

**Course: Restorative dental medicine I**

**Course Coordinator: Prof. Alen Braut, PhD, DMD**

**Department: Endodontics and restorative dentistry**

**Study program: University integrated Undergraduate and Graduate Study of Dental Medicine**

**Study year: 3<sup>rd</sup>**

**Academic year: 2025/2026**

## **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.):**

Restorative dental medicine I is an obligatory course on the University integrated undergraduate and graduate study Dental medicine on the 3<sup>rd</sup> year of study. It consists of 15 lectures, 10 seminars and 45 practicals, a total of 70 hours (7 ECTS).

The aim of the course is to acquire basic knowledge and skills in the field of restorative dental medicine. The goal is to familiarize students with materials for temporary and permanent fillings of cavities on hard dental tissues, to show the stages in the formation of cavities on teeth with carious lesions, and to familiarize students with basic and additional instrumentation for cavity formation and fillings. Particular attention is on the acquisition of students' skills during clinical exercises with the aim of independently performing the assigned practical tasks.

### **Assigned reading:**

Mouth GJ, Hume WR, Ngo HC, Wolff MS. Preservation and restoration of tooth structure. 3rd edition. Wiley Blackwell. 2016.

### **Optional/additional reading:**

Textbook of Operative Dentistry: N.Garg, A.Garg. The Health Sciences Publisher, New Delhi, London, Philadelphia, Panama; 3rd Ed. 2015.

### **COURSE TEACHING PLAN:**

#### **The list of lectures (with topics and descriptions):**

**L1.** Introduction to Restorative Dental Medicine. Basic and modern principles of cavity preparation and filling treatment (I and II class)

Learning outcomes:

Describe the aim of the restorative dental medicine course

Describe and name the indication and explain creation of cavities on the occlusal and proximal surfaces of premolars and molars in the permanent dentition.

**L2.** Basic and modern principles of cavity preparation and filling treatment (III, IV and V class)

Learning outcomes:

List, describe and explain the indication and creation of cavities on the proximal surfaces of the frontal teeth in the permanent dentition, as well as the vestibular and oral surfaces of all teeth.

**L3.** Principles of adhesive cavity design

Learning outcomes:

List, describe and explain the indications and basic principles of creating cavities for aesthetic fillings on all teeth.

**L4.** Applied histology of hard dental tissues

Learning outcomes:

Define the structure of hard dental tissues and connect the structure on the principles of cavity preparation and the use of dental materials.

**L5.** Dentin wound and preparations for the protection of the pulpo-dentine complex. Temporary restorations

Learning outcomes:

Describe and explain indications for the use of materials for the protection of dentine wounds, temporary closure of cavities, their composition and characteristics.

**L6.** Dental cements (zinc-phosphate, carboxylate, glass-ionomer)

Learning outcomes:

List and describe materials used to replace lost dentine tissue. Describe composition of materials and their preparation and the technique of placing them in the cavity.

**L7.** Glass-ionomer cements I

Learning outcomes:

Explain the basic characteristics of glass ionomer cements. List their indications and the cavity preparation procedure before placing glass ionomer cement in the cavity.

**L8.** Glass-ionomer cements II

Learning outcomes:

Name the basic characteristics of glass ionomer cements. Know their indications and the cavity preparation procedure before placing glass ionomer cement in the cavity.

**L9.** Dental amalgams

Learning outcomes:

Recognize the historical development of amalgam, indications and contraindications.

Interpret the composition and conditions for placing amalgam in the cavity.

**L10.** Composite materials. Composition and application

Learning outcomes:

Recognize the historical development of composites, indications and contraindications.

Interpret the composition and conditions for placing the composite in the cavity.

**L11.** Composite materials. Polymerization lamps

Learning outcomes:

Recognize the historical development of light curing composites, indications and contraindications, polymerization lamps, wave length and activations.

Interpret the composition and conditions for polymerization of the composite in the cavity.

**L12.** Dentin adhesives I

Learning outcomes:

Recognize the historical development of dentine adhesives, indications and contraindications.

Interpret the composition and conditions for placing the adhesive in the cavity.

**L13.** Dentin adhesives II

Learning outcomes:

Differentiate clinical protocols of application of dentine adhesives, indications and contraindications.

Interpret and explain the composition and conditions for placing the adhesive in the cavity.

**L14.** Acute vs chronic and iatrogenic dental trauma

Learning outcomes

Describe and explain diagnosis, etiology and therapy of trauma to hard dental tissues.

**L15.** Temporary restoration materials

Learning outcomes

Describe and explain the materials and indications for temporary cavity restoration

## The list of seminars with descriptions:

### **S.1. Workplace, instruments, dry working field (Eng. Rubber-dum)**

Describe and explain work at dental work unit, instruments for examination and diagnostics, cavity processing and the final processing of fillings

### **S.2. Basic principles of making class I and II cavities**

Define and explain the basic principles of cavity processing on distal teeth

### **S.3. Basic principles of class III and V cavity preparation for amalgam and composite**

Define and explain the basic principles of cavity processing on smooth surfaces

### **S.4. Basic principles of class IV and VI cavity preparation**

Name, describe and explain atypical preparations.

### **S.5. Dental cements (zinc phosphate, polycarboxylate)**

Name indications, define composition, preparation and placement of substrates in the cavity.

### **S.6. Glass-ionomer cements**

Describe, discuss and conclude indications, composition, preparation and placement of SIC.

### **S.7. Dental amalgams; interdental matrices, clamps and interdental wedges**

To acquire theoretical knowledge about the indications, composition, preparation and placement of amalgam.

Master the infill placement aids.

### **S.8. Adhesive cavity and dentine adhesives**

Name and explain indications, composition, preparation and placement of dentin adhesives.

Explain the principles of cavity preparation for aesthetic fillings.

### **S.9. Composite materials and finishing restorations**

Name and explain indications, composition, preparation and installation of composites.

Master the process of finishing composite filling.

### **S.10. Acute dental trauma**

To acquire theoretical knowledge about diagnostics and therapeutic procedures for trauma to hard dental tissues.

## The list of practicals with descriptions:

### **PART I**

P.1. Dental history, patient's consent

Describe and explain workplace and instruments

Describe and differentiate dental instruments, perform the examination of the patient and record the anamnesis and consent of the patient before the procedure

P.2. Establishment of a dry working field, rubber dam placement (Kofferdam in German)

Demonstrate patient preparation before therapeutic procedures, create a dry work area.

P.3. Preparation of Class I cavity for amalgam

Perform the procedure on the occlusal surfaces of the distal teeth for amalgam filling.

P.4. Preparation of class II cavity for amalgam

Perform the procedure on the proximal surfaces of the distal teeth for amalgam fillings

P.5. Preparation of class V cavities for amalgam

Perform the procedure on vestibular surfaces of the distal teeth for amalgam fillings

P.6. Preparation of II class adhesive cavity

Perform the procedure on the proximal surfaces of the distal teeth for composite fillings

P.7. Preparation of III class adhesive cavity

Perform the procedure on the proximal surfaces of the frontal teeth for composite fillings

P.8. Placement of cavity liners and bases

Perform the procedure of preparing and placing the substrate in the cavity.

P.9. Placement of interdental matrix and matrix holder on models, interdental wedges

Demonstrate work with auxiliary materials for placing fillings

P.10. Class I and V amalgam restorations

Demonstrate placing an amalgam filling in a cavity

P.11. Class II amalgam restorations

Demonstrate placing an amalgam filling in a cavity

P.12. Class II composite restorations

Demonstrate placing an amalgam filling in a cavity

P.13. Class III composite restorations

Demonstrate placing an amalgam filling in a cavity

P.14. Finishing and polishing of amalgam and composite restorations

Demonstrate placing an amalgam filling in a cavity

P.15 Repeating tasks according to free choice

## **PART II**

### **P.1. First examination, dental status, treatment plan**

Perform a clinical examination of the oral cavity, recognize the dental status and analyze a therapy plan

### **P.2. First examination, dental status, treatment plan**

Perform a clinical examination of the oral cavity, recognize the dental status and analyze a therapy plan

### **P.3. First examination, dental status, treatment plan**

Perform a clinical examination of the oral cavity, recognize the dental status and analyze a therapy plan

### **P.4. Minimally invasive procedures**

Explain and analyze the indication and perform minimally invasive procedures on patients.

### **P.5. Minimally invasive procedures**

Explain and analyze the indication and perform minimally invasive procedures on patients.

### **P.6. Minimally invasive procedures**

Explain and analyze the indication and perform minimally invasive procedures on patients.

### **P.7. Treatment of medium and deep carious lesions**

Differentiate diagnosis, plan therapy and perform therapeutic interventions for the treatment of diseases of hard dental tissues.

### **P.8. Treatment of medium and deep carious lesions**

Differentiate diagnosis, plan therapy and perform therapeutic interventions for the treatment of diseases of hard dental tissues.

### **P.9. Treatment of medium and deep carious lesions**

Differentiate diagnosis, plan therapy and perform therapeutic interventions for the treatment of diseases of hard dental tissues.

### **P.10. Treatment of medium and deep carious lesions**

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### **P.12. Treatment of medium and deep carious lesions**

Differentiate diagnosis, plan therapy and perform therapeutic interventions for the treatment of diseases of hard dental tissues.

### **P.13. Treatment of medium and deep carious lesions**

Differentiate diagnosis, plan therapy and perform therapeutic interventions for the treatment of diseases of hard dental tissues.

### **P.14. Treatment of medium and deep carious lesions**

Differentiate diagnosis, plan therapy and perform therapeutic interventions for the treatment of diseases of hard dental tissues.

### **P.15. Treatment of medium and deep carious lesions**

Differentiate diagnosis, plan therapy and perform therapeutic interventions for the treatment of diseases of hard dental tissues.

### Students' obligations:

Students are obliged to regularly attend, actively participate and complete all assignments in all forms of teaching. All activities described in this plan must be completed, students who do not show adequate knowledge on seminars will not be allowed to perform the practical tasks. An insufficient grade (C) is regarded as being absent from the practical.

Completion of the course Restorative dental medicine I is necessary to enroll in the course Restorative dental medicine II on the 4<sup>th</sup> study year.

Student evaluation is carried out according to the valid Rulebook on Studies of the University of Rijeka. The students' work will be evaluated during the course and in the final exam. Students are graded using the ECTS (A-F) and numerical system (1-5). Grading in the ECTS system is carried out by absolute distribution.

During the semester and the final exam, students will be able to collect a maximum of 100 grade points (a maximum of 70 grade points during the semester and a maximum of 30 grade points during the final exam).

During the semester, a student can collect a maximum of 70 grade points (Table 1).

Table 1. Student evaluation

|            | Assessment                  | Max grade points |
|------------|-----------------------------|------------------|
| Colloquium | Written test                | 35               |
| Practicals | Task completion             | 15               |
| Seminars   | Activity, oral examinations | 20               |
|            | Total                       | 70               |
| Final exam | Written test                | 30               |

#### Evaluation of preclinical and clinical practicals

Exercise supervisors will evaluate theoretical knowledge and practical work models/phantoms. The average grade will be used for the final scoring. Negative grade (C) on practicals and seminars is considered as absence from class. Two negative grades as well as missing 3 or more practicals will result in immediate failure of the semester which means the student has to reenroll next year. Every negative grade that the student receives must be corrected through a colloquium held by the practical supervisor that gave the negative grade.

During the V semester the students have to perform every task in the program of preclinical practicals, and each task has to be positively graded which is a prerequisite to take the colloquium at the end of the V semester.

During clinical practicals in the VI semester the students have to perform 3 positively graded tasks in order to have the right of taking the final exam. IMPORTANT: During the VI semester students perform clinical work on each other in the form of prophylactic cleaning (teeth brushing) and preventive pit and fissure sealing procedures. If for some reason students are against participating in practicals as patients they have to state this at the beginning of the semester and provide their own patients to perform the necessary tasks.

Table 2. Student evaluation on practicals and seminars:

| Average grade on each seminar/practical (A-C) | Average grade on each seminar/practical (1-5) | Average grade on all seminars/practicals | Number of grade points Seminar+Practical |
|-----------------------------------------------|-----------------------------------------------|------------------------------------------|------------------------------------------|
| A                                             | 5                                             | 4,5- 5                                   | 20+15                                    |
| A/B                                           | 4                                             | 3,5- 4,49                                | 16+12                                    |
| B                                             | 3                                             | 2,50- 3,49                               | 12+10                                    |
| B/C                                           | 2                                             | 2- 2,49                                  | 8+8                                      |
| C                                             | 1                                             | 0- 1,99                                  | 4+1                                      |

### Colloquium evaluation

The colloquium is taken in written form. The total number of grade points is obtained by multiplying the test score in decimal form with the number of maximum points (35). Students who do not pass the colloquium (less than 50% of correct answers) will be given one remedial colloquium on which they can obtain a maximum grade of 50%. A successfully passed colloquium is a prerequisite for attending and clinical work on practicals in the VI semester.

### Final exam evaluation

During the course, the student must collect a minimum of 35 grade points in order to be able to take the final exam. A student who has obtained 35 or more points during the course can take the final exam, where he can obtain a maximum of 30 points. A student who collects a total of less than 35 grade points during classes does not meet the criteria to access the final exam, and is graded as failing (F) and must re-enroll in the course.

The final exam is taken in written form. The total number of grade points is obtained by multiplying the test score in decimal form with the number of maximum points (30). To pass the exam the student needs to obtain a score of at least 50%

### Final grade formation

The final grade is formed by adding all the grade points obtained by the student during class and on the final exam and is determined according to the table below

- A (5) – 90-100 grade points
- B (4) – 75-89,99 grade points
- C (3) – 60-74,99 grade points
- D (2) – 50-59,99 grade points
- F (1) – 0-49,99 grade points

The numerical evaluation system is compared with the ECTS system as follows: A - excellent (5), B - verygood (4), C - good (3), D - sufficient (2), F - insufficient (1).

### Other important information regarding to the course:

#### Retaking the course:

In case of re-enrolling the course the students have the same responsibilities as the first time attendees and are obliged to regularly attend, actively participate and complete assignments in all forms of teaching.

Every form of plagiarism, and use of AI tools such as ChatGPT for such causes is considered as violation of author rights. Such behavior will not be tolerated and will be sanctioned.

Consultations: Consultations with teachers need to be scheduled via e-mail.

### COURSE SCHEDULE (for academic year 2024/25)

| Date       | Lectures(time)     | Seminars | Practicals | Instructor                   |
|------------|--------------------|----------|------------|------------------------------|
| 5.2.2026.  | L1 (8.00-8.45)     |          |            | Prof. Alen Braut,<br>PhD,DMD |
|            | L2 (8.45-9.30)     |          |            | Prof. Alen Braut,<br>PhD,DMD |
|            | L3 (9.30-10.15)    |          |            | Prof. Alen Braut,<br>PhD,DMD |
|            | Pause              |          |            |                              |
|            | L4 (10.30-11.15)   |          |            | Prof. Alen Braut,<br>PhD,DMD |
|            | L5 (11.15-12.00)   |          |            | Prof. Alen Braut,<br>PhD,DMD |
|            | L6 (12.00-12.45)   |          |            | Prof. Alen Braut,<br>PhD,DMD |
|            | L7 (12.45-13.30)   |          |            | Prof. Alen Braut,<br>PhD,DMD |
| 6.02.2026. | L8 (8.00- 8.45)    |          |            | Prof. Alen Braut,<br>PhD,DMD |
|            | L9 (8.45-9.30)     |          |            | Prof. Alen Braut,<br>PhD,DMD |
|            | L10 (9.30-10.15)   |          |            | Prof. Alen Braut,<br>PhD,DMD |
|            | Pause              |          |            |                              |
|            | L11 (10.30- 11.15) |          |            | Prof. Alen Braut,<br>PhD,DMD |
|            | L12 (11.15-12.00)  |          |            | Prof. Alen Braut,<br>PhD,DMD |
|            | L13 (12.00-12.45)  |          |            | Prof. Alen Braut,<br>PhD,DMD |



|             |                   |                   |                   |                              |
|-------------|-------------------|-------------------|-------------------|------------------------------|
|             | L14 (12.45-13.30) |                   |                   | Prof. Alen Braut,<br>PhD,DMD |
|             | L15 (13.30-14.15) |                   |                   | Prof. Alen Braut,<br>PhD,DMD |
| 9.02. 2026. |                   | S1 (9.00-9.45)    |                   | Prof. Alen Braut, PhD,DMD    |
|             |                   |                   | P1A (9.45-10.30)  | Prof. Alen Braut, PhD,DMD    |
|             |                   |                   | P1B (9.45-10.30)  | E. Božac PhD,DMD             |
|             |                   | S2 (10.30-11.15)  |                   | Prof. Alen Braut, PhD,DMD    |
|             |                   |                   | P2A (11.15-12.00) | Prof. Alen Braut, PhD,DMD    |
|             |                   |                   | P2B (11.15-12.00) | E. Božac PhD,DMD             |
|             |                   | S3(12.00-12.45)   |                   | Prof. Alen Braut, PhD,DMD    |
|             |                   |                   | P3A (12.45-13.30) | Prof. Alen Braut, PhD,DMD    |
|             |                   |                   | P3B (12.45-13.30) | E. Božac PhD,DMD             |
|             |                   | S4 (13.30-14.15)  |                   | Prof. Alen Braut, PhD,DMD    |
|             |                   |                   | P4A (14.15-15.00) | Prof. Alen Braut, PhD,DMD    |
|             |                   |                   | P4B (14.15-15.00) | E. Božac PhD,DMD             |
| 10.02.2026. |                   | S5 (15.00-15.45)  |                   | Prof. Alen Braut, PhD,DMD    |
|             |                   |                   | P5A (15.45-16.30) | Prof. Alen Braut, PhD,DMD    |
|             |                   |                   | P5B (15.45-16.30) | E. Božac PhD,DMD             |
|             |                   | S6 (16.30-17.15)  |                   | Prof. Alen Braut, PhD,DMD    |
|             |                   |                   | P6A (17.15-18.00) | Prof. Alen Braut, PhD,DMD    |
|             |                   |                   | P6B (17.15-18.00) | E. Božac PhD,DMD             |
|             |                   | S7 (18.00-18.45)  |                   | Prof. Alen Braut, PhD,DMD    |
|             |                   |                   | P7A (18.45-19.30) | Prof. Alen Braut, PhD,DMD    |
|             |                   |                   | P7B (18.45-19.30) | E. Božac PhD,DMD             |
| 11.02.202.  |                   | S8 (15.00-15.45)  |                   | Prof. Alen Braut, PhD,DMD    |
|             |                   |                   | P8A (15.45-16.30) | Prof. Alen Braut, PhD,DMD    |
|             |                   |                   | P8B (15.45-16.30) | E. Božac PhD,DMD             |
|             |                   | S9 (16.30-17.15)  |                   | Prof. Alen Braut, PhD,DMD    |
|             |                   |                   | P9A (17.15-18.00) | Prof. Alen Braut, PhD,DMD    |
|             |                   |                   | P9B (17.15-18.00) | E. Božac PhD,DMD             |
|             |                   | S10 (18.00-18.45) |                   | Prof. Alen Braut,<br>PhD,DMD |

|              |                  |  |                    |                            |
|--------------|------------------|--|--------------------|----------------------------|
|              |                  |  | P10A (18.45-19.30) | Prof. Alen Braut, PhD, DMD |
|              |                  |  | P10B (18.45-19.30) | E. Božac PhD,DMD           |
| 12.2.2026    |                  |  | P11A (9.00-9.45)   | Prof. Alen Braut, PhD, DMD |
|              |                  |  | P11B (9.00-9.45)   | E. Božac PhD,DMD           |
|              |                  |  | P12A (9.45-10.30)  | Prof. Alen Braut, PhD, DMD |
|              |                  |  | P12B (9.45-10.30)  | E. Božac PhD,DMD           |
|              |                  |  | P13A (10.30-11.15) | Prof. Alen Braut, PhD, DMD |
|              |                  |  | P13B (10.30-11.15) | E. Božac PhD,DMD           |
| 13.2.2026.   |                  |  | P14A (9.00-9.45)   | Prof. Alen Braut, PhD, DMD |
|              |                  |  | P14B (9.00-9.45)   | E. Božac PhD,DMD           |
|              |                  |  | P15A (9.45-10.30)  | Prof. Alen Braut, PhD, DMD |
|              |                  |  | P15B (9.45-10.30)  | E. Božac PhD,DMD           |
| TBD          | Colloquium A + B |  |                    | Prof. Alen Braut, PhD,DMD  |
| Part II      |                  |  |                    |                            |
| 23.02.2026.  |                  |  | P1A (16.00-17.30)  | Prof. Alen Braut, PhD, DMD |
|              |                  |  | P1B (16.00-17.30)  | E. Božac PhD, DMD          |
| 2.03.2026.   |                  |  | P2A (16.00-17.30)  | Prof. Alen Braut, PhD, DMD |
|              |                  |  | P2B (16.00-17.30)  | E. Božac PhD, DMD          |
| 9.03. 2026.  |                  |  | P3A (16.00-17.30)  | Prof. Alen Braut, PhD, DMD |
|              |                  |  | P3B (16.00-17.30)  | E. Božac PhD, DMD          |
| 16.03. 2026. |                  |  | P4A (16.00-17.30)  | Prof. Alen Braut, PhD, DMD |
|              |                  |  | P4B (16.00-17.30)  | E. Božac PhD, DMD          |
| 23.03. 2026. |                  |  | P5A (16.00-17.30)  | Prof. Alen Braut, PhD, DMD |
|              |                  |  | P5B (16.00-17.30)  | E. Božac PhD, DMD          |
| 30.03. 2026. |                  |  | P6A (16.00-17.30)  | Prof. Alen Braut, PhD, DMD |
|              |                  |  | P6B (16.00-17.30)  | E. Božac PhD, DMD          |
| 13.04. 2026. |                  |  | P7A (16.00-17.30)  | Prof. Alen Braut, PhD, DMD |

|              |  |  |                    |                            |
|--------------|--|--|--------------------|----------------------------|
|              |  |  | P7B (16.00-17.30)  | E. Božac PhD, DMD          |
| 20.04. 2026. |  |  | P8A (16.00-17.30)  | Prof. Alen Braut, PhD, DMD |
|              |  |  | P8B (16.00-17.30)  | E. Božac PhD, DMD          |
| 27.04.2026.  |  |  | P9A (16.00-17.30)  | Prof. Alen Braut, PhD, DMD |
|              |  |  | P9B (16.00-17.30)  | E. Božac PhD, DMD          |
| 4.05.2026.   |  |  | P10A (16.00-17.30) | Prof. Alen Braut, PhD, DMD |
|              |  |  | P10B (16.00-17.30) | E. Božac PhD, DMD          |
| 11.05.2026.  |  |  | P11A (16.00-17.30) | Prof. Alen Braut, PhD, DMD |
|              |  |  | P11B (16.00-17.30) | E. Božac PhD, DMD          |
| 18.05.2026.  |  |  | P12A (16.00-17.30) | Prof. Alen Braut, PhD, DMD |
|              |  |  | P12B (16.00-17.30) | E. Božac PhD, DMD          |
| 25.05.2026.  |  |  | P13A (16.00-17.30) | Prof. Alen Braut, PhD, DMD |
|              |  |  | P13B (16.00-17.30) | E. Božac PhD, DMD          |
| 01.06.2026.  |  |  | P14A (16.00-17.30) | Prof. Alen Braut, PhD, DMD |
|              |  |  | P14B (16.00-17.30) | E. Božac PhD, DMD          |

**List of lectures, seminars and practicals:**

|    | LECTURES (Topics)                                                                                                                     | Teaching hours | Location/Lecture room       |
|----|---------------------------------------------------------------------------------------------------------------------------------------|----------------|-----------------------------|
| L1 | Introduction to Restorative Dental Medicine. Basic and modern principles of cavity preparation and filling treatment (I and II class) | 1              | Lecture room Krešimirova 42 |
| L2 | Basic and modern principles of cavity preparation and filling treatment (III, IV and V class)                                         | 1              | Lecture room Krešimirova 42 |
| L3 | Principles of adhesive cavity design                                                                                                  | 1              | Lecture room Krešimirova 42 |
| L4 | Applied histology of hard dental tissues                                                                                              | 1              | Lecture room Krešimirova 42 |
| L5 | Dentin wound and preparations for the protection of the pulpo-dentine complex. Temporary restorations                                 | 1              | Lecture room Krešimirova 42 |
| L6 | Dental cements (zinc-phosphate, carboxylate, glass-ionomer)                                                                           | 1              | Lecture room Krešimirova 42 |
| L7 | Glass-ionomer cements I                                                                                                               | 1              | Lecture room Krešimirova 42 |

|                             |                                                  |           |                                |
|-----------------------------|--------------------------------------------------|-----------|--------------------------------|
| L8                          | Glass-ionomer cements II                         | 1         | Lecture room<br>Krešimirova 42 |
| L9                          | Dental amalgams                                  | 1         | Lecture room<br>Krešimirova 42 |
| L10                         | Composite materials. Composition and application | 1         | Lecture room<br>Krešimirova 42 |
| L11                         | Composite materials. Polymerization lamps        | 1         | Lecture room<br>Krešimirova 42 |
| L12                         | Dentin adhesives I                               | 1         | Lecture room<br>Krešimirova 42 |
| L13                         | Dentin adhesives II                              | 1         | Lecture room<br>Krešimirova 42 |
| L14                         | Acute vs chronic and iatrogenic dental trauma    | 1         | Lecture room<br>Krešimirova 42 |
| L15                         | Temporary restoration materials                  | 1         | Lecture room<br>Krešimirova 42 |
| <b>TOTAL TEACHING HOURS</b> |                                                  | <b>15</b> |                                |

|                             | <b>SEMINARS (Topics)</b>                                                         | <b>Teaching hours</b> | <b>Location/Lecture room</b>   |
|-----------------------------|----------------------------------------------------------------------------------|-----------------------|--------------------------------|
| S1                          | Workplace, instruments, dry working field (Eng. Rubber-dum)                      | 1                     | Lecture room<br>Krešimirova 42 |
| S2                          | Basic principles of class I and II cavity preparations                           | 1                     | Lecture room<br>Krešimirova 42 |
| S3                          | Basic principles of class III and V cavity preparation for amalgam and composite | 1                     | Lecture room<br>Krešimirova 42 |
| S4                          | Basic principles of class IV and VI cavity preparation                           | 1                     | Lecture room<br>Krešimirova 42 |
| S5                          | Dental cements (zinc phosphate, polycarboxylate)                                 | 1                     | Lecture room<br>Krešimirova 42 |
| S6                          | Glass-ionomer cements                                                            | 1                     | Lecture room<br>Krešimirova 42 |
| S7                          | Dental amalgams; interdental matrices, clamps and interdental wedges             | 1                     | Lecture room<br>Krešimirova 42 |
| S8                          | Adhesive cavity and dentine adhesives                                            | 1                     | Lecture room<br>Krešimirova 42 |
| S9                          | Composite materials and finishing restorations                                   | 1                     | Lecture room<br>Krešimirova 42 |
| S10                         | Acute dental trauma                                                              | 1                     | Lecture room<br>Krešimirova 42 |
| <b>TOTAL TEACHING HOURS</b> |                                                                                  | <b>10</b>             |                                |

|               | <b>PRACTICALS (Topics)</b>        | <b>Teaching hours</b> | <b>Location/Lecture room</b>                |
|---------------|-----------------------------------|-----------------------|---------------------------------------------|
| <b>PART I</b> |                                   |                       |                                             |
| P1            | Dental history, patient's consent | 1                     | Preclinical<br>practicum,<br>Krešimirova 42 |

|         |                                                                                  |   |                                       |
|---------|----------------------------------------------------------------------------------|---|---------------------------------------|
| P2      | Establishment of a dry working field, rubber dam placement (Kofferdam in German) | 1 | Preclinical practicum, Krešimirova 42 |
| P3      | Preparation of Class I cavity for amalgam                                        | 1 | Preclinical practicum, Krešimirova 42 |
| P4      | Preparation of class II cavity for amalgam                                       | 1 | Preclinical practicum, Krešimirova 42 |
| P5      | Preparation of class V cavities for amalgam                                      | 1 | Preclinical practicum, Krešimirova 42 |
| P6      | Preparation of II class adhesive cavity                                          | 1 | Preclinical practicum, Krešimirova 42 |
| P7      | Preparation of III class adhesive cavity                                         | 1 | Preclinical practicum, Krešimirova 42 |
| P8      | Placement of cavity liners and bases                                             | 1 | Preclinical practicum, Krešimirova 42 |
| P9      | Placement of interdental matrix and matrix holder on models, interdental wedges  | 1 | Preclinical practicum, Krešimirova 42 |
| P10     | Class I and V amalgam restorations                                               | 1 | Preclinical practicum, Krešimirova 42 |
| P11     | Class II amalgam restorations                                                    | 1 | Preclinical practicum, Krešimirova 42 |
| P12     | Class II composite restorations                                                  | 1 | Preclinical practicum, Krešimirova 42 |
| P13     | Class III composite restorations                                                 | 1 | Preclinical practicum, Krešimirova 42 |
| P14     | Finishing and polishing of amalgam and composite restorations                    | 1 | Preclinical practicum, Krešimirova 42 |
| P15     | Repeating tasks according to free choice                                         | 1 | Preclinical practicum, Krešimirova 42 |
| PART II |                                                                                  |   |                                       |
| P1      | First examination, dental status, treatment plan                                 | 2 | Dental office no. 1, Krešimirova 40   |
| P2      | First examination, dental status, treatment plan                                 | 2 | Dental office no. 1, Krešimirova 40   |
| P3      | First examination, dental status, treatment plan                                 | 2 | Dental office no. 1, Krešimirova 40   |
| P4      | Minimally invasive procedures                                                    | 2 | Dental office no. 1, Krešimirova 40   |

|                             |                                              |           |                                        |
|-----------------------------|----------------------------------------------|-----------|----------------------------------------|
| P5                          | Minimally invasive procedures                | 2         | Dental office no. 1,<br>Krešimirova 40 |
| P6                          | Minimally invasive procedures                | 2         | Dental office no. 1,<br>Krešimirova 40 |
| P7                          | Treatment of medium and deep carious lesions | 2         | Dental office no. 1,<br>Krešimirova 40 |
| P8                          | Treatment of medium and deep carious lesions | 2         | Dental office no. 1,<br>Krešimirova 40 |
| P9                          | Treatment of medium and deep carious lesions | 2         | Dental office no. 1,<br>Krešimirova 40 |
| P10                         | Treatment of medium and deep carious lesions | 2         | Dental office no. 1,<br>Krešimirova 40 |
| P11                         | Treatment of medium and deep carious lesions | 2         | Dental office no. 1,<br>Krešimirova 40 |
| P12                         | Treatment of medium and deep carious lesions | 2         | Dental office no. 1,<br>Krešimirova 40 |
| P13                         | Treatment of medium and deep carious lesions | 2         | Dental office no. 1,<br>Krešimirova 40 |
| P14                         | Treatment of medium and deep carious lesions | 2         | Dental office no. 1,<br>Krešimirova 40 |
| <b>TOTAL TEACHING HOURS</b> |                                              | <b>43</b> |                                        |

|    | FINAL EXAM DATES |
|----|------------------|
| 1. | 15.06.2026.      |
| 2. | 29.06.2026.      |
| 3. | 13.07.2026.      |
| 4. | 24.09.2026.      |

| Course                |          |          |            |       |
|-----------------------|----------|----------|------------|-------|
| Class form            | Lectures | Seminars | Practicals | Total |
| Total number of hours | 15       | 10       | 43         | 68    |
| Hours online          | 0        | 0        | 0          | 0     |
| % online class        | 0%       | 0%       | 0%         | 0%    |

Exam term dates stated in the table above may differ from dates, which are published in the summary exam dates table. The table is posted on the Faculty web site under the site – Study under the name “Exam terms” and contains the actual final exam terms of all courses.