

Subject Name

Preclinical and Laboratory Removable Prosthodontics

Department where subject is taught

Department of Removable Prosthodontics

Address of the department/chair headquarters

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

Subject Status

Compulsory subject

Year of study in which the subject is taught

3rd year

Semester in which the subject is taught

Winter and Summer semester

Number of ECTS

8 ECTS

Subject Holder

Assoc. Prof. Davor Illeš, PhD, dilles@sfzg.hr

Other teachers participating in the course delivery

Prof. Iva Alajbeg, PhD, ialajbeg@sfzg.hr

Prof. Tomislav Badel, PhD, badel@sfzg.hr

Prof. Robert Ćelić, PhD, celic@sfzg.hr

Prof. Sonja Kraljević Šimunković, PhD, kraljevic@sfzg.hr

Prof. Nikša Dulčić, PhD, dulcic@sfzg.hr

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Assoc. Prof. Samir Ćimić, PhD, scimic@sfzg.hr

Assoc. Prof. Ivica Pelivan, PhD, pelivan@sfzg.hr

Assoc. Prof. Sanja Peršić Kiršić, PhD, persic@sfzg.hr

Assoc. Prof. Nikola Petričević, PhD, petricevic@sfzg.hr

Assoc. Prof. Davor Illeš, PhD, dilles@sfzg.hr

Assist. Prof. Maja Žagar, PhD, mpavic@sfzg.hr

Ines Kovačić, PhD, ikovac@sfzg.hr

Ema Vrbanović, PhD, evrbanovic@sfzg.hr

Marko Zlendić, DMD, marko.zlentic@gmail.com

Number of teaching hours

	Winter Semester	Summer Semester	Total (both semesters)
Lectures	15	15	30
Seminars	-	-	-
Practicals	45	30	75
Total	60	45	105

1 hour = 45 minutes

Type of practicals in the subject

Preclinical practicals

Aims and purpose of the subject

The course "Preclinical and Laboratory Removable Prosthodontics" teaches students basic biomedical and technological knowledge and skills that form the basis of clinical and laboratory work in conventional therapy for partially or completely edentulous jaws with associated soft and hard oral tissues.

During the course, students acquire and integrate knowledge and skills of clinical and laboratory procedures for the fabrication of complete and partial dentures, working on dental phantoms and models.

This provides them with the necessary knowledge and practical skills as preparation for performing clinical procedures on patients.

By acquiring the aforementioned knowledge and skills within this course, students understand the complexity of prosthetic therapy, which simultaneously depends on the success of both clinical and laboratory procedures.

Prerequisites for enrollment in the subject

There are no prerequisites for enrollment in the subject for students of the 3rd year of the integrated undergraduate and graduate study of Dental Medicine.

All students must enroll in the subject.

Learning outcomes at the level of the integrated undergraduate and graduate study program of Dental Medicine 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 literature
- ☒ Knowledge, skills and competencies related to collecting clinical information
- ☒ Knowledge, skills and competencies related to diagnosis and treatment planning
- ☒ Knowledge, skills and competencies related to therapy, establishment and maintenance of oral health
- ☒ Knowledge, skills and competencies related to preventive measures and health promotion

Expected learning outcomes

Knowledge

- Define the clinical and laboratory phases of complete denture fabrication
- Define the clinical and laboratory phases of partial denture fabrication
- Describe the use and properties of materials in removable prosthodontics
- Explain the biomechanics of partial dentures

Skills

- Fabricate anatomical and functional impressions
- Fabricate gypsum models
- Use laboratory equipment
- Mount maxillary and mandibular models in an articulator using a facebow

Competencies

- Evaluate the quality and precision of the gypsum model
- Plan therapy for completely and partially edentulous patients

Subject Content

Here is the English translation of the provided document in plain text:

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- Define the clinical and laboratory phases of partial denture fabrication
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- Fabricate anatomical and functional impressions
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- Use laboratory equipment
- Mount maxillary and mandibular models in an articulator using a facebow

Competencies

- Evaluate the quality and precision of the gypsum model
- Plan therapy for completely and partially edentulous patients

Subject Content**Lectures**

	Lecture topics in the winter semester	Number of teaching hours
1.	Partial edentulism and removable partial dentures (RPD)	1
2.	Partial dentures - types(divisions), material and components - overview	1
3.	Classifications of edentulism and their usage in practice	1
4.	Major connectors	1
5.	Stabilisation	1
6.	Retention	1
7.	Treatment planning - alternatives and considerations	1
8.	Using articulators and dental surveyors in treatment planning	1
9.	Impressions and models for partial dentures	1
10.	Laboratory procedures for producing a metal skeleton of partial denture	1
11.	Retentive elements for partial dentures	1
12.	Interocclusal records and teeth selection	1
13.	Flasking, denture finishing and delivery	1
14.	Virtual in RPD design	1
15.	Final analysis of RPD-s	1
	Lecture topics in the summer semester	Number of teaching hours
1.	Introduction to removable prosthodontics	1
2.	Loss of teeth - edentulism	1
3.	First anatomic impression	1

4.	Individual tray	1
5.	Functional impression	1
6.	Articulators	1
7.	Occlusal rims	1
8.	Interocclusal records	1
9.	Anterior teeth setup	1
10.	Posterior teeth setup	1
11.	Complete denture occlusion	1
12.	Flasking	1
13.	Denture finishing and delivery	1
14.	Virtual removable dentistry	1
15.	Final analysis of complete dentures	1

1 sat = 45 minuta

Vježbe

	Practical topics in the winter semester	Number of teaching hours
1.	Removable partial dentures - basics	3
2.	Impression trays	3
3.	Classifications of edentulism and their usage in practice	3
4.	Major connectors	3
5.	Stabilisation	3
6.	Retention	3
7.	Treatment planning - alternatives and considerations	3
8.	Using articulators and dental surveyors in treatment planning	3
9.	Impressions and models for partial dentures	3
10.	Laboratory procedures for producing a metal skeleton of partial denture	3
11.	Retentive elements for partial dentures	3
12.	Interocclusal records and teeth selection	3
13.	Flasking, denture finishing and delivery	3
14.	Virtual in RPD design	3
15.	Final analysis of RPD-s	3
	Practical topics in the summer semester	Number of teaching hours

1.	Introduction to Removable Prosthodontics	2
2.	Foundation of Complete Denture	2
3.	First (Anatomic) Impression	2
4.	Individual (Functional) Tray	2
5.	Functional Impression and Master Model	2
6.	Articulators	2
7.	Occlusal Rims	2
8.	Interocclusal Records & Articulation	2
9.	Anterior Teeth - Choosing & Setup	2
10.	Posterior Teeth - Choosing & Setup	2
11.	Complete Denture Occlusion	2
12.	Contouring of Gingiva & Flasking	2
13.	Denture Finishing and Delivery	2
14.	Virtual removable dentistry	2
15.	Review	2

1 hour = 45 minutes

Student Obligations

Students are required to attend classes and complete assigned tasks.

Monitoring student work

Student work is monitored through regular class attendance, full completion of practical work, and an oral exam.

Method of taking the exam

After the second semester of practical and seminar classes, an written exam is taken.

Datum(i) održavanja ispita

	Extraordinary exam periods			Regular exam period WINTER	Extraordinary exam periods		Regular exam period SUMMER		Regular exam period AUTUMN	
							June	July	August	September
Datum(i)							9.; 16.	7.	25.	8.; 15.

Required literature

- Zarb GA, Bolender CL, Eckert SE, Fenton AH, Jacob RF, Mericske-Stern R. Prosthodontic Treatment for Edentulous Patients: Complete Dentures and Implant- supported Prostheses. London, New York: CV Mosby, 2003.
- Carr AB, McGivney GP, Brown DT. McCracken's Removable Partial Prosthodontics 11th ed., Elsevier Mosby, 2006.

Supplementary literature

- Morrow RM, Rudd KD, Rhoads JE. Dental laboratory procedures. Complete dentures. Volume one. Mosby, 1986.
- Rudd KD, Morrow RM, Rhoads JE. Dental laboratory procedures. Removable partial dentures. Volume three. Mosby, 1986.
- Hohmann A, Hielscher W. Lehrbuch der Zahntechnik. Band II. Quintessenz Verlag, Berlin, Berlin.
- Sowter JB. Removable Prosthodontic Techniques. University of North Carolina, 1986.
- Živko-Babić J, Jerolimov V. Metali u stomatološkoj protetici. Odabrana poglavlja Zagreb: Školska knjiga, 2005.