

1	Subject	Dental implantology			
2	Code	DDI604			
3	Study Program	Study Program of Integrated studies in dental medicine			
4	Organizing Institution (Unit, Institute, Chair, Department)	Department for oral surgery			
5	Educational degree (first or second cycle)	Integrated study			
6	Study year/semester	6/ 11	7	Number of credits	5
8	Teacher	Prof. M. Peeva-Petreska, Prof.O.Dimitrovski, Associate prof. E.Janev, Associate prof. D.Veleska-Stevkowska, Prof.G.Kovaceva, Prof.S.Peshevska			
9	Preconditions	Passed all compulsory courses of 7 and 8 semester. Signatures of 9 and 10 semester courses			
10	<p>Teaching goals: Through the Dental Implantology curriculum, students will be introduced to the basic principles of planning and performing the surgical phase for dental implant placement, suprastructure production and maintenance of healthy peri-implant tissues, as well as possible complications at all stages of implant treatment. Starting with basic anamnestic, diagnostic clinical and paraclinical methods for evaluation of patients in terms of dental implant placement, they then gain basic knowledge about the morphological characteristics of the jaw bones and quantitative and qualitative characteristics of the alveolar ridge, the anatomical limitations, acquainted with the basic rules of X-ray, 3D computer analysis for the planning of treatment with dental implants; patient selection, indications, contraindications and risk factors; familiarity with immediate and mediate implantation method; acquaintance with alveolar ridge augmentation methods and materials; basic knowledge of all kinds of suprastructures over implants; hybrid prostheses and fixed structures, and receive the basis for managing post-implantation complications - prevention and treatment of periimplant mucositis and periimplantitis. The students would be able to make adequate patient selection, set indication and plan for implant therapy; they would be also be capable of performing certain diagnostic procedures in implantology (measuring the width and length of the alveolar ridge and the soft tissue complex, clinical and x-ray analysis). More knowledge about the choice of dental implants and the preparation of the suprastructure over the implants, maintenance of peri-implant tissue and prevention of post-implantation complications.</p>				
11	Brief content				
	Theoretical course				Class
	History of dental implantology				1
	Macroscopic and microscopic aspects of dental implants, implant surface and implant design				1
	Indications for dental implant therapy				1
	Risk factors and contraindications for dental implant therapy				1
	Osseointegration principles				1
	Quantitative and qualitative analysis of residual alveolar crest-classifications				1
	Anatomorphological features of the jaw bones and adjacent anatomical structures				1
	Therapy plan - radiographical and clinical analysis				1
	3D computer analysis of alveolar ridges and positioning of implants				1
	Materials and methods for local augmentation of alveolar ridges				2
	Surgical phase for endosseous implant placement				1
	Sinus lift methods and indications				1
	Intra-operative and post-operative complications of implant therapy				1
	Prosthetic aspects in dental implantology-Biomechanics				1

	Implant suprastructures - classification and features	2
	Techniques and materials for implant prosthesis	1
	Metal ceramic suprastructures over implants	1
	CAD / CAM procedures in the preparation of suprastructures	1
	Mini implant concept	1
	Peri-implant anatomy and evaluation of implant success	1
	Aspects of periimplant disease - etiology and diagnostics	1
	Peri-implant mucositis-pathogenesis, clinical picture	1
	Peri-implant osteitis-pathogenesis, clinical picture	1
	Conservative and surgical techniques for the treatment of periimplant disease	1
	Cumulative Interceptive Maintenance Therapy - CIST Protocol	1
	Implantology in maxillofacial surgery	1
	Bone reconstruction with bone grafts (transplants)	1
	Implants and radio therapy	1
	Total	30
	Practical course	Class
	Patient selection for implant therapy - indications and contraindications	2
	Dental implant placement planning - orthopantomogram measurement and analysis	2
	Implant therapy planning - analysis of studio models and clinical measurements	2
	Therapy plan - 3D analysis	3
	Implant placement on models	5
	Complications - intraoperative and postoperative	2
	Taking impressions over implants	2
	Choice of abutments	1
	Mobile - hybrid dentures	2
	Prosthetic phase - model work	5
	Maintenance of implants - hygiene and performance evaluation of the implant	2
	Complications and treatment of periimplant mucositis and periimplantitis	2
	Total	30
	Seminars	15
	Elaboration of topics from the relevant material, presentation of the topics by the students and active involvement of the students until discussion of the given topic.	
12	Methods of studying: class room oriented lectures, interactive lectures, group work, practical training, seminar paper	
13	Total	150 classes
14	Organization of the course	30 classes - theoretical course, 30 classes- practical course, Seminars -15, 75 classes - home individual learning and other activities

15	Forms of teaching activities	15.1.	Theoretical course			30 classes
		15.2.	Practical course, seminars			Practical course - 30 classes Seminars -15
16	Other forms of activities	16.1.	Project tasks			
		16.2.	Individual tasks			
		16.3.	Individual (home) learning			75 classes
17	Method of assessment	17.1.	Tests			30points
		17.2.	Active participation, seminar paper/project (oral/written presentation)			10 points
		17.3.	Final (oral) exam			60 points
18	Grading criteria (points / grade)	Up to 59 points			5 (five) (F)	
		from 60 to 67 points			6 (six) (E)	
		from 68 to 75 points			7 (seven) (D)	
		from 76 to 84 points			8 (eight) (C)	
		from 85 to 93 points			9 (nine) (B)	
		from 94 to 100 points			10 (ten) (A)	
19	Requirement for signature and taking the final exam	<p>The student is required to actively follow all of the planned activities.</p> <p>Conditional criteria for assessment of knowledge:</p> <p>In order to get a signature, the student should obtain minimum points in both theoretical and practical courses, and to present seminar paper;</p> <p>In order to take the final exam, the student should obtain the minimum points from activity and test;</p> <p>If the student has not obtained the minimum points in the continual assessments, he/she in next exam session will have paper part of the exam (40 points) and final exam (60 points)</p>				
20	Language of the course	English				
21	Method for evaluation of the quality of education	Anonymous student's evaluation of the subject, teachers and collaborators involved in the educational activities				
22	Literature					
	22.1.	Mandatory textbooks				
		No.	Author	Title	Publisher	Year
		1	Milan Jurišić , Dragoslav Stamenković , Aleksa Marković , Aleksandar Todorović , Božidar Dimitrijević , Vojislav Leković , Vitomir Konstantinović , Miroslav Vukadinović	Oralna implantologija	Stomatoloski fakultet Beograd	2008
2	Jovan V. Perović	Oralna implantologija	Agencija za marketing i zeppelin reklame DON VAS	2004		

		3	Carl E.Misch	Contemporary Implant Dentistry 3rd Edition	Elsevier	2007
	22.2.	Additional literature				
		No.	Author	Title	Publisher	Year
		1	Randolph Resnik	Misch's Contemporary Implant Dentistry 4th Edition	Mosby	2019