

1.	Subject	BASICS OF SCIENTIFIC RESEARCH			
2.	Code	DA – 325			
3.	Study program:	Three-year professional studies for graduate obstetricians			
4.	Conducted by	UKIM – Medical Faculty Department of Internal Medicine			
5.	Degree of education (first or second cycle)	First cycle			
6.	Academic year/semester	III/VI	7.	Credits	3.5
8.	Professor	Head: Prof. d-r Ljubiva Georgievska – Ismail Theoretical lessons: Prof. d-r Ljubica Georgieva – Ismail Prof. d-r Biljana Janevska Prof. d-r Katerina Tosheska – Trajkovska Prof. d-r Marija Vavlukis Practical lessons: Prof. d-r Marija Vavlukis Prof. d-r Katerina Tosheska – Trajkovska Prof. d-r Lidija Poposka Doc. D-r Zanina Perevska Ass. D-r Valentina Andova			
9.	Prerequisite	Enrolled in the semester			
10.	Goals	Getting acquainted with: <ul style="list-style-type: none"> • Basics and importance of scientific research and the scientific methods principles • Elements of the research process and understanding them • Medicine based on proof and its use • Finding scientific research project sources and gaining elementary knowledge about approaching them critically • Basic procedures and rules of preparation, publishing and/or presenting the result of a scientific research 			
11.	Content summary:	Theoretical lessons (15 lessons): <ul style="list-style-type: none"> • Introduction to the subject, commitments, expectations; Science and scientific method – what is it, history, importance and principles • Terminology in science, types of proof, recommendation strength • Design of the scientific research project • Using biomedical data bases • Ethics in scientific research work and responsible behavior in science • Structure of the scientific project and publication preparation, style, language and presentation • Critical assessment of parts of a scientific project Practical lessons (20 lessons): <ul style="list-style-type: none"> - Practical lesson 1: How to choose a topic for scientific research and searching the web sources with key words - Practical lesson 2: Planning and organizing the scientific research – practice on a given subject with special attention paid on materials and methods 			

	<ul style="list-style-type: none"> - Practical lesson 3: Ethics in science – panel discussion on given topics (plagiarism, conflict of interest, authors’ rights protection) - Practical lesson 4: Parts of the paper: Critical approach towards part of the paper (title, design, material and methods, results, discussion, conclusion) - Practical lesson 5: Preparing a draft of a compilation thesis on a given topic, literature citation, presentation of a paper on a given material <p>Graduation thesis preparation (50 lessons)</p>																										
12.	Teaching methods: interactive lessons, practical lessons, panel discussions																										
13.	Total classes:	85																									
14.	Organization																										
15.	Types of teaching activities	15.1	Lessons: theoretical classes	13 (+2 hours exams)																							
		15.2	Practical lessons, seminars	20																							
16.	Other types of activities	16.1	Practice																								
		16.2	Self-supporting practice	50 lessons (graduation thesis preparation)																							
		16.3																									
17.	Knowledge assessment		Points																								
	17.1	Mid-term exams	Mini-quizzes after the practical lessons – 5 in total (every correct answer gives 1.5 points) Min. – max. 23-38																								
	17.2	Final exam	Written form Min. – max. 27 - 45 (30 questions: every correct answer gives 1.5 points. Minimum of 60% correct answer)																								
	17.3	Paper/project (oral presentation)	There are bonus points for writing a paper/public presentation for those who decided to participate at the beginning of the course (5 points)																								
	17.4	Active participation	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;"></td> <td style="width: 30%; text-align: right;">Theoretical lessons</td> <td style="width: 10%; text-align: right;">points</td> <td style="width: 30%; text-align: right;">Min. – Max</td> </tr> <tr> <td></td> <td></td> <td></td> <td style="text-align: right;">4 - 6</td> </tr> <tr> <td></td> <td style="text-align: right;">Practical lessons</td> <td style="text-align: right;">points</td> <td style="text-align: right;">4 - 6</td> </tr> <tr> <td></td> <td colspan="3">Attending 70% of the lessons – 4 points</td> </tr> <tr> <td></td> <td colspan="3">Attending 80% of the lessons – 5 points</td> </tr> <tr> <td></td> <td colspan="3">Attending 90% of the lessons – 6 points</td> </tr> </table>			Theoretical lessons	points	Min. – Max				4 - 6		Practical lessons	points	4 - 6		Attending 70% of the lessons – 4 points				Attending 80% of the lessons – 5 points				Attending 90% of the lessons – 6 points	
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18.	Grading criterion (points/grades)	Up to 59	5 (five) F																								
		60-68	6 (six) E																								
		69-76	7 (seven) D																								
		77-84	8 (eight) C																								
		85-92	9 (nine) B																								
		93-100	10 (ten) A																								
19.	Requirements for obtaining a signature and attending the final examination	<p>To obtain a signature the student must gain minimum points from attending the theoretical and practical lessons.</p> <p>The final grade for the subject is formed according to the table for grading, and is based on the sum of the points from all the activities and the mid-term exams.</p>																									
20.	Language	Macedonian, English when necessary																									
21.	Method of	Students’ anonymous evaluation of the subjects, the professors and collaborators																									

	evaluating the quality of the lessons	who hold the lessons.	
22.	Literature:		
	22.1	Mandatory literature	
		1.	Authorized lectures of the professors who hold the theoretical lessons (Georgievska Ismail, Vavlukis, Tosheska, Janevska)
	22.2	Additional literature	
		1.	Panzova V., Science as a vocation., Faculty of Philosophy, UCIM, 2003
		2.	Marushikj M. et al., Introduction to Scientific Work in Medicine., Skopje, Kultura, 2003
		3.	Spiroski ZM., Scientific Paper – writing it and publishing it. Skopje, Institute of Immunobiology and Humane Genetics, 2002