

Study programme	MEDICAL STUDIES IN ENGLISH				
Cycle	INTEGRATED	Type	UNIVERSITY		
Study track	-	Module	-		
Year of study	2	Semester	IV		
Course title	Teratology – taking drugs during pregnancy	Course code	MFMSEI03		
ECTS	1.5	Status	ELECTIVE		
Teaching hours		Lectures	Exercises	Seminars	Practice
		8	10	7	-
Teachers	Sandra Kostić, PhD, associate professor	8	10	7	
Course objectives	The aim of the course is to understand and acquire knowledge about the influence of drugs on the development of malformations in fetus				
Course learning outcomes	Learning outcome (LO) Student:			Course learning outcome code	LO code at the study program level
	- Describes and explains the basics of human development and development of malformations			IU-MFMSEI03-1	IU-MSE1
	- Identify and describe developmental malformations			IU-MFMSEI03-2	IU-MSE4
	- Identify and describe the most common drugs taken during the pregnancy and their mechanism of action and possible influence on development of anomalies			IU-MFMSEI03-3	IU-MSE5
	- Name and explain the supplements taken during the pregnancy and their possible influence on development of anomalies			IU-MFMSEI03-4	IU-MSE5
	- Describe the influence of illegal substances on the foetal development			IU-MFMSEI03-5	IU-MSE5
Prerequisites for the course enrolment	In accordance with the Rulebook on the Integrated Studies at the School of Medicine University of Mostar				
Course content	Week / shift	Topic			
	Lectures	<ul style="list-style-type: none"> - The basics of the human development - The principles of teratology and historical examples - Taking drugs during pregnancy and lactation - Developmental anomalies – genetic, epigenetic and environmental influence 			
	Seminars	<ul style="list-style-type: none"> - Placenta – blood supply, the placental barrier - Pharmacokinetics (absorption, distribution, metabolism, secretion) - Mother diet - Supplements in diet - The influence of illegal substances on the fetal development 			
	Exercises	<ul style="list-style-type: none"> - Various drugs (narcotics, NSAIDs, anxiolytics and antidepressants, antibiotics, drugs for heart and blood vessels diseases, cytostatic, sex hormones, drugs for skin diseases): action and examples of possible anomalies due to their action - The value of the animal research of teratogens - Research of the scientific literature, short movies with teratology theme 			
Language	English				
E-learning	Classes are conducted in person. If necessary, lectures, seminars and exercises can be combined (in person and online) or completely online via e-learning platforms (Google-Meet).				
Teaching methods					
Types of assessment (indicate - Bold)					
Type of pre-examination obligation			Type of exam		

midterm	seminar paper	essay/report	practical/project task	other	written exam	oral exam	practical				
Allocation of ECTS credits and share in the grade											
Student obligations		Learning outcome code	Hours of workload	Share in ECTS		Share in grade					
Class attendance			25	0.8							
Seminar paper		IU- MFMSEI03-3 IU- MFMSEI03-4 IU- MFMSEI03-5	10	0.35							
Written exam		IU- MFMSEI03-1 IU- MFMSEI03-2 IU- MFMSEI03-3 IU- MFMSEI03-4 IU- MFMSEI03-5	10	0.35							
In total			45	1.5		100 %					
Method of calculating the final grade											
The final grade is descriptive, pass/fail. After completing the seminar work and the written exam, student will pass the course.											
Literature (indicate)	Title (title, author, year)	Edition		Language				Type of literature			
		own	other	croatian	english	other	multilingual	book	article	script	other
Compulsory	Embryology, teratology, causes of congenital disorders (ppt)	x			x						x
	Sadler, T. W. Langman's medical embryology. — 15th ed.		x		x			x			
	Drugs in Pregnancy: Pharmacologic and Physiologic Changes that Affect Clinical Care (Emily A. Pinheiro ^{1,2} and Catherine S. Stika), 2020.		x		x				x		
	Nutritional Gaps and Supplementation in the First 1000 Days (Beluska-Turkan K et al.) 2019.		x		x				x		
	Prenatal Substance Abuse: Short- and Long-term Effects on the Exposed Fetus (Marylou Behnke, Vincent C. Smith) 2013.		x		x				x		
	Macronutrient and Micronutrient Intake during Pregnancy: An Overview of Recent Evidence (Mousa A. et. Al), 2019		x		x				x		
Additional	Drugs During Pregnancy and Lactation (Third Edition), 2015 Treatment Options and Risk Assessment Edited by: Christof Schaefer, Paul W. J. Peters and Richard K. Miller		x		x						x

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Additional course information											