

**Course title** Assessment of Orthodontic Treatment Need

**Department** Department of Orthodontics Faculty of Dental Medicine Rijeka

**Address** Kresimirova 40, Rijeka

**Total ECTS points** 3

**Course leader** Professor Stjepan Špalj

**Course associates**

### Teaching plan

	No. classes
Lecture	5
Seminar	6
Practical	4
Total	15

1 class = 45 minutes

### Course description

The course focuses on public health aspect and epidemiology of malocclusions, perception of malocclusions, factors of seeking and providing treatment, indices of treatment needs, priorities and outcome, prevention, timing and cost-benefit analysis of prevention and treatment.

### Learning outcomes

1. estimate orthodontic treatment need by various indices
2. critically evaluate whether public health insurance covers treatment of malocclusion
3. rank the priority for treatment
4. argue the cost-benefit of prevention of malocclusions and orthodontic treatment

### Course content

Lecture

	Lecture topics	Number of classes/hours
1.	Public health aspect of malocclusion	1
2.	Indices of orthodontic treatment need	1
3.	Quality of life and the need for orthodontic treatment	1
4.	Orthognathic functional treatment need	1
5.	Treatment seeking, compliance and treatment outcome	1

1 sat = 45 minuta

## Seminari

	<b>Seminar topics</b>	<b>Number of classes/hours</b>
<b>1.</b>	Research on the public health aspect of malocclusions	5
<b>2.</b>	-	-
<b>3.</b>	-	-
<b>4.</b>	-	-
<b>5.</b>	-	-

1 sat = 45 minuta

## Vježbe

	<b>practicals topics</b>	<b>Number of classes/hours</b>
<b>1.</b>	Analysis of clinical cases - use of the treatment need indices	4
<b>2.</b>		
<b>3.</b>		
<b>4.</b>		
<b>5.</b>	-	-

1 class = 45 minutes

**Literature**

1. Bishara SE. Textbook of orthodontics. Philadelphia: WB Saunders; 2001. Chapter 8. Etiology and prevalence of malocclusion. pp. 83-96.
2. Mitchell L. An introduction to orthodontics. 3rd ed. Oxford: Oxford University Press; 2007. (Chapter 1. The rationale for orthodontic treatment. pp. 1-6. & Chapter 2. The aethiology and classification of malocclusions. pp. 7-15.
3. Proffit WC. Contemporary orthodontics. 4th ed. St. Louis: Mosby; 2007. Chapter 1. Malocclusion and dentofacial deformity in contemporary society. pp.3-23.
4. Pine C, Harris R. Community oral health. Berlin: Quintessenz; 2007. Chapter 9f. Public health aspects of oral diseases and disorders – dentofacial irregularities. pp. 227-237.
5. Burt BA, Eklund SA. Dentistry, dental practice, and the community. 5th ed, St. Louis: Elsevier Saunders; 2000. Chapter 17. Measuring other conditions in oral epidemiology. pp. 197-199. & Chapter 22. Oral cancer and other oral conditions. pp. 267-276.
6. Špalj S. Ortodontski priručnik. Rijeka: Medicinski fakultet; 2015. Poglavlje 14. Procjena potreba za ortodontskom terapijom str. 202-214. [in Croatian]
7. Špalj S. Oralna epidemiologija. Rijeka: Medicinski fakultet; 2015. Poglavlje 10 Epidemiološki pokazatelji oralnih bolesti i stanja: 10.8. Malokluzije, 10.9. Orofacijalni rascjepi. Str. 167-175. [in Croatian]

**CV (*curriculum vitae*) and bibliography of course leader**

Stjepan Špalj holds a DMD's degree (1998), a master's of science (2000) and a PhD (2005) from the University of Zagreb, School of Dental Medicine, and specialized in orthodontics at the Dental Clinic, University Hospital Center Zagreb (2008). He completed a postgraduate master program in temporomandibular disorders and orofacial pain at the University of Naples Frederick II, Italy (2019). He graduated in journalism from the Faculty of Political Science in Zagreb (1998). He teaches orthodontics, public health and ethics at the Faculty of Dental Medicine University of Rijeka and the Faculty of Dental Medicine and Health J. J. Strossmayer University of Osijek, as well as oral epidemiology at the postgraduate specialist and doctoral studies at the School of Dental Medicine University of Zagreb.

His research interests include oral corrosion and the effects of dental materials, biometrics, perception and behavioral dentistry, and the public health aspect of malocclusions. Co-author of 89 original scientific papers published in journals indexed in the Web of Science and Scopus databases. Principal investigator of six research projects, two of which are funded by the Croatian Science Foundation. Researcher on five projects, one of which is an international collaborative project funded by the Croatian Science Foundation. Mentor of 14 graduate theses and 11 PhD thesis, and he was granted twice on projects of development of scientific careers of young researchers by the Croatian Science Foundation (2018 and 2021). For the needs of translational research, he initiated the establishment of the Bank of Dental and Perioral Biosamples, which operates within the TransMedRi Biobank, Laboratory for Oral Biology and Biomaterials and Laboratory for Craniodentofacial Biometrics at the Faculty of Dental Medicine in Rijeka.

He received several awards for scientific and teaching excellence: for scientific excellence at the University of Osijek for year 2019 and the University of Rijeka for 2019, for teaching excellence at the University of Rijeka in 2020 and for the best e-course at the University of Rijeka 2012. Co-author of 4 textbooks.

He spent some time on Erasmus scholarships and study visits at several universities in Italy (Bologna, Padua, Trieste, Naples and Milan), Sweden (Gothenburg), Norway (Oslo), Germany (Mainz), Austria (Graz), Poland (Krakow), Hungary Budapest), Bulgaria (Plovdiv), Slovenia (Ljubljana), North Macedonia (Skopje), Serbia (Belgrade and Novi Sad), Kosova (Prishtina) and Bosnia-Herzegovina (Sarajevo).

For five years he worked as a general dentist in health centers and dental practices in Senj, Crikvenica and Vukovar. For three years he worked as a journalist in the daily newspapers Novi list, Vecernji list and Jutarnji list. Employed at the University of Rijeka and Universtiy Hospital Center Rijeka since 2009. Primarius from 2018. Head of the Department of Orthodontics at the Faculty of Dental Medicine in Rijeka since 2020 and previously at the Faculty of Medicine in Rijeka since 2014. Head of the postgraduate doctoral study of Dental Medicine at the University of Rijeka. Acting Head of the Dental Clinic at University Hospital Center Rijeka from February-September 2020, Deputy Head of the Clinic 2017-2022.

**Bibliography**

<https://www.bib.irb.hr/pregled/profil/27970>