

Course title

Odontobiography and paleodontology

Department

Department of Dental Anthropology

Address

School of Dental Medicine, Department of Dental Anthropology, Gundulićeva 5, HR-10000 Zagreb, Croatia

Total ECTS points

4 ECTS

Course leader

Marin Vodanović

Course associates

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Teaching plan

	Number of school hours
Lecture	15
Seminar	-
Practical	15
Total	30

1 school hour = 45 minutes

Course description

Teeth and mouth are a rich source of information about an individual. An average dentist is able to notice this information but usually is not trained to put them in appropriate context and they stay useless. Paleodontology is a discipline that combines dentistry and archeology with the aim of studying the teeth, oral cavity and oral health of ancient populations. Someone's biography based on analysis of the teeth and mouths is called odontobiography. It can be made for living or dead people including skeletons of archaeological origin. The aim of making odontobiography is to reconstruct the life of an individual and to provide as many details as possible from her/his life by analysis of the oral environment. This course through lectures provides theoretical insight into what paleodontology and odontobiography are, and through exercises provides the possibility of practical application of acquired knowledge.

Learning outcomes

1. to define the investigation techniques in odontobiography
2. to define the investigation techniques in paleodontology
3. to perform a paleodontological analysis of oral cavity
4. to write an odontobiography

Course content

Lectures

	Topics	Number of school hours
1.	Introduction to paleodontology	1
2.	Odontobiography - meta analysis of oral cavity	1
3.	Ethics in paleodontology	1
4.	Samples and photo documentation	1
5.	Investigation techniques in odontobiography and paleodontology	1
6.	Determination of sex	1
7.	Determination of age	1
8.	Metric variations	1
9.	Non-metric variations	1
10.	Bone diseases	1
11.	Dental caries	1
12.	Tooth wear	1
13.	Enamel hypoplasia	1
14.	Periodontal diseases	1
15.	Orthodontic anomalies	1

1 school hour = 45 minutes

Practicals

	Topics	Number of school hours
1.	Meta-analysis of anatomy and morphology of oral cavity	5
2.	Meta-analysis of pathology of oral cavity	5
3.	Meta-analysis – own case	5

1 school hour = 45 minutes

Literature

- Alt KW, Rösing FW, Teschler-Nicola M. Dental anthropology, fundamentals, limits and prospects. Wien: Springer-Verlag; 1998. 9783709174982
- Brkić H. Forenzička stomatologija. Zagreb: Školska knjiga; 2000. 9789530315389
- Brkić H. Textbook of Forensic Odonto-stomatology by IOFOS. Jastrebarsko: Naklada Slap; 2021.
- Iscan MY, Kennedy KAR. Reconstruction of life from the skeleton. New York: Alan R. Liss Inc; 1989. 9780471562290

- Šlaus M. Bioarheologija – demografija, zdravlje, traume i prehrana starohrvatskih populacija. Zagreb: Školska knjiga; 2006. 9789530307155
- Šlaus M, Novak M, Vyroubal V, Bedić A, Brkić H, Vodanović M. Photographic Atlas of Bioarchaeology from the Osteological Collection of the Croatian Academy of Sciences and Arts. School of Dental Medicine University of Zagreb and Croatian Academy of Sciences and Arts; Zagreb: 2013. 978-953-7781-01-9

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

Bibliography

<https://www.bib.irb.hr/pretraga?operators=and|Vodanovi%C4%87,%20Marin%20%2829327%29|text|profile>

Marin Vodanovic, studied dental medicine at the School of Dental Medicine, University of Zagreb, Croatia and received his dental degree in 1999. In 2005 he obtained his Master of Science degree, and 2008 his PhD degree. He specialized in endodontics and dental pathology and completed his studies at University Hospital Centre Zagreb, Croatia in 2010. In 2014 he became Head of the Department of dental anthropology, School of Dental Medicine, University of Zagreb and in 2015 Vice Dean at School of Dental Medicine, University of Zagreb.

His main areas of research expertise are in paleodontology, forensic dentistry, dental anthropology endodontics, occupational diseases, dental terminology and application of artificial intelligence in dentistry. He served as project leader and researcher at several projects. In 2012 he was at the Smithsonian Institution, Washington DC, USA performing an investigation of tooth wear. He is author or coauthor of more than 250 publications including several books, textbooks, dictionaries and book chapters.

He is editor in chief of the Bulletin of the International Association for Paleodontology and Newsletter of the International Organization for Forensic Odonto-Stomatology, member of editorial board of Acta stomatologica Croatica, Stomatološki vjesnik Bosne i Hercegovine, and Croatian Dental Herald (2006 - 2008). In 2015 he served as a guest editor in Annals of anatomy.

He served as speaker and keynote speaker on conferences worldwide. He is a founder and president of the International Association for Paleodontology, secretary of the Croatian Association of Forensic Stomatologists, member of the executive board of International Organization for Forensic Odonto-Stomatology, Croatian Endodontic Association, Croatian Dental Society, Croatian Medical Association, Croatian Catholic Medical Society and Croatian Dental Chamber.

He served as reviewer for many journals including: American Journal of Physical Anthropology, PLOS ONE, Archives of Oral Biology, Journal of Archaeological Science, International Journal of Osteoarchaeology, Journal of Clinical Pathology and Forensic Medicine, Journal of Dental Education, Journal of Forensic Dental Sciences, Acta stomatologica Croatica etc.

In 2006 he was awarded with Republic of Croatia National Science Award.

More information at: <http://www.marinvodanovic.com>