

**Subject title**

Preclinical periodontology

**Department where the subject is conducted**

Department of Periodontology

**Address of the Department**

School of Dental Medicine, University of Zagreb, Gundulićeva 5, HR-10000 Zagreb

**Subject status**

Mandatory subject

**Year on which the subject is conducted**

4th year

**Semester in which is it conducted**

Winter semester

**ECTS-a points**

4 ECTS

**Head of the subject**

Prof. dr. sc. Darko Božić, bozic@sfzg.hr

**Other staff on the subject that participate in the class**

Izv. prof. dr. sc. Ivan Puhar, puhar@sfzg.hr

Izv. prof. dr. sc. Andrej Aurer, aurer@sfzg.hr

Izv. prof. dr. sc. Ana Badovinac, badovinac@sfzg.hr

Izv. prof. sc. Domagoj Vražić, vrazic@sfzg.hr

Doc. dr. sc. Larisa Musić, lmusic@sfzg.hr

**Numbers of hours of the class**

|                     | Winter semester | Summer semester | All together (both semesters) |
|---------------------|-----------------|-----------------|-------------------------------|
| <b>Lectures</b>     | 15              | -               | 15                            |
| <b>Seminars</b>     | -               | -               | -                             |
| <b>Practice</b>     | 30              | -               | 30                            |
| <b>All together</b> | 45              | -               | 45                            |

1 hour = 45 minutes

**Type of practice in the subject**

Preclinical practice

### Aims and purpose of the subject

Periodontology is a basic and specialist area which encompasses anatomy, etiology, epidemiology, prevention and treatment of supportive periodontal tissues. Teaching in preclinical periodontology encompasses, in accordance with the European federation of periodontology (EFP), a program with theoretical and practical components. Lectures provide students basic and new knowledge in periodontology and historical, current and future development of the specialty. The tasks of the seminars are to prepare students for a successful execution of practical tasks in preclinical practices and future clinical practices.

### Requirements to enter the subject

There are no requirements for entering the subject for students of the 4th year of the integrated undergraduate and graduate Dental medicine studies. The subject must be enrolled by all students.

### Learning outcomes on the level of the integrated undergraduate and graduate Dental medicine studies to which the subject contributes:

- ☐ Knowledge, skills and competences that are related to professionalism, ethics and law.
- ☐ Knowledge, skills and competences that are related to communication and social skills.
- ☒ Knowledge, skills and competences that are related to basic knowledge and possibility to gather information from literature.
- ☒ Knowledge, skills and competences that are related to gathering clinical information.
- ☒ Knowledge, skills and competences that are related to setting diagnosis and treatment plan.
- ☒ Knowledge, skills and competences that are related to treatment, establishment and maintenance of oral health.
- ☒ Knowledge, skills and competences that are related to preventive measures and health promotion.

### Expected learning outcomes

#### Knowledge

1. Should describe the anatomy of periodontal supporting structures.
2. Learn the recent classification of periodontal diseases (2017).
3. Describe types and characteristics of inflamed soft and hard periodontal tissues.
4. Describe the exam of patients with periodontal disease.

#### Skills

5. Explain the course and aims of periodontal treatment and maintenance.
6. Demonstrate proper working with periodontal instruments in a manikin model of the jaws.
7. Analyze radiographic images.
8. Explain mechanical removal of tooth deposits and additional chemical therapy.

**Subject content****Lectures**

|            | <b>Lecture topics in the winter semester</b>                               | <b>Number of hours</b> |
|------------|----------------------------------------------------------------------------|------------------------|
| <b>1.</b>  | Introduction in periodontology; Historical development of periodontology e | 1                      |
| <b>2.</b>  | Anatomy of the periodontium                                                | 1                      |
| <b>3.</b>  | Tooth plaque and calculus                                                  | 1                      |
| <b>4.</b>  | Microbiology of periodontal diseases                                       | 1                      |
| <b>5.</b>  | Immunology and pathogenesis of periodontal diseases                        | 1                      |
| <b>6.</b>  | Classification and epidemiology of periodontal diseases                    | 1                      |
| <b>7.</b>  | Gingival diseases - etiology, pathogenesis and forms                       | 1                      |
| <b>8.</b>  | Periodontitis – etiology, pathogenesis and symptoms                        | 1                      |
| <b>9.</b>  | Necrotizing periodontal diseases, Periodontal abscess                      | 1                      |
| <b>10.</b> | Developmental and acquired anomalies and conditions -mucogingival problem  | 1                      |
| <b>11.</b> | Systemic aspects of periodontal diseases                                   | 1                      |
| <b>12.</b> | Planning and goals of periodontal therapy                                  | 1                      |
| <b>13.</b> | Initial periodontal therapy                                                | 1                      |
| <b>14.</b> | Prophylaxis of periodontal diseases and antiseptics                        | 1                      |
| <b>15.</b> | Recapitulation                                                             | 1                      |

1 hour = 45 minutes

**Practice**

|            | <b>Practice topics in the winter semester</b>                                                                               | <b>Number of hours</b> |
|------------|-----------------------------------------------------------------------------------------------------------------------------|------------------------|
| <b>1.</b>  | Anatomy of the periodontium, anamnesis<br>Practical part: Medical history, Periodontal status                               | 2                      |
| <b>2.</b>  | Clinical examination of the patient<br>Practical : model simulation                                                         | 2                      |
| <b>3.</b>  | Periodontal status<br>Practical: measurements and recording of periodontal indices                                          | 2                      |
| <b>4.</b>  | Periodontal instruments<br>Practical : probing model simulation                                                             | 2                      |
| <b>5.</b>  | Course of periodontal treatment<br>Practical : model simulation                                                             | 2                      |
| <b>6.</b>  | Radigraphic analysis<br>Practical: detailed radiographic analysis                                                           | 2                      |
| <b>7.</b>  | Written mid-term exam                                                                                                       | 2                      |
| <b>8.</b>  | Supragingival plaque control – intensive oral hygiene program;<br>Practical work: instructions and oral hygiene enforcement | 2                      |
| <b>9.</b>  | Professional biofilm control; Practical work: air polishing and ultrasound instrumentation on the model                     | 2                      |
| <b>10.</b> | Subgingival instrumentation technique; Practical work: instrumentation with curettes 1/2 (5/6) and 7/8 on the model         | 2                      |

|            |                                                                                                                     |   |
|------------|---------------------------------------------------------------------------------------------------------------------|---|
| <b>11.</b> | Subgingival instrumentation technique; Practical work: instrumentation with curettes 1/2 (5/6) and 7/8 on the model | 2 |
| <b>12.</b> | Subgingival instrumentation technique; Practical work: instrumentation with curettes 1/2 (5/6) and 7/8 on the model | 2 |
| <b>13.</b> | Subgingival instrumentation technique; Practical work: instrumentation with curettes 1/2 (5/6) and 7/8 on the model | 2 |
| <b>14.</b> | Case presentation of an advanced periodontitis case – 3D models                                                     | 2 |
| <b>15.</b> | Practical mid-term exam                                                                                             | 2 |

1 hour = 45 minutes

### Student tasks

Students are required to attend classes and fulfill given tasks.

### Following students work

Students will be followed for class attendance and success on the exam.

### Type of examination

Written exam on the computer.

### Dates of exams

|       | Extraordinary exam dates |          |         | Regular exam dates<br>WINTER | Extraordinary exam dates |            |            | Regular exam dates<br>Summer |           | Regular exam dates<br>Autumn |           |
|-------|--------------------------|----------|---------|------------------------------|--------------------------|------------|------------|------------------------------|-----------|------------------------------|-----------|
|       | November                 | December | January | February                     | March                    | April      | May        | June                         | July      | August                       | September |
| Dates |                          |          |         | 2.2.2026.<br>16.2.2026.      | 9.3.2026.                | 13.4.2026. | 11.5.2026. | 15.6.2026.                   | 6.7.2026. | 31.8.2026.                   | 7.9.2026. |

### Mandatory literature

- Jan Lindhe, Thorkild Karring, Niklaus P. Lang. Klinička parodontologija i dentalna implantologija. 1. hrvatsko izdanje, Zagreb, Globus, 2004.
- Herbert F. Wolf, Edith M. Rateitschak, Klaus H. Rateitschak. Parodontologija. Stomatološki atlas. 1. hrvatsko izdanje, Zagreb, Naklada Slap, 2008.

### Additional literature

- Michael G. Newman, Henry H. Takei, Fermin A. Carranza. Carranza's Clinical Periodontology, 10th edition, Philadelphia, WB Saunders Co., 2006.
- Marisa Roncati. Nekirurška parodontološka terapija. 1. hrvatsko izdanje, Zagreb, Quintessence Publishing Hrvatska, 2019.