

SUBJECT CHART

1. Schedule data

1.1 University	„VICTOR BABES” UNIVERSITY OF MEDICINE AND PHARMACY TIMISOARA
1.2 Faculty	FACULTY OF DENTAL MEDICINE
1.3 Department	I
1.4 Studies area	License
1.5 Cycle of studies ²⁾	License
1.6 Studies program	DENTAL MEDICINE

2. Discipline data

2.1. Subject name	ANATOMY AND EMBRYOLOGY						
2.2 Lecture activity tutor	Associate Professor Şişu Alina, MD, PhD						
2.3 Practice activity tutors	Assistant Professor Ciobanu Iulia, MD, PhD						
2.4 Year of study	I	2.5 Semester	I	2.6 Assessment type	Exam	2.7 Type of Discipline	Content ³⁾
							Compulsory ³⁾
							DF
							DF

3. Estimated total time (hours per semester of teaching activities)

3.1 Number of hours per week	5	3.2 from which: lecture	2	3.3 practice	3
3.4 Total hours of the curriculum	70 (5 x 14 for 1 sem)	3.5 from which: lecture	28	3.6 practice	42
Distribution of time					hours
Study after manual, lecture material, references and notes					30
Additional documentation in the library, on the specialized electronic platforms and on the field					6
Training seminars / practice / projects, themes, papers, portfolios and essays					10
Tutoring					-
Exams					4
Other activities					-
3.7 Total hours of individual study	46				
3.8 Total hours per semester	120 (4 creditsx30 hours/credit)				
3.9 Credit points ⁵⁾	4				

5. Conditions (if necessary)

5.1 lecture	<ul style="list-style-type: none"> • Mobile phones will be closed during classes, conversations are not tolerated. • The students' delay in the lecture will not be tolerated as it is proven disruptive to the educational process; • The date of the lecture's seminary is announced at the beginning of the semester. Claims for postponement will not be accepted for reasons other than a legitimate objective; The attendance at the lecture is compulsory, a maximum of 30% out of the total absences being accepted.
5.2 practice/ project	<ul style="list-style-type: none"> • Mobile phones will be closed during the practice, are not tolerated telephone conversations during the practice, nor students leaving the room. • The students' delay will not be tolerated as it proves disruptive to the educational process; • Presence at internships / practice is mandatory, a maximum of 15% out of the total absences is accepted (recovery of absences until the beginning of the session exams). • Recovery of absences is allowed up to 15% out of the total number of absences with the payment during the academic year (except for medical cases that will require individual approval of the Dean). • The date of the endpoint verification of practice material is announced at the beginning of the semester. Applications for postponement will not be accepted for reasons other than a legitimate objective; • The practical exam will be held in the last week of the semester or in the ordinary session, from the topic of the practical works / laboratories displayed in advance. The practical exam in the session will not be held on the same day with the MCQs. • Students accumulating between 15-30% of absences will recover them on a paying system and lose the right to attend the regular session. • Students accumulating over 30% of absences can not attend the exam during the current academic year and are required to re-study the discipline.

6. Specific skills

Professional Skills	<ol style="list-style-type: none"> 1. Learning the <i>Nomina Anatomica</i>. 2. Acquiring appropriate medical language by the student. 3. Learning the theoretical and practical issues of individual anatomical elements and complex structures (systems and apparatuses). 4. Proper acquisition of exploration maneuvers and dissection techniques of normal anatomical structures. 5. Descriptive and topographic recognition of the anatomical structures of the human body. 6. Correlation of the descriptive anatomy knowledge with the live morphological exploration of radio-anatomic structures. 7. Correlation of the topographic anatomy structures with elements of medical semiology.
Transversal Skills	<ol style="list-style-type: none"> 1. Interest for professional development by engaging critical thinking skills demonstrated through active participation in the lecture and practice seminar / project; 2. Involvement in scientific research activities by participating in the elaboration of papers, studies, specialized articles; 3. Effective use of information sources and communication resources and assisted training (Internet portals, specialized software applications, databases, on-line courses, etc.) in an international language; 4. Recognition of the normal anatomical structure and assessment of its participation in the development of a pathological condition, anatomical support of any non-invasive exploratory act (CT, MRI) or invasive (surgical act).

7. Discipline objectives (based on the specific competences)

7.1 General objective of Discipline	<ol style="list-style-type: none"> 1. Knowing the elements of descriptive and topographic anatomy of all body parts 2. Understanding the basic embryogenesis and organogenesis as the basis for morphogenesis in the normal anatomical development of the human body. 3. Knowledge body regions in axial segments (head, neck, trunk) or appendicular (states) in the topographic anatomy. 4. Knowledge of the complex morphology of organ systems and apparatuses. 5. Morphological exploration of prepared body pieces (cadavers) of the anatomical sections. 6. Acquiring international anatomical terminology (<i>Nomina Anatomica</i>).
7.2 Specific objectives	<ol style="list-style-type: none"> 1. Knowledge and understanding of anatomical features. 2. Recognition of all anatomical elements. 3. Knowing the relationship between the different anatomical structures. 4. Study of topographical regions and sectional anatomy.

8. Contents

8.1 Lecture	Teaching methods	No. of hours	Notifications
1. Introduction in Anatomy. Axes, planes and Nomina Anatomica.	Interactive presentation of the teaching material, using multimedia, PowerPoint presentations, educational videos.	2	
2. General embryology.		2	
3. Topographical anatomy of the upper limb. Muscle groups of the upper limb.		2	
4. Blood supply and nerve supply of the upper limb.		2	
5. Topographical anatomy of the lower limb. Muscle groups of the lower limb.		2	
6. Blood supply and nerve supply of the lower limb.		2	
7. Topographical anatomy of the trunk.		2	
8. The blood vessels and the nerves of the trunk.		2	
9. Arthrology – generalities. Joints of the upper limb, lower limb and axial skeleton.		2	
10. The lungs, the pleura and the mediastinum.		2	
11. The heart, the pericardium and the great vessels of the thorax.		2	
12. Topographical regions of the antero-lateral aspect of the abdominal wall.		2	
13. Viscera of the abdominal cavity.		2	
14. Viscera of the pelvic cavity.		2	

Mandatory references:

1. Şişu AM., Grigoriță L., Motoc A., Moise M., Şelaru M., Băcean O., Petrescu C., *Skeleton of the Human Body*, Ed. Eurostampa, 2014.
2. Şişu AM., Bolintineanu S., *The Perineum*. Ed. Eurostampa, 2018.
3. Gray H, *Gray's Anatomy – Anatomy descriptive and surgery*, Produced by Magpie Books, London, 1995.

Optional references:

1. Johannes Sobotta - *Sobotta Atlas of Human Anatomy* - Published by Lippincott Williams & Wilkins, 1996.

2. Frank Netter - <i>Atlas of Human Anatomy</i> - Published by Icon Learning Systems, 2003.			
8.2 Practice	Teaching-learning methods	No. of hours	Notifications
1. Study of the scapular girdle and the bones of the upper limb.	Checking of students' theoretical knowledge of the current work, proving by the student the knowledge of the method of dissection, assessment of each student's work. To verify the student's practical knowledge by identifying macroscopic anatomical structures on cadaveric parts, macroscopic anatomical specimens, sections, anatomical casts.	3	
2. Study of the pelvic girdle and the bones of the lower limb.		3	
3. Study of the vertebral column, ribs and sternum. Opening the axilla: walls and contents.		3	
4. Dissection of the anterior region of the arm: muscles, blood vessels and nerves. Dissection of the antero-lateral region of the forearm: muscles, blood vessels and nerves. Dissection of the palmar region.		3	
5. Dissection of the dorsal region of the trunk. Study of the muscular layers and of the dorsal aponeuroses.		3	
6. Dissection of the antero-medial region of the thigh. Femoral triangle: limits and layers. Dissection of the anterolateral region of the leg – muscles,vessels,nerves. Study of the dorsal region of the foot.		3	
7. Dissection of the gluteal region - limits and layers. Dissection of the posterior aspect of the thigh - limits and layers.		3	
8. Study of the posterior knee regions. Study of the posterior crural and posterior talocrural regions. Dissection of the plantar region.		3	
9. Anatomical exploration and the dissection of the antero-lateral wall of the thorax. Dissection of the pectoralis major and minor muscles, serratus anterior muscle, subclavius muscle and intercostalis muscles.		3	
10. Study of the thorax – cutting the sternocostal plastron. Study of the viscera in situ. Study of the hylum and the pulmonary pedicle. Study of the lungs – lobes and segments.		3	
11. Study of the mediastinum. Dissection of the pericardium, the heart and the greater vessels. Removal of the heart. Heart – external conformation. Dissection of the mediastinum. Study of the trachea, bronchi, and the thoracic portion of the oesophagus. Study of the thoracic portion of the aorta, the venae cavae, vagus nerves.		3	
12. Anatomic exploration of the abdominal wall. Dissection of the External Oblique Muscle, Internal Oblique Muscle and Transversus Abdominis Muscle. Study of the inguinal canal. The sheath of the Rectus Abdominis Muscle and its contents.		3	
13. Topographic divisions of the abdominal wall. Opening of the abdomen. Study the viscera in situ. Study of the supramesocolic viscera: the liver, the stomach, the spleen.		3	
14. Study of the inframesocolic abdominal organs. Renal fossa. Study of the kidneys. Study of the abdominal aorta and inferior vena cava.		3	
Mandatory references: 1. Richard L.Drake, A. Wayne Vogl, Adam W.M.Mitchell, <i>Gray s for students</i> , Churchill Livingstone Elsevier, 2010. 2. Frank Netter - <i>Atlas of Human Anatomy</i> - Published by Icon Learning Systems, 2003.			
Optional references: 1. Johannes Sobotta - <i>Sobotta Atlas of Human Anatomy</i> - Published by Lippincott Williams & Wilkins, 1996.			

10. Evaluation

Activity type	10.1 Assessment criteria	10.2 Methods of assessment	10.3 Percent of the final grade
10.4 Lecture	Entering the theoretical exam is conditioned by the participation of the students in at least 70% of the lectures. MCQs exam: - 50 MCQs with one correct answer (max. 30% out of the MCQs) and between 2 and 4 correct answers.	<i>Final assessment:</i> 50 MCQs - score for mark 5: minimum 50% out of maximum score). 3 written subjects (each subject- score for mark 5: minimum 50% out of maximum score).	60%

	- time of the exam- 90 min.	<i>Continuous assessment:</i> MCQs from the test and semester activity.	10%
10.5 Practical exam	<p>Students accumulating up to 15% absences will recover them (totally) during the semester.</p> <p>Students accumulating between 15-30% absences will recover after paying and lose the right to enter in the regular session.</p> <p>Students accumulating over 30% of absences cannot attend the exam during the current academic year and are required to re-study the discipline.</p> <p>Practical exam and is held during the last week of the semester.</p> <p>Practical exam is mandatory:</p> <ul style="list-style-type: none"> - Mark 5: The student must answer 100% out of the 5 questions of the minimum scale - Mark 10: The student must answer 100% out of the total number of questions. 	<i>Final assessment:</i> practical exam	30%
10.6 Minimum performance standard			
1. Knowing the <i>Nomina Anatomica</i> . 2. Recognizing the anatomical elements that form the human body and the relationships between them. 3. Knowing the topographical regions, regional layers and anatomic structures.			

Date of completion 19.10.2018	Tutor Lecture Signature Associate Professor Şişu Alina, MD, PhD	Practice Tutor Signature Assist. Prof. Ciobanu Iulia, MD, PhD
Head of Discipline Signature Prof. Matusz Petru, M.D., Ph.D		
Date of approval in the Department	Head of Department Signature Prof. Sorin Bolintineanu, M.D., Ph.D	