Faculty of Medicine / STOMATOLOGY / BASIS OF SCIENTIFIC RESEARCH WORK

Course:	BASIS OF SCIENTIFIC RESEARCH WORK			
Course ID	**Course status**	**Semester**	**ECTS credits**	**Lessons** (Lessons+Exercises+Laboratory)
13249	Mandatory	9	2	2+0+0
Programs	STOMATOLOGY			
Prerequisites	There are no requirements for registering and attending the course.			
Aims	The main goal of the course Methodology of scientific research work is to train students to independently design research in health care, conduct research, write papers for scientific journals and to present the results of their scientific work.			
Learning outcomes	1. Understand the need for a systematic approach to scientific research work. 2. Accept the principles of scientific research work in medicine. 3. Get trained for independent conception of scientific research work. 4. Accept the principles of teamwork. 5. Acquire the necessary knowledge in the oral presentation of works. 6. Acquire the necessary knowledge in submitting papers to journals and the review process.			
Lecturer / Teaching assistant	Dušan Mustur, Assist. Prof., MD, MSc, PhD			
Methodology	Lectures, discussions, consultations and seminar papers.			
Plan and program of work				
Preparing week	Preparation and registration of the semester			
I week lectures	Introduction. Science, scientific activity and research. General methodology of scientific research.			
I week exercises				
II week lectures	Scientific methods.			
II week exercises				
III week lectures	Technology of scientific research.			
III week exercises				
IV week lectures	Identifying a scientific problem and a formulation of a scientific promblem.			
IV week exercises				
V week lectures	Establishing a hypothesis that explains the phenomenon.			
V week exercises				
VI week lectures	Types of scientific publications. Primary, secondary and tertiary publications.			
VI week exercises				
VII week lectures	Collection, study and arrangement of literary materials and scientific information. The first colloquium.			
VII week exercises				
VIII week lectures	Preparing the structure or composition of a scientific paper.			
VIII week exercises				
IX week lectures	Methodology of scientific research work in medicine and dentistry.			
IX week exercises				
X week lectures	Basics of the ethics of scientific and research work in medicine.			
X week exercises				
XI week lectures	The multidisciplinary nature of research in medicine.			
XI week exercises				
XII week lectures	Methodological aspects of experimental research in medicine and dentistry.			
XII week exercises				
XIII week lectures	Methodological aspects of clinical research in medicine and dentistry.			
XIII week exercises				
XIV week lectures	The relationship between research and practice in the medical sciences. The 2nd colloquium.			

XIV week exercises	
XV week lectures	Evidence based medicine (EBM). Evidence based dentistry (EBD).
XV week exercises	
Student workload	Teaching and final exam: (2.66 hours) x 16 = 42.56 hours Necessary preparations before the beginning of the semester (administration, enrollment, certification): (2.66 hours) x 2 = 5.32 hours Total workload for the course: 2 x 30 = 60 hours Load structure: 42.56 hours (classes and final exam) + 5.32 hours (preparation) + 12 hours (supplementary work).

Per week	**Per semester**
2 credits x 40/30=2 hours and 40 minuts 2 sat(a) theoretical classes 0 sat(a) practical classes 0 excercises **0 hour(s) i 40 minuts** of independent work, including consultations	Classes and final exam: **2 hour(s) i 40 minuts x 16 =42 hour(s) i 40 minuts** Necessary preparation before the beginning of the semester (administration, registration, certification): **2 hour(s) i 40 minuts x 2 =5 hour(s) i 20 minuts** Total workload for the subject: **2 x 30=60 hour(s)** Additional work for exam preparation in the preparing exam period, including taking the remedial exam from 0 to 30 hours (remaining time from the first two items to the total load for the item) **12 hour(s) i 0 minuts** Workload structure: **42 hour(s) i 40 minuts (cources), 5 hour(s) i 20 minuts (preparation), 12 hour(s) i 0 minuts (additional work)**
Student obligations	Lectures, discussions, consultations and seminar papers.
Consultations	
Literature	Polgar S, Thomas SA. Introduction to Research in the Health Sciences. Fifth Editon. Churchill Livingstone Elsevier. Philadelphia, 2008. Friedland, DF et all Evidence-Based Medicine and the Internet, In: Evidence-Based Medicine: A Framework for Clinical Practice. McGraw-Hill, New York, 1996. Shortliffe EH, Cimino JJ. Biomedical Informatics: Computer Applications in Health Care and Biomedicine. Springer, Berlin, Heidelberg, 2006. Dačić M. Metodologija izrade naučnostručnog rada u biomedicinskim istraživanjima. Viša medicinska škola-Zemun, Beograd. 2005. Lalatović Z. Metodologija naučno-istraživačkog rada sa osnovama statistike. Available from URL: http://www.fms-tivat.me/predavanja4god/Metodologija_naucno_istrazivackog_rada_ZL.pdf. Cucić V. Zdravstvena zaštita zasnovana na dokazima. Velarta, Beograd, 2001.
Examination methods	Regular class attendance 5 points, seminar work 5 points, two colloquiums 20 points each, final exam (test) 50 points. A passing grade is obtained if at least 50 points are collected.
Special remarks	
Comment	

Grade:	F	E	D	C	B	A
Number of points	less than 50 points	greater than or equal to 50 points and less than 60 points	greater than or equal to 60 points and less than 70 points	greater than or equal to 70 points and less than 80 points	greater than or equal to 80 points and less than 90 points	greater than or equal to 90 points