1.	Subject	**OCCUPATIONAL MEDICINE**
2.	Code	OM 526
3.	Study Program	General medicine

4.	Organizing Institution (Unit, Institute, Chair, Department)	UKIM-Faculty of Medicine Cathedra of Occupational Medicine
5.	Educational degree (first or second cycle)	Integrated cycle
6.	Study year/semester	Fifth (V) year / Tenth (X) semester
7.	Број на ЕКТС кредити	2
8.	Responsible teacher	Prof. Dr Jovanka Karadzinska Bislimovska, Head of Chair * the education process is performed by all members of the Cathedra
9.	Preconditions for starting the subject	Passed first part of the professional exam Completed criteria for VII semester
10.	Teaching goals of the study program (competencies): Adoption of the knowledge, skills, and basic principles in occupational medicine, principles, and practice of health and working environment	

11.	Contents of the study program: **Theoretical course**: • Physiology and psychology of work; • Ergonomics, Ecology of work and working environment's surveillance • Physical hazards in working environment and health's effects; • Chemical hazards in working environment and health's effects; • Psychosocial factors at work and health's effects; • Biological hazards in working environment and health's effects • Occupational diseases, work-related diseases and impairments of selected organs and systems • Preventive measures, Preventive strategy **Practical course:** • Microclimate in working environment; workplace analysis; • Noise in working environment and hearing assessment; • Ionizing radiation, personal dosimeters, safety measures; • Lighting in working environment and sight assessment; • Air pollution in working environment; • Functional capacity assessment: cardio-respiratory system, anthropometry; • Preventive medical examinations**;** • Occupational diseases (case reports) • Work-related-diseases (case reports) • Pneumoconiosis and RTG classification-interpretation; • Methods and procedures in work ability assessment-practical work; • Specific occupational risks in exposed workers in different sectors and industries • Workers' Preparedness and Response to disasters • Analysis of research data and scientific publications in the field of occupational medicine	
12.	Methods of learning: Lectures with interactive approach; Practical work, Seminars, Poster preparation and presentation	
13.	Total available amount of learning hours	60 hours
14.	Distribution of the available learning time	45 hours lectures, practical work,

		seminars, project tasks

			15 hours home learning	
15.	Types of educational activities	15.1.	Lectures-theoretical course	24 hours
		15.2.	Practical work (laboratory, clinical), seminars	Practical work: 16 hours Seminars: 2 hours
16.	Other types of activities	16.1.	Project tasks	3 hours
		16.2.	Individual tasks	
		16.3.	Home learning	15 hours
17.	Types of knowledge assessment			

17.1	Tests	min.-max. Continuous tests Continuous testing of knowledge (colloquium) 1 written test points 15-25 Physiology and psychology of work, Ergonomics, Workplace risk assessment and ecological monitoring, Occupational diseases, work-related diseases and injuries at work, Physical factors of working environment **Final exam** min. - max. **Written exam*** points 12-20 **Oral exam**** points 18-30 * Written exam - Chemical factors of working environment and health's effects, occupational toxicology, metals, gases, pesticides, organic compounds ** Oral exam (integrative) including physical, chemical, biological, and psychosocial workplace hazards, occupational diseases, and impairments of selected organs and systems, preventive measures The student is obliged to have a minimum of predicted points for each part of the exam in particular, in order to enable them to be inscribed as points for the final exam. Otherwise, the exam is considered

		unsuccessful.
17.2	Seminar work/project (presentation: written/oral)	min. - max. Project activity (part of practical work) points 2-5

	17.3	Active participation		min. - max.
			Theoretical course *	2-5
			Practical course **	12-20

			* Attendance at theoretical lectures 51%-60% 2 points 61%-70% 3 points 71%-85% 4 points 86%- 100% 5 points ** Practical course (4 exercises with duration of 4 hours each - each exercise with 2 points) Attendance at practical course - exercises: 6-8 points Active participation in exercices: 4-7 points The student can be absent just once (one exercise).

18.	Knowledge assessment criteria: (points/grade)	up to59 points	5 (five) F
		60 to 68 points	6 (six) E
		69 to 76 points	7 (seven) D

		77 to 84 points	8 (eight) C
		85 to 92 points	9 (nine) B
		93 to 100 points	10 (ten) A

19.	Criteria for obtaining a signature and taking the final exam	Conditional criteria: In order to obtain a signature, the student is required to attend theoretical, practical courses and seminars and to score minimum points. The student can take the final exam if he/she has passed the continuous tests with minimum points; Additionally, he/she has to pass the continuous assessments, and then can take the complete final exam. The grade for the subject is formed according to the rating table, based on the sum of the points from all the activities, the continuous testing and the final exam.
20.	Language of the course	Macedonian
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

1.	Bislimovska Karadzinska J, Minov J, Risteska-Kuc S, Mijakoski D, Stoleski S.	Occupational Medicine	University "Sts. Cyril and Methodius", Skopje	2011
2.	Stikova E.	Occupational Medicine	Faculty of Medicine, Skopje	2012
3.	William N Rom; Steven	Environmental and occupational medicine	Wolters Kluwer/Lippincott Williams & Wilkins,	2007

					Philadelphia, USA	

			Markowitz; Book		UCLA University, Columbia University	
	22.2.	Additional literature				
		1.	Robert B. Wallace ed, MaxeyRosenauLast	Public Health and Preventive Medicine	OEM Press Publication, Denver-New Orleans, USA	2008
		2.	Robert J. Gatchel, Izabela Z. Schultz	Handbook of Occupational Health and Wellness	Imprint: Springer, Harvard University, Boston,USA	2012