.2027.			P3 11.00 – 12.30 D	Prof.prim.Nataša Ivančić Jokić, PhD, DMD Leda bašić. DMD
09.03.2027.	L3 e-course 18.30 - 20.00			Prof.prim.Nataša Ivančić Jokić, PhD, DMD
16.03.2027.			P4 11.00 – 12.30 D	Prof.prim.Danko Bakarčić, PhD, DMD Odri Cicvarić, PhD, DMD
16.03.2027.	L4 e-course 18.30 - 20.00			Prof.prim.Nataša Ivančić Jokić, PhD, DMD
23.03.2027.			P5 11.00 – 12.30 D	Prof.prim.Nataša Ivančić Jokić, PhD, DMD Marija Šimunović Erpušina, DMD
23.03.2027.	L5 e-course 18.30 - 20.00			Prof.prim.Nataša Ivančić Jokić, PhD, DMD
30.03.2027.			P6 11.00 – 12.30 D	Prof.prim.Danko Bakarčić, PhD, DMD Leda Bašić, DMD
30.03.2027.	L6 e-course 18.30 - 20.00			Prof.prim.Nataša Ivančić Jokić, PhD, DMD



06.04.2027.			P7 11.00 – 12.30 D	Prof.prim.Nataša Ivančić Jokić, PhD, DMD Odri Cicvarić, PhD, DMD
06.04.2027.	L7 e-course 18.30 - 20.00			Prof.prim.Nataša Ivančić Jokić, PhD, DMD
13.04.2027.			P8 11.00 – 12.30 D	Prof.prim.Danko Bakarčić, PhD, DMD Marija Šimunović Erpušina, DMD
13.04.2027.	L8 e-course 18.30 - 20.00			Prof.prim.Nataša Ivančić Jokić, PhD, DMD
20.04.2027.			P9 11.00 – 12.30 D	Prof.prim.Nataša Ivančić Jokić, PhD, DMD Leda Bašić, DMD
20.04.2027.	L9 e-course 18.30 - 20.00			Prof.prim.Nataša Ivančić Jokić, PhD, DMD
27.04.2027.			P10 11.00 – 12.30 D	Prof.prim.Danko Bakarčić, PhD, DMD Odri Cicvarić, PhD, DMD
27.04.2027.	L10 e-course 18.30 - 20.00			Prof.prim.Nataša Ivančić Jokić, PhD, DMD
04.05.2027.			P11 11.00 – 12.30 D	Prof.prim.Nataša Ivančić Jokić, PhD, DMD Marija Šimunović Erpušina, DDM
04.05.2027.	L11 e-course 18.30 - 20.00			Prof.prim.Nataša Ivančić Jokić, PhD, DMD
11.05.2027.			P12 11.00 – 12.30 D	Prof.prim.Danko Bakarčić, PhD, DMD Leda Bašić, DMD
11.05.2027.	L12 e-course 18.30 - 20.00			Prof.prim.Nataša Ivančić Jokić, PhD, DMD
18.05.2027.			P13 11.00 – 12.30 D	Prof.prim.Nataša Ivančić Jokić, PhD, DMD Odri Cicvarić, PhD, DDM
18.05.2027.	L13 e-course			Prof.prim.Nataša Ivančić Jokić,



	18.30 - 20.00			PhD, DMD
25.05.2027.			P14 11.00 – 12.30 D	Prof.prim.Danko Bakarčić, PhD, DDM Marija Šimunović Erpušina, DMD
25.05.2027.	L14 e-course 18.30 - 20.00			Prof.prim.Nataša Ivančić Jokić, PhD, DMD
01.06.2027.			P15 11.00 – 12.30 D	Prof.prim.Nataša Ivančić Jokić, PhD, DMD Leda Bašić, DMD
01.06.2027.	L15 e-course 18.30 - 20.00			Prof.prim.Nataša Ivančić Jokić, PhD, DMD

List of lectures, seminars and practicals:

	LECTURES (Topics)	Teaching hours	Location/Lecture room
L1	Introduction to pediatric dental medicine, first visit, child development	2	Krešimirova 40
L2	Specificities of the child's behavior	2	Krešimirova 40
L3	Behavior control techniques	2	Krešimirova 40
L4	The first examination of the child	2	Krešimirova 40
L5	Tooth development, Chronology of tooth mineralization and eruption	2	Krešimirova 40
L6	Complications of tooth eruption, Tooth root resorption	2	Krešimirova 40
L7	MIH, Dental fluorosis	2	Krešimirova 40
L8	Tooth development anomalies	2	Krešimirova 40
L9	Development of occlusion, Characteristics of deciduous and permanent dentition	2	Krešimirova 40
L10	Diagnostic methods and procedures in pediatric dentistry	2	Krešimirova 40
L11	Pain control and premedication in children	2	Krešimirova 40
L12	Anesthesia in pediatric dentistry	2	Krešimirova 40
L13	Caries lesion and its (initial and superficial)	2	Krešimirova 40
L14	Caries lesion and its (dentin caries)	2	Krešimirova 40
L15	Endodontic therapy of primary teeth	2	Krešimirova 40
	TOTAL TEACHING HOURS	30	



	PRACTICALS (Topics)	Teaching hours	Location/Lecture room
P1	First patient visit, medical history (anamnesis)	2	Krešimirova 40 OFFICE No. 3
P2	Psychological approach to the child, behavior control techniques	2	Krešimirova 40 OFFICE No. 3
P3	The first examination of the child	2	Krešimirova 40 OFFICE No. 3
P4	The first examination of the child	2	Krešimirova 40 OFFICE No. 3
P5	Determination and recognition of primary and permanent teeth	2	Krešimirova 40 OFFICE No. 3
P6	Determination and recognition of primary and permanent teeth	2	Krešimirova 40 OFFICE No. 3
P7	Determining the type of dentition, analysis of X-ray images	2	Krešimirova 40 OFFICE No. 3
P8	Occlusion analysis	2	Krešimirova 40 OFFICE No. 3
P9	Techniques of administration of local anesthesia	2	Krešimirova 40 OFFICE No. 3
P10	Conservative therapy of hard dental tissues	2	Krešimirova 40 OFFICE No. 3
P11	Conservative therapy of hard dental tissues	2	Krešimirova 40 OFFICE No. 3
P12	Conservative therapy of hard dental tissues	2	Krešimirova 40 OFFICE No. 3
P13	Conservative therapy of hard dental tissues	2	Krešimirova 40 OFFICE No. 3
P14	Conservative therapy of hard dental tissues	2	Krešimirova 40 OFFICE No. 3
P15	Conservative therapy of hard dental tissues	2	Krešimirova 40 OFFICE No. 3
	TOTAL TEACHING HOURS	30	

	FINAL EXAM DATES
1.	08.06.2027.
2.	06.07.2027.
3.	07.09.2027.



Sveučilište u Rijeci
University of Rijeka



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	Lectures	Seminars	Practicals	Total
Total number	30	0	30	60
On-line	28	0	0	28
Percentage	93%	0		47%