



University of Rijeka
Faculty of Dental Medicine
Course: Fixed Prosthodontics
Course Director: Prof. prim. PhD Ivone Uhač, DMD
Department: Department of Prosthodontics
Program: University Integrated Undergraduate and Graduate Study of Dental Medicine (in English)
Year of Study: 6th year
Academic Year: 2025/2026

SYLLABUS

Course Information (brief course description, general instructions, location and format of teaching, required materials, instructions on attendance and preparation, student obligations, etc.):

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Course: Fixed Prosthodontics

The course *Fixed Prosthodontics* is a compulsory course comprising 30 hours of lectures, 60 hours of seminars, and 165 hours of clinical practicals, totaling 255 hours (17 ECTS). The course is conducted in specialist prosthodontic offices at the Clinic of Dental Medicine, Krešimirova 40, Rijeka.

Course Aim

The course aims to prepare students for the diagnosis and treatment of damaged or missing masticatory units that cannot be restored using conservative dental procedures, the prevention of adverse consequences of tooth damage and loss, and the restoration and maintenance of proper function and aesthetics through the fabrication of prostheses fixed to abutment teeth. The objective is to familiarize students with fundamental clinical procedures for the fabrication of fixed prosthodontic restorations, from the simplest partial fixed restorations to complex fixed prosthodontic rehabilitations, combined fixed–removable prostheses, and implant-supported fixed restorations. Special emphasis is placed on team-based, interdisciplinary collaboration with specialists in various dental fields for the management of complex oral rehabilitation cases. Students will be trained for independent clinical work on patients. The purpose of teaching is for students, through lectures, practicals, and seminars, to acquire all knowledge and skills necessary for planning and fabricating fixed prosthodontic restorations.

Course Content



- Medical history, clinical examination, fixed prosthodontic diagnostics, and treatment planning.
- Periodontal aspects of fixed prosthodontic work.
- Preparation of teeth and the oral cavity for fixed prosthodontic therapy.
- Anesthesia.
- Tooth preparation – clinical approach.
- Impression procedures – clinical approach.
- Shape, color, and aesthetics of natural and artificial teeth.
- Conventional and adhesive cementation systems.
- Longevity and complications during the functional phase of fixed prosthodontic restorations.
- Biomechanics of abutment teeth.

Crowns:

- Classification, indications, contraindications.
- Temporary crowns, full metal, veneered, metal-ceramic, full acrylic, full ceramic, partial, modified, telescopic, and conical crowns; post-and-core crowns; inlay, onlay, overlay; aesthetic veneers.

Bridges:

- Definition and basic components, indications, contraindications.
- Bridge framework and statics.
- Acrylic, immediate, temporary, inlay, cantilever, removable, adhesive, and metal-ceramic bridges.
- Planning and rehabilitation of the stomatognathic system with fixed prosthodontic restorations.
- Crowns and bridges in combined prosthodontic treatments.
- Crowns and bridges on implants.

Teaching Methods

The course is conducted continuously over the 7th, 8th, 9th, 10th, and 11th semesters through lectures, seminars, and clinical practicals (255 hours: 30L + 60S + 165P).

During seminars, students actively participate in presentations and discussions related to theoretical topics. In clinical practicals, instructors demonstrate clinical procedures, and students gradually acquire and perform practical clinical tasks on patients under supervision. Two mandatory midterms are held during the course, followed by a practical and oral final examination. Successful completion of all course activities, participation in mandatory midterms, and passing the final exam awards the student **17 ECTS credits**.

Assigned reading:

Ćatić A. et al. Clinical fixed prosthetics I: crowns. Zagreb: Medicinska naklada; 2015 Schillingburg TH., Hobo S., Whisett L., Jacobi R. Basics of fixed prosthodontics. Quintessence Publishing Co 2008.

Ćatović A. et al. Clinical fixed prosthetics, Zagreb: Faculty of Dentistry, University of Zagreb, 1999. Clinical fixed prosthetics I" - crowns - authors: Amir Ćatić, Adnan Ćatović, Marko Jakovac, Dragutin Komar, Ivan Kovačić, Ketij Mehulić, Ivone Uhač and Denis Vojvodić. Zagreb: Medicinska naklada, 2015.

Uhač I. Complete crowns - basics of grinding, Authorized lecture. 2011.

<https://www.medri.hr/katedre/Protetika/novosti.php>



Uhač I. Aesthetic fixed prosthetic reconstructions - clinical and laboratory approach, Authorized lecture.
2011. <https://www.medri.hr/katedre/Protetika/novosti.php>

Optional/additional reading:

Mehulić K. Ceramic materials in dental prosthetics. Zagreb: School book; 2010 Rosentiel S., Land F., Fujimoto J. Contemporary fixed prosthodontics, 4th edition. Mosby inc. Publishing 2006

Živko-Babić J, Jerolimov V. I et al. Dental materials. Selected chapters. Zagreb: Faculty of Dentistry, 2005.

Jerolimov V. et al. Dental materials. Zagreb: Faculty of Dentistry, University of Zagreb, 2003.

Gnatologij@net.http://www.sfzg.hr. Kraljević K. Anatomy and physiology of occlusion, Zagreb, Globus, 1991

Course Plan:

List of Practicals with Explanations:

Practicals for the course Fixed Prosthodontics are conducted at the Clinic of Dental Medicine, Clinical Hospital Centre Rijeka, in specialist prosthodontic offices. Practicals are organized in small groups (4 students per instructor).

Building on the knowledge and skills acquired during the 4th and 5th years, students in the 6th year will work with patients presenting more complex clinical cases. They will master the use of articulators and the dental arch. Students will plan and perform all clinical stages involved in the preparation and fabrication of larger fixed prosthodontic constructions, combined prostheses, and telescopic-supported restorations. Implant-supported prosthetic restorations will also be demonstrated.

By the end of the 11th semester, students will acquire the knowledge and skills necessary for fabricating all types of fixed prosthodontic restorations, ranging from the simplest constructions to more complex and combined fixed-removable prostheses.

Student Responsibilities:

Students are required to regularly attend and actively participate in all forms of teaching, including the practical completion of all assigned tasks.

Examination (examination procedure, description of the written/oral/practical components, scoring method, grading criteria):

Student Assessment – Fixed Prosthodontics

Student assessment is conducted in accordance with the valid Regulations on Studies of the University of Rijeka. Student performance is evaluated continuously during the course and in the final examination. Students are graded using both the ECTS scale (A–F) and the numerical scale (1–5). In the ECTS system, absolute distribution is applied.

During the semesters and the final exam, students can earn a maximum of 100 points: 70 points during the



semesters and 30 points in the final exam. During the semesters, students can earn up to 70 points as follows: 40 points from two midterms, 10 points from the seminar paper, and 20 points from continuous assessment of theoretical and practical knowledge during practicals. Midterms are written and held at the end of the 8th and 10th semesters. Practical instructors evaluate theoretical knowledge and practical work on patients. The average score is taken for final grading. Students who fail a midterm (less than 50% correct answers) are allowed one remedial midterm.

A minimum of 35 points must be earned during the semester to qualify for the final exam. Students with 35 or more points may take the final exam, where they can earn a maximum of 30 points. Students who earn fewer than 35 points during the semester fail the course (F) and must retake it.

The final exam is practical and oral, covering the material specified in the course syllabus. A maximum of 30 points can be earned: 5 points for the practical part and 25 points for the oral part. The final grade is based on the total activity of the student, i.e., points earned during the semesters and the final exam.

To receive a final grade, the student must pass the final exam. Both the practical and oral parts must be successfully completed. Students are required to bring a completed clinical exercise record sheet to the final exam. Failure results in a failing grade, but the student has the right to retake the exam in the next session.

Assessment of Student Obligations

Evaluation	Maximum Points
Midterms	
I. Midterm – end of 8th semester	20
II. Midterm – end of 10th semester	20
Total	40
Continuous assessment of theoretical and practical knowledge. The average grade is converted as follows:	
Practicals	Grade 2 = 10 points
	Grade 3 = 12.5 points
	Grade 4 = 15 points
	Grade 5 = 20 points
Seminar Paper	Written (PowerPoint presentation) and oral presentation (during the 11th semester) 10
TOTAL	70

Midterm Evaluation (40 points)

Midterms are written. Each midterm consists of 40 questions = 20 points. Each correct answer is multiplied by a coefficient of 0.5 to calculate the total midterm score. A minimum of 50% correct answers is required to pass. Students failing a midterm are allowed one remedial attempt. To take the final exam, both midterms must be passed.



Final Exam (30 points)

Component	Points
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Practical	5
Oral	25

Final Grade Calculation

Points earned during the 7th, 8th, 9th, 10th, and 11th semesters are combined with points from the final exam. Based on the total score, students are graded as follows:

- **A (5 – Excellent): 90–100 points**
- **B (4 – Very Good): 75–89.99 points**
- **C (3 – Good): 60–74.99 points**
- **D (2 – Sufficient): 50–59.99 points**
- **F (1 – Fail): 0–49.99 points**

The numerical grading scale corresponds to the ECTS scale as follows:

- **A – Excellent (5)**
- **B – Very Good (4)**
- **C – Good (3)**
- **D – Sufficient (2)**
- **F – Fail (1)**

Ostale napomene (vezane uz kolegij) važne za studente:

Course Correlations and Prerequisites

The *Fixed Prosthodontics* program is linked with specific components of the courses *Materials in Dental Medicine* and *Preclinical Fixed Prosthodontics*, which are prerequisites for enrollment in this course.

Teaching and Learning Approach

During lectures, students should focus on physiology, diagnostics, treatment planning, and all clinical and laboratory stages of fabricating fixed prosthodontic restorations. In seminars, students actively participate to synthesize theoretical knowledge with clinical skills.



Attendance

Attendance in all forms of teaching is mandatory. Students may be absent for up to 30% of the total instruction time with valid justification. Any student unable to attend practicals must provide a valid reason for absence and arrange make-up sessions or alternative scheduling with the practical instructor, as feasible. Classes are conducted at the scheduled times, and entry after the instructor has started is not permitted. Eating and drinking during class is prohibited, and unnecessary entry/exit during sessions is not allowed. Mobile phone use is forbidden during classes and knowledge assessments.

Seminar Papers

Seminar papers must be prepared using a computer (with spelling and grammar checks) and submitted electronically first. Printing and/or public presentation of the paper may only occur after approval and arrangement with the assistant or group leader. Copying other students' work is prohibited; however, the use of selected content from other sources is permitted if properly cited.

Academic Integrity

Adherence to academic integrity principles is expected from both instructors and students in accordance with the University of Rijeka Code of Ethics

http://www.uniri.hr/hr/propisi_i_dokumenti/eticki_kodeks_svri.htm.

Contacting Instructors

Students may contact instructors during designated consultation hours. All course-related announcements will be provided during the introductory lecture and posted on the course notice board.

Course Timetable (Academic Year 2025/2026)

Date	Lecture (time	Seminar	Practical (time and	Instructor
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	and place)	(time and place)	place)	
30.09.2025.			8.00-10.15 Office 5 V1Grup D	Prof. PhD Vlatka Debeljak, DMD Prof. PhD Zoran Kovač, DMD
07.10.2025.			8.00-10.15 Office 5 V2Grup D	Prof. PhD Vlatka Debeljak, DMD Prof. PhD Zoran Kovač, DMD
14.10.2025.			8.00-10.15 Office 5 V3Grupa D	Prof. PhD Vlatka Debeljak, DMD Prof. PhD Zoran Kovač, DMD
21.10.2025.			8.00-10.15 Office 5 V4Grup D	Prof. PhD Vlatka Debeljak, DMD Prof. PhD Zoran Kovač, DMD
28.10.2025.			8.00-10.15 Office 5 V5Grup D	Prof. PhD Vlatka Debeljak, DMD Prof. PhD Zoran Kovač, DMD
04.11.2025.			8.00-10.15 Office 5 V6Grup D	Prof. PhD Vlatka Debeljak, DMD Prof. PhD Renata Gržić, DMD
11.11.2025.			8.00-10.15 Office 5 V7Grup D	Prof. PhD Vlatka Debeljak, DMD Prof. PhD Renata Gržić, DMD
25.11.2025.			8.00-10.15 Office 5 V8Grup D	Prof. PhD Vlatka Debeljak, DMD Prof. PhD Renata Gržić, DMD
02.12.2025.			8.00-10.15 Office 5 V9Grup D	Prof. PhD Vlatka Debeljak, DMD Prof. PhD Renata Gržić, DMD
09.12.2025.			8.00-10.15 Office 5 V10Grup D	Prof. PhD Vlatka Debeljak, DMD Prof. PhD Renata Gržić, DMD
16.12.2025.			8.00-10.15 Office 5 V11Grup D	Prof. PhD Renata Gržić, DMD Prof. PhD Zoran Kovač, DMD
23.12.2025.			8.00-10.15 Office 5 V12Grup D	Prof. PhD Renata Gržić, DMD Prof. PhD Zoran Kovač, DMD
13.01.2026.			8.00-10.15 Office 5 V14Grup D	Prof. PhD Renata Gržić, DMD Prof. PhD Zoran Kovač, DMD
20.01.2026.			8.00-10.15	Prof. PhD Renata Gržić, DMD



			Office 5 V15Grup D	Prof. PhD Zoran Kovač, DMD
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	PRACTICALS (Topics)	Teaching hours	Location/Lecture room
V1	Acquiring the knowledge and skills necessary for the fabrication of combined restorations and complex fixed prosthodontic restorations.	3	Krešimirova 40
V2	Acquiring the knowledge and skills necessary for the fabrication of combined restorations and complex fixed prosthodontic restorations.	3	Krešimirova 40
V3	Acquiring the knowledge and skills necessary for the fabrication of combined restorations and complex fixed prosthodontic restorations.	3	Krešimirova 40
V4	Acquiring the knowledge and skills necessary for the fabrication of combined restorations and complex fixed prosthodontic restorations.	3	Krešimirova 40
V5	Acquiring the knowledge and skills necessary for the fabrication of combined restorations and complex fixed prosthodontic restorations.	3	Krešimirova 40
V6	Acquiring the knowledge and skills necessary for the fabrication of combined restorations and complex fixed prosthodontic restorations.	3	Krešimirova 40
V7	Acquiring the knowledge and skills necessary for the fabrication of combined restorations and complex fixed prosthodontic restorations.	3	Krešimirova 40
V8	Acquiring the knowledge and skills necessary for the fabrication of combined restorations and complex fixed prosthodontic restorations.	3	Krešimirova 40
V9	Acquiring the knowledge and skills necessary for the fabrication of combined restorations and complex fixed prosthodontic restorations.	3	Krešimirova 40
V10	Acquiring the knowledge and skills necessary for the fabrication of combined restorations and complex fixed prosthodontic restorations.	3	Krešimirova 40
V11	Acquiring the knowledge and skills necessary for the fabrication of combined restorations and complex fixed prosthodontic restorations.	3	Krešimirova 40
V12	Acquiring the knowledge and skills necessary for the fabrication of combined restorations and complex	3	Krešimirova 40



	fixed prosthodontic restorations.		
V13	Acquiring the knowledge and skills necessary for the fabrication of combined restorations and complex fixed prosthodontic restorations.	3	Krešimirova 40
V14	Acquiring the knowledge and skills necessary for the fabrication of combined restorations and complex fixed prosthodontic restorations.	3	Krešimirova 40
V15	Acquiring the knowledge and skills necessary for the fabrication of combined restorations and complex fixed prosthodontic restorations.	3	Krešimirova 40
TOTAL TEACHING HOURS		45	

	Final Exam Schedule
1.	4.2.2026.
2.	18.2.2026.
3.	17.6.2026.
4.	15.7.2026.
5.	9.9.2026
6.	16.9.2026