



Course: Orthodontics II

Course Coordinator: asst. prof. Magda Trinajstić Zrinski, DMD, PhD, spec. orthod, asst. prof. Višnja Katić, DMD, PhD, spec. orthod.

Course Collaborators: prof. Stjepan Špalj, DMD, PhD; Vjera Perković, DMD, PhD; Matea Badnjević, DMD; Matea Tomljanović, DMD; Doris Šimac Pavičić, DMD

Department: Department of Orthodontics

Study program: University Integrated Undergraduate and Graduate Study of Dental Medicine (in English)

Study year: 5th

Academic year: 2026/2027

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 course **Orthodontics II** is a mandatory course in the fifth year of the Integrated undergraduate and graduate program of Dental Medicine and consists of 30 hours of lectures, 60 hours of practicals and 30 hours of seminars, totaling 120 hours (**6 ECTS**). The course is delivered in the premises of the Faculty of Dental Medicine and via e-course on the Merlin platform.

The aim of the course is for the student of dental medicine to become familiar with the ways of occurrence and development of malocclusions, to master skills of interceptive and preventive procedures, and acquire knowledge about the possibilities and methods of orthodontic treatment.

The content of the course is as follows:

Orthodontic anamnesis; Orthodontic clinical examination; Analysis of dentition; Predictive analyses of space in mixed dentition; Dentoalveolar discrepancy; Dentodental discrepancy; Analysis of occlusion on the cast and the patient; Functional analysis in all three dimensions on the patient; Photography in orthodontics; X-rays - types, cephalometric analysis; Morphofunctional harmony in orthodontics; Assessment of the need for treatment using the Index of Orthodontic Treatment Need (IOTN); Malocclusion treatment options (class I, class II/1 malocclusions, class II/2, class III, transverse malocclusions, vertical malocclusions); Harmful impact of premature tooth loss on the development of dentition; Impact of dental trauma on dentition development; Congenital anomalies of the dentofacial complex; The influence of anomalies of the number, shape and structure of teeth on the development of the dentition and the possibilities of treatment; Myofunctional orthodontic treatment; Physiology of mineralized tissues and reaction to applied force; Types of forces and displacements in orthodontics, adverse effects of orthodontic treatment; Principles of biomechanics in orthodontics; Functional



appliances; Removable appliances; Fixed appliances; Extraoral appliances; Protocol of oral hygiene in orthodontics; Treatment plan, patient cooperation and motivation.

Conducting classes:

Classes are held in the form of lectures, practicals and seminars weekly during the 9th and 10th semester. During the practicals the teacher evaluates the student readiness to perform. During the seminar, the teacher evaluates student preparation for presenting the discussed topic and moderates the discussion. A mandatory midterm exam will be held and, at the end of classes, the final exam. By completing all student activities, passing the midterm exam and the final exam the student earns 6 ECTS points.

Course Coordinators:

Asst. Prof. Magda Trinajstić Zrinski, DMD, PhD
Asst. Prof. Višnja Katić, DMD, PhD

Course Collaborators:

Prof. Stjepan Špalj, DMD, PhD
Vjera Perković, DMD, PhD
Matea Badnjević, DMD
Matea Tomljanović, DMD
Doris Šimac Pavičić, DMD

Assigned reading:

- Littlewood SJ, Mitchell L. An introduction to orthodontics. 5th ed. London: Oxford University Press; 2019
- Proffit, W.R. Contemporary Orthodontics. Philadelphia: Elsevier; 2019.

COURSE TEACHING PLAN:

The list of lectures (with topics and descriptions):

L1. Orthodontic history and first examination

Learning outcomes:

Define, describe and take the patient's orthodontic history; define, describe and perform clinical orthodontic examination of the patient.

L2. Public health aspect of malocclusions

Learning outcomes:

Describe and determine the need for orthodontic treatment in the public health system in Croatia, the reasons for providing and seeking orthodontic treatment for malocclusions, preventive and economic aspects of malocclusions.

L3. Dental photography – principles of photographing and editing photographs



Learning outcomes:

Describe the need and method of photographing (intraoral, extraoral, calibration) as well as editing and presentation of photographs.

L4. Analysis of symmetries and asymmetries

Learning outcomes:

Analyze the symmetry of the face and head.

Analyze dental arches in the transverse, sagittal and vertical planes, model analysis.

L5. Anomalies in the number and position of teeth

Learning outcomes:

Define, list and analyze occlusion on the study cast and patient; define, recognize and determine the influence of anomalies in the number, shape and structure of teeth on the development of the dentition, state the possibilities of treatment.

L6. Impacted teeth

Learning outcomes:

Etiology, diagnosis and therapeutic approach.

L7. Treatment of crowding

Learning outcomes:

Define and describe the frequency, etiology, characteristics and classification of crowding, recognize it on the cast and the patient, list the treatment options.

L8. Treatment of spacing

Learning outcomes:

Define and describe the frequency, etiology, characteristics and classification of spacing, recognize it on the cast and the patient, list the treatment options.

L9. Treatment of transverse malocclusions

Learning outcomes:

Define and describe the frequency, etiology, characteristics and classification of crossbite, list the diagnostic procedures, recognize the anomaly on the cast and the patient, state the treatment options.

L10. Treatment of vertical malocclusions

Learning outcomes:

Define and describe the frequency, etiology and characteristics of vertical malocclusions, list the diagnostic procedures, recognize the malocclusion on the cast and the patient, state the treatment options.

L11. Treatment of Class II/1 malocclusion

Learning outcomes:

Define and describe the frequency, etiology, characteristics and classification of Class II/1, state the diagnostic procedures, recognize the malocclusion on the cast and the patient, list the treatment options.

L12. Treatment of Class II/2 malocclusion

Learning outcomes:

Define and describe the frequency, etiology, characteristics and classification of Class II/2, state the diagnostic procedures, recognize the malocclusion on the cast and the patient, state the treatment options.

L13. Treatment of Class III malocclusion

Learning outcomes:



Define and describe the frequency, etiology, characteristics and classification of Class III malocclusions, list the diagnostic procedures, recognize the malocclusion on the cast and the patient, list the treatment options.

L14. Congenital anomalies

Learning outcomes:

Define and describe congenital anomalies.

L15. Orthodontic aspect of trauma and tooth extraction

Learning outcomes:

Determine the impact of dental trauma on the development of the dentition; describe the harmful impact of premature tooth loss on the development of the dentition.

L16. Bone biology and physiology of tooth movement

Learning outcomes:

Describe the physiology of mineralized tissues and the reaction to applied force.

L17. Types of tooth movement and nature of orthodontic forces

Learning outcomes:

List and describe the types of forces and movements in orthodontics.

L18. Concepts of bony and non-bony anchorage

Learning outcomes:

Define anchorage and describe the procedures and appliances used to secure anchorage.

L19. Mechanical principles in orthodontic force control – types of wires (elasticity/plasticity), elastics, springs

Learning outcomes:

Define the sources of forces in orthodontics, elasticity and plasticity.

L20. Dentofacial orthopedics – skeletal effects of orthodontic forces

Learning outcomes:

Amount, direction and age of skeletal effects of orthodontic forces; description, recognition and mechanism of appliances used to achieve skeletal effects.

L21. Risks and complications of orthodontic treatment

Learning outcomes:

Define the risks and complications of orthodontic forces and treatment.

L22. Mechanisms of action and effect of removable appliances

Learning outcomes:

State the possibilities and limitations of removable appliances; list and describe the modified plate and functional appliances and their effect (Schwarz plate, reduced activator, bionator, twin block, Fränkel function regulator).

L23. Mechanisms of action and effect of fixed appliances

Learning outcomes:

List and describe the elements of segmental and continuous fixed appliances; describe the bonding and fitting of a fixed appliance; state the treatment stages; list and describe segmental fixed appliances (quad helix, transpalatal arch, lingual arch, lip bumper, Nance).

L24. Alveolar envelope – limitations of orthodontic treatment

Learning outcomes:

Describe the characteristics of the alveolar ridge, dentoalveolar compensation and the limits of orthodontic treatment.

L25. Assessment of the right time to start orthodontic treatment

Learning outcomes:



State how the right time to start treatment is defined, compare the treatment plan with the cooperation and motivation of the patient; define the importance of informed consent in orthodontics.

L26. Management of eruption and serial extraction

Learning outcomes:

Describe the methods of guiding tooth eruption and the development of occlusion, the extraction sequence in serial extraction.

L27. Obstructive sleep apnea and orthodontics

Learning outcomes:

Recognize the signs and symptoms of obstructive sleep apnea and its connection with orthodontics.

L28. Malocclusions, orthodontic treatment and temporomandibular disorders

Learning outcomes:

Diagnosis of temporomandibular disorders, the role of occlusion, malocclusion and orthodontic treatment in the etiology of the disorders, treatment.

L29. Orthodontic treatment with aligners

Learning outcomes:

Define the possibilities and limitations of malocclusion treatment with clear aligners.

The list of seminars (with topics and descriptions):

S1. Oral hygiene protocol in orthodontics and prophylaxis

Learning outcomes:

Get to know prophylaxis methods and oral hygiene protocols necessary to maintain the health of the oral cavity during orthodontic treatment.

S2. Analysis of the shape and symmetry of the dental arches and the curve of Spee, tooth size discrepancy and methods of correction of tooth size discrepancy

Learning outcomes:

Analyze the shape and symmetry of the dental arches using the orthodontic measuring grid and the Schmuth plate, describe the curve of Spee, measure tooth size discrepancy according to Bolton and state the possibilities of correction.

S3. Dento-alveolar discrepancy and predictive analyses in mixed dentition

Learning outcomes:

Measure and explain the meaning of dento-alveolar discrepancy according to Lundström. Be able to describe the measurement of dento-alveolar discrepancy according to Nance. Define, describe the importance of and carry out a prediction analysis on an individual case.

S4. Cephalometric X-ray analysis – definition of points and reference lines, analysis of the size and position of the jaws

Learning outcomes:

Define the anatomical and projection points and reference lines necessary for the analysis of the lateral cephalogram. Know how to define, measure and interpret the parameters needed to determine the size and position of the jaws.

S5. Cephalometric X-ray analysis of growth pattern, position of incisors and soft tissues

Learning outcomes:

Know how to define, measure and interpret the parameters necessary to determine the growth pattern, the position of the incisors and the soft tissues.



S6. Assessment of orthodontic treatment needs (clinical indices and quality of life) and treatment planning. Criteria by which HZZO covers orthodontic treatment

Learning outcomes:

Define the indices for assessing the need for orthodontic treatment. Define a list of orthodontic problems and possible therapeutic solutions. Define the criteria by which the Croatian Health Insurance Fund (HZZO) covers orthodontic treatment.

S7. Problem-based learning – case studies

Learning outcomes:

Presentation of the list of orthodontic problems and the proposed treatment.

S8. Problem-based learning – case studies

Learning outcomes:

Presentation of the list of orthodontic problems and the proposed treatment.

S9. Malocclusions and speech sound articulation

Learning outcomes:

Recognize speech sound disorders associated with malocclusions. Explain the influence of orthodontic treatment on speech and the role of the speech and language therapist in orthodontic treatment.

S10. Problem-based learning – case studies

Learning outcomes:

Presentation of the list of orthodontic problems and the proposed treatment.

S11. Problem-based learning – case studies

Learning outcomes:

Presentation of the list of orthodontic problems and the proposed treatment.

S12. Treatment with the labial fixed orthodontic appliance

Learning outcomes:

Describe the elements of the labial fixed appliance and the course of treatment by stages, from bonding to removal of the appliance.

S13. Treatment with the lingual fixed orthodontic appliance

Learning outcomes:

Describe the elements of the lingual fixed appliance, the indications, advantages and limitations compared with the labial technique.

S14. Problem-based learning – case studies

Learning outcomes:

Presentation of the list of orthodontic problems and the proposed treatment.

S15. Problem-based learning – case studies

Learning outcomes:

Presentation of the list of orthodontic problems and the proposed treatment.

S16. Fixed segmental appliances

Learning outcomes:

List and describe segmental fixed appliances, their indications and mode of action.

S17. Plate appliances

Learning outcomes:

Describe the elements of plate appliances, the indications, possibilities and limitations.

S18. Construction bite

Learning outcomes:

Explain the types of construction bite and describe the clinical procedure.



S19. Problem-based learning – case studies

Learning outcomes:

Presentation of the list of orthodontic problems and the proposed treatment.

S20. Problem-based learning – case studies

Learning outcomes:

Presentation of the list of orthodontic problems and the proposed treatment.

S21. Functional appliances and Moss's functional matrix theory (Fränkel appliance, bionator)

Learning outcomes:

Explain Moss's functional matrix theory and relate it to the mechanism of action of the Fränkel appliance and the bionator. Describe the parts of the appliances, the indications and the course of treatment.

S22. Functional appliances – activators

Learning outcomes:

Know the types of activators, the indications, the mechanism of action and patient cooperation.

S23. Problem-based learning – case studies

Learning outcomes:

Presentation of the list of orthodontic problems and the proposed treatment.

S24. Problem-based learning – case studies

Learning outcomes:

Presentation of the list of orthodontic problems and the proposed treatment.

S25. Prefabricated myofunctional appliances

Learning outcomes:

Describe prefabricated myofunctional appliances, the indications, possibilities and limitations.

S26. Problem-based learning – case studies

Learning outcomes:

Presentation of the list of orthodontic problems and the proposed treatment.

S27. Problem-based learning – case studies

Learning outcomes:

Presentation of the list of orthodontic problems and the proposed treatment.

S28. Fixed functional appliances

Learning outcomes:

Know the types of fixed functional appliances, the indications and the mechanism of action.

S29. Orthognathic surgery

Learning outcomes:

Know the indications for orthognathic surgery, describe the orthodontic preparation before surgery and the treatment after the procedure.

The list of practicals with descriptions:

Practicals in the Orthodontics II course are performed in the clinic at the Clinic for Dental Medicine of the University Hospital Centre Rijeka. Before participating in the practicals, students are required to acquire theoretical knowledge and basic practical skills on models in pre-clinical practicals. During clinical practicals, students will work on patients to apply the acquired knowledge in the daily casuistry of the orthodontic office. Analysis and treatment planning will be carried out on real and virtual models and computers in dedicated biometric software.



Students' obligations:

Students are obliged to regularly attend and actively participate in all forms of classes. Exams, seminars, the presentation of the case report, and the final exam are mandatory.

A student may miss up to 20% of classes exclusively for health reasons, documented by a doctor's note. Attendance at lectures is compulsory. Missed classes must be compensated in agreement with the course coordinator. If a student misses more than 20% of classes (justified or unjustified), they cannot continue following the course and lose the possibility of taking the final exam. In that case, the student receives 0 ECTS credits and a grade of F.

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

ECTS credit rating system:

Student evaluation is carried out according to the valid **Rulebook on studies of the University of Rijeka**. Students work will be evaluated during classes and at the final exam. Out of the total **100 grade points**, a student can earn 50 points during classes and another 50 points on the exam. Grading of students is done using ECTS (A-F) and numerical system (5-1). Grading in ECTS to the system is performed by absolute distribution.

Students who obtain from **0 to 24.9%** of the grade points, that could be obtained during classes through forms of continuous monitoring and evaluation, are graded F (failed) and they cannot acquire ECTS credits and must re-enroll in the course.

The student acquires grade points by actively participating in classes, completing assigned tasks and going out to exams in the following way:

I. During the class, the following are assessed (maximum 50 points):

- a) exam (up to 30 points)
- b) case presentations (up to 10 points)
- c) seminar paper (up to 10 points)

a) Exam (up to 30 points)

During classes, all students are obliged to participate in the exam, which earns them a maximum of 30 points, the percentage of resolution is multiplied by a weight of 0.3. The limit is 50% resolution.

c) Seminar (up to 10 points)

b) Presentation of the case (up to 10 points)

The evaluation of the presented seminar paper and the case presentation carries 10 evaluation points each (range from 0-10), and is converted into grade points as follows:

grade	grade points
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2	4
2-3	5
3	6
3-4	7
4	8
4-5	9
5	10

Final exam (total 50 grade points)

The final exam consists of a practical and an oral part. Both are scored equally.

Who can take the final exam:

Students who achieved 25% or more grade points that could have been obtained during classes through forms of continuous monitoring and evaluation of students.

Who cannot take the final exam:

Students who, during classes, achieved from 0 to 24.9% of the grade points that could have been obtained during classes through forms of continuous monitoring and evaluation of students are graded F (failed), cannot acquire ECTS points and must re-enroll in the course .

The final exam carries 50 grade points (range 0-50) and consists of a practical and a theoretical part.

Success in the practical and theoretical part of the final exam is converted into grade points as follows:

grade	grade points
2	12,5
2-3	15
3	17
3-4	19
4	21
4-5	23
5	25

The above-mentioned scale evaluates the practical and theoretical parts separately, and their sum gives the total grade of the final exam.

In order to pass the final exam and the final evaluation (including the addition of previously achieved evaluation points during classes), the student must be positively evaluated on both the practical and theoretical parts of the final exam and achieve a minimum of 25 evaluation points (50%).

Grading in the ECTS system is done by absolute distribution, that is, based on the final achievement:

A – 90 - 100% points

B – 75 -89.9 %

C – 60 -74.9 %

D -- 50 - 59.9%



F – 0 - 49.9%

Grades in the ECTS system are translated into a numerical 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:

Any use of another person's text or other form of author's work, as well as the use of ChatGPT or any other tool whose functionality is based on artificial intelligence technology, without clear and unambiguous citation of sources, is considered a violation of someone else's copyright and the principle of academic integrity and represents serious violation of student obligations, which entails disciplinary responsibility and disciplinary measures according to the Rulebook on disciplinary responsibility of students.

Consultation time: Wednesday at 14:00

COURSE SCHEDULE (for the academic year 2026/2027)

Date	Lectures (time and place)	Seminars (time and place)	Practicals (time and place)	Instructor
29.09.2026.			P1 E (11:00-12:30) Krešimirova 40	Asst. Prof. Višnja Katić Doris Šimac Pavičić, DMD
30.09.2026.	L1 (12:30-13:15) Krešimirova 42			Asst. Prof. Magda Trinajstić Zrinski
30.09.2026.	L2 (13:15-14:00) Krešimirova 42			Asst. Prof. Magda Trinajstić Zrinski
01.10.2026.			P1 D (12:30-14:00) Krešimirova 40	Prof. Stjepan Špalj Matea Badnjević, DMD Matea Tomljanović, DMD
06.10.2026.			P2 E (11:00-12:30) Krešimirova 40	Asst. Prof. Višnja Katić Doris Šimac Pavičić, DMD
07.10.2026.	L3 (12:30-13:15) Krešimirova 42			Asst. Prof. Magda Trinajstić Zrinski
07.10.2026.	L4 (13:15-14:00) Krešimirova 42			Asst. Prof. Magda Trinajstić Zrinski
08.10.2026.			P2 D (12:30-14:00)	Prof. Stjepan Špalj



			Krešimirova 40	Matea Badnjević, DMD Matea Tomljanović, DMD
13.10.2026.			P3 E (11:00-12:30) Krešimirova 40	Asst. Prof. Višnja Katić Doris Šimac Pavičić, DMD
14.10.2026.	L5 (12:30-13:15) Krešimirova 42			Prof. Stjepan Špalj
14.10.2026.	L6 (13:15-14:00) Krešimirova 42			Prof. Stjepan Špalj
15.10.2026.			P3 D (12:30-14:00) Krešimirova 40	Prof. Stjepan Špalj Matea Badnjević, DMD Matea Tomljanović, DMD
20.10.2026.			P4 E (11:00-12:30) Krešimirova 40	Asst. Prof. Višnja Katić Doris Šimac Pavičić, DMD
21.10.2026.		S1 (12:30-13:15) online webinar		Vjera Perković, DMD, PhD
21.10.2026.		S2 (13:15-14:00) online webinar		Vjera Perković, DMD, PhD
22.10.2026.			P4 D (12:30-14:00) Krešimirova 40	Prof. Stjepan Špalj Matea Badnjević, DMD Matea Tomljanović, DMD
27.10.2026.			P5 E (11:00-12:30) Krešimirova 40	Asst. Prof. Višnja Katić Doris Šimac Pavičić, DMD
28.10.2026.		S3 (12:30-13:15) Krešimirova 42		Asst. Prof. Magda Trinajstić Zrinski
28.10.2026.		S4 (13:15-14:00) Krešimirova 42		Asst. Prof. Magda Trinajstić Zrinski
29.10.2026.			P5 D (12:30-14:00) Krešimirova 40	Prof. Stjepan Špalj Matea Badnjević, DMD Matea Tomljanović, DMD
03.11.2026.			P6 E (11:00-12:30) Krešimirova 40	Asst. Prof. Višnja Katić Doris Šimac Pavičić, DMD
04.11.2026.		S5 (12:30-13:15) Krešimirova 42		Prof. Stjepan Špalj
04.11.2026.		S6 (13:15-14:00) Krešimirova 42		Prof. Stjepan Špalj
05.11.2026.			P6 D (12:30-14:00) Krešimirova 40	Prof. Stjepan Špalj Matea Badnjević, DMD Matea Tomljanović, DMD
10.11.2026.			P7 E (11:00-12:30) Krešimirova 40	Asst. Prof. Višnja Katić Doris Šimac Pavičić, DMD



11.11.2026.	L7 (12:30-13:15) Krešimirova 42			Asst. Prof. Magda Trinajstić Zrinski
11.11.2026.	L8 (13:15-14:00) Krešimirova 42			Asst. Prof. Magda Trinajstić Zrinski
12.11.2026.			P7 D (12:30-14:00) Krešimirova 40	Prof. Stjepan Špalj Matea Badnjević, DMD Matea Tomljanović, DMD
17.11.2026.			P8 E (11:00-12:30) Krešimirova 40	Asst. Prof. Višnja Katić Doris Šimac Pavičić, DMD
18.11.2026.	L9 (12:30-13:15) online webinar (date to be confirmed)			Prof. Stjepan Špalj
18.11.2026.	L10 (13:15-14:00) online webinar (date TBC)			Prof. Stjepan Špalj
19.11.2026.			P8 D (12:30-14:00) Krešimirova 40	Prof. Stjepan Špalj Matea Badnjević, DMD Matea Tomljanović, DMD
24.11.2026.			P9 E (11:00-12:30) Krešimirova 40	Asst. Prof. Višnja Katić Doris Šimac Pavičić, DMD
25.11.2026.	L11 (12:30-13:15) Krešimirova 42			Prof. Stjepan Špalj
25.11.2026.	L12 (13:15-14:00) Krešimirova 42			Prof. Stjepan Špalj
26.11.2026.			P9 D (12:30-14:00) Krešimirova 40	Prof. Stjepan Špalj Matea Badnjević, DMD Matea Tomljanović, DMD
01.12.2026.			P10 E (11:00-12:30) Krešimirova 40	Asst. Prof. Višnja Katić Doris Šimac Pavičić, DMD
02.12.2026.		S7 (12:30-13:15) online webinar		Vjera Perković, DMD, PhD
02.12.2026.		S8 (13:15-14:00) online webinar		Vjera Perković, DMD, PhD
03.12.2026.			P10 D (12:30-14:00) Krešimirova 40	Prof. Stjepan Špalj Matea Badnjević, DMD Matea Tomljanović, DMD
08.12.2026.			P11 E (11:00-12:30) Krešimirova 40	Asst. Prof. Višnja Katić Doris Šimac Pavičić, DMD
09.12.2026.		S9 (12:30-13:15) Krešimirova 42		Asst. Prof. Magda Trinajstić Zrinski



09.12.2026.		S10 (13:15-14:00) Krešimirova 42		Asst. Prof. Magda Trinajstić Zrinski
10.12.2026.			P11 D (12:30-14:00) Krešimirova 40	Prof. Stjepan Špalj Matea Badnjević, DMD Matea Tomljanović, DMD
15.12.2026.			P12 E (11:00-12:30) Krešimirova 40	Asst. Prof. Višnja Katić Doris Šimac Pavičić, DMD
16.12.2026.	L13 (12:30-13:15) Krešimirova 42			Asst. Prof. Magda Trinajstić Zrinski
16.12.2026.	L14 (13:15-14:00) Krešimirova 42			Prof. Stjepan Špalj
17.12.2026.			P12 D (12:30-14:00) Krešimirova 40	Prof. Stjepan Špalj Matea Badnjević, DMD Matea Tomljanović, DMD
22.12.2026.			P13 E (11:00-12:30) Krešimirova 40	Asst. Prof. Višnja Katić Doris Šimac Pavičić, DMD
07.01.2027.			P13 D (12:30-14:00) Krešimirova 40	Prof. Stjepan Špalj Matea Badnjević, DMD Matea Tomljanović, DMD
12.01.2027.			P14 E (11:00-12:30) Krešimirova 40	Asst. Prof. Višnja Katić Doris Šimac Pavičić, DMD
13.01.2027.		S11 (12:30-13:15) Krešimirova 42		Prof. Stjepan Špalj
13.01.2027.		S12 (13:15-14:00) Krešimirova 42		Prof. Stjepan Špalj
14.01.2027.			P14 D (12:30-14:00) Krešimirova 40	Prof. Stjepan Špalj Matea Badnjević, DMD Matea Tomljanović, DMD
19.01.2027.			P15 E (11:00-12:30) Krešimirova 40	Asst. Prof. Višnja Katić Doris Šimac Pavičić, DMD
20.01.2027.		S13 (12:30-13:15) Krešimirova 42		Asst. Prof. Magda Trinajstić Zrinski
20.01.2027.		S14 (13:15-14:00) Krešimirova 42		Asst. Prof. Magda Trinajstić Zrinski
21.01.2027.			P15 D (12:30-14:00) Krešimirova 40	Prof. Stjepan Špalj Matea Badnjević, DMD Matea Tomljanović, DMD
23.02.2027.	L15 (13:15-14:00) Krešimirova 40			Asst. Prof. Magda Trinajstić Zrinski
23.02.2027.		S15 (14:00-14:45) Krešimirova 40		Asst. Prof. Magda Trinajstić Zrinski



24.02.2027.			P16 DE (14:00-17:00) Krešimirova 40	Prof. Stjepan Špalj Matea Badnjević, DMD Matea Tomljanović, DMD
02.03.2027.	L16 (13:15-14:00) Krešimirova 40			Prof. Stjepan Špalj
02.03.2027.	L17 (14:00-14:45) Krešimirova 40			Prof. Stjepan Špalj
03.03.2027.			P17 DE (14:00-17:00) Krešimirova 40	Prof. Stjepan Špalj Matea Badnjević, DMD Matea Tomljanović, DMD
09.03.2027.	L18 (13:15-14:00) Krešimirova 40			Asst. Prof. Magda Trinajstić Zrinski
09.03.2027.	L19 (14:00-14:45) Krešimirova 40			Asst. Prof. Magda Trinajstić Zrinski
10.03.2027.			P18 DE (14:00-17:00) Krešimirova 40	Prof. Stjepan Špalj Matea Badnjević, DMD Matea Tomljanović, DMD
16.03.2027.	L20 (13:15-14:00) Krešimirova 40			Prof. Stjepan Špalj
16.03.2027.	L21 (14:00-14:45) Krešimirova 40			Prof. Stjepan Špalj
17.03.2027.			P19 DE (14:00-17:00) Krešimirova 40	Prof. Stjepan Špalj Matea Badnjević, DMD Matea Tomljanović, DMD
23.03.2027.		S16 (13:15-14:00) online webinar		Vjera Perković, DMD, PhD
23.03.2027.		S17 (14:00-14:45) online webinar		Vjera Perković, DMD, PhD
24.03.2027.			P20 DE (14:00-17:00) Krešimirova 40	Prof. Stjepan Špalj Matea Badnjević, DMD Matea Tomljanović, DMD
30.03.2027.		S18 (13:15-14:00) Krešimirova 40		Asst. Prof. Magda Trinajstić Zrinski
30.03.2027.		S19 (14:00-14:45) Krešimirova 40		Asst. Prof. Magda Trinajstić Zrinski
31.03.2027.			P21 DE (14:00-17:00) Krešimirova 40	Prof. Stjepan Špalj Matea Badnjević, DMD Matea Tomljanović, DMD
06.04.2027.		S20 (13:15-14:00) Krešimirova 40		Prof. Stjepan Špalj
06.04.2027.		S21 (14:00-14:45) Krešimirova 40		Prof. Stjepan Špalj
07.04.2027.			P22 DE (14:00-17:00)	Prof. Stjepan Špalj



			Krešimirova 40	Matea Badnjević, DMD Matea Tomljanović, DMD
13.04.2027.	L22 (13:15-14:00) Krešimirova 40			Asst. Prof. Magda Trinajstić Zrinski
13.04.2027.		S22 (14:00-14:45) Krešimirova 40		Asst. Prof. Magda Trinajstić Zrinski
14.04.2027.			P23 DE (14:00-17:00) Krešimirova 40	Prof. Stjepan Špalj Matea Badnjević, DMD Matea Tomljanović, DMD
20.04.2027.	L23 (13:15-14:00) Krešimirova 40			Prof. Stjepan Špalj
20.04.2027.		S23 (14:00-14:45) Krešimirova 40		Prof. Stjepan Špalj
21.04.2027.			P24 DE (14:00-17:00) Krešimirova 40	Prof. Stjepan Špalj Matea Badnjević, DMD Matea Tomljanović, DMD
27.04.2027.	L24 (13:15-14:00) Krešimirova 40			Asst. Prof. Magda Trinajstić Zrinski
27.04.2027.		S24 (14:00-14:45) Krešimirova 40		Asst. Prof. Magda Trinajstić Zrinski
28.04.2027.			P25 DE (14:00-17:00) Krešimirova 40	Prof. Stjepan Špalj Matea Badnjević, DMD Matea Tomljanović, DMD
04.05.2027.	L25 (13:15-14:00) Krešimirova 40			Prof. Stjepan Špalj
04.05.2027.		S25 (14:00-14:45) Krešimirova 40		Prof. Stjepan Špalj
05.05.2027.			P26 DE (14:00-17:00) Krešimirova 40	Prof. Stjepan Špalj Matea Badnjević, DMD Matea Tomljanović, DMD
11.05.2027.	L26 (13:15-14:00) Krešimirova 40			Asst. Prof. Magda Trinajstić Zrinski
11.05.2027.	L27 (14:00-14:45) Krešimirova 40			Asst. Prof. Magda Trinajstić Zrinski
12.05.2027.			P27 DE (14:00-17:00) Krešimirova 40	Prof. Stjepan Špalj Matea Badnjević, DMD Matea Tomljanović, DMD
18.05.2027.		S26 (13:15-14:00) Krešimirova 40		Prof. Stjepan Špalj
18.05.2027.		S27 (14:00-14:45) Krešimirova 40		Prof. Stjepan Špalj
19.05.2027.			P28 DE (14:00-17:00) Krešimirova 40	Prof. Stjepan Špalj Matea Badnjević, DMD



				Matea Tomljanović, DMD
25.05.2027.	L28 (13:15-14:00) Krešimirova 40			Asst. Prof. Magda Trinajstić Zrinski
25.05.2027.		S28 (14:00-14:45) Krešimirova 40		Asst. Prof. Magda Trinajstić Zrinski
26.05.2027.			P29 DE (14:00-17:00) Krešimirova 40	Prof. Stjepan Špalj Matea Badnjević, DMD Matea Tomljanović, DMD
01.06.2027.	L29 (13:15-14:00) Krešimirova 40			Prof. Stjepan Špalj
01.06.2027.		S29 (14:00-14:45) Krešimirova 40		Prof. Stjepan Špalj
02.06.2027.			P30 DE (14:00-17:00) Krešimirova 40	Prof. Stjepan Špalj Matea Badnjević, DMD Matea Tomljanović, DMD

List of lectures, seminars and practicals:

	LECTURES (Topics)	Teaching hours	Location/Lecture room
L1	Orthodontic history and first examination	1	Krešimirova 42
L2	Public health aspect of malocclusions	1	Krešimirova 42
L3	Dental photography – principles of photographing and editing photographs	1	Krešimirova 42
L4	Analysis of symmetries and asymmetries	1	Krešimirova 42
L5	Anomalies in the number and position of teeth	1	Krešimirova 42
L6	Impacted teeth	1	Krešimirova 42
L7	Treatment of crowding	1	Krešimirova 42
L8	Treatment of spacing	1	Krešimirova 42
L9	Treatment of transverse malocclusions	1	online webinar
L10	Treatment of vertical malocclusions	1	online webinar
L11	Treatment of Class II/1 malocclusion	1	Krešimirova 42
L12	Treatment of Class II/2 malocclusion	1	Krešimirova 42
L13	Treatment of Class III malocclusion	1	Krešimirova 42
L14	Congenital anomalies	1	Krešimirova 42
L15	Orthodontic aspect of trauma and tooth extraction	1	Krešimirova 42
L16	Bone biology and physiology of tooth movement	1	Krešimirova 40
L17	Types of tooth movement and nature of orthodontic forces	1	Krešimirova 40



L18	Concepts of bony and non-bony anchorage	1	Krešimirova 40
L19	Mechanical principles in orthodontic force control – types of wires (elasticity/plasticity), elastics, springs	1	Krešimirova 40
L20	Dentofacial orthopedics – skeletal effects of orthodontic forces	1	Krešimirova 40
L21	Risks and complications of orthodontic treatment	1	Krešimirova 40
L22	Mechanisms of action and effect of removable appliances	1	Krešimirova 40
L23	Mechanisms of action and effect of fixed appliances	1	Krešimirova 40
L24	Alveolar envelope – limitations of orthodontic treatment	1	Krešimirova 40
L25	Assessment of the right time to start orthodontic treatment	1	Krešimirova 40
L26	Management of eruption and serial extraction	1	Krešimirova 40
L27	Obstructive sleep apnea and orthodontics	1	Krešimirova 40
L28	Malocclusions, orthodontic treatment and temporomandibular disorders	1	Krešimirova 40
L29	Orthodontic treatment with aligners	1	Krešimirova 40
	Total hours of lectures	29	

	SEMINARS (Topics)	Teaching hours	Location/Lecture room
S1	Oral hygiene protocol in orthodontics and prophylaxis	1	online webinar
S2	Analysis of the shape and symmetry of the dental arches and the curve of Spee, tooth size discrepancy and methods of correction of tooth size discrepancy	1	online webinar
S3	Dento-alveolar discrepancy and predictive analyses in mixed dentition	1	Krešimirova 42
S4	Cephalometric X-ray analysis – definition of points and reference lines, analysis of the size and position of the jaws	1	Krešimirova 42
S5	Cephalometric X-ray analysis of growth pattern, position of incisors and soft tissues	1	Krešimirova 42
S6	Assessment of orthodontic treatment needs (clinical indices and quality of life) and treatment planning. Criteria by which HZZO covers orthodontic treatment	1	Krešimirova 42
S7	Problem-based learning – case studies	1	online webinar
S8	Problem-based learning – case studies	1	online webinar
S9	Malocclusions and speech sound articulation	1	Krešimirova 42
S10	Problem-based learning – case studies	1	Krešimirova 42
S11	Problem-based learning – case studies	1	Krešimirova 42



S12	Treatment with the labial fixed orthodontic appliance	1	Krešimirova 42
S13	Treatment with the lingual fixed orthodontic appliance	1	Krešimirova 42
S14	Problem-based learning – case studies	1	Krešimirova 42
S15	Problem-based learning – case studies	1	Krešimirova 42
S16	Fixed segmental appliances	1	online webinar
S17	Plate appliances	1	online webinar
S18	Construction bite	1	Krešimirova 40
S19	Problem-based learning – case studies	1	Krešimirova 40
S20	Problem-based learning – case studies	1	Krešimirova 40
S21	Functional appliances and Moss's functional matrix theory (Fränkel appliance, bionator)	1	Krešimirova 40
S22	Functional appliances – activators	1	Krešimirova 40
S23	Problem-based learning – case studies	1	Krešimirova 40
S24	Problem-based learning – case studies	1	Krešimirova 40
S25	Prefabricated myofunctional appliances	1	Krešimirova 40
S26	Problem-based learning – case studies	1	Krešimirova 40
S27	Problem-based learning – case studies	1	Krešimirova 40
S28	Fixed functional appliances	1	Krešimirova 40
S29	Orthognathic surgery	1	Krešimirova 40
	Total seminar hours	29	

	PRACTICALS (Topics)	Teaching hours	Location/Lecture room
P1-30	Acquiring the skills to recognize and treat malocclusions	30x2	Krešimirova 40
	TOTAL HOURS	60	

	FINAL EXAM DATES
1.	10.06.2027.
2.	24.06.2027.
3.	08.07.2027.
4.	09.09.2027.



Sveučilište u Rijeci
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	Lectures	Seminars	Practicals	Total
Total number	29	29	60	118
On-line	2	6	0	8
Percentage	7%	21%	0%	7%