Attachment No. 3		Course program of the first cycle of studies			
1.	Course title	Preclinical fixed prosthodontics			
2.	Code	DMMPF3			
3.	Study program	Dentistry - integrated first and second cycle of studies			
4.	Organizer of the study program (unit, i.e. institute, department, division)	University "Ss. Cyril and Methodius" in Skopje, Faculty of Dentistry – Skopje, Department of Prosthodontic Dentistry			
5.	Degree (first, second, third cycle)	Integrated First and Second Cycle Studies			
6.	Academic year/semester	Year	3	Semester	5 and 6
7	Course workload expressed in ECTS credits	9			
8.	Teacher	Prof. Dr. Biljana Kapushevska – teacher in charge Group of teachers from the department			
9.	Language in which the curriculum is conducted	English			
10.	Necessary prerequisites for taking and passing the course	Completed all compulsory subjects from the second year and passed all compulsory subjects from the first year			
11.	Course objectives (competences) and learning outcomes:	The student should be introduced to the principles and techniques of laboratory fabrication of artificial dental crowns. To prepare and familiarize the student with the basic principles and methods of work in preclinical prosthodontic practice - modeling and fabrication of dental bridges from a technical aspect, and also to be introduced to modern methods and systems, all-ceramic fabrications, and digital CAD-CAM technology. Gaining competencies and knowledge in the field of preclinical fixed prosthodontics.			
12.	Detailed course content by chapters and units, with learning outcomes for each chapter	Theoretical teaching-lectures 1. Chapter: Crowns (15 c) 1.1 Concept of fixed prosthodontic constructions and their historical development, artificial dental crowns, types, and conditions that artificial crowns should meet (1			

		class) 1.2 Basic information on tooth preparation, concept of preparation limit, introduction to different types of impressions in fixed dental prosthodontics (1 class) 1.3 Working models with different types of removable stumps (1 class) 1.4 Preparation of the tooth stump, methods for making a crown with wax foil, with plastic foil (Adapta system), by dripping and by dipping in molten wax, and CAD-CAM design and CAD-CAM fabrication of a crown (1 class) 1.5 Modeling of the occlusal surface and axial surfaces (1 class) 1.6 Investment, casting, and processing of the cast (1 class) 1.7 Crown veneering with composite materials and aesthetic crown veneered with ceramics (1 class) 1.8 Special purpose (atypical) crowns (1 class) 1.9 Concept of non-metallic crowns and modern types of non-metallic crowns (1 class) 1.10 All-ceramic crowns made with CAD-CAM technology (1 class) 1.11 Telescopic (double) crowns, conical crowns according to Kerber, and crowns with a metal skeleton made with galvanization (1 class) 1.12 Abutments - individual cast abutments, ready-made, and abutments made of aesthetic materials (1 class) 1.13 Partial crowns, vestibular veneers, inlay, onlay, overlay (1 class) 1.14 Protective crowns (1 class) 1.15 Colloquium Results from chapter 1: the student will focus on education for the manufacture of fixed prosthodontic constructions Chapter 2: Bridges (15 classes) 1.1 General characteristics, definition, conditions for manufacture, and components of dental bridges and their use for the treatment of defects in the dental rows (2 classes) 1.2 Division, modeling, and fabrication of dental bridges (with wax foil and ready-made semi-finished products) depending on their localization (2classes) 1.3 Basic principles of planning dental bridges and fabrication and modeling of frontal and lateral dental bridges (2 classes) 1.4 Preparation for casting and casting of dental bridges (2 classes) 1.5 Opening the cuvette, processing, and polishing (2 classes) 1.6 Modeling and fabrication of dental bridges fully veneered with composite masses (2 classes) 1.7 Modeling and fabrication of circular dental bridges (2 classes) 1.8 Metal-ceramic dental bridges, characteristics in modeling and fabrication of frontal and lateral metal-ceramic dental bridges (2 classes) 1.9 Investment, processing, and conditioning of ceramic dental bridges (2classes) 1.10 Veneering of metal-ceramic dental bridges - color selection, ceramic application, firing (corrective and glaze), and fabrication of veneers (2classes) 1.11 Modeling and fabrication of alternative dental bridges (2 classes) 1.12 Modeling and fabrication of wing and extension dental bridges (2classes) 1.13 General characteristics, division, and fabrication of metal-free ceramic systems (2 classes) 1.14 Modeling of teeth according to gnathological principles with waxing (2 classes) 1.15 Colloquium Total: 45 classes Practical teaching-exercises - From the first chapter 45 classes - From the second chapter 45classes Total 90 classes
13	Interrelation of subjects	With the compulsory subjects of I and II Year
14.	Detailed description of the teaching and working methods for the subject	Interactive teaching, laboratory and classroom exercises, demonstration of laboratory instruments and methods used, presentation of seminar papers.
15.	Total available time	270 classes

16.	Forms of teaching activities	16.1.	Lectures - theoretical teaching. classes		45 classes
		16.2.	Exercises (laboratory, lecture), seminars, teamwork: classes		exercises 90 classes
		16.3.	Practice: classes		
17.	Other forms of activities	17.1.	Project assignments: classes		
		17.2.	Independent assignments: classes		
		17.3.	Home study - assignments		135 classes
18	Signature requirements	Attendance at 60% of lectures in each semester. Absence from a maximum of two exercises each semester			
19	Method of assessment				
	19.1.	Tests: points		18-30 points	
	19.2.	Seminar paper/project, written and oral presentation: points		12-20 points	
	19.3.	Final exam: points		30-50 points	
20	Grading criteria (points/grade)		from 59 points	5 (five) (F)	
			60 to 68 points	6 (six) (E)	
			69 to 76 points	7 (seven) (D)	
			from 77 to 84 points	8 (eight) (C)	
			from 85 to 92 points	9 (nine) (B)	
			from 93 to 100points	10 (ten) (A)	
21.	Method of monitoring the quality of teaching		Self-evaluation by students, control of assistants in carrying out practical teaching and assessment of the students' success, as well as the pass rate of students who have passed the course		

22.	Literature					
	22.1.	Required literature				
		Ord. No.	Author	Title	Publisher	Year
		1.	Kapushevska B.	Technology of fixed prostheses-bridges-II supplemented edition	Magnasken, Skopje	2019
		2.	Gigovski N.	Preclinical fixed prosthodontics-crowns 1	Monograph	2017
		3.	Bajevska J.	Dental ceramics	Faculty of Dentistry	2014
		4.	Fundamentals of Fixed Prosthodontics 4th Edition	Shillingburg H. et al	Quintessence Publishing Co.	2012
	22.2.	Additional literature				
		Ord. No.	Author	Title	Publisher	Year
		1.	Trifunovikj D. et al.	Dental prosthodontics-pre-clinic	Institute for textbooks - Belgrade	2005