EVIDENCE-BASED MEDICINE				
GENERAL INFORMATION				
Course teacher	Prof. Jure Mirat, MD, PhD			
Associates	Prof. Ljubica Glavaš-Obrovac, MEng Biotech,			
	PhD			
	Prof. Maja Miškulin, MD, PhD			
	Assoc. Prof. Vesna Ilakovac, PhD			
	Assoc. Prof. Ana Stupin, MD, PhD			
	Assoc. Prof. Kristina Selthofer Relatić, MD, PhD			
	Assoc. Prof. Krešimir Šolić, MEengE, PhD			
	Asst. Prof. Kristin Bojanić, MD, PhD			
Study programme	Graduate University Study of Medical			
	Laboratory Diagnostics			
Course status	elective			
Year of study, semester	2 nd year, 4 th semester			
ECTS credits	3			
Form of teaching (number of classes)	Lectures 25; Seminars: 15; Practicums 5			
Expected number of students attending the course	20			
COURSE DESCRIPTION				
Course objectives				

Objective of this course is to expand students' knowledge on benefits and applicability of recent discoveries made regarding evidence-based medicine and clinical practice.

Course entry requirements and competencies needed for the course

Completed Undergraduate Study of Medical Laboratory Diagnostics or equivalent bachelor's degree (baccalaureate)

Learning outcomes at study programme level

1.1, 2.4, 2.5, 2.6, 2.7

Expected learning outcomes at course level

After attending lectures, completing seminars and exercises, independent study and passing the exam, students will be able to:

- 1. apply the principles of evidence-based laboratory medicine
- 2. critically assess data published in scientific and expert studies
- 3. analyse data and access on-line information
- 4. explain characteristics and efficiency of diagnostic and screening tests
- 5. valorize the application of quality indicators in the concept of evidence-based clinical practice

Course content

Lecture: Significance of the concept, basic terms. Historical development and methods of implementing evidence-based clinical practice. Correlation between theoretical concept and clinical practice. Benefits in clinical practice. Manner of collecting data, preparing them for processing and processing. Concept of meta-analysis. Databases and possibilities of accessing information. Research selectivity and its application in specific cases. Flaws and disadvantages. Database search, collecting relevant information and analysing such information and converting it to information applicable to a specific case and clinical practice. Changing clinical practice based on rejected results in accordance with the Management of Change concept. Introducing changes in the concept of management both for individual segments of healthcare organisation and entire institutions, based on data obtained from literature. Benefits and risks. Application of evidence-based clinical practice in quality control systems. Monitoring work of a healthcare organisation based on collected data. Understand the use of quality indicators in the concept of evidence-based medicine and institution management. Correlation between evidence-based clinical practice, institution management and health institution accreditation. Overview of work and understanding of basic concepts. Data analysis and access to

information. Practical presentation of database accessing and practical work with online databases. Characteristics and efficiency of diagnostic tests and screening tests. Data standardisation.

Seminars: Critical evaluations of scientific works. Student participation in presentation of a medical issue and an attempt to change the traditional approach to the approach involving evidence-based medicine.

Practical exercises: Data analysis and access to information. Practical presentation of access to databases and practical work with databases located on the Internet.

Forms of teaching

Lectures; seminars and practicums, independent assignments.

Students' responsibilities

Attendance is obligatory throughout all course forms, and the student has to attend all the exams. Student absence of up to 30% is considered acceptable in each teaching form. Practical work and seminars that were not completed have to be taken in the form of colloquiums. The student has to attend all forms of exams required.

Monitoring students' work (Connecting learning outcomes, teaching methods and evaluation)

Teaching activity	ECTS	Learning	Student activity	Evaluation	Grade points	
		outcome		methods	Min.	Max.
Attending classes	0.25	1-5	Attendance,	Attendance records	2	5
Seminar paper	0.5		Seminar paper	Writing and presenting seminar paper	3	15
	0.25		Practical work	Exercises in a clinical laboratory	5	10
Final exam	2	1-5	Studying for final	Written exam	40	70
Total	3				50	100

Evaluation of written part of final exam

Percentage of correct answers (%)	Grade points
96.00-100	70
90.00-95.0	60
80.00-89.00	50
70.00-79.00	45
60.00-69.00	40

Formulating the final grade:

Grade points achieved in classes are combined with points achieved in the final exam. Grading in the ECTS system is absolute grading and represents one's final achievement. Grades are numerically expressed as follows: A – excellent (5): 80-100 grade points; B – very good (4): 70-79.99 grade points; C – good (3): 60-69.99 grade points; D – sufficient (2): 50-59.99 grade points

Assigned reading (available in the library and in other media)							
Title	Number of	Availability in					
	copies in the	other media					
	library						
Relevant scientific articles available online free of charge		Yes					
Further reading							
-							
Quality assurance methods that ensure the acquisition of exit competencies							

Anonymous, quantitative, standardised students' opinion survey on the course and teacher's work, carried out by the Quality Assurance Office of the Faculty of Medicine in Osijek.