Study program: Integrated academic studies in dentistry	
Type and level of the study program: integrated academic studies	
Course title: Computer use in dentistry (DII-COMP)	
Teacher: Đurović Koprivica J. Daniela, Jeremić Knežević N. Milica, Maletin Z. Aleksandra, Puškar M. Tatjana	
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

Theoretical education

- 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 computes 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 ortodonthic-surgical treatment
- Computer generated analysis of the growth

Practical education: exercises, other forms of education, research related activities

Production of seminar papers

Literature

Compulsory

Outlines of lectures

Additional

Internet, Kobson databases

Number of active classes				Other:
Lectures: 30	Practice: 15	Other types of teaching:	Research related activities:	

Teaching methods

Lectures, practices, seminars

Student activity assessment (maximally 100 points)			
Pre-exam activities	**points**	**Final exam**	**points**
Lectures	10	Written	70
Practices	10	Oral	
Colloquium		....	
Essay	10		