

Study program: Integrated academic studies in medicine			
Type and level of the study program: integrated academic studies			
Course title: Medical statistics and informatics (M1-MS/IN)			
Teacher: Eržebet F. Ač Nikolić, Svetlana T. Kvrđić, Vesna P. Mijatović Jovanović, Snežana N. Ukropina, Olja T. Nićiforović Šurković, Sonja Lj. Šušnjević, Srđan M. Škrbić, Dragan M. Mašulović, Danijela N. Boberić Krstićev, Zoran I. Putnik			
Course status: compulsory			
ECTS Credits: 5			
Condition: -			
Course aim To enable student to be capable for evaluation of his/her own and other people's work using statistical-analytical procedures, to design simple survey for improvement of the quality of his/her work, to read critically professional and scientific literature for better understanding of procedures of science based medicine. The aim of this course is to introduce students with elements of computer literacy and especially use of information-communications technology in medicine.			
Expected outcome Capability to distinguish the statistical aspects of scientific papers in the field of medicine, the use of different statistical methods, processing and interpretation of the data collected in the study and use computers to solve problems by using pre-built software solutions.			
Content Basic concepts in statistics. Statistical population, units and symbols. Procedures for data processing in statistical analysis and presentation of results (statistical tables, graphs and figures). Relative numbers. Measures of central tendency. Measures of variability. Rating homogeneity. The types of samples. Trend. Correlation analysis. Parametric and non-parametric tests for testing statistical hypotheses. The methodology for health status of the population analysis. Basics of hardware and software architecture of the computer. System and application software. Basics of computer networks and the Internet. The use of computers in medicine (data processing, medical information systems, medical diagnostics, standards in medical informatics, telemedicine and e-health).			
Literature <i>Compulsory</i> 1. Harris M, Taylor G, editors. Medical statistics made easy, third edition. Banbury, UK: Scion Publishing; 2014. (resource type: eBook). 2. Moore DS, editor. The basic practice of statistics, third edition. New York: W.H. Freeman and Company, 2004. <i>Additional</i> 1. Peacock JL, Peacock PJ, editors. Oxford Handbook of Medical Statistics. Oxford: Oxford University Press; 2011. (resource type: eBook). 2. Riffenburgh R. Statistics in Medicine. San Diego: Academic Press, 2005. 3. Coolidge LF, editor. Statistics: A Gentle Introduction. Third Edition. University of Colorado, Colorado Springs: SAGE publications;2013.			
Number of active classes			Other:
Lectures: 30	Practice: 30	Other types of teaching:	Research related activities:
Teaching methods: Lecture; Practice; Work on computer			
Student activity assessment (maximally 100 points)			
Pre-exam activities	points	Final exam	points
Lectures	10	Written	70
Practices	20	Oral	
Colloquium		
Essay			