

**Course: Preclinic fixed prosthodontics**

**Course Coordinator: Ivone Uhač, DMD, PhD, Full Professor**

**Department: Department of Prosthodontics**

**Study programme:** Integrated Undergraduate and Graduate University Study of Dental Medicine in English

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

**Academic year: 2022./2023.**

**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.):**

The Preclinical fixed prosthodontics course is a mandatory course at the 3rd year of the Integrated Undergraduate and Graduate University Study of Dental Medicine, and consists of 30 academic hours of lectures, 15 academic hours of seminars and workshops, and 60 academic hours of preclinical exercises. The course is held in the premises of the pre-clinical training room at Krešimirova 42.

Course instructor is Ivone Uhač, DMD, PhD, Full Professor and associates are Sunčana Simonić-Kocijan, DMD, PhD, Associate Professor and Petra Tariba Knežević, DMD, PhD, Assistant Professor.

The aim of this subject is to acquire basic knowledge and skills in preclinical fixed prosthodontics, technical, technological and laboratory procedures that are used in the making of a fixed prosthodontic restoration. The objective of the course is to train the student, theoretically and practically, for clinical work on the subject Fixed prosthodontics I.

The Preclinical Fixed Prosthetics course is conducted continuously during the 6th semester in the form of lectures, seminars and exercises - 105 academic hours (L30 + S15 + E60). During the seminar, students actively participate in presentations and discussions related to a particular theoretical unit. During preclinical exercises, the teacher demonstrates and supervises the students in performing practical tasks. Two mandatory colloquia will be held during the class, and a written test will be held at the end of the class. By completing all teaching activities and attending mandatory colloquiums and the final exam, the student acquires 6.5 ECTS points.

**Course content:**

Introduction to the course, definition, purpose and scope of the profession (acquaintance with the area of work of fixed prosthodontics, prosthodontics' office and laboratory of dental medicine), Clinic workplace, equipment and instruments in a prosthodontics' office. Crown classification, indications and contraindications. Tooth preparation basics in making of a total crown. Mistakes and complications of tooth preparation. Classification and features of impression materials in fixed prosthodontics. Impression materials, procedures and impression taking techniques. Materials and procedures used to show the preparation margin. Interjaw relationship records in making of a fixed prosthodontic restoration. Protection of a prepared tooth – provisional restoration. Cast post and core. Prefabricated post and core. Dental medicine laboratory, workplace of a dental technician, appliances and instruments. Materials used for study, work and control models. Articulators in fixed prosthodontics. Waxes in fixed prosthodontics. Making of wax models and casting system. Investment, materials and procedures. Alloys for fixed prosthodontic restorations. Casting, casted restoration features, cast processing, complications. Connecting the

same/different metals. Aesthetic part of the restoration and laboratory production – acrylic materials and production technology. Aesthetic part of the restoration and laboratory production – ceramic materials and production technology. Glass reinforced composites in fixed prosthodontics. Full ceramic systems and production technology. Adjusting and checking of the fixed prosthodontic restorations, Cements and methods of cementation of the fixed prosthodontic restorations, Repair and removal of the fixed prosthodontic restorations.

**Correlativity and correspondence:**

The Preclinical Fixed Prosthodontics course follows the Materials in Dental Medicine course, and it is necessary to take the Materials in Dental Medicine course first.

**Approach to learning and teaching in the subject:**

During the lectures, the student should follow all clinical and laboratory phases of making fixed prosthodontic restorations. At the seminars, concepts related to the production of fixed prosthodontic restorations should be gradually adopted. This will ultimately lead to the integration of theoretical knowledge and practical skills that will be acquired during preclinical practicals, and train the student to work on the clinical course Fixed Prosthodontics. During the practicals, students should learn basic clinical and laboratory techniques and methods related to the production of all types of fixed prosthodontic restorations.

**Attending classes**

Attendance at all forms of teaching is mandatory. A student may be excused for missing a total of 30% of classes. Classes are held at the prescribed time and it is not possible to enter after the teacher has entered. It is not allowed to bring food and drinks to the class and unnecessary entering/leaving the class. It is forbidden to use mobile phones during class as well as during tests. Absences from seminars and practicals must be made up in agreement with the group teacher.

**Seminar paper**

Seminar paper must be created using a computer (with spelling and grammar checked) and submitted first in electronic form. Only after an agreement with the assistant - group teacher will the paper be printed and/or presented publicly. Copies of other people's papers are not allowed, but the use of certain parts is allowed with proper citing the source.

**Academic integrity**

Respect for the principle of academic integrity is expected from both teachers and students in accordance with the Code of Ethics of the University of Rijeka ([http://www.uniri.hr/hr/propisi\\_i\\_dokumenti/eticki\\_kodeks\\_svri.htm](http://www.uniri.hr/hr/propisi_i_dokumenti/eticki_kodeks_svri.htm)).

**Contacting teachers**

Contact with teachers is made in the time provided for it (consultations). Students will receive all information related to the course in the introductory lecture and will be able to find it on the bulletin board and on the website of the Department of Dental Prosthetics.

**Assigned reading:**

Rosentiel S, Land F, Fujimoto J. Contemporary fixed prosthodontics, 5<sup>th</sup> edition. Elsevier, ST. Louis, Missouri, 2016.

**Optional/additional reading:**

Shillingburg HT et al. Fundamentals of fixed prosthodontics, 4th ed. Quintessence Pub. Co., 2012.

## **COURSE TEACHING PLAN:**

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

- 1. Introduction to the course, definition, purpose and scope of the profession**  
Expected learning outcomes:  
Analyze the objectives of the course Preclinical fixed prosthodontics.  
Describe the scope of the profession of dental prosthodontics.
- 2. Clinical workplace, equipment and instruments in a prosthodontics' office**  
Expected learning outcomes:  
Differentiate and describe equipment and instruments in a prosthodontics' office.  
Describe the application of a particular device and instrument.
- 3. Crown classification, indications and contraindications**  
Expected learning outcomes:  
Differentiate and describe types of crowns.  
Analyze the indications and contraindications in planning the making of crowns.
- 4. Tooth preparation basics in making of a total crown. 1.**  
Expected learning outcomes: :  
Describe basic principles of tooth preparation for total crowns.  
Define shapes and sizes of burs, select a proper burr for each tooth surface and use them.  
Describe the procedure of proper tooth preparation.  
Describe the tooth preparation in the tooth neck area.
- 5. Tooth preparation basics in making of a total crown. 2.**  
Expected learning outcomes:  
Describe the use of handpieces.  
Describe the selection of adequate burs for tooth preparation.  
Differentiate the stages of tooth preparation and the selection of burs for a particular tooth surface.
- 6. Mistakes during tooth preparation**  
Expected learning outcomes:  
Describe the consequences of incorrect tooth preparation techniques.  
Describe the consequences of using inappropriate preparation instruments.
- 7. Complications of tooth preparation**  
Expected learning outcomes:  
Describe the early and late complications of tooth preparation.  
Analyze the methods of managing complications.
- 8. Type and classification of impression materials**  
Expected learning outcomes:  
Compare and clearly define features of impression materials.  
Explain the application of a certain impression material in a certain clinical situation.
- 9. Impression procedures and impression techniques in fixed prosthodontics.**  
Expected learning outcomes:  
Describe impression techniques.  
Adopt the basic principles of preparing impression material.  
Analyze the method for impression tray selection.  
Describe the reasons for selection of a certain impression technique.
- 10. Materials and procedures used to show the preparation margin**  
Expected learning outcomes:

Analyze means and materials for showing the preparation margin.  
Explain and describe the mechanical-chemical technique of showing the preparation margin.

**11. Interjaw relationship records in making of a fixed prosthodontic restoration.**

Expected learning outcomes:

Acquire knowledge about the physiological relationships of the upper and lower jaw.  
Distinguish in which clinical procedures the appropriate technique for determining jaw relationships is used.

Describe certain techniques for determining interjaw relationships in fixed prosthetics.

**12. Protection of a prepared tooth – provisional restoration.**

Expected learning outcomes:

Differentiate procedures and materials for chemical protection of prepared teeth.

Describe the techniques of direct fabrication of provisional restorations.

Get to know laboratory techniques for making provisional restorations.

**13. Cast post and core.**

Expected learning outcomes:

Analyze the indications and contraindications for making post and core.

Describe tooth preparation techniques for cast post and core.

Analyze impression techniques for cast post and core.

Explain the selection of cement.

**14. Prefabricated post and core**

Expected learning outcomes:

Differentiate types of prefabricated post and cores with their advantages and disadvantages.

Describe tooth preparation means and techniques for prefabricated post and core.

Explain the selection of luting agent.

**15. Dental medicine laboratory, workplace of a dental technician, appliances and instruments**

Expected learning outcomes:

Get to know the laboratory of dental medicine.

Differentiate the appliances in the laboratory of dental medicine.

Describe the use of particular appliances and instruments.

**16. Materials used for study, work and control models**

Expected learning outcomes:

Compare the types of models.

Describe the purpose of each type of model.

Describe the making of study, working and control models.

Get to know the materials for making models.

Analyze the properties and application of plaster in model making.

**17. Articulators in fixed prosthodontics.**

Expected learning outcomes:

Compare the types of articulators.

Describe the face bow and its use.

Describe the method of transferring the model into the articulator.

Analyze the individualization of semiadjustable articulators.

**18. Waxes in fixed prosthodontics. Making of wax models and casting system.**

Expected learning outcomes:

Differentiate types and features of waxes and their usage in fixed prosthodontics.

Describe rules of a wax model production.

Describe rules of making a casting system.

Describe the selection and use of prefabricated wax patterns.

**19. Investment, materials and procedures.**

Expected learning outcomes:

Define rules for wax model investment.

Describe the properties and application of investment materials.

**20. Alloys for fixed prosthodontic restorations.**

Expected learning outcomes:

Describe the properties of noble and non-noble alloys in the making of fixed restorations.

Compare types of alloys in fixed prosthodontics.

Analyze the use of a particular alloy in fixed prosthodontics.

**21. Casting, casted restoration features, cast processing, complications.**

Expected learning outcomes:

Explain the thermal preparation of the object for casting.

Describe the required properties of the cast restoration.

Analyze the complications that may arise during casting.

**22. Connecting the same/different metals.**

Expected learning outcomes:

Compare techniques and materials for connecting metals.

Describe the laboratory procedures of soldering and welding.

Analyze the complications that can arise during connecting metals.

**23. Aesthetic part of the restoration and laboratory production – acrylic materials and production technology.**

Expected learning outcomes:

Define types, features and usage of acrylic materials in fixed prosthodontics.

Describe laboratory techniques of making acrylic part of the fixed prosthodontic restoration.

**24. Aesthetic part of the restoration and laboratory production – ceramic materials and production technology.**

Expected learning outcomes:

Define types, features and usage of ceramic materials in fixed prosthodontics.

Describe laboratory techniques of making ceramic part of the fixed prosthodontic restoration.

**25. Glass reinforced composites in fixed prosthodontics.**

Expected learning outcomes:

Define features and usage of glass reinforced composites in fixed prosthodontics.

Describe laboratory techniques of making glass reinforced composites restoration.

**26. Full ceramic systems and production technology.**

Expected learning outcomes:

Differentiate full ceramic systems.

Define characteristics and usage for each ceramic system.

Describe the laboratory technique for each ceramic system.

**27. Adjusting and checking fixed prosthodontic restorations.**

Expected learning outcomes:

Analyze the appearance and properties of the restoration.

Explain the relationship with the surrounding oral structures.

Analyze possible irregularities.

Describe the techniques of adjustment of the restoration.

**28. Cements in fixed prosthodontics.**

Expected learning outcomes:

Differentiate between luting agents for fixed prosthodontic restorations.  
Compare properties and analyze the selection of luting agents in a particular clinical case.

**29. Methods of cementation of the fixed prosthodontic restoration**

Expected learning outcomes:

Describe the preparation of a particular cement  
Analyze cementation techniques

**30. Repair and removal of the fixed prosthodontic restoration**

Expected learning outcomes:

Analyze the possibility of complications while using the restoration  
Describe repair techniques in the oral cavity  
Get to know the techniques used in the removal of fixed prosthetic restorations

**The list of seminars with descriptions:**

**1. Crowns**

Expected learning outcomes:

Describe types of crowns.  
Analyze clinical indications and contraindications for use of crowns

**2. Workplace, equipment and instruments**

Expected learning outcomes:

Describe equipment and instruments in a prosthodontics' office.  
Describe the application of a particular device and instrument.

**3. Preparation instruments and burs - practical application (plaster model, acrylic teeth, natural teeth)**

Expected learning outcomes:

Describe preparation instruments and burs and explain their use  
Explain the way of using handpieces  
Compare work on a plaster model, acrylic and natural teeth

**4. Tooth preparation**

Expected learning outcomes:

Argumentate the rules of tooth preparation  
Explain the selection of tooth preparation method  
Explain the choice of the type of preparation on the neck of the tooth

**5. Ergonomics in fixed prosthodontics**

Expected learning outcomes:

Analyze the specifics of clinical work in fixed prosthodontics  
Compare the work in fixed prosthodontics in relation to other areas of dental medicine

**6. Complications of tooth preparation**

Expected learning outcomes:

Define complications during tooth preparation and procedures to prevent them

**7. Impression techniques**

Expected learning outcomes:

Describe and interpret the choice of impression materials and techniques  
Explain the choice of impression technique, possible complications and procedures for preventing them

**8. Models in fixed prosthodontics**

Expected learning outcomes:

Describe and explain the making and use of models in fixed prosthetics

**9. Articulators in fixed prosthodontics**

Expected learning outcomes:

Describe the use of articulator in fixed prosthodontics

**10. Making of models, investment, casting**

Expected learning outcomes:

Describe and explain the materials and procedures for making the wax restoration object and casting system

Analyze the casting process

**11. Alloys for fixed prosthodontic restorations**

Expected learning outcomes:

Describe and compare the properties of alloys and their selection in making of fixed prosthodontic restorations

**12. Veneered acrylic and metal-ceramic crown production technology**

Expected learning outcomes:

Describe and analyze the choice of materials and the technology of manufacturing metal restorations with an aesthetic veneer

**13. Full ceramic crown production technology**

Expected learning outcomes:

Describe and analyze the choice of materials and the manufacturing technology of full ceramic restorations

**14. Post and core**

Expected learning outcomes:

Describe the selection, tooth preparation, impression technique and cementation techniques for posts and cores

**15. Cementation of fixed prosthodontic restorations**

Expected learning outcomes:

Describe and analyze the properties, selection and application of cements

**The list of practicals with descriptions:**

Practicals within the Preclinical fixed prosthodontics course are performed in the preclinical exercise room. Students acquire teeth preparation skills on simulators. Before accessing the exercises, students are required to acquire theoretical knowledge that they will perform practically. During the exercises, the student will independently, under the supervision of the teacher, carry out basic tooth preparation and shaping for a complete crown. Tangential, chamfer and shoulder preparation at the neck of the tooth will be performed, on molars, premolars, canines and incisors. Students will take impressions of the prepared teeth and make provisional restorations. They will prepare teeth for post and core, use direct and indirect impression techniques. They will make a wax model of the restoration, and they will be demonstrated the laboratory techniques of investment, casting, soldering and application of the aesthetic material of the restoration.

**Students' obligations:**

Students are obliged to regularly attend and actively participate in all forms of classes with the practical performance of all prescribed tasks.

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

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 exam, students will be able to collect a maximum of 100 grade points (a maximum of 70 grade points during classes and a maximum of 30 grade points during the final exam). During classes, a student can collect a maximum of 70 grade points (table 1); 40 on partial tests, 20 during exercises and 10 on seminar paper. Students who collect less than 40 grade points during the semester are graded F (fail).

The final exam is written and covers the material determined by the course plan and program. A maximum of 30 evaluation points can be collected on the final exam. It is necessary to solve at least 50% of the final exam to obtain a positive final grade. The final grade of the exam is formed according to the total activity of the student, i.e. from the grade points collected during the semester and the grade points on the final exam.

	VALUATION	Max number of grade points
<b>Partial tests</b>	I. Colloquy - 30 questions	15
	II. Colloquy - 30 questions	15
	<b>Total</b>	<b>30</b>
<b>Practicals</b>	Continuous verification of theoretical and practical knowledge. The average grade is taken in the following way: grade D(2)=12 points grade C(3)=18 points grade B(4)=24 points grade A(5)=30 points	30
	<b>Total</b>	<b>30</b>
<b>Seminar paper</b>	Written form and oral presentation	<b>10</b>
	<b>TOTAL</b>	<b>70</b>

Table 1: Evaluation of student obligations for the Preclinical fixed prosthodontics course

### Evaluation of mid-term exams

The colloquium is held in written form.

The colloquium is evaluated with 15 evaluation points, 30 questions = 15 points

Each correct answer is multiplied by a coefficient of 0.5 and the total number of points on the colloquium is obtained (15/30).

A minimum of 50% correct answers is required to pass.

Students who do not successfully pass one of the colloquia (less than 50% of correct answers) will be given one remedial colloquium.

In order to take the exam, the student must successfully pass both intermediate exams.

### Evaluation of the final exam

The final exam is held in written form.

The final exam can be taken by a student who has collected a minimum of 40 grade points during classes.

In order to take the exam, the student must successfully pass both intermediate exams.

The exam is evaluated with 30 evaluation points, 60 questions = 30 points.

Each answer is multiplied by a coefficient of 0.5 and the total number of points on the exam is obtained (30/60).

A minimum of 50% correct answers is required to pass.

**Formation of the final grade:**

Points earned on the written part of the final exam are added to the grade points earned during the semester. Based on the total sum of points, students are evaluated as follows:

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

**Other important information regarding to the course:**

**Retaking the course:**

**COURSE SCHEDULE (for academic year)**

Date	Lectures (time and place)	Seminars (time and place)	Practicals (time and place)	Instructor
20.03.2023.	P1,P2 8.00-9.30 Krešimirova 42.			Prof.dr.sc. Ivone Uhač, dr.med.dent.
21.03.2023.	P3, P4, P5, P6 8.00-11.00 Krešimirova 42.			Prof.dr.sc. Ivone Uhač, dr.med.dent.
21.03.2023.	P7, P8 11.00-12.30 Krešimirova 42. online			Prof.dr.sc. Ivone Uhač, dr.med.dent.
22.03.2023.	P9, P10 16.00-17.30 Krešimirova 42. online			Prof.dr.sc. Ivone Uhač, dr.med.dent.
28.03.2023.	P11, P12 11.00-12.30 Krešimirova 42. online			Prof.dr.sc. Ivone Uhač, dr.med.dent.
29.03.2023.			V1 8.00-11.00 Krešimirova 42.	Doc.dr.sc. Petra Tariba Knežević, dr.med.dent.
29.03.2023.	P13, P14 16.00-17.30 Krešimirova 42. online			Prof.dr.sc. Ivone Uhač, dr.med.dent.
03.04.2023.			V2 8.00-11.00 Krešimirova 42.	Doc.dr.sc. Petra Tariba Knežević, dr.med.dent.

04.04.2023.	P15, P16 11.00-12.30 Krešimirova 42. online			Prof.dr.sc. Ivone Uhač, dr.med.dent.  Izv.prof.dr.sc. Sunčana Simonić-Kocijan, dr.med.dent.
05.04.2023.			V3 8.00-11.00 Krešimirova 42.	Doc.dr.sc. Petra Tariba Knežević, dr.med.dent.
05.04.2023.	P17, P18 16.00-17.30 Krešimirova 42. online			Izv.prof.dr.sc. Sunčana Simonić-Kocijan, dr.med.dent.
11.04.2023.	P19, P20 11.00-12.30 Krešimirova 42. online			Izv.prof.dr.sc. Sunčana Simonić-Kocijan, dr.med.dent.
12.04.2023.			V4 8.00-11.00 Krešimirova 42.	Doc.dr.sc. Petra Tariba Knežević, dr.med.dent.
12.04.2023.	P21, P22 16.00-17.30 Krešimirova 42. online			Izv.prof.dr.sc. Sunčana Simonić-Kocijan, dr.med.dent.
18.04.2023.	P23, P24 11.00-12.30 Krešimirova 42. online			Izv.prof.dr.sc. Sunčana Simonić-Kocijan, dr.med.dent.
19.04.2023.			V5 8.00-11.00 Krešimirova 42.	Doc.dr.sc. Petra Tariba Knežević, dr.med.dent.
19.04.2023.	P25, P26 16.00-17.30 Krešimirova 42. online			Izv.prof.dr.sc. Sunčana Simonić-Kocijan, dr.med.dent.
24.04.2023.			V6 8.00-11.00 Krešimirova 42	Doc.dr.sc. Petra Tariba Knežević, dr.med.dent.
25.04.2023.	P27, P28 11.00-12.30 Krešimirova 42. online			Izv.prof.dr.sc. Sunčana Simonić-Kocijan, dr.med.dent.  Prof.dr.sc. Ivone Uhač, dr.med.dent.
26.04.2023.			V7 8.00-11.00 Krešimirova 42	Doc.dr.sc. Petra Tariba Knežević, dr.med.dent.
26.04.2023.	P29, P30 16.00-17.30 Krešimirova 42. online			Prof.dr.sc. Ivone Uhač, dr.med.dent.
02.05.2023.		S1, S2 11.00-12.30 Krešimirova 42. online		Prof.dr.sc. Ivone Uhač, dr.med.dent.
03.05.2023.			V8 8.00-11.00	Doc.dr.sc. Petra Tariba Knežević, dr.med.dent.

			Krešimirova 42	
03.05.2023.		S3, S4 16.00-17.30 Krešimirova 42. online		Prof.dr.sc. Ivone Uhač, dr.med.dent.
09.05.2023.		S5, S6 11.00-12.30 Krešimirova 42. online		Prof.dr.sc. Ivone Uhač, dr.med.dent.
10.05.2023.			V9 8.00-11.00 Krešimirova 42	Doc.dr.sc. Petra Tariba Knežević, dr.med.dent.
10.05.2023.		S7, S8 16.00-17.30 Krešimirova 42. online		Prof.dr.sc. Ivone Uhač, dr.med.dent.  Izv.prof.dr.sc. Sunčana Simonić- Kocijan, dr.med.dent.
15.05.2023.			V10 8.00-11.00 Krešimirova 42	Doc.dr.sc. Petra Tariba Knežević, dr.med.dent.
16.05.2023.		S9, S10 11.00-12.30 Krešimirova 42. online		Izv.prof.dr.sc. Sunčana Simonić- Kocijan, dr.med.dent.
17.05.2023.			V11 8.00-11.00 Krešimirova 42	Doc.dr.sc. Petra Tariba Knežević, dr.med.dent.
17.05.2023.		S11, S12 16.00-17.30 Krešimirova 42. online		Izv.prof.dr.sc. Sunčana Simonić- Kocijan, dr.med.dent.
23.05.2023.		S13, S14 11.00-12.30 Krešimirova 42.online		Izv.prof.dr.sc. Sunčana Simonić- Kocijan, dr.med.dent.
24.05.2023.			V12 8.00-11.00 Krešimirova 42	Doc.dr.sc. Petra Tariba Knežević, dr.med.dent.
24.05.2023.		S15 16.00-16.45 Krešimirova 42. online		Izv.prof.dr.sc. Sunčana Simonić- Kocijan, dr.med.dent.
29.05.2023.			V13 8.00-11.00 Krešimirova 42	Doc.dr.sc. Petra Tariba Knežević, dr.med.dent.
31.05.2023.			V14 8.00-11.00 Krešimirova 42	Doc.dr.sc. Petra Tariba Knežević, dr.med.dent.
07.06.2023.			V15 8.00-11.00 Krešimirova 42	Doc.dr.sc. Petra Tariba Knežević, dr.med.dent.

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

	<b>LECTURES (Topics)</b>	<b>Teaching hours</b>	<b>Location/Lecture room</b>
L1	Introduction to the course, definition, purpose and scope of the profession	1	Krešimirova 42
L2	Clinical workplace, equipment and instruments in a prosthodontics' office	1	Krešimirova 42
L3	Crown classification, indications and contraindications	1	Krešimirova 42
L4	Tooth preparation basics in making of a total crown 1.	1	Krešimirova 42
L5	Tooth preparation basics in making of a total crown 2.	1	Krešimirova 42
L6	Mistakes during tooth preparation	1	Krešimirova 42
L7	Complications of tooth preparation	1	online
L8	Type and classification of impression materials	1	online
L9	Impression procedures and impression techniques in fixed prosthodontics.	1	online
L10	Materials and procedures used to show the preparation margin	1	online
L11	Interjaw relationship records in making of a fixed prosthodontic restoration	1	online
L12	Protection of a prepared tooth – provisional restoration	1	online
L13	Cast post and core	1	online
L14	Prefabricated post and core	1	online
L15	Dental medicine laboratory, workplace of a dental technician, appliances and instruments	1	online
L16	Materials used for study, work and control models	1	online
L17	Articulators in fixed prosthodontics	1	online
L18	Waxes in fixed prosthodontics. Making of wax models and casting system	1	online
L19	Investment, materials and procedures	1	online
L20	Alloys for fixed prosthodontic restorations	1	online
L21	Casting, casted restoration features, cast processing, complications	1	online
L22	Connecting the same/different metals	1	online
L23	Aesthetic part of the restoration and laboratory production – acrilate materials and production technology	1	online

L24	Aesthetic part of the restoration and laboratory production – ceramic materials and production technology	1	online
L25	Glass reinforced composites in fixed prosthodontics	1	online
L26	Full ceramic systems and production technology	1	online
L27	Adjusting and checking fixed prosthodontic restorations	1	online
L28	Cements in fixed prosthodontics	1	online
L29	Methods of cementation of the fixed prosthodontic restoration	1	online
L30	Repair and removal of the fixed prosthodontic restoration	1	online
<b>TOTAL TEACHING HOURS</b>		<b>30</b>	

	<b>SEMINARS (Topics)</b>	<b>Teaching hours</b>	<b>Location/Lecture room</b>
S1	Crowns	1	online
S2	Workplace, equipment and instruments	1	online
S3	Preparation instruments and burrs - practical application (plaster model, acrylic teeth, natural teeth)	1	online
S4	Tooth preparation	1	online
S5	Ergonomics in fixed prosthodontics	1	online
S6	Complications of tooth preparation	1	online
S7	Impression techniques	1	online
S8	Models in fixed prosthodontics	1	online
S9	Articulators in fixed prosthodontics	1	online
S10	Making of models, investment, casting	1	online
S11	Alloys for fixed prosthodontic restorations	1	online
S12	Veneered acrylic and metal-ceramic crown production technology	1	online
S13	Full ceramic crown production technology	1	online
S14	Post and core	1	online
S15	Cementation of fixed prosthodontic restorations	1	online
<b>TOTAL TEACHING HOURS</b>		<b>15</b>	

	<b>PRACTICALS (Topics)</b>	<b>Teaching hours</b>	<b>Location/Lecture room</b>
P1	Preclinical workplace, equipment and instruments	4	Krešimirova 42
P2	Demonstration of working on a simulator Practical work on the simulator - work ergonomics	4	Krešimirova 42

P3	Visit to the laboratory of dental medicine, workplace, appliances and instruments for work	4	Krešimirova 42
P4	Preparation of the upper molar	4	Krešimirova 42
P5	Preparation of the lower molar	4	Krešimirova 42
P6	Preparation of the upper premolar	4	Krešimirova 42
P7	Preparation of the upper canine	4	Krešimirova 42
P8	Preparation of the lower canine	4	Krešimirova 42
P9	Preparation of the upper incisor	4	Krešimirova 42
P10	Preparation of the lower incisor	4	Krešimirova 42
P11	Impression techniques Making of provisional restoration	4	Krešimirova 42
P12	Tooth preparation for post and core Modelling of the post and core	4	Krešimirova 42
P13	Making of study and work models Placing the model into the articulator	4	Krešimirova 42
P14	Demonstration of making a casting system, investment and casting	4	Krešimirova 42
P15	Demonstration of making the aesthetic part of the restoration	4	Krešimirova 42
<b>TOTAL TEACHING HOURS</b>		<b>60</b>	

	<b>FINAL EXAM DATES</b>
1.	14.6.
2.	12.7.
3.	13.9.
4.	
5.	