

**Faculty of Medicine / APPLIED PHYSIOTHERAPY / ANATOMY AND HISTOLOGY I**

<b>Course:</b>	ANATOMY AND HISTOLOGY I			
<b>Course ID</b>	<b>Course status</b>	<b>Semester</b>	<b>ECTS credits</b>	<b>Lessons</b> (Lessons+Exercises+Laboratory)
10268	Mandatory	1	9	5+3+0
<b>Programs</b>	APPLIED PHYSIOTHERAPY			
<b>Prerequisites</b>	No			
<b>Aims</b>	Students should acquire basic knowledge of the microscopic and microscopic structure of the human body from the aspect of applied physiotherapy			
<b>Learning outcomes</b>	It is expected that the student after graduation from this subject will be able to: 1. to understand and use basic terminology and concepts in anatomy and histology; 2. to recognize and describe the anatomical and histological characteristics of bone, joint and joint human muscular system; 3. to recognize, describe and discuss the normal macroscopic and microscopic structure and function of the bones, joints and muscles of the head and neck, spine, upper and lower lower extremities; 4. to explain the anatomical connection of bone, joint and joints human muscular system; 5. to connect acquired knowledge from the histology of organs and systems organ with acquired knowledge from anatomy			
<b>Lecturer / Teaching assistant</b>	Božidarka Rakočević, dr sci. med prof. dr E. Nenezić			
<b>Methodology</b>	Lectures. Exercises. Consultations. Learning for practical exercises, colloquia and final exam.			
<b>Plan and program of work</b>				
Preparing week	Preparation and registration of the semester			
I week lectures	Introduction to Anatomy and Histology. Division of anatomy and histology. Nomenclature.			
I week exercises	Follow the lectures			
II week lectures	Cell membrane and membrane transport.			
II week exercises	Follow the lectures			
III week lectures	General osteology. Clavicula. Scapula. Humerus. Radius. Cytosol, cytoskeleton, cell organelles.			
III week exercises	Follow the lectures			
IV week lectures	Ulna. Ossa manus. Sulcus et canalis carpi. The bones of the thoracic cage. Sternum. Costae. The nucleus and the cell cycle.			
IV week exercises	Follow the lectures			
V week lectures	Backbones. Vertebrae. Sacrum. Os coccygis. Os coxae. Pelvis as a whole. Pelvic diameters. Femur. Patella. Tibia. Fibula Ossa pedis Colloquium histology.			
V week exercises	Follow the lectures			
VI week lectures	The skull bones. Facial bones. Remedial colloquium histology.			
VI week exercises	Follow the lectures			
VII week lectures	Arthrology. Division. Parts. Biological characteristics of joints. Classification and general characteristics of epithelial tissues.			
VII week exercises	Follow the lectures			
VIII week lectures	Art. Sternoclavicularis. Art. Humeri. Art. Cubiti. Art. Radiocarpalis. Artt. Manus Colloquium - osteology. Histological structure of single-layered and multi-layered epithelial tissues.			
VIII week exercises	Follow the lectures			
IX week lectures	Art. sacroiliac. Symphysis pubic. Ar. Cox. Art. Genus. Art. Talocruralis. Artt. Pedis. General characteristics and classification of connective tissues.			
IX week exercises	Follow the lectures			
X week lectures	Myologia. Muscle division. Muscles. Supplementary parts. Splitting hands on the regions. Barriers. Shoulder muscles. Fossa axillaris (walls and contents). Muscles of the arm. Embryonic and connective tissues.			
X week exercises	Follow the lectures			
XI week lectures	Muscle of forearm. The muscles of the hand. Cartilaginous and bony connective tissue.			

**ECTS catalog with learning outcomes**  
**University of Montenegro**

XI week exercises	Follow the lectures					
XII week lectures	The muscles of thoracic cage. Head and neck muscles. Colloquium - syndromology. Blood and hematopoiesis.					
XII week exercises	Follow the lectures					
XIII week lectures	The muscles of the pelvis. Muscles of the thigh. Histological structure of nervous tissue.					
XIII week exercises	Follow the lectures					
XIV week lectures	Muscles of the lower leg and foot. Classification and general characteristics of muscle tissue.					
XIV week exercises	Follow the lectures					
XV week lectures	Colloquium - myology. Histological structure of muscle tissue.					
XV week exercises	Compensation					
<b>Student workload</b>	Weekly: 9 credits x 40/30 = 12 hours. Structure: lectures 5 hours, exercises 3 hours, individual student work 4 hours. In semester: Teaching and final exam: 12 hours x 15 (week lesson) = 180 hours + 12 for rendering exams, a total of 192 hours. Necessary preparation before the beginning of the semester (administration, enrollment, validation) 2 x 12 hours = 24 hours. Total load for item 9x30 = 270 hours. Supplementary work for exam preparation in the corrective test period, including taking a correctional exam from 0 to 54 hours (the remaining time from the first two items to total load for the subject); Load structure: 192 hours (teaching and exams) + 24 hours (preparation) + 54 hour (supplementary work).					
<b>Per week</b>			<b>Per semester</b>			
<b>9 credits x 40/30=12 hours and 0 minuts</b> 5 sat(a) theoretical classes 0 sat(a) practical classes 3 excercises <b>4 hour(s) i 0 minuts</b> of independent work, including consultations			Classes and final exam: <b>12 hour(s) i 0 minuts x 16 =192 hour(s) i 0 minuts</b> Necessary preparation before the beginning of the semester (administration, registration, certification): <b>12 hour(s) i 0 minuts x 2 =24 hour(s) i 0 minuts</b> Total workload for the subject: <b>9 x 30=270 hour(s)</b> Additional work for exam preparation in the preparing exam period, including taking the remedial exam from 0 to 30 hours (remaining time from the first two items to the total load for the item) <b>54 hour(s) i 0 minuts</b> Workload structure: <b>192 hour(s) i 0 minuts (courses), 24 hour(s) i 0 minuts (preparation), 54 hour(s) i 0 minuts (additional work)</b>			
<b>Student obligations</b>			Students are obliged to attend classes, to learn exercises, to work and pass on domestic work, and to work on both colloquia.			
<b>Consultations</b>			With prior announcement, the same day after lectures and exercises			
<b>Literature</b>			Bošković M. Anatomija čoveka. Beograd: Medicinska knjiga; 2003. Marinković S, Ilić A, Malobabić S. Neuroanatomija. 2. dop. izd. Beograd: Savremena administracija; 1988. Z. Anđelković Čelija i tkiva. Bogdanović D. Anatomija grudnog koša. Thorax. Beograd: Savremena administracija; 2001. Draganić VP, Mijač M, Radonjić V. Anatomija čoveka- abdomen i karlica. Beograd: Savremena administracija; 2002. Trpinac D. Histologija. Beograd: Kuća štampe; 2001.			
<b>Examination methods</b>			The presence of lectures and exercises is evaluated with a maximum of 5 points; 3 colloquies are rated with a total of 45 points (15 + 15 + 15); Final Exam evaluates at most 50 points; The score is obtained if it is accumulated cumulatively at least 50			
<b>Special remarks</b>			no			
<b>Comment</b>			no			
<b>Grade:</b>	F	E	D	C	B	A
<b>Number of points</b>	less than 50 points	greater than or equal to 50 points and less than 60 points	greater than or equal to 60 points and less than 70 points	greater than or equal to 70 points and less than 80 points	greater than or equal to 80 points and less than 90 points	greater than or equal to 90 points