PLANING AND IMPLEMENTATION OF SCINETIFIC RESEARCH WORK				
GENERAL INFORMATION				
Course coordinator	Professor Jerko Barbić, MD, PhD			
Assistant/Associate	Professor Mladen Merćep, MD, PhD			
Study Programme	Integrated undergraduate and graduate university study of Medicine			
Status of the course	Elective			
Year of study, semester	3 rd year, 5 th semester			
ECTS	2			
Workload (hours)	Lectures (10), seminars (10), exercises (5)			
Expected number of students	30			
COURSE DESCRIPTION				

Course objectives

The aim of the course is to introduce studenty to the research metohods in medicine (basic, observational, prospective cihorts). Links between bascic resarch and clinical research will be presented and introduction to transational medicie will be presented. Studenty wil learn how to write scinetify hypothesis and how to test hypothesis. The most common forms of bias and confounding will be explanied. It will show methods for seting research proposal, methods and how to present research data. In the practical part

Students will learn how to use programs for data processing and analyis. Finlly stundets will present their plan for the research.

Enrolment requirements and entry competencies

In accordance with the conditions for enrollment in the 3rd year of the study program

Learning outcomes at the Programme level

2.1, 2.2., 2.3, 3.4, 3.5, 4.2

Learning outcomes (5-10)

- 1. Explanation the difference between different types of biomedical research.
- 2. Define the research question and the type of research that can be used to obtain an answer to the research question
- 3. Define the scinetific hypothesis
- 4. Explain the meaninig of bias in biomedicine.
- 5. Explain the methods of dana processing and display.

Course content

The course content include the following topics: prioritises of resarch, budget of project, Resources for the project – equpimnet, financial and organizational conditions. Time frame and costs of the project. Structure of the scientific research project proposal of the Ministry of Science, Education and Sports of the Republic of Croatia. Name/topic of the project. Abstract. Keywords. Collaborators on the project (Principal researcher, research and technical staff). Project costs. Equipment-resources-space

Mode of teaching

Lectures; Seminars; Exercises

Student obligations

Students are expected to attend all class sessions, as well as to take all the examinations. However,

they are allowed for excused absences, totalling 30% of all classes. Monitoring student work (alignment of learning outcomes, teaching methods, and grading)

Teaching activity	ECTS	Learning	Student activity	Assessment	Grade points	
		outcome		methods	Min.	Max.
Attending classes	0.5		Attendance at	Keeping	5	20
		1-5	classes	records		
Seminars, Exercises	0.5	1-5	Active	Evidention	10	20
			participation and	Exercise diary		
			presentation at			
			seminars and			
			exercises			
Final exam	1	1-4	Learning for the	Oral exam	35	60
			final exam			
Total	2				50	100

Evaluation od final exam:

Student answer	Grade points		
The answer meets the minimum criteria	35.0		
The average answer with noticeable errors	45.0		
The very good answer with minor errors	55.0		
The exceptional answer	60.0		

Calculation od final grade:

Students who achieved 35 or more points in the final exam, the points obtained in the final exam are added to the grade points obtained during the class, and this sum constitutes the final grade. Since the study program schedule descriptive assessment of elective courses, the course coordinator awards the grade "passed" to a student who achieves 50 or more grade points in the course.

Required reading (available in the library and through other media)					
Title	Number of	Availability			
	copies in the	through other			
	library	media			
1. Matko Marušić i suradnici; Uvod u znanstveni rad u medicini,	10				
6 izdanje, Medicinska naklada Zagreb 2019. godine					

Additional reading

Course evaluation procedures

Anonymous, quantitative, standardized student survey providing feedback on the course as well as on the work of course coordinators and their assistants/associates is being conducted by the QA Office of the Faculty of medicine Osijek.

Note /Other

E-learning does not count towards course contact hours, but is being used in teaching and comprises links to various web pages, as well as video and audio materials available on web pages.