



Study program: Doctoral Academic Studies in Biomedicine sciences		
Name of the subject: CONTEMPORARY MATERIALS AND TECHNOLOGIES IN DENTAL MEDICINE		
Teacher(s): Milica N. Jeremić Knežević, Tatjana M. Puškar, Larisa P. Blažić, Bojana R. Milekić, Aleksandra Z. Maletin, Igor M. Budak		
Status of the subject: elective		
Number of ECTS points: 20		
Condition: -		
Goal of the subject Introduction to contemporary materials and technologies in dental medicine		
Outcome of the subject Acquiring knowledge about biocompatibility of materials, nanostructured dental materials, algometer, materials for root canal obturation, impressions and impressions materials in dental medicine, microscopy techniques in dental medicine, magnetic resonance imaging and CBCT, imaging of TMJ, application of electrospinning method, instrumental method for teeth color matching, adhesive properties of root canal sealers, methods for scanning, and virtual and augmented reality in dental medicine		
Content of the subject <i>Theoretical lectures</i> <ul style="list-style-type: none"> - Biocompatibility in dental medicine - Nanostructured biomaterials in dental medicine - Algometer in dental medicine - Investigation of a novel material for root canal obturation - Impression materials in implant prosthodontics - Impressions in implant prosthodontics - Microscopy techniques in contemporary dental tissues and materials research - Magnetic resonance imaging in dental medicine - CBCT in dental medicine - Imaging of temporomandibular joint-clinical and radiological implications - Application of electrospinning method in dental medicine - Instrumental methods for teeth colour matching in restorative dental medicine - Adhesive properties of contemporary root canal sealers - Contemporary methods of 3D digitalization (scanning) in dental medicine - Virtual and augmented reality applied in dental medicine <i>Practical lectures</i> Seminar paper.		
Recommended literature <ol style="list-style-type: none"> 1. Rekow D. Digital Dentistry: A Comprehensive Reference and Preview of the Future. Quintessence Pub Co, 1st Ed, 2018. 2. Masri R., Driscoll C. Clinical applications of Digital Dental Technology, Wiley Blackwell, 1st, 2015 3. Gunnar Bergenholtz, Preben Horsted-Bindslev, Claes Reit. Textbook of Endodontology; 2nd Edition. Wiley-Blackwell, 2010. 		
Number of active classes	Theory: 60	Practice: 45
Methods of delivering lectures Theoretical teaching.		
Evaluation of knowledge (maximum number of points 100) activity during lectures: 20 SRA: 30 seminars: 20 oral exam: 30		
Ways of testing the knowledge: Seminar and project presentation.		