

1	Subject	BIOMECHANICS IN DENTISTRY			
2	Code	DBD411			
3	Study Program	Study Program of Integrated studies in dental medicine			
4	Organizing Institution (Unit, Institute, Chair, Department)	Department for Prosthetic Dentistry			
5	Educational degree (first or second cycle)	Integrated study			
6	Study year/semester	4/7	7	Number of credits	2
8	Teacher	Prof. Ljuben Guguvcevski			
9	Preconditions	/			
10	Teaching goals: The student is introduced to the basic biomechanical principles in the function of the chewing system. Especially important is the moment of proper planning of prosthetic workings as it achieves tissue protection and longevity in the use of the prosthetics dentures.				
11	Brief content				
	Theoretical course				Class
	Introduction to biomechanics in dentistry				1
	Lower jaw biomechanics				1
	Mandible movements in sagittal, frontal and vertical plane				1
	Craniofacial bones examination during tension (in vivo)				1
	Mandible simulation				1
	Computer simulation of jaw biomechanics				1
	Biomechanics characteristics of the oral support tissues				1
	Biomechanics characteristics of oral mucosa				1
	Biomechanics characteristics of periodontal tissues				1
	The possibly of support use				1
	Biomechanics reaction of the masticatory system during loading				1
	Biomechanics aspects in prosthetic framework planning				1
	Biomechanics principles in teeth preparation				1
	Biomechanics aspects of dental implants				1
	Dental implants during				1
	Total				15
	Seminars				Class
	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.				15
12	Methods of studying: class room oriented lectures, interactive lectures, group work, practical training, seminar paper				
13	Total available time	60 classes			
14	Organization of the course	15 classes - theoretical course, 15 classes- seminars, 30 classes - home individual learning and other activities			
15	Forms of	15.1.	Theoretical course		15 classes

	teaching activities	15.2.	Practical course, seminars			15 classes
16	Other forms of activities	16.1.	Project tasks			
		16.2.	Individual tasks			
		16.3.	Individual (home) learning			30 classes
17	Method of assessment	17.1.	Tests			30 points
		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 from theoretical 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	Mc Neill C.	Science and Practice of Occlusion	Quintessence Publishing Co.	1997
	22.2.	Additional literature				
		No.	Author	Title	Publisher	Year
1		Љубен Гугувчевски	Н. Биомеханика на цвакалниот систем	Скопје	2011	