



Sveučilište u Rijeci  
University of Rijeka



Sveučilište u Rijeci • Fakultet dentalne medicine  
University of Rijeka • Faculty of Dental Medicine

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**University of Rijeka**  
**FACULTY OF DENTAL MEDICINE**

**Course:** Dental Implantology

**Leader:** Prof. Zoran Kovač, DMD, PhD

**Department:** Department of Oral Surgery

**Study:** University Integrated Undergraduate and Graduate Study of Dental Medicine

**Study Year:** 5<sup>th</sup> year

**Academic Year:** 2025/2026

## **SYLLABUS**

**Information about the course (brief description of the course, general instructions, where and in what form classes are organized, necessary supplies, instructions on attendance and preparation for classes, student obligations, etc.):**

The course **Dental Implantology** is a compulsory course in the fifth year (10<sup>th</sup> semester) of the University Integrated Undergraduate and Graduate Study of Dental Medicine and consists of 15 hours of lectures (**1.0 ECTS**). The course is taught on the premises of the Faculty of Dental Medicine.

**Target.** Dental implantology is part of the specialist program in oral surgery and the task of the course is to introduce the student to today's possibilities of implant prosthetic rehabilitation of the oral cavity. The use of Osseo integrated implants has enabled the stabilization and retention of complete dentures, primarily in the lower jaw, so the dentist must be familiar with the indications for dental implantation and show it to the patient within all other possibilities. Also, the aim of the course is to introduce the student to the possibilities of making fixed prosthetic replacements after the placement of dental implants in shortened dental arches and in the loss of the front tooth by trauma or due to embryo aplasia. The goal of the course is to describe to the student all the problems of dental implantology and to warn the student about uncritical approaches that are seen on a daily basis, and result in failures and discredit the profession. The goal is therefore to argue that



dental implantology requires teamwork between a doctor of dental medicine and a specialist in oral surgery, dental prosthetics and periodontology.

**Course enrollment requirements:** Passed exam for the course Preclinical Oral Surgery.

**The content of the course is as follows:**

Historical overview of the development of dental implantology in the world and in Croatia, internal and trans dental implants, jaw atrophy, enlargement of the alveolar ridge with alloplastic implants or solutions with dental implants, experimental model, indications and contraindications for the use of modern dental implants, the concept of osseointegration, dates for the implementation of individual surgical phases, patient preparation and dates for making prosthetic superstructures, equipment and implant systems, surgical Procedure and presentation of clinical cases, materials in dental implantology, shape and surface of implants, micro and macro interlocking, mobile prosthetic superstructure, occlusion and gnathological aspects of dental implantology, fixed prosthetic superstructure, implant maintenance, peri-implant diseases, bone regeneration and stimulation of bone regeneration, surgical solutions in unfavorable anatomical

**Teaching:** Classes are conducted in the form of lectures.

**Possibility of conducting classes in a foreign language:** No.

**Student obligations:** Students are obligated to regularly attend lectures and can be absent on maximum 30% of total number of lectures. In case of absence, students need to present a valid doctor's note.

**List of compulsory exam literature:**

Ćabov T, Kovač Z. Dentalna implantologija. Quintessence, Zagreb, 2021.

Knežević G et al. Osnove dentalne implantologije. Školska knjiga, Zagreb, 2002.

Sethi A, Kaus T. Practical implant dentistry. Quintessence, 2005.

Lang NP et al. Lindhe's clinical periodontology and implant dentistry. John Wiley and Sons, 2021.



Geistlich myGuide. (<https://www.geistlich-myguide.com>)

#### List of supplementary literature:

Shafie H. Clinical and Laboratory Manual of Implant Overdentures. Blackwell & Munksgaard, 2007.

Drago C, Peterson T. Implant Restorations: A Step-by-Step Guide. Blackwell & Munksgaard, 2007.

Al-Faraje L. Surgical complications in oral implantology. Etiology, Prevention, and Management.; Quintessence, Chicago, 2011.

Davarpanah M, Martinez H, Kebir M, Tecucianu JF. Priručnik dentalne implantologije. In.Tri d.o.o, Zagreb, 2006.

Galasso L. Atlas komplikacija i neuspjeha u dentalnoj implantologiji: smjernice za terapijski pristup. Media ogled, Zagreb, 2013.

Grunder U. Implantati u estetskoj zoni. Quintessence, Zagreb, 2016.

Zuhr O, Hurzeler M. Estetska, parodontna plastična i implantološka kirurgija. Media ogled, Zagreb, 2011.

#### Exam (method of taking the exam, description of the written/oral/practical part of the exam, method of scoring, assessment criteria):

Student assessment is carried out in accordance with the current Ordinance on Studies of the University of Rijeka. The assessment of students is carried out using the ECTS (A-F) and the numerical system (1-5). Assessment in the ECTS system is carried out by absolute distribution.

Students can achieve a maximum of 50 points during classes, and 50 points on the final exam.

Out of the maximum 50 points that can be achieved during classes, the student must collect a minimum of 25 points to take the final exam. Students who achieve less than 25 points will have the opportunity to take one remedial intermediate exam and, if they pass the exam in that intermediate exam, they will be able to take the final exam. Students who achieve



between 25 and 32 points are entitled to take the final exam, which is then considered a make-up exam and is not scored, in which case the final grade can only be a 2. Students who achieve less than 25 grade points (F grade category) must re-enroll in the course.

The student acquires grade points by actively participating in classes:

A TOTAL OF 50 POINTS

Students who have earned more than 25 points during classes must take the final exam where they can earn a maximum of 50 points.

**The final exam is written (up to 50 points).**

Assessment in the ECTS system is carried out by absolute distribution, i.e. based on the final achievement:

excellent (5) A - 90 to 100%

very good (4) B - 75 to 89.9%

good (3) C - 60 to 74.9%

sufficient (2) D - 50 to 59.9%

insufficient (1) F - 0 to 49.9%

**Other notes (related to the course) important for students:**

Any use of someone else's text or other form of copyrighted work, as well as the use of ChatGPT or any other another tool whose functionality is based on AI technology, without a clear and unambiguous citation of the source, is considered a violation of someone else's copyright and the principle of academic integrity, and represents a serious violation of student obligations, which entails disciplinary liability and disciplinary measures in accordance with Ordinance on Disciplinary Responsibility of Students.

Consultation hours: Thursdays from 10 a.m. to 11 a.m.

Teaching content and all information related to the course as well as exam dates can be found on the website of the Department of Oral Surgery.

**List of lectures (with titles and explanations):**



**L1. Historical overview of the development of dental implantology.**

*Learning outcomes:* Explain the development of dental implantology.

**L2. Materials in Dental Implantology.**

*Learning outcomes:* Explain modern materials used in dental implantology.

**L3. Indications/contraindications in dental implantology.**

*Learning outcomes:* Define the correct indication/contraindication for implant-prosthetic rehabilitation.

**L4. Clinical examination and radiological diagnostics in dental implantology.**

*Learning outcomes:* Explain the clinical examination in implant-prosthetic rehabilitation. Analyze appropriate radiological images.

**L5. Dental implant surgical procedure.**

*Learning outcomes:* Explain all the phases and dates of individual phases of the surgical procedure. Define possible intraoperative and postoperative complications of dental implant placement.

**L6. –L10. Prosthetic Possibilities in Dental Implantology.**

*Learning outcomes:* Define prosthetic possibilities in dental implantology Explain impression procedures in dental implantology Define basic printing materials. Define mobile and fixed superstructures on dental implants. Explain the gnathological aspects of dental implantology.

**L10.-L15. Periodontal aspects of implant-prosthetic rehabilitation.**

*Learning outcomes:* Explain the assessment of the success of implant-prosthetic rehabilitation. Explain the procedures for maintaining implant prosthetic work. Explain the etiology and treatment of peri-implantitis. Explain the possibilities of tissue and bone regeneration.



Date	Lectures (time and place)	Seminars (time and place)	Practicals (time and place)	Teacher
6.03.2026.	L1-L5 14:15 – 18:00 Lecture room, Krešimirova 42			Prof. Tomislav Čabov, DMD, Phd
13.03.2026.	L6-L10 14:15 – 18:00 Lecture room, Krešimirova 42			Prof. Zoran Kovač, DMD, PhD
20.03.2026.	L11-L15 ONLINE			Assoc. prof. Jelena Prpić, DMD, Phd

**List of lectures:**

	LECTURES (lecture topic)	Number of hours of classes	Venue
L1	Historical overview of the development of dental implantology	1	Krešimirova 42
L2	Materials in dental implantology	1	Krešimirova 42
L3	Indications/contraindications in dental implantology	1	Krešimirova 42
L4	Clinical examination and radiological diagnostics in dental implantology	1	Krešimirova 42



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L5	Dental implant surgical procedure	1	Krešimirova 42
L6-L10	Prosthetic possibilities in dental implantology	5	Krešimirova 42
L11-L15	Periodontal aspects of implant-prosthetic rehabilitation	5	Krešimirova 42
	<b>Total number of lecture hours</b>	<b>15</b>	

	<b>EXAM DATES (final exam)</b>
1.	30.04.2026.
2.	8.06.2026.
3.	23.06.2026.