

NAME OF THE COURSE		Summer School in Clinical epidemiology				
Course teacher	Assoc. Prof. Ivana Kolčić	Credits (ECTS)	2			
Associate teachers		Type of instruction (number of hours)	L	S	E	T
			10	15	0	25
Status of the course	Summer school	Percentage of application of e-learning	0%			
COURSE DESCRIPTION						
Course enrolment requirements and entry competences required for the course	Knowledge about the study design, types of clinical trials basic statistical methods and medical information search methods					
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	<p>General: characterize quantitative methods used in clinical trials, carry out the literature search, critical evaluation of scientific results, critical application of scientific knowledge in the clinical practice, and unbiased evaluation of effectiveness of clinical work which are the prerequisites for improvement of health care and planning of its development</p> <p>Specific: recognize and apply appropriate approach for application of .quantitative methods of clinical epidemiology into clinical practice, calculate the parameters of causality, diagnostic procedures, effectiveness and harms of therapeutic procedures and disease prognosis, describe the EBM procedures and judge the appropriate application of EBM procedures in daily clinical work</p>					
Course content broken down in detail by weekly class schedule (syllabus)	<ol style="list-style-type: none"> 1. Introduction to Clinical Epidemiology: scope, principles and procedures. Differences between quantitative and qualitative data (lecture, 1 hour) 2. Principles of clinical trials: basic types of clinical trials, recruitment, monitoring and outcome. Bias in clinical trials (lecture 2 hours, seminar 1 hour) 3. Causal Investigation: clinical trials and quantitative estimation (1 hour lecture, 2 hours seminar) 4. Diagnostic methods: clinical trials and quantitative evaluation (2 hours lecture, 2 hours seminar) 5. Therapy: clinical trials, assessment of efficacy and harm (lecture 1 hour, seminar 2 hours) 6. Prognosis of the disease: clinical trials and quantitative analysis (lecture 1 hour, seminar 1 hour) 7. Evidence-based medicine, achievements and limitations, procedures, clinical questions, finding evidence (2 hours lectures, 1 hour seminar) 8. Assessment of papers on diagnostic procedures (2 hours seminar) 9. Evaluation of papers on therapeutic procedures, benefits and harms (seminar 2 hours) 10. Estimation of papers on prognosis and causes of disease (2 hours seminar) 11. Analysis and improvement of the health care quality 					

Format of instruction	x lectures x seminars and workshops <input type="checkbox"/> exercises <input type="checkbox"/> <i>on line</i> in entirety <input type="checkbox"/> partial e-learning <input type="checkbox"/> field work		x independent assignments <input type="checkbox"/> multimedia <input type="checkbox"/> laboratory <input type="checkbox"/> work with mentor <input type="checkbox"/> (other)			
Student responsibilities	In accordance to Rules of studying and Deontological code for USSM students.					
Screening student work (<i>name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course</i>)	Class attendance	0.5	Research		Practical training	
	Experimental work		Report		(Other)	
	Essay		Seminar essay	1	(Other)	
	Tests		Oral exam		(Other)	
	Written exam	0.5	Project		(Other)	
Grading and evaluating student work in class and at the final exam	Written exam and seminar essay					
Required literature (available in the library and via other media)	Title			Number of copies in the library	Availability via other media	
	1. Gamulin S. Clinical Research: Clinical Epidemiology, Zagreb, Medicinska naklada, 2017.					
	2. Eldar R. Quality of care, Medicinska naklada 2005.					
	3. Seminar assignments					
	4. Articles from which seminar assignments are made					
	5. Lecture handouts					
Optional literature (at the time of submission of study programme proposal)	1. Fletcher W, Fletcher SW. Clinical epidemiology: The essentials, 4th edition. Lippincot Williams and Wilkins, 2005.					
	2. Sackett DL, Haynes RB, Guyatt GH, Tugwell P. Clinical epidemiology. A basic science for clinical medicine. Boston; Little, Brown and Company, 1991.					
	3. Haynes RB, Sackett DL, Guyatt GH, Tugwell P, Clinical epidemiology, Lippincott Philadelphia, 2006.					
	4. Kolčić I, Vorko Jović A (Eds.). Epidemiology. Medicinska naklada, Zagreb, 2012.					

	5. Marušić M i sur. Principles of research in medicine, Zagreb, Medicinska naklada, 2008.
Quality assurance methods that ensure the acquisition of exit competences	<ul style="list-style-type: none"> ▪ Teaching quality analysis by students and teachers ▪ Exam passing rate analysis ▪ Committee for control of teaching reports ▪ External evaluation
Other (as the proposer wishes to add)	