

1.	Subject	ANATOMY WITH EMBRYOLOGY			
2.	Code	DA – 115			
3.	Study program:	Three-year professional studies for graduate obstetricians			
4.	Conducted by	UKIM – Medical faculty Department of anatomy, Department of histology			
5.	Degree of education (first or second cycle)	Integrated cycle			
6.	Academic year/semester	First/I	7.	Credits	2.5
8.	Professor	Chair of the Department of Anatomy Prof. J.Zivadnovikj; Responsible professor of the Department of Histology and Embryology Prof. Elida Mitevska and Doc. Lena Kakasheva-Mazenkovska *the classes are held by all the members of the departments			
9.	Prerequisite	No			
10.	Goals	<ul style="list-style-type: none"> • Introduction of anatomy as natural, morphological science and its importance in medicine • Introduction to anatomical terminology and its use • Introduction to the basic microscopic anatomy of the human body • Learning topographical anatomy of chest and abdomen • Learning topographical anatomy of the female pelvis • Learning pelvis osteometry • Comprehension of the complex process of prenatal development of the multicellular human organism: how was it created and developed inside the mother's uterus • Comprehension of why there are disorders in the development of the organs and what is the essence of the congenital anomalies • Learning the structure of the female reproductive system which is a morphofunctional base for the reproductive abilities of women 			
11.	Content summary:	<p>Theoretical lessons: Anatomy (26 classes)</p> <ul style="list-style-type: none"> - Introduction to anatomy, anatomical nomenclature - Basic anatomy: introduction to osteology, sindesmology, myology, angiology and neurology - Anatomy of the functional systems - Systematic and topographical anatomy of the chest and abdomen - Systematic and topographical anatomy of the female pelvis (walls, perineum, female reproductive organs, vascularisation and innervation) - Osteometry of the pelvis <ul style="list-style-type: none"> - Disorders in the development and the appearance of congenital anomalies - Obvious physical manifestations of deviations in the normal development of a newborn - Histological structure of the female reproductive system <ul style="list-style-type: none"> - Content and basic structure of the female reproductive system - Ovary: structure (capsule, cortex and medulla), structure of the developing stages of the follicle (primordial, primary, secondary, early tertiary and late tertiary); ovulation; structure of the post-ovulation residues (corpus rubrum, corpus luteum et corpus albicans). - Fallopian tube: structure and specifications of the epithelium - Uterus: structure of the endometrium, myometrium and perimetrium; structural changes of the 			

	<p>endometrium during the menstrual cycle; the cervix – structure specifications connected with the function.</p> <ul style="list-style-type: none"> - Vagina, hymen and vulva (basic structural characteristics) <p>- Embryonic development and most common disorders of the female reproductive system:</p> <ul style="list-style-type: none"> - Formation of an ovary, fallopian tubes, uterus, vagina and external genitalia <p>Practical lessons:</p> <p>Anatomy (10 classes)</p> <ul style="list-style-type: none"> - Exercises with particular bones, joints and muscles of the pelvis and the spine cord - Topographical anatomy of the female pelvis - Topographical anatomy of the abdomen <p>Histology (5 classes)</p> <ul style="list-style-type: none"> - Working with models of the pre-embryonic, embryonic and fetal period; - Microscopic analysis of the histological features of the placenta and umbilical cord; video presentations of the placenta and the umbilical cord. - Microscopic analysis of the histological features of the organs of the female reproductive system: an ovary, a fallopian tube, uterus and vagina. 			
12.	Teaching methods: Interactive classes, practical lessons, seminars			
13.	Total classes:	100		
14.	Organization	Theoretical lessons: 55 classes Practical lessons: 45 classes Learning at home		
15.	Types of teaching activities	15.1	Lessons: theoretical classes	40
		15.2	Practical lessons	15
			Seminars	
16.	Other types of activities	16.1	Practice	
		16.2	Self-supporting practice	
		16.3	Learning at home	45
17.	Knowledge assesment		Points	
	17.1	Regular checks of the knowledge (mid-term exam)	Min.-max. Regular checks of the knowledge (mid-term exam) -2 written: 1.Anatomy: Anatomy of the functional systems Points 18-30 2.Histology: histology and embryology Points 12-20	
	17.2	Final exam	Anatomy: Min.-max. *Written points 18 - 30 **Practical points 6 - 10 *The written part of the final exam is connected to the material about the abdomen and the pelvis. **The practical part of the final exam is connected to: -recognizing and describing organs and anatomical elements in the abdomen and pelvis on fixed models and	

			<p>cadavers.</p> <p>The student must obtain minimum of the points for every part of the final exam, separately, so that the points on the final exam are calculated and written. If criterion is not met, the student has failed the exam.</p>	
	17.3	Paper/project (oral presentation)	<p>Anatomy</p> <p>Min.-Max. Points 1 - 2</p>	
	17.4	Active participation	<p>Min. – Max. Points</p> <p>Theoretical lessons 1 - 2 Practical lessons 4 - 6</p>	
18.	Grading criterion (points/grades)	Up to 59 points	5 (five) F	
		From 60 to 68 points	6 (six) E	
		From 69 to 76 points	7 (seven) D	
		From 77 to 84 points	8 (eight) C	
		From 85 to 92 points	9 (nine) B	
		From 93 to 100 points	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 visiting the theoretical and practical lessons, as well as writing the paper.</p> <p>To attend the final exam, the student must pass the mid-term exams. If the mid-term exams are not passed in the determined exam week, the student attends a complete final exam which is a combination of the mid-term exams and the final exam.</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, mid-term exams and final exam.</p>		
		Type of activity	Points	
			Anatomy	Histology
		Theoretical lessons	0.5-1.0	0.5-1.0
		Practical lessons	2.5-4.0	1.5-2.0
		Paper	1-2	
		Mid-term exams	18-30	12-20
		Final exam	Written part – 18-30	
			Practical part – 6-10	
		Total	46-77	14-23
Total:	60-100			
20.	Language	Macedonian		
21.	Method of evaluating the quality of the lessons	Anonymous student evaluation of the subject, the professors and the collaborators who hold the lessons.		
22.	Literature			
	22.1	Mandatory literature		
	1.	Zivadinovikj J, Matveeva N, Papazova M, Zafirova B, Chadikovska E, Anatomy 3, Ss. Cyril and Methodius		

		University, Medical Faculty, Skopje, 2020.
	2.	Milenkova L, Kostovska N. Basic Human Embryology, Kultura, Skopje, 2002
	3.	Keith L, Moore & T.V.N. Persaud Human Development – clinically based embryology Saunders Elsevier 2008
	4.	Kostovska N, Milenkova L, Histology, Tissue structure, DeGama, Skopje, 2003
	5.	Milenkova L, Kostovska N. Histological structure of the organ systems Ss. Cyril and Methodius University, Medical Faculty, Skopje, 2013
22.2	Additional literature	
	1.	Anatomy Atlas
	2.	Moore KL, Dali AF, Agur AMP. Clinically based anatomy.6th edition. Skopje, Tabernakul; 2011.
	3.	Department of Histology and Embryology Learning materials Electronic files with subjects from the practical lesson, on the website of the Medical faculty 2015
	4.	Zunkveira LK, Karneiro H. Basics of histology – text and atlas Prosvetno delo – 2009 (macedonian translation) Original: 11 edition 2005
	5.	Ross MH, Pavlina V. Histology – text and atlas Tabernakul -2010 (macedonian translation) Original: 5th edition 2006
	6.	www.biolucida.com Medical education edition