Attachment No. 3		Course program for the first cycle of studies			
1.	Course title	Ergonomics			
2.	Code	DMMER2			
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 Endodontics and restorative dentistry			
5.	Degree (first, second, third cycle)	Integrated first and second cycle studies			
6.	Academic year/semester	Year	2	Semester	3
7	Course workload expressed in ECTS credits	3			
8.	Teacher	Teacher in charge: Prof. Dr. Marina Eftimoska All teachers from the Department			
9.	Language in which the curriculum is conducted	English			
10.	Necessary prerequisites for listening and taking the class	Listened to all compulsory subjects from the first year			
11.	Course objectives (competences) and learning outcomes:	The student should understand the ergonomic principles in dentistry for the correct design of the dental office and the working environment, to know the design of the dental instruments, as well as the ergonomic aspects of staffing the workspace that will allow more efficient and better quality performance of the work tasks. The student acquires knowledge of the basic principles of 4-handed dentistry, broader knowledge of the work position of the therapist and the patient, knowledge of the occurrence of risk factors for the development of occupational diseases, as well as their prevention and therapy.			
12.	Detailed course content by chapter and units, with the learning outcomes for each chapter	Theoretical teaching - lectures 1. Chapter - Introduction to Ergonomics and Ergonomic Principles in Dentistry - Introduction to ergonomics and ergonomic principles in dentistry, defining ergonomic concepts 2 classes - Ergonomic design of the workspace in dentistry..... 2 classes - Ergonomic design of instruments in dentistry..... 2 classes - Positions and movements of the dentist and their team at work and application of ergonomics at work.....2 classes - Visualization of the working field and the position of the dentist when working with devices for increasing the working field...2 classes - Dentist, team, and patient protection and infection control.... 2 classes - Sterilization and disinfection in dentistry.....2 classes - Colloquium Results from Chapter 1: The student will be educated on the application of ergonomic principles in planning and organizing the workspace, as well as the appropriate application of ergonomically designed instruments. The student will focus on applying the correct positions and movements at work, as well as methods of protection at work, aseptic work, as well as infection control. 2. Chapter - Ergonomic risk - factors in dentistry - causes of occupational diseases…….2 classes			

		- Musculoskeletal diseases and factors for their occurrence.... 3 classes - Musculoskeletal diseases of certain parts of the body caused by non-ergonomic position and work of the dentist..... 2 classes - Prevention of musculoskeletal diseases resulting from risk exposure - factors in dentistry.....3 classes - Injuries and eye diseases related to the dental profession, problems with venous circulation in the dental team, and their prevention……2 classes - Basics of 4-handed dentistry.....2 classes - Modern way and modern ergonomic means for work in dentistry for the realization of the process of diagnosis and therapy, visualization of the work field, and computerization of the dental office..... 2 classes - Colloquium Chapter 2 results- The student will focus on education about the risk factors in dental practice that are the causes of the occurrence of occupational diseases. They will acquire knowledge about the prevention of the occurrence of musculoskeletal diseases, work within 4-handed dentistry, as well as work with modern ergonomic means in dental practice. Total: 30.....classes Practical teaching - exercises - From the first chapter - Ergonomic design of the workspace in dentistry..... 2 classes - Ergonomic design of instruments in dentistry..... 2 classes - Positions and movements of the dentist and their team at work and application of ergonomics at work.....2 classes - Visualization of the working field and the position of the dentist when working with devices for increasing the working field...1 class - Sterilization and disinfection in dentistry.....1 class - From the second chapter - Ergonomic risk - factors in dentistry - causes of occupational diseases.....2 classes - Musculoskeletal diseases of certain parts of the body caused by non-ergonomic position and work of the dentist..... 2 classes - Basics of 4-handed dentistry.....2 classes - Modern way and modern ergonomic means for work in dentistry…. 1 Total.....15 classes		
13	Interrelation of subjects	Connection to anatomy, physiology, psychology, technical sciences		
14.	Detailed description of the teaching and working methods for the subject	Interactive teaching on ergonomic principles and their application in dentistry, guidelines and recommendations for ensuring optimal working conditions that will allow more efficient and faster performance of work tasks. Clinical exercises, working in small groups, presenting, performing, and demonstrating ergonomic attitudes and ergonomic design of instruments and methods used in dentistry.		
15.	Total Available Time	90 classes		
16.	Forms of teaching activities	16.1.	Lectures - theoretical teaching. Classes	30
		16.2.	Exercises (laboratory, auditorium), seminars, teamwork: classes	15
		16.3.	Practice: classes	
17.	Other forms of activities	17.1.	Project assignments: classes	
		17.2.	Independent assignments: classes	15
		17.3.	Home study - assignments	30
18	Signature requirements	Attendance at 80% of exercises and attendance at 60% of lectures		
19	Method of grading			
	19.1.	Tests: points		1 colloquium - 20 points 2 colloquium - 20 points
	19.2.	Seminar work/project, written and oral presentation: points		10 points
	19.3.	Final exam: points		50 points
20	Evaluation criteria (points/grade)		up to 59 points	5 (five) (F)

<table>
<tr><td></td><td></td><td colspan="3">from 60 to 68 points</td><td colspan="2">6 (six) (E)</td></tr>
<tr><td></td><td></td><td colspan="3">from 69 to 76 points</td><td colspan="2">7 (seven) (D)</td></tr>
<tr><td></td><td></td><td colspan="3">from 77 to 84 points</td><td colspan="2">8 (eight) (C)</td></tr>
<tr><td></td><td></td><td colspan="3">from 85 to 92 points</td><td colspan="2">9 (nine) (B)</td></tr>
<tr><td></td><td></td><td colspan="3">from 93 to 100 points</td><td colspan="2">10 (ten) (A)</td></tr>
<tr><td>21.</td><td colspan="2">Method of monitoring the quality of teaching</td><td colspan="5">Self-evaluation by students, assistant control during the practical teaching and assessment of the achieved student success, as well as the pass rate of students who have passed the subject</td></tr>
<tr><td rowspan="6">22.</td><td colspan="7">Literature</td></tr>
<tr><td rowspan="2">22.1.</td><td colspan="6">Required literature</td></tr>
<tr><td>Ord. number</td><td>Author</td><td>Title</td><td>Publisher</td><td>Year</td></tr>
<tr><td>1.</td><td>Sonja Apostolska</td><td>Ergonomics</td><td>Sonja Apostolska</td><td>2014</td></tr>
<tr><td rowspan="3">22.2.</td><td colspan="6">Additional literature</td></tr>
<tr><td>Ord. number</td><td>Author</td><td>Title</td><td>Publisher</td><td>Year</td></tr>
<tr><td>1.</td><td>Denise C. Murphy</td><td>Ergonomics and the Dental Care Work</td><td>Washington, DC: American Public Health Association</td><td>1999</td></tr>
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