

Course name

Fixed prosthodontics I

Department/chair

Department of Fixed prosthodontics

Address of the department/chair

Gunduliceva 5

Mandatory or elective course

Mandatory course

Year of study

4

Semester

Winter and summer semester

ECTS

9 ECTS

Course leader

Associate Professor Andreja Carek

Other teachers on the course

Amir Ćatić,
Marko Jakovac
Lana Bergman
Josip Kranjčić
Slađana Milardović
Joško Viskiće

Number of hours

	Winter semester	Summer semester	Total (winter+summer)
Lectures	15	-	15
Seminars	-	-	-
Practicals	45	45	90
Total	60	45	105

1 hour = 45 minutes

Description and aim of the course

Classes for students of the Integrated Undergraduate and Graduate University Study of Dental Medicine in the subject of Fixed prosthetics I are organised in the form of lectures, seminars and clinical exercises. Clinical classes are organised in small groups, which makes it easier for students to master the knowledge and skills necessary for independent work. Special attention is given to pre-prosthetic preparation of the patient, analysis of prosthetic therapy, indications and contraindications of crowns, principle of tooth preparation, indications, contraindications, types and technologies of post and core, impression procedures and materials, intermaxillary relations, occlusal vertical dimension, types of cements and cementing techniques, temporary crowns, monolithic and layered restorations, CAD/CAM systems, etc.

The content of teaching is constantly supplemented with new knowledge in accordance with the development of new technologies and materials. Students are gradually introduced to working on patients under the constant supervision.

This program encourages students' ability to analyse the current situation and by choosing the best possible therapy, based on an interdisciplinary approach for each individual clinical case, gaining a basic orientation in prophylaxis and prosthetic therapy of the stomatognathic system, which will preserve or restore oral health of patients.

Course enrolment requirements

Passed exam in Preclinical and laboratory fixed prosthetics is a condition for enrolment and taking the exam in Fixed prosthodontics I.

Learning outcomes at the level of the study program to which the subject contributes:

- Knowledge, skills and competencies related to professionalism, ethics and law
- Knowledge, skills and competencies related to communication and social skills
- Knowledge, skills and competencies related to basic knowledge and the ability to gather information from the literature
- Knowledge, skills and competencies related to the collection of clinical information
- Knowledge, skills and competencies related to diagnosis and therapy planning
- Knowledge, skills and competencies related to the therapy, establishment and maintenance of oral health
- Knowledge, skills and competencies related to preventive measures and health promotion

Course learning outcomes

Knowledge
Describe in which cases certain types of prosthetic restorations are used (superstructure, crowns; metal-ceramic, full ceramic, veneers).
List the procedures for cast and prefabricated post and core (direct and indirect technique).
Describe the dental impression techniques (two-step, one-step impressions).
List the complications that can occur during and after fixed prosthetic therapy.
Skills
Predicting successful prosthetic rehabilitation related to the collection of clinical information.
Dental crown prep for traditional and one-day procedures. Perform the procedure of temporary or permanent crown cementation.
Determine tooth color.
Competencies
Descriptive analysis of dental X-ray images.
Diagnostic and treatment planning in fixed prosthodontics therapy.

Course content

Lectures

	Topics – winter semester	Hours
	Dental crowns – monolithic and multilayers; introduction, indications and contraindications	1
	Endoprostodontics; post and cores - indications, contraindications, types and procedures	1
	Tooth preparation – fundamental principles, rotary instruments	1
	Dental impressions – procedures and materials	1
	The maxillomandibular relationships (MMR), face bow transfer and mounting of dental models in articulator; Dental models – classifications and characteristics	1
	Dental crowns in combination with removable partial dental prostheses	1
	Temporary crowns	1
	Cementation of fixed dental prostheses	1
	Metal ceramic crowns	1
	Full ceramic crowns	1
	Implant Supported Crowns I	1
	Implant Supported Crowns II	1
	Maintenance, complications and crown removal	1
	Digital Dentistry in Prosthodontics-limitations and future of current concepts	1
	Final lecture	1
	Topics – summer semester	Hours
	-	-
	-	-
	-	-
	-	-
	-	-

	-	-
	-	-
	-	-
	-	-
	-	-
	-	-
	-	-
	-	-
	-	-
	-	-

1 hour = 45 minutes

Obligations that students have on the course

Students are required to come to class and fulfil entrusted tasks.

Description of the method of evaluation of students work on the course

During the course, a test of knowledge is performed in each methodological unit.

Exam

Upon completion of classes and completion of all obligations prescribed by the rules on teaching this subject, the student takes the exam. The exam is taken after the VIII semester. It consists of a written knowledge test.

Exam dates

	November	December	January	February	April	May	June	July	August	September
Dates							19.06.	03.07		05.09. 19.09.

Literature (mandatory)

<ul style="list-style-type: none"><input type="checkbox"/> Shillingburg TH, Hobo S, Whitsett L, Jacobi R. Fundamentals of fixed prosthodontics. 4rd edition. Quintessence Publishing Co, 2012.(Chapter 6, 9, 10, 15, 17, 21, 23, 24, 28)<input type="checkbox"/> Rosentiel S, Land F, Fujimoto J. Contemporary fixed prosthodontics. 5th ed. Mosby inc. Publishing, 2015. (Chapter 3, 7, 9, 11, 12, 13, 14, 19, 24, 25, 28, 29)<input type="checkbox"/> Misch's Contemporary Implant Dentistry 4th Edition - January 25, 2020 (Part IV)

Literature (supplementary)

<p>Mehulić K i sur. Dentalni materijali. Zagreb: Medicinska naklada; 2017.</p> <ul style="list-style-type: none">• Mehulić K i sur. Dentalna medicina – vodič za praktičare. Zagreb: Medicinska naklada; 2020. <ul style="list-style-type: none"><input type="checkbox"/> Jakovac M, Kranjčić J. Pretklinička i laboratorijska fiksna protetika. Zagreb: Stega tisak; 2020.• Živko-Babić J, Jerolimov V. Metali u stomatološkoj protetici. Odabrana poglavlja. Zagreb : Školska knjiga, 2005.
