



Study program: Integrated Academic Studies in Dental Medicine			
Course title: Computer Use in Dental Medicine			
Teacher: Tatjana M. Puškar, Igor M. Budak, Aleksandra Z. Maletin, Milica S. Jeremić Knežević, Daniela J. Djurovic Koprivica			
Course status: elective			
ECTS Credits: 3			
Condition: Medical Statistics and Informatics			
Course aim To get students acquainted with the application of computing technologies in modern dentistry practice			
Expected outcome of the course: The students will get acquainted with the application of computers in determining the teeth color, position and movement of the lower jaws, analyzing the occlusion contacts and planning and performing fixed prosthetic procedures.			
Course description			
<i>Theoretical education</i>			
<ul style="list-style-type: none"> - Introduction, application of computers in dentistry, computers and management, databases: expert systems, simulation procedures – diagnostic and therapeutic - CAD-CAM systems, function and application - CAD-CAM systems, computed inspection, designing and producing dental replacements, machine processable materials - One step tooth replacement - Specificities of particular CAD-CAM systems - Application of computing technologies in determining the teeth color, specificities of digital imaging - Application of computers in gnathology, analysis of occlusion contacts, comp. analysis of lower jaw movements - Application of computers in implantology, computer-guided installation of dental implants and dental replacements on implants - Application of computers in endodontics - Patient processing and creation of relevant database - Intraoral and extraoral photographing - Diagnostics of the malocclusion – analysis of the model and the photograph - Computer simulation of the treatment plan - Computer simulation of the ortodontic-surgical treatment - Computer generated analysis of the growth 			
<i>Practical education</i>			
Production of seminar papers			
Literature			
<i>Compulsory</i>			
1. MASRI, Radi; DRISCOLL, Carl F. (ed.). Clinical Applications of Digital Dental Technology. John Wiley & Sons, 2015.			
2. Outlines of lectures			
Number of active classes		Theoretical: 30	Practice: 15
Teaching methods			
Theoretical and practical			
Student activity assessment (maximally 100 points)			
Pre-exam activities	Points	Final exam	points
Lectures	10	Written	70
Practices	10	Oral	
Colloquium		
Essay	10		